# BLM Land Health Status HOW DATA CAN INFORM DECISION-MAKING ON WILD HORSES



#### **My Takeaways**

- BLM is doing a poor job assessing the health of the lands it manages.
- The policy BLM is implementing is not informed by the data it does have.
- Failures in properly assessing rangeland health are affecting other aspects of the environment not only grazing and horses, but other wildlife and the ecosystem.



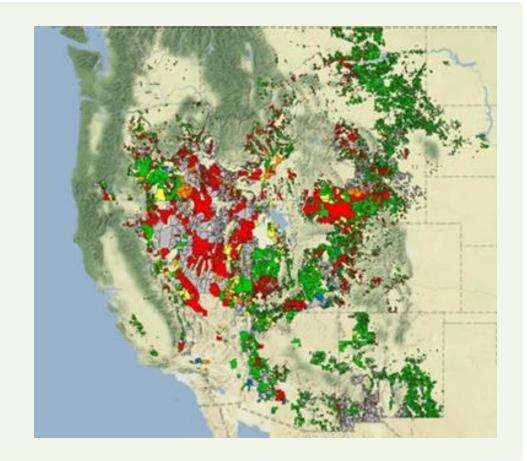
#### **PEER's BLM Land Health Data Report**

- PEER's Freedom of Information Act (FOIA) request
  - Grazing allotment Land Health Standards records
  - Conducted between 1997 and 2019
  - 21,000 livestock allotments
- PEER's BLM Land Health Data Report
  - Rangeland health conditions of the 155,000,000 acres of leased livestock allotments
- Addressing data quality problems



Figure 1. Land Health of Total 151,000,000BLM Managed Grazing Allotments







# The Data: What Are They and Why Are They Important?

- Federal Lands Policy Management Act must ensure rangeland health
- Lack of Formal Records = Incomplete/inaccurate assessments
- Factors that Impact Rangeland Health
  - E.g., off road vehicles, drought, invasive species, and fire
  - Livestock grazing is the most frequently cited cause for range failure
- Data helps track, map, and examine rangeland health



#### Rangeland Health Standards: How does BLM Assess Grazing Allotments?

The regulations require livestock grazing practices to ensure that:

- a) Watersheds are in, or are making significant progress toward, properly functioning physical condition, including their upland, riparian-wetland, and aquatic components; soil and plant conditions support infiltration, soil moisture storage, and the release of water that are in balance with climate and landform and maintain or improve water quality, water quantity, and timing and duration of flow.
- b) Ecological processes, including the hydrologic cycle, nutrient cycle, and energy flow, are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.
- c) Water quality complies with State water quality standards and achieves, or is making significant progress toward achieving, established BLM management objectives such as meeting wildlife needs.
- d) Habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal proposed or candidate threatened and endangered species, and other special status species.

60 FR 9969, Feb. 22, 1995, as amended at 71 FR 39508, July 12, 2006.



#### Rangeland Health Standards: How does BLM Assess Grazing Allotments?

BLM working documents rely on "standards and guidelines" to assess allotments. The standards and guidelines for grazing administration required authorized officers to ensure that:

