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September 8, 2014

Superintendent Daniel Wenk Attn: Bison Quarantine EA Yellowstone National Park PO Box 168 Yellowstone National Park, WY 82190

Buffalo Field Campaign Scoping Comments Yellowstone Bison Quarantine Plan EA

Dear Superintendent Daniel Wenk,

Thank you for considering our scoping comments on Yellowstone National Park's proposal to establish one or more operational quarantines for migratory buffalo.

Buffalo Field Campaign was founded in 1997 to protect the natural habitat of wild migratory buffalo and native wildlife, to stop the slaughter and harassment of America's last wild buffalo as well as to advocate for their lasting protection, and to work with people of all Nations to honor the sacredness of wild buffalo.

Buffalo Field Campaign is located in West Yellowstone, Gallatin County, Montana, and is supported by volunteers and citizens in Montana, Idaho and Wyoming, and by people from around the world who value America's native wildlife and the ecosystems upon which they depend, and enjoy the natural wonders of our irreplaceable public lands.

As an organization and on behalf of our members, Buffalo Field Campaign is deeply concerned and actively involved in protecting the last remaining descendants of indigenous buffalo in North America to occupy their original range. Buffalo Field Campaign publicizes the plight of wild buffalo, works to end their slaughter by government agencies, and advocates for the long-term protection of viable populations of buffalo and year-round habitat. Buffalo Field Campaign actively engages the American public to honor and protect our cultural heritage by allowing wild buffalo to exist as an indigenous wildlife species fulfilling their ecological role on their native landscape. Buffalo Field Campaign volunteers patrol habitat where buffalo migrate in Montana, Wyoming and Idaho. These direct experiences with buffalo on their native habitats inform our actions and strengthen our commitment to gaining permanent protections for America's last wild buffalo.

Buffalo Field Campaign requests Yellowstone National Park undertake an Environmental Impact Statement for its proposal to quarantine migratory buffalo.

A public controversy exists concerning potential environmental effects on the integrity of migratory buffalo and the ecosystem they inhabit through the Park's proposal to take buffalo from the population and Yellowstone National Park.

Buffalo Field Campaign contests the Park's quarantine assumption that a "surplus" of migratory buffalo exists. The buffalo are more than a total population number or size: the wild species is a herd animal with a complex family structure based on maternal lines, group and herd affinity, and extended social ties. The buffalo of Yellowstone National Park are distinguished as the only population that has continuously inhabited the ecosystem for thousands of years. As an indigenous migratory species, the buffalo carries the spirit of freedom in America. The Park's proposal to quarantine buffalo is in conflict with these broadly held public values.

The buffalo population in Yellowstone National Park shows evidence of subpopulation structure (Halbert et al., 2012, 1-11; Gardipee et al., 2008, 14-24) including different tooth wear patterns (Christianson et al., 2005, 674) and diet, parturition timing and synchrony (Gogan et

al., 2005, 1717-27), longitudinal differences in migration patterns, spatial separation (Olexa and Gogan 2007, 1531) and fidelity to rutting and calving grounds.

For the Park to simply make a determination that buffalo exceed a politically derived population target and a "surplus" exists for quarantine is arbitrary and capricious and not supported by the best available science.

The Park must evaluate and disclose the cumulative effects of management actions that take or permanently remove buffalo from the population and the ecosystem.

* Analyze and disclose impacts of combined take on the buffalo population, subpopulations, family groups and maternal lines.

Yellowstone National Park has also been misusing Congressional authority to get rid of "surplus buffalo." The United States Congress (1923) never intended that "wild" buffalo be declared surplus:

"The "tame" herd of buffalo in Yellowstone National Park was established under authority contained in the act of July 1, 1902 (32 Stat. 574), with an appropriation of \$15,000 for the purpose. Twenty-one animals were purchased in the fall of that year, and these have multiplied until now the herd contains 578. It is estimated that the "wild" herd, a remnant of the vast hordes that once roamed this region, numbers from 125 to 150, but it has no place in the present discussion." (46)

Yellowstone National Park needs to stop abusing the intent and purpose of what Congress had intended and acknowledge that "surplus buffalo" is an artifact of captive, introduced buffalo on the Lamar Buffalo Ranch, which by design could only hold so many captive or "tame" buffalo.

* Evaluate and disclose the intent and purpose of the United States Congress in enacting 16 U.S.C. § 36.

* Evaluate the context provided by the United States Congress in distinguishing "wild" from "tame" buffalo and how the Park intends to treat this Congressional distinction in assigning buffalo to quarantine.

The so-called "surplus" is also an artifact of the Park's management participation in the Interagency Bison Management Plan (IBMP).

Through hazing or harassment from habitat and capturing in traps, the plan severely limits the distribution and migration of buffalo in Yellowstone National Park, on our National Forests and on private lands where buffalo are welcome.

As a consequence of limiting natural migrations of buffalo, the IBMP imposes a population target without regard for subpopulation distinction and differentiation that could impact adaptability and fitness. Thus, elements of the IBMP, which the Park created and has agreed to, produce the artificial conditions that lead management to declare a "surplus" for shipping buffalo to slaughter, quarantine, population control experiments, etc.

Quarantine is likely to become a permanent component of the Park's management decisions. As such, the Park's proposed action constitutes an irretrievable commitment of taxpayer money and resources for the foreseeable future.

* Disclose and evaluate permanent impacts and any mitigation measures the Park intends to implement. Include in the Park's analysis cumulative ecological, economic, and visitor experience impacts.

For the past 15 years, government fiscal transparency for IBMP management actions has been woefully inadequate.

The Park needs to disclose in its analysis the source(s) of taxpayer money and the long-term costs of quarantining buffalo.

The public should not have to guess where public taxpayer money is being appropriated and spent on the IBMP. Even the United States Government Accountability Office (2008, 26) could only arrive at an

estimate. For 2007, the last fiscal year reporting, estimated annual costs to implement the IBMP were \$2,927,500.

* Conduct a look back for all agencies to evaluate and disclose the combined funding and spending costs on the IBMP since 2000.

If other agencies are not cooperative in taxpayer transparency, conduct a look back at YNP's funding sources and evaluate how money was spent and allocated for each significant program. What outcomes and benefits were achieved for the buffalo, the Park's resources and values?

- * Disclose how the Park's proposal to quarantine buffalo diminishes and harms the public trust. Disclose how the Park's fiduciary responsibilities to the public trust are impacted.
- * Evaluate and compare the costs of quarantining buffalo with other management actions that provide habitat for migratory buffalo:
 - Dismantling the Stephens Creek buffalo trap and associated facilities.
 - Dismantling the Corwin Springs buffalo trap and facilities.
 - Dismantling the Slip N Slide buffalo trap and associated facilities.
 - Eliminating government hazing or harassment operations that dislocate buffalo from habitat.
 - Eliminating the government zone management scheme.

The precedent of the Park permanently removing wild migratory buffalo to captivity in one or more operational quarantines is highly controversial.

The Park's proposed action also establishes a precedent for future actions with significant effects on migratory buffalo and the ecosystem they inhabit.

In summary, the Park's quarantine proposal constitutes a major Federal action requiring the preparation of a detailed study of the impacts and alternatives so that the buffalo, and natural resources and values of the Park, will not be impaired for future generations.

Given the uncertainty of how quarantine will impact migratory buffalo, Buffalo Field Campaign requests Yellowstone National Park fund an independent buffalo population viability analysis to determine long-term sustainability.

Population viability was identified as a high priority in the IBMP FEIS (2000, 731). A viability study is long past due given the Park's continuing actions that have disparately impacted the population including capturing buffalo for slaughter without regard for origin, permitting the take of buffalo for birth control experiments, taking calve cohorts to quarantine while slaughtering the extended family groups, and other actions that take buffalo from the population and habitat in Yellowstone National Park.

While the Park has funded an initial genetic modeling study (Pérez-Figueroa et al., 2012, 159-166) buffalo genetic diversity is one of many attributes that needs to be protected for future generations.

Buffalo Field Campaign is also concerned about the biological integrity and adaptability of migratory buffalo in the face of the inability of the government to adapt the best available science, and other long-term threats like climate change.

Complicating matters is the intransigence of the state of Montana in providing year-round habitat for the migratory wildlife population to persist into the future. But much of Montana's intransigence is an artifact of MCA 81-2-120, a law subject to change by legislative or popular amendment or repeal at the ballot box. What appears fixed today is subject to the will of the people and new leadership to enact change.

Mounting fiscal deficits will surely result in the curtailment and or loss of funding from USDA APHIS to the Montana Dept. of Livestock to carryout its management actions against migratory buffalo in the state. The Park should change course and avoid subordinating its own mandate to preserve the natural wonders and wildlife for future

generations to a dubious law (MCA 81-2-120) and uncertain flow of taxpayer dollars to support its proposals.

Before proceeding with its quarantine proposal, Buffalo Field Campaign requests the Park fund a population viability study by independent scientists not affiliated with the National Park Service.

If the Park proceeds with operational quarantine, the question of buffalo viability, adaptability and diversity warrant a hard look by independent scientists.

It is also important for the Park to evaluate Pérez-Figueroa (2012) based on the limitations and qualifications identified by the authors including the lack of actual empirical data to determine retention of genetic diversity and thus ensure buffalo population viability:

- Base population of 2000 bison.
- Yellowstone bison is one deme (an interbreeding group within a larger population).
- "Little is known about male reproductive success in bison."
- DNA-based paternity analysis was not used.
- "Selection and mutation were not included in the model."
- "... actual levels of AD could be even higher than those obtained in our simulations..." (Mutation was not considered; selection could enhance genetic diversity in isolated ungulate populations).
- "Culling was random among all age classes or random within the age groups culled . . ."
- "Culling was conducted whenever population size exceeded a threshold value (4500 or 3500 depending on the scenario)."
- "Individuals were culled until the target population size (2500 or 3000) was reached."
- "We did not consider high variance in female reproductive success or heritability of fitness, both of which could increase the rate of loss of variation (heterozygosity) by perhaps 10-20% (Ryman et al., 1981)." (159-165)

Buffalo Field Campaign requests Yellowstone National Park undertake an impairment review and disclose in its analysis whether operational quarantine or consigning migratory buffalo to quarantine constitutes an impairment of natural resources and values.

The nature, duration, magnitude and scope of potential impacts of quarantine on the integrity of migratory buffalo and the ecosystem they inhabit warrant an investigation and determination of impairment in the Park's analysis and public process.

While the Park has focused much of its taxpayer-financed actions on "disease risk management" it has neglected studying and educating visitors about the keystone ecological roles of migratory buffalo to the detriment of the Park's resources and values.

A brief review of scientific research identified in the IBMP FEIS (2000, Appendix D) finds over fifty disease-related study needs and not one study on the keystone contributions of buffalo in sustaining the ecosystem. The Park's one-sided and singular focus on disease has neglected important ecological work on how buffalo beneficially influence diversity and the ecosystem.

In addition, the Park's monocular focus on "disease" has also misled the public and aided news reporting that too often defines buffalo solely as a livestock disease threat. It's time for the Park to make up for its bias by placing as much scientific emphasis and public education on the ecology of buffalo and the life diversity the migratory species provides for grassland ecosystems.

Buffalo Field Campaign requests Yellowstone National Park take a hard look and disclose in its analysis potential harms to quarantined buffalo from diseases that could spread through the population as a result of confining buffalo to quarantine, and fires.

* Evaluate and disclose the susceptibility of buffalo to diseases that could spread from buffalo confined to quarantine, to other buffalo in

quarantine, and to the buffalo population roaming their natural habitat.

* Review the literature and recorded incidents of outbreaks of disease that have impacted the buffalo in Yellowstone National Park. Was confinement of buffalo a factor, a vector, or a potential threat of disease to buffalo in the ecosystem?

Meagher (1973, 70) noted "outbreaks of hemorrhagic septicemia in 1912, 1919, and 1922 caused considerable mortality in the introduced herd in Lamar Valley."

Tessaro (1989, 419) also found hemorrhagic septicemia killed 22 of 171 bison in 1911 and subsequently impacted the herd again in 1922.

- * Evaluate and disclose potential adverse consequences from quarantining buffalo including disease transmission that could lead to mortalities or harm to buffalo and the population.
- * Describe what if any mitigation measures the Park proposes to be implemented in the event of disease outbreaks stemming form quarantine that could harm buffalo, whether confined or naturally roaming their habitat.
- * Review potential adverse consequences for quarantining buffalo including being more susceptible to biting insects and not being able to seek relief by dispersing.

The Fort Peck tribe reported a fire swept through its electrified fence pastures and killed ten quarantined buffalo (*Indian Country Today Media Network*. 25, Sept. 2012).

- * Evaluate and disclose the Park's contingencies for evacuating buffalo from quarantine in the event of fires.
- * Review the adverse behavioral changes buffalo learn in confinement.

Buffalo Field Campaign questions the purpose of Yellowstone National Park's proposal to set up one or more

quarantine facilities for a wild migratory species, the buffalo.

The Park's prior actions to permit the take of migratory buffalo for a quarantine feasibility study (Yellowstone National Park 2006) also had a similar purpose to this proposal "to establish or augment tribal and public populations of plains bison to assist the conservation of the species as wildlife." However, an objective review finds that the buffalo removed from the Park have not conserved the species as wildlife. Instead, the Park has facilitated the exploitation of a wild species for commercial benefit and not conservation.

Buffalo Field Campaign also questions why the Park is proposing to replicate past failures to conserve the wild species. The conservation status of bison as a wildlife species is not going to be advanced by establishing more "controlled" fenced herds in isolated populations not subject to natural predators or permitted to migrate and establish home ranges. This failed management strategy has not restored the wild species, and Buffalