RE: BLM Violation of Climate Change Directives

Dear Secretary Jewell:

I am writing you on behalf of Public Employees for Environmental Responsibility (PEER) to draw your attention to the systemic failure of the Bureau of Land Management (BLM) to address climate change causes and effects in its planning, permit issuance and other actions pertaining to public lands grazing. We are also requesting your involvement in forcing a reversal of BLM’s historic and persistent “climate agnosticism” with respect to livestock grazing.

PEER is a national non-profit alliance of local, state, and federal scientists, law enforcement officers, land managers, and other professionals dedicated to upholding environmental laws and values. I am writing this complaint because, as detailed below, one of the agencies in your own Department has been and remains derelict in meeting its clear environmental obligations.

Complaint Summary
Recent federal orders, policies, and guidance direct federal agencies to respond to climate change in their official planning. These directives, along with case law under statutes such as the National Environmental Policy Act (NEPA), make clear that consideration of climate change is required in an agency’s environmental review process.

Livestock grazing is ubiquitous on federal lands and is one of the most significant causes of degraded rangeland conditions across the American West. The consequences of public lands grazing is three-fold: the IPCC identified domestic cattle as a significant source of methane, one of the most potent greenhouse gases; see below at section B(1)(a). Secondly, overgrazing has reduced the ability of public lands to offset greenhouse gas emissions by sequestering carbon. Thirdly, degraded rangelands have reduced resiliency to changing climate, thus exacerbating the impacts of changing climate--including lowered water quality, increased desertification and reduced wildlife habitat.
Yet, the BLM steadfastly refuses to assess the full range of environmental impacts of grazing in its environmental reviews, most notably in the NEPA documents associated with the issuance and renewal of grazing permits but also by failing to consider livestock grazing as a cumulative impact to all BLM-authorized activities. BLM has consistently shirked its duty to address climate change in its environmental review process, and continues to do so despite increased federal guidance directing otherwise.

Climate Mandate
President Obama has consistently prioritized climate preparedness, issuing an executive order in 2009 establishing a task force to create an initial adaptation strategy and directing all federal agencies to develop vulnerability assessments and adaptation plans. Subsequently, the President directed agencies to protect biodiversity and conserve natural resources in the face of climate change. In 2013, the task force created in the previous executive order was replaced with a multi-agency Council on Climate Preparedness and Resilience tasked with recommending actions to encourage climate preparedness and resilience.

That Council issued a report in 2014 identifying priority strategies to make the nation’s natural resources more resilient to climate change, including fostering climate-resilient lands and waters and modernizing federal plans to build resilience. The report directed agencies to develop tools to improve their capacity to manage for resilience and to select priority areas for conservation, restoration, or other investments to build resilience, and, specifically, directed the Department of Interior (DOI) to develop “resilience metrics.” The Council has directed agencies with natural resources responsibilities to identify best practices for applying resilience criteria to program management.

Additionally, DOI has incorporated climate-change adaptation strategies into its planning process. Secretarial Order 3289 (replacing a 2001 order directing DOI agencies to consider climate change impacts in planning), in 2009, established a Climate Change Response Council to execute a coordinated Department-wide strategy. The Order announced the creation of two initiatives addressing regional coordination on ecosystem, watershed, and environmental management and a general policy for combating climate change.

Of particular importance to grazing is the final new initiative of the Secretarial Order, the DOI Carbon Footprint Project, aimed at developing a unified greenhouse gas emission reduction

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1 40 C.F.R. 1508.7
3 The President’s Climate Action Plan
5 Council on Climate Preparedness and Resilience, Priority Agenda: Enhancing the Climate Resilience of America’s Natural Resources (Oct. 2014) at 5-6, 14.
6 Id. at 19-20.
7 Id. at 51.
8 Secretarial Order 3226 (January 19, 2001)
program, including setting a baseline and reduction goal for the Department’s greenhouse gas emissions and energy use.

In 2012, DOI included in its Departmental Manual new provisions relating to climate change adaptation. The provisions commit DOI to integration of climate change adaptation strategies into its policies, planning, programs, and operations, including park, refuge, and public land management.

In 2013, DOI issued a Climate Change Adaptation Plan that recognized that “vulnerabilities to climate change impacts vary widely across the Department’s mission areas. Bureaus’ climate change adaptation priorities and needs depend on the particular vulnerabilities of their mission and assets.” The plan announced “guiding principles” for all bureaus of offices that included requiring individual agencies to establish adaptation-related planning priorities.

Livestock Grazing Measurable Impacts on Climate Change
There is broad scientific support for the existence of climate change. This complaint focuses on the exacerbating effects of BLM-managed public lands livestock grazing on the well-established causes and impacts of climate change.

A. Livestock grazing contributes significantly to global greenhouse gas emissions.
A significant source of greenhouse gases, including carbon dioxide, methane, nitrous oxide and ammonia, animal agriculture is one of the primary contributors to global climate change. A study by the United Nations Food and Agriculture Organization found that emissions from animal agriculture represent eighteen percent of anthropogenic global greenhouse gases. This is more than the emissions produced from powering all the world’s road vehicles, trains, ships, and airplanes combined.

Other sources allocate to livestock’s role in climate change a significantly higher percentage, closer to fifty-one percent of all global greenhouse gases. Whichever the case, animal agriculture stands as a major anthropogenic contributor of greenhouse gas emissions.

Notable among these emissions are methane and nitrous oxide, of which livestock production is the largest global source. The livestock sector generates 65 percent of human-related nitrous

9 Climate Change Policy, 523 DM 1 (effective Dec. 20, 2012).
10 Department of Interior Climate Change Adaptation Plan for FY 2013, at 1.
15 Bailey, supra note 39, at 5.
oxide and 37 percent of all human-induced methane, whose global warming potential exceeds that of carbon dioxide by 296 and 23 times, respectively.\textsuperscript{16} Additionally, livestock grazing represents 64 percent of human-related ammonia, a significant contributor to acid rain.

Grazing’s potential to impact climate change is greater than that of feedlot-raised cattle. Grass-fed cows gain weight more slowly and therefore release methane and nitrous oxide for a longer period of time, resulting in greater greenhouse gas emissions--ultimately twice as much methane as feedlot cows.\textsuperscript{17} Moreover, while methane produce by feedlot cows can be captured and productively used, range cow produced methane is released to the atmosphere.

Aside from the greenhouse gas released directly from livestock, there are also associated indirect emissions from sources such as fertilizer and manure decomposition (which releases methane), land degradation, and the use of fossil fuels associated with animal transportation.\textsuperscript{18} In addition, public land grazing is part of a cycle that facilitates degradation of private lands and increased use of chemical fertilizers and growth of annual grasses using full-till agriculture. Holders of public land livestock grazing permits “turn-out” their cattle on to public lands and raise winter fodder on their private lands. Typically, the private lands do not use “no-till” techniques, despite incentives from the NRCS, and are heavily dependent upon chemical fertilizers, herbicides, and fossil fuel. Subsidized by a variety of federal programs, not least the BLM’s grazing charge that is a small fraction of the costs charged by states and private owners, livestock grazing on public lands seems designed to encourage greenhouse gas production.

\textbf{B. Land degradation associated with livestock grazing impacts climate change.}

Grazing contributes to global warming by changing how lands function physically, chemically, and ecologically.\textsuperscript{19} When vegetation is grazed, it stores less carbon. In addition, livestock use commonly causes carbon loss via mechanical disturbance of soils and alteration of vegetative composition and cover, leading to decomposition of soil organic matter and loss of below-ground sinks in roots and soil inorganic carbon.\textsuperscript{20} Reducing the carbon-storage capacity of the soil reduces the earth’s potential to sequester carbon. Overgrazing, which happens with the “season-long” grazing that is typical on BLM lands, reduces the plant root growth and mass and reduces the ability of the most productive types of native vegetation to compete with invasive noxious weeds and annual grasses such as cheatgrass.

Although the soil carbon storage capacity of native plants and their ability to out compete invasive weeds is well known, the BLM does not manage rangelands as carbon sinks. Instead, the BLM manages its rangelands to maximize forage for livestock, sometimes secondarily considering residual forage for wildlife. Faced with a listing of greater sage-grouse under the Endangered Species Act, the BLM has been mandated to look at the role of overgrazing on

\begin{itemize}
  \item \textsuperscript{17} Doug Gurian-Sherman, \textit{Raising the Steaks: Global Warming and Pastureraised Beef Production in the United States}, Union of Concerned Scientists (2011); see also Bailey, supra note 39, at 9.
  \item \textit{Id.}
\end{itemize}
wildfire return intervals and the spread of invasives and non-native grasses. However, although the US Fish and Wildlife Service determined that climate change was a risk factor for sage grouse, the BLM continues to ignore the contribution of public land grazing to climate change and the potential for rangeland management to offset greenhouse gas production or to make public lands more resilient to climate changes. Even the BLM’s greater sage grouse national planning efforts failed to evaluate climate change including the loss of soil carbon capacity or the loss of climate resilience caused by BLM livestock grazing. If the “national” planning efforts ignore the role BLM livestock grazing management has on climate change, even when it is a risk factor for ESA listing, it is hardly surprising that the impact of grazing on grasslands’ ability to sequester carbon or withstand climate change is not analyzed in BLM NEPA documents authorizing grazing.

The vast extent of BLM-managed rangelands means that the cumulative potential for affecting soil carbon loss and storage capacity is significant. According to one estimate, “[i]mproving management on 279 million acres of poorly managed ... rangelands [in the U.S. alone] would sequester 11 million additional tons of carbon annually.”

Healthy grasslands and forests could mitigate much of the impact of climate change by sequestering carbon. However, when lands are overgrazed, “land degradation is a sign of decreasing reabsorption of atmospheric [carbon dioxide] by vegetation re-growth.”

A disturbingly large portion of BLM lands fail to meet range health standards (adopted by the BLM in the 1990s) principally due to livestock operations. The “Rangeland Inventory, Monitoring and Evaluation Report for Fiscal Year 2011” covers BLM allotments in Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming. The report totals BLM acreage failing to meet rangeland health standards in measures such as water quality, watershed functionality and wildlife habitat and it shows that:

- Almost 40% of acres within BLM allotments surveyed since 1998 have failed to meet the agency’s own required land health standards. In allotments totaling more than 33 million acres, an area exceeding the State of Alabama in size, the impairment is attributed to livestock grazing;

- Overall, 30% of allotments by area surveyed to date suffer from significant livestock-induced damage, suggesting that once the remaining allotments have been surveyed, the total impaired area could well be larger than the entire State of Washington; and

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22 https://www.federalregister.gov/articles/2015/10/02/2015-24292/endangered-and-threatened-wildlife-and-plants-12-month-finding-on-a-petition-to-list-greater
23 Donahue, supra note 42, at 100.
24 Id.
• While factors such as drought, fire, invasion by non-native plants, and sprawl are important, livestock grazing is identified by BLM experts as the primary cause (nearly 80%) of BLM lands not meeting health standards.  

Nor are the conditions on the ground improving. In the last decade as more land has been assessed, estimates of damaged lands have doubled in the areas where BLM conducts major livestock grazing.

These degraded landscape conditions contribute not only to a reduced capacity for carbon storage, but also to increased desertification, increased fugitive dust and decreased albedo. Further, grazing facilitates the introduction of invasive plants and annual grasses which have less carbon storage capabilities than native plants and result in the increased wildfire return intervals described by the USFWS.

In addition, overgrazing is particularly damaging to riparian health, making these critical ecosystems less able to withstand increasing storm events, early spring snow melt-offs and increased shifting of precipitation from the winter (with slow spring melts) to high volume precipitation falling as rain (which stays on the land for a far shorter time).

Even BLM concedes that livestock grazing results in a feedback loop that aggravates other climate change impacts:

“The particular impacts consequent to livestock grazing have ever-growing significance in light of observed and predicted climate change impacts in the Southwest including higher temperatures; reduced snowpack and earlier snowmelt; longer droughts; more erratic, but more intense precipitation events rushing over drought-stressed lands and further incising channels; vegetation die-offs; and the spread of invasive, exotic species... The grazing cannot meet the meaning of a FONSI, i.e., no significant impacts; and it cannot be justified in an [Environmental Impact Statement] vis-à-vis reasonable alternatives of no grazing or greatly reduced grazing. The impacts are too many, serious, irreversible, and unavoidable given the current levels, frequency, and geographic extent of the livestock grazing.”

While the science of grazing’s contribution to climate change and resulting loss of habitat resilience is well understood the BLM continues to approach livestock grazing as if it were a limited activity instead of a range-wide degrader of resilient public lands and contributor to climate change.

**BLM Improper Omission of Grazing Climate Assessment**

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Despite strong evidence of the climate change impacts of grazing, along with federal guidance, numerous federal directives, and case law mandating that climate change be considered in the NEPA process, BLM continues to disregard climate change impacts in its planning decisions.

Particularly, BLM consistently disregards climate change in the environmental review process for the issuance and renewal of grazing permits. As detailed below, BLM historically excludes climate change from NEPA documents—and this exclusion continues in the face of federal directives promoting agency accountability for climate change impacts. Perhaps more insidiously, the BLM fails to consider livestock grazing as a cumulative to every authorization on the public lands.

BLM maintains a national register for Land Use Planning (LUP) and National Environmental Policy Act (NEPA) documents. While not complete, this register represents a sampling of the NEPA documents on livestock grazing permit issuance that are available for public viewing. Since 2013, of the available records for the issuance or renewal of grazing permits, only thirty-one are accompanied by NEPA documentation explaining the basis of BLM’s decision. Of these thirty-one NEPA documents, twenty-one are silent as to the potential impacts of the grazing decision on climate change.

Those NEPA documents that do mention climate change forgo any meaningful analysis and incorporate, depending on the particular field office, the same boilerplate language dismissive of the action’s potential effects on climate change:

“The Worland Field Office Interdisciplinary Team determined the following resources are not present or affected by the proposed action or alternatives; therefore, they are not analyzed further in this EA: . . . Air Quality/Climate Change.”

“It is currently beyond the scope of existing science to identify a specific source of greenhouse gas emissions or sequestration and designate it as the cause of specific climate or resource impacts at a specific location. The proposed action and alternatives, when implemented, would not have a clear, measurable cause-and-effect relationship to climate change because the available science cannot identify a specific source of greenhouse gas emissions such as those from livestock grazing and tie it to a specific amount or type of changes in climate. Therefore, the effects of livestock grazing to the global climate will not be analyzed in detail in this EA.”

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“Addressing effects on greenhouse gas levels within the scope of NEPA is difficult due to the lack of explicit regulatory guidance on how to meaningfully apply existing NEPA regulations to this evolving issue, and due to the continuously evolving science available at varying levels. The proposed action and alternatives do not have a clear, measurable cause and effect relationship to climate change because the available science cannot identify a specific source of greenhouse gas emissions or storage and tie it to a specific amount or type of climate change.”

“USGS has reviewed science on GHG emissions and concluded it is beyond scope of existing science to identify a specific source of GHG emissions and designate it as the cause of specific climate impacts at a specific location. The effects that infrequent, ephemeral livestock grazing on the Hazen-Shepard Allotment may contribute to climate change are currently unknown, but are expected to be negligible under the proposed action and alternatives.”

Rather than analyze the potential climatic effects of issuing a grazing permit, BLM consistently relies on the assertion that such an analysis is beyond the scope of existing science. However, as the federal policy toward increasing accountability for climate change has shown, addressing these impacts should be at the forefront of BLM’s analysis when undertaking a major federal action. Yet climate change continues to be treated either as a non-factor or a factor incapable of, according to BLM, producing a significant impact.

In December 2014, the White House Council on Environmental Quality (CEQ) issued revised draft guidance on consideration of greenhouse gas emissions and the effects of climate change in NEPA reviews. Notably, the Draft NEPA Guidance clarifies that climate change adaptation and resilience are important considerations for agencies planning actions. The Guidance also recognizes that government action occurs incrementally, program-by-program and step-by-step, and climate impacts are not attributable to any single action, but are exacerbated by a series of smaller decisions:

“Therefore, the statement that emissions from a government action or approval represent only a small fraction of global emissions is more a statement about the nature of the


36 Id. at 6.
climate change challenge, and is not an appropriate basis for deciding whether to consider climate impacts under NEPA.\textsuperscript{37}

Addressing cumulative impacts, the Guidance states that agencies “need to consider whether the reasonably foreseeable incremental addition of emissions from the proposed action, when added to the emissions of other relevant actions, is significant when determining whether GHG emissions are a basis for requiring preparation of an EIS.”

As noted in the CEQ Guidance, refraining from analysis because emissions represent only a small fraction of global emissions is not an appropriate basis for deciding whether to consider climate impacts under NEPA. As evidenced, there is an established relationship between grazing and climate change, and BLM’s assessment that this connection is too attenuated will no longer suffice.

Moreover, BLM sidesteps the environmental review process altogether in many instances, allowing a Documentation of NEPA Adequacy (DNA) or Categorical Exclusion to suffice.\textsuperscript{38} A DNA identifies previously prepared NEPA documents which “adequately describe the environmental consequences” of a newly proposed action and a categorical exclusion is deemed to have no significant environmental effects. Among BLM’s categorical exclusions are the issuances of new grazing permits where the new grazing permit is consistent with the use specified on the previous permit.

The result is that permitting decisions are being made based on NEPA documents, in some cases adopted decades ago, with no assessment of climate change impacts. In other words, BLM continues to base management decisions on the unsupported premise that its thousands of livestock grazing permits have no climate impact.

**Conclusion**

Based on the foregoing information pointing to the fact that BLM consistently refuses to address climate impacts in its planning process, PEER respectfully requests that you direct BLM to –

1. Adopt a climate-change adaptation strategy, per Secretarial Order 3289, for its public lands livestock grazing program;

2. Adopt a greenhouse gas emission reduction plan, per the DOI Carbon Footprint Project, for its public lands livestock grazing program;

3. Analyze the climate change impacts of the issuance and renewal of grazing permits in all future NEPA documents; and

\textsuperscript{37} Id. at 9.

4. Review all of its prior grazing-related categorical exclusions to determine whether those exclusions from NEPA review are still appropriate in light of the risks presented by climate change.

If you have questions or would like any additional information in support of this complaint, please do not hesitate to contact me.

Sincerely,

[Signature]

Kirsten Stade
Advocacy Director