- i. Management practices maintain or promote adequate amounts of ground cover to support infiltration, maintain soil moisture storage, and stabilize soils;
- ii. Management practices maintain or promote soil conditions that support permeability rates that are appropriate to climate and soils;
- iii. Management practices maintain or promote sufficient residual vegetation to maintain, improve or restore riparian-wetland functions of energy dissipation, sediment capture, groundwater recharge and stream bank stability;
- iv. Management practices maintain or promote stream channel morphology (e.g., gradient, width/depth ratio, channel roughness and sinuosity) and functions that are appropriate to climate and landform;
- v. Management practices maintain or promote the appropriate kinds and amounts of soil organisms, plants and animals to support the hydrologic cycle, nutrient cycle, and energy flow;
- vi. Management practices maintain or promote the physical and biological conditions necessary to sustain native populations and communities;
- vii. Desired species are being allowed to complete seed dissemination in 1 out of every 3 years (Management actions will promote the opportunity for seedling establishment when climatic conditions and space allow.);
- viii. Conservation of Federal threatened or endangered, proposed, candidate, and other special status species is promoted by the restoration and maintenance of their habitats;
- ix. Native species are emphasized in the support of ecological function;
- x. Non-native plant species are used only in those situations in which native species are not readily available in sufficient quantities or are incapable of maintaining or achieving properly functioning conditions and biological health;
- xi. Periods of rest from disturbance or livestock use during times of critical plant growth or regrowth are provided when needed to achieve healthy, properly functioning conditions (The timing and duration of use periods shall be determined by the authorized officer.);
- xii. Continuous, season-long livestock use is allowed to occur only when it has been demonstrated to be consistent with achieving healthy, properly functioning ecosystems;
- xiii. Facilities are located away from riparian-wetland areas wherever they conflict with achieving or maintaining riparian-wetland function;
- xiv. The development of springs and seeps or other projects affecting water and associated resources shall be designed to protect the ecological functions and processes of those sites; and
- xv. Grazing on designated ephemeral (annual and perennial) rangeland is allowed to occur only if reliable estimates of production have been made, an identified level of annual growth or residue to remain on site at the end of the grazing season has been established, and adverse effects on perennial species are avoided.

60 FR 9969, Feb. 22, 1995, as amended at 61 FR 59835, Nov. 25, 1996; 71 FR 39508, July 12, 2006.



#### Rangeland Health Standards: How does BLM Assess Grazing Allotments?

[If] the authorized officer determines through standards assessment and monitoring that existing grazing management practices or levels of grazing use on public lands are significant factors in failing to achieve the standards and conform with the guidelines that are made effective under this section, the authorized officer will, in compliance with applicable laws and with the consultation requirements of this part, formulate, propose, and analyze appropriate action to address the failure to meet standards or to conform to the guidelines. (Emphasis added)

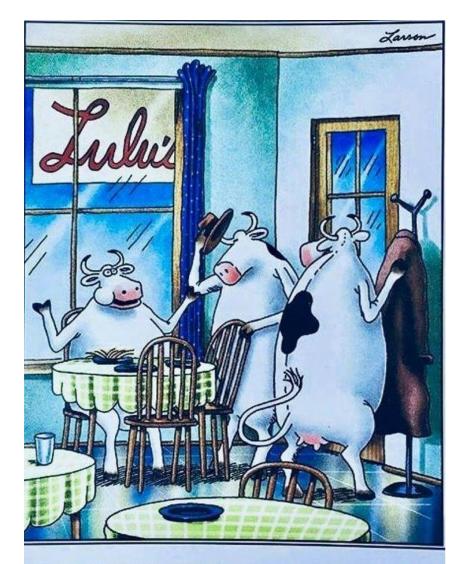
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#### **Notable Findings in the Land Health Data**

- Of the total acres assessed, BLM reports that 50% fail to meet Land Health Standards. This is a total of 54 million acres (approximately the area of Washington state).
- Of the lands that failed to meet LHS, BLM reported that in 72% of cases, "a significant cause" was livestock grazing. That is approximately 40 million acres that are failing due to overgrazing.
- BLM has assessed Land Health Standards for approximately 108 million acres of grazed public lands. The agency has yet to assess nearly 41 million acres.
- A portion of the assessed lands that are classified as "meeting" standards are actually only "making significant progress" toward meeting the standards, not actually meeting them.
- There are massive allotments that need agency attention. In Wyoming, for example, there is an allotment of over 950,000 public acres that is identified as failing Land Health Standards. BLM attributes "livestock grazing" as a significant cause. There is a 1.4-million-acre allotment in Nevada that has yet to be assessed.



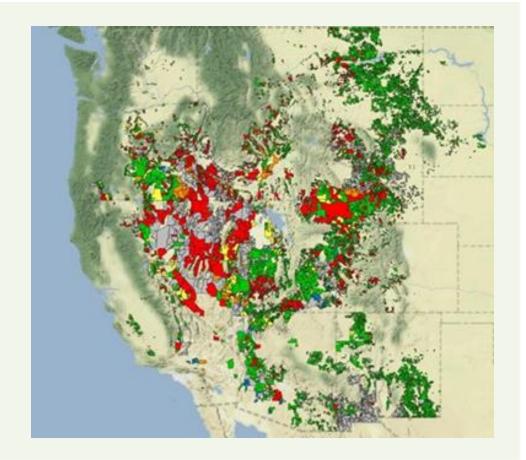


"Hey! Where's everybody going? / still have one or two empty stomachs."



Figure 1. Land Health of Total 151,000,000BLM Managed Grazing Allotments







**Figure 2.** Current Rangeland Health Standards Status as described in BLM allotment Land Health Assessment records, 1997 - 2019

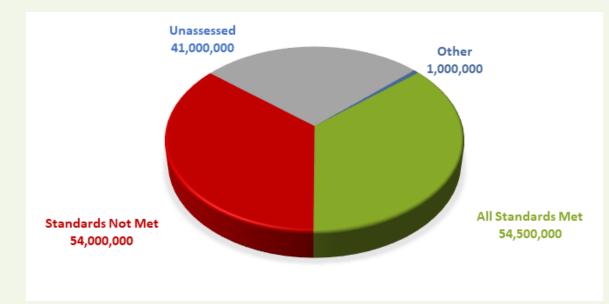


Table 1. BLM Allotment Land Health Status Determinations 1997 - 2019

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Status		Percentage of Public Land Acres		
BLM GIS layer X LHS tabular data from FOIA request	Public land acres (from FOIA dataset)	Percent of all allotments	Percent of all assessed allotments	Percent of allotments failing LHS standards
All Standards Met	54,553,776	36%	50%	
Not Met - Livestock	39,059,868	26%	36%	72%
Not Met – Cause not identified	4,509,463	3%	4%	8%
Not Met - Other	10,601,121	7%	10%	20%
Determination Not Complete	40,751,988	27%		
Other	1,435,245	1%		



Table 3. Current Rangeland Health Standards Status for all BLM allotments through 2019 (%)

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State	All Standards Met	Not Met - Livestock	Not Met – Cause Not Identified	Not Met - Other	Determination not Complete	Other	Total
Arizona	56%	8%	٥%	8%	22%	5%	100%
California	40%	32%	3%	7%	17%	2%	100%
Colorado	49%	33%	1%	9%	8%	0%	100%
Idaho	16%	40%	7%	9%	28%	0%	100%
Montana	80%	14%	2%	3%	1%	0%	100%
New Mexico	57%	1%	0%	0%	41%	0%	100%
Nevada	10%	36%	3%	8%	43%	0%	100%
Oregon	40%	23%	11%	8%	18%	0%	100%
Utah	54%	16%	0%	6%	21%	3%	100%
Wyoming	34%	36%	3%	8%	19%	0%	100%
TOTAL	36%	26%	3%	7%	27%	1%	100%





- BLM has a wild horse and burro control policy that is supposed to help maintain healthy lands. The agency regularly reduces the total number of horses on public lands to maintain the Appropriate Management Level (AML) in Herd Management Areas (HMA).
- In early October 2022, BLM stated in a National Wild Horse and Burro Advisory Board meeting that it rounded up a total of 20,851 wild horses and burros and permanently removed 19,011 animals from federal rangelands in fiscal 2022. This record number exceeds by far the previous record of 13,666 animals, which was set in 2021.





- In contrast, BLM does not have a similar national strategy to analyze the impacts of the massive livestock grazing program even though its data indicates that livestock is a problem for land health.
- Overall, in allotments including those within HMAs, BLM cites livestock as the number one cause of allotments failing LHS, <u>not horses</u>.



**Figure 7.** BLM Land Health Standards data reveal that livestock are by far the most frequently cited as the cause of failure to meet standards, for quality of water, vegetation, and soils, as well as the ability to support wildlife nationwide, including allotments within

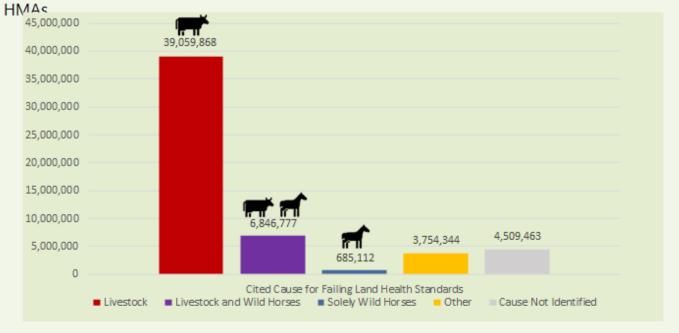




Table 6. Acreage breakout of land health standards status associated with wild horses and livestock as recorded by BLM field office

Description of breakout	Public Land (acres)
Total allotments meeting land health standards	54,517,295
Total allotments failing land health standards	54,170,452
Failing due to livestock	39,059,868
Failing due to causes other than livestock	10,601,121
	6,846,777
Failing due to livestock in conjunction with wild horses	
Failing solely due to wild horses (no reference to livestock)	685,112
Failing due to causes other than livestock or wild horses	3,754,344
Failing but cause not identified	4,509,463

Table 7. Horses and livestock as the sole causal factor for failing allotments						
Failing Due to Livestock and Horses	Allotments (n)	Allotments (%)	Public Lands (acres)	Public Lands (%)		
Not Met due to Livestock & Horses	56	86%	6,161,665	90%		
Not Met due solely to Horses	9	14%	685,112	10%		
Totals	65	100%	6,846,777	100%		



Table 8. Wild horses are identified as a cause of failure to achieve land health standards in 65 allotments containing roughly 7 million acres of public lands. Most lands failing standards that identify wild horses and burro as a cause are on Nevada.

State	Acres identified as failing due to horses, or horses and livestock	Public Lands (% of total)
California	546,456	8%
Colorado	32,905	0%
Idaho	93,367	1%
Montana	38,313	1%
Nevada	5,653,590	83%
Oregon	81,499	1%
Utah	371,792	5%
Wyoming	28,855	0%
TOTAL	6,846,777	100%
TOTAL		



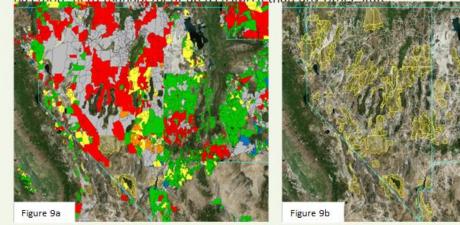


 While wild horses do have impacts on the land, coherent landscape and recovery planning require a hard look at the policy of continuing to permit millions of cows to forage on increasingly stressed rangelands.



#### Wild Horses in Nevada

In Nevada, 5,653,590 acres of public lands have been determined to be failing due to wild horses, though some of those allotments also have livestock as contributing factors. While this number is very high, it's actually an outlier in the country as Nevada has more herd management areas (HMAs) than any other state.



**Figure 9.** In the above map images of Nevada, taken from PEER's Interactive BLM Rangeland Health Geospatial Data Portal, the red sections of the map to the left (Figure



#### **Recommendations for BLM**

- Create a central BLM geodatabase containing rangeland health evaluation records. Combine and coordinate all the agency databases so that it puts all the data to work.
- Complete and update Land Health Standards evaluations. Many allotments have not been evaluated and many of the evaluations were completed ten years ago.
- Commit to utilizing the data to make land use decisions. If grazing has been determined to be a cause for failure, BLM can reduce livestock numbers or change the season of use. If the cause of failure is off-road vehicles, the agency can limit permitting. The data are not political.
- Use the data to look at broader regional trends and to identify field office outliers within those regions. For instance, there are field offices with usually low failure levels relative to others within an ecoregion. A notable example is the Utah's Fillmore Field Office, located in the Central Basin and Range ecoregion, has a much lower livestock failure rate than the rest of the ecoregion. It is revealed as a square block of green (meeting all standards) in a sea of red (failing to meet standards).
- Prioritize biodiversity, including the dwindling greater sage-grouse population. The agency should consider expediting data collection and compliance efforts for the allotments in sage grouse habitat.
- Reconsider the wild horse and burro program. Use the agency data to evaluate the impacts of horses on failing lands in comparison to livestock.



#### **Contact Information**

• Colleen Teubner, Staff Litigation and Policy Attorney, <a href="mailto:cteubner@peer.org">cteubner@peer.org</a>

www.peer.org

