



Public Employees for Environmental Responsibility

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March 17, 2016

NPS Washington Administrative Program Center
1849 C. Street, N.W. Stop 2605
Attention: Correspondence Control Unit (CCU)
1201 Eye Street NW
Washington, DC 20240

Email: Director@nps.gov

Re: Complaint About Information Quality: Grand Canyon Bison Technical Assistance Report (2015)

Dear Sir or Madam:

Public Employees for Environmental Responsibility (PEER) hereby submits this Information Quality Complaint pursuant to the Data Quality Act of 2000¹, the Office of Management and Budget (OMB) *Guidelines for Ensuring and Maximizing the Quality, Utility, and Integrity of Information disseminated by Federal Agencies*,² National Park Service (NPS) Director's Order #11B: Ensuring Quality of Information Disseminated by the National Park Service³ and the U.S. Department of Interior (DOI) Information Quality Guidelines.⁴

¹ Section 515 of the Fiscal Year 2001 Treasury and General Government Appropriations Act, Pub.L. 106-554

² Office of Mgmt. & Budget Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, 67 Fed. Reg. 8452 (Feb. 22, 2002).

³ [HTTP://WWW.NPS.GOV/POLICY/DORDERS/11B-FINAL.HTM](http://www.nps.gov/policy/dorders/11B-FINAL.HTM)

⁴ <http://www.doi.gov/ocio/guidelines/515Guides.pdf>

The challenged information is a report authored by an NPS employee, Glenn Plumb and entitled “Grand Canyon National Park Bison Technical Assistance Report” (hereinafter referred to the “Plumb Report”).⁵ Through this complaint, PEER seeks to have this report withdrawn from the public domain and the NPS forswear its use or reliance upon its conclusions in any official decision making process.

Background

In the early 1900s, a rancher named Charles Jesse Jones brought a herd of the animals to northern Arizona. He cross-bred these bison with cattle. After a few years, he abandoned the project, leaving some of the hybrid herd behind. The descendants of this herd, known alternatively as cattalo or beefalo, have lived in Arizona ever since.

In 1926, the State of Arizona bought the herd and allowed them to be hunted. Some of the animals were moved in 1950 to the House Rock Wildlife Area, but drought and hunting pressure drove them onto the Kaibab Plateau. Those animals now roam the plateau of the Kaibab National Forest, giving them access to Grand Canyon National Park. In recent years, that herd has increasingly sought refuge in Grand Canyon National Park to escape both the prospect of being hunted and to avoid human interaction.

That remnant herd is now marooned in Grand Canyon National Park and numbers between 600-800 animals. Because they are confined to a small place (approximately 40,000 acres) and do not migrate, the herd is damaging the soil, waters and flora of the Kaibab Plateau within the park boundaries. For example, of the 63 "special status" plants found in Arizona in 2000, 24 of them could be found on the Kaibab Plateau. Recent studies indicates that another seven species should be added to this list, and that all seven are endemic to the Kaibab Plateau or

⁵ Cited as Plumb, G.E. 2015. Grand Canyon Park Bison Technical Assistance Report, on file at NPS Biological Resources Division, Fort Collins, CO.

Grand Canyon, meaning that they grow nowhere else in the world. Unfortunately, the places many of these rare Kaibab plants need to survive – the most sensitive springs, meadows and ponds – are also the places being harmed by this hybrid herd.

These negative impacts also extend into the Grand Canyon itself. Springs below the rim create vital habitat for rare plants, and those areas have become damaged by the cattalo trampling and dewatering the main source of these vital seeps and springs. As they move around, the herd also carves multiple trails at many remote overlooks on the west side of the North Rim, creating unnatural erosion.

In accordance with the National Environmental Policy Act (NEPA), during the spring of 2014 the NPS initiated public scoping for an Environmental Impact Statement (EIS) to develop a long-term approach for managing the current and future impacts of this hybrid herd on the park's natural and cultural resources. At that time, NPS considered the herd to be non-native to the Grand Canyon.

In 2015 however, the Plumb Report came to the opposite conclusion, finding that these animals are native to the park. This finding changed the range of options available to NPS – as the agency may not extirpate native animals from national park units. As a result, NPS dropped plans for an EIS and instead announced that it would develop an Environmental Assessment (EA) with a preferred alternative of culling the herd back to a more manageable level but leaving a significant number of these animals in the park.

As outlined in this complaint, PEER contends that the Plumb Report 1) suffers from a lack of integrity, accuracy and reliability; 2) flies in the face of NPS Management Policies; and 3) lacks the transparency required of influential information relied upon as the basis of official decision making. As a result, this complaint seeks to have the Plumb Report retracted as an

official NPS document and its conclusions barred from official use until the information is corrected.⁶

A. DESCRIPTION OF CHALLENGED “INFLUENTIAL INFORMATION” THAT NPS RELIES UPON and “DISSEMINATES” TO THE PUBLIC

The challenged information is the byproduct of an inter-agency collaboration with participants from the NPS, U.S. Forest Service and Arizona Game & Fish Department. This report reaches the conclusion that “bison are wildlife native to the greater Grand Canyon region and should therefore be managed accordingly.”⁷

This document clearly meets the definition of “influential” information within the meaning of the DOI Information Quality Guidelines in that it “will or does have a clear and substantial impact on important public policies...”⁸

With respect to “influential” information, NPS is held to a higher, more rigorous standard, according to the DOI Information Quality Guidelines, of utilizing “the best available science and supporting studies conducted in accordance with sound and objective scientific practices, including peer-reviewed studies where available.”⁹

In addition, NPS has disseminated the information within the meaning of 5 CFR 1320.3(d) in that it has acted to “conduct or sponsor” the collection of information which comprises this report and it was provided to third parties. In this instance, the information has been provided to federal and state agencies outside the NPS, academics from Northern Arizona

⁶ These are the remedies stipulated in the DOI Information Quality Guidelines in Section III.

⁷ Plumb Report, p4.

⁸ See DOI Guidelines at VII, Subsection 9.

⁹ DOI Information Quality Guidelines at II 4.

University and a private consultant, the Louis Berger Group. In addition, it has been distributed to Grand Canyon stakeholder organizations and to other individuals following this issue.

Finally, the report is a public record within the meaning of the Freedom of Information Act.¹⁰ It is an official expression of the NPS which reflects its position on an important issue of public controversy.

B. THE CHALLENGED INFORMATION DOES NOT COMPLY WITH THE GUIDELINES BECAUSE IT DOES NOT REPRESENT THE INTEGRITY ACCURACY AND RELIABILITY REQUIRED BY NPS INFORMATION QUALITY GUIDELINES

1. The Challenged Information Is At Odds with Historic Data

a. The Herd Was Transplanted to Grand Canyon in a Commercial Scheme

To call the current catalo herd “native” wildlife flies in the face of the history of the herd which indisputably did not originate in, migrate to or have any connection, however, remote with Grand Canyon National Park.

b. The Challenged Glosses Over the Utter Lack of Evidence Supporting Its Conclusion

The Plumb Report cannot cite a single piece of evidence supporting the notion that bison were resident to northern Arizona. It admits there is “limited archaeological and historic evidence of wild bison in northern Arizona.”¹¹ It also acknowledges that the lack of archeological evidence of bison parts could be the result of trade among Native peoples rather than actual bison migration.¹²

¹⁰ 5 U.S.C. 552, as amended

¹¹ Plumb Report, p2

¹² Ibid

It further admits that the “limited discovery of historic bison artifacts and artwork or stories and knowledge” would indicate that any bison in the area “occurred infrequently and at very limited abundance.”¹³

Notwithstanding the complete lack of a supporting historic record, it reaches the opposite conclusion in an unambiguous fashion, as if that conclusion was predetermined regardless of the evidence.

c. The Challenged Information Misrepresents the Scientific Works It Cites

The two published scientific works that Plumb Report cites as the “best available science”¹⁴ either contradict or do not support the report conclusion:

- The Plumb Report cites Sanderson et al. (2008)¹⁵ as providing evidence that the Kaibab Plateau and northern Arizona are within the historical range of bison. The map the Plumb Report cites shows most of northern Arizona as being within the broadly-delineated and continental-scale ‘likely historic range’ (circa 1500). This map, however, is a modification of an earlier map from Hall and Kelson (1959) which altogether excludes Arizona. Sanderson, et al offers no stated rationale or supporting evidence for its inclusion.

An obvious reason for this lack of explanation was that the issue was not the focus of the paper. The Sanderson paper was about bison conservation, not the delineation of its historic range. It is thus quite likely that this map offered incidentally was not subjected to the scrutiny of the peer reviewers. However,

¹³ Ibid

¹⁴ Ibid, p3

¹⁵ Sanderson, E.W., K. Redford, B. Weber, K. Aune, D. Baldes, J. Berger, D. Carter, C. Curtin, J.N. Derr, S. Dobrott, et al. 2008. The ecological future of the North American bison: Conceiving long-term, large-scale conservation of wildlife. *Conservation Biology*, 22:252–266.

there is no published methodology or substantiating evidence for a map showing the Kaibab Plateau of northern Arizona within the historic range of the American bison.

- The other study the Plumb report cites (Gates et al. (2010))¹⁶ is even more inapt. That Bison Survey includes a map of the “original” (i.e. Holocene) range of bison based on two other sources. Their map excludes Arizona altogether and the text states that it is “not generally recognized as within the original range of plains bison.”¹⁷ Although the authors cite some contrary evidence of bison inhabiting portions of Arizona, this work – which the Plumb Report describes as the “best science” – reaches the opposite conclusion.¹⁸

In short, the Plumb Report is unable to cite any scientific evidence supporting its central finding that any portion of the Grand Canyon National Park or the Kaibab Plateau was ever part of the historic range of the plains bison, nor does it refute any of the opposite conclusions within the citations.

d. Unexplained Reversal of NPS Position

The Plumb Report mentions that the origins of this hybridized herd led “the NPS for a time to consider today’s descendants of those efforts as hybridized non-native animals.”¹⁹ The Plumb Report offers no citation for this earlier position, implying that it is a position wholly without evidentiary or scientific support.

¹⁶ Gates, C.C., C.H. Freese, P.J.P. Gogan, and M. Kotzma. 2010. American Bison: Status Survey and Conservation Guidelines 2010. Gland, Switzerland: IUCN.

¹⁷ Ibid, p. 7

¹⁸ The authors do present a map of bison conservation herds with the historical range superimposed but that is based on Sanderson et al. (2008). Ibid, p. 56

¹⁹ Plumb Report, p.4

By failing to explain this position officially long-held within NPS and still supported by many NPS and DOI scientists, the Plumb Report lacks the requisite completeness and reliability to comply with Information Quality Act standards.

e. Density Analysis Is Flawed

In little more than two pages, the Plumb Report reaches the conclusion that the park can sustainably manage a cattalo herd of between 80 and 400 animals.²⁰ That analysis –

- Lacks any data about population-specific demographic parameters such as birth, death, immigration, and emigration rates. It is unclear how any reliable Population Viability Analysis could be developed absent such data. Moreover, it is not clear whether the Plumb Report authors or the NPS possess such data about the Grand Canyon herd;
- Absent such data, makes unsupported comparison between the cattalo here and the wild horses of Assateague Island National Seashore. There is no stated scientific basis for such a comparison, let alone any articulated consideration of the vastly different ecosystems of high-elevation meadows and forests versus sea-level barrier islands;
- In an even more attenuated attempt at analysis, draws inferences to population dynamics of other “dominant, large ungulate species” without any explanation for why the population dynamics of camels, zebras and even hippopotami are relevant;
- Is missing any reference to current or planned hunting levels, without which it is difficult to develop a reliable assessment of viable population levels; and

²⁰ Ibid, ps.6-8

- Uses the entire landscape size (approximately 110,000 acres) as the divisor in its recommended bison-per-acre ration versus the (much smaller) area of suitable or occupied habitat (approximately 15,000 acres), as would typically be the case. Using the larger landscape size results in smaller density levels, which may be inaccurate and misleading as to the actual dynamics on the ground if the animals in fact are occupying a much smaller area. Nor does the Report disclose whether this same methodology was used to calculate densities of the other populations cited.

In addition to these methodologic flaws and gaps, the Plum Report contains no information about herd damage to sensitive and rare flora or to impacted sources of water. Such information would be highly relevant in determining what would be a “viable” population in this setting.

In short, the Report’s recommended “Bison Abundance” appears to be little more than a back-of-the-envelope estimate that fits the author’s pre-decided conclusion rather than the credible scientific analysis it purports to be.

C. THE INFORMATION IS NOT COMPLAINT WITH NPS POLICY CRITERIA AS REQUIRED NPS INFORMATION QUALITY GUIDELINES

The challenged report does not conform to the provisions of the NPS Management Policies regarding management of exotic species.²¹

It is undisputed that this herd was intentionally brought to northern Arizona by humans as part of a commercial enterprise. The NPS Management Policies define “exotic species” as “those

²¹ See NPS Management Policy 4.4.4.1

species that occupy or could occupy park lands directly or indirectly as the result of deliberate or accidental human activities.”²²

Those policies further provide that:

“All exotic plant and animal species that are not maintained to meet an identified park purpose will be managed—up to and including eradication—if (1) control is prudent and feasible, and (2) the exotic species

- interferes with natural processes and the perpetuation of natural features...or natural habitats, or...
- significantly hampers the management of park or adjacent lands...”²³

This policy reads as if it was written with this hybridized exotic herd in mind.

Moreover, the Plumb Report appears to be premised on the completely inaccurate concept that an exotic species can become a native species over time. That is not the case and certainly not over such a short time scale from their introduction in 1906 to present day.

Although, the NPS Management Policies do not explicitly distinguish between migrant or transient species versus resident native species, they do state that “Native species in a place are evolving in concert with each other.”²⁴

The Plumb Report contains no information about whether bison historically occurred in sufficient numbers or with sufficient frequency to “evolve in concert with” the native flora and fauna. Moreover as noted earlier, the Plumb Report’s admission of the very, very scant historical or cultural references of any kind to bison in northern Arizona, it is extremely doubtful that such evidence of co-evolution exists.

²² NPS Management Policy 4.4.1.3

²³ NPS Management Policy 4.4.4.2

²⁴ NPS Management Policy 4.4.1.3

In fact, the mounting data on deleterious impacts from this hybrid herd on both natural and cultural resources within Grand Canyon National Park would argue strongly any notion that these large animals and the park's native fauna and flora ever evolved in concert.

Finally, there is no indication that NPS Management Policies were waived or set aside to accommodate the work that led to the publication of this report. As a result, those policies remain in force. Consequently, the Plumb Report embraces premises and conclusions that violate the clear directives of NPS Management Policies and should be rescinded.

D. THE CHALLENGED REPORT WAS DEVELOPED WITHOUT THE REQUISITE TRANSPARENCY REQUIRED OF INFLUENTIAL INFORMATION

As detailed above, the Plumb Report should be considered “influential information” which the DOI Information Quality Guidelines stipulate “will be produced with a high degree of transparency about data and methods.”²⁵

Such transparency is lacking in the Plumb Report. It contains no detail about its methods, except to note that it was the result of a series of “four one-hour conference calls.”

The report states “the team would seek consensus” in reaching conclusions and repeats that the report itself was a “consensus” product.²⁶ Despite promising to “note dissent where appropriate” there is no note of dissent.

Thus, the development of the report's conclusions – which depart 180 degrees from the positions previously held by NPS – is presented as a black box, utterly opaque to independent review. As such, it is the antithesis of the high degree of transparency needed to ensure public confidence in the integrity and accuracy of information shaping public policy. This transparency is also a safeguard against political influence over technical and scientific reports. It is intended

²⁵ DOI Information Quality Guidelines Section II

²⁶ Plumb Report, p.2

to deter officials from reaching predetermined conclusions which are politically convenient but not supported by a record of evidence which may be publicly scrutinized and questioned.

E. PEER IS AFFECTED BY THE INFORMATION ERROR

PEER is a non-profit organization chartered in the District of Columbia with the mission to hold government agencies accountable for enforcing environmental laws, maintaining scientific integrity, and upholding professional ethics in the workplace. PEER is an “affected person” in that PEER 1) has been an active participant in wildlife management issues confronting Grand Canyon National Park, as well as other units of the National Park System; 2) PEER is the principal watchdog organization tracking NPS compliance with its own Management Policy, as well as statutes and rules designed to ensure scientific quality of NPS technical work, including compliance with the requirements of the Information Quality Act; and 3) on behalf of PEER members who are current and former NPS employees, PEER has a vital interest in ensuring that NPS comply with applicable laws, regulations and its own policies.

F. RECOMMENDATIONS FOR CORRECTION OF THE INFORMATION CHALLENGED BY THIS COMPLAINT

Accordingly, PEER respectfully requests NPS take the following steps to comply with the Information Quality Act:

1. Retract or rescind the Plumb Report from official files and cease any further reliance upon it.
2. Issue a public statement, posted on official websites, that the Plumb Report has been rescinded and withdrawn from further official consideration due to violations of the Information Quality Act.

3. Undertake a new externally peer-reviewed assessment on the nativity of the hybridized bison herd in Grand Canyon National Park. Until that study is completed, the NPS should stop preparation of an EA or any other NEPA evaluation premised on this herd being native wildlife.

CONCLUSION

Based on the foregoing information, PEER respectfully requests that the NPS rescind or remove the Plumb Report from official publication and cease further distribution and correct its online and printed information on this matter.

Since the challenged document is “influential” information, we urge NPS reviewers of this complaint to employ the more rigorous standard of review called for in the DOI guidelines. Regardless of the review standard employed, however, PEER does not believe that this challenged report exhibits the qualities of integrity, reliability and accuracy required by the Data Quality Act as implemented by the NPS and DOI Guidelines.

Pursuant to the NPS Guidelines, I look forward to your response to this Complaint within 60 days. Thank you in advance for your prompt attention to this matter.

Sincerely,

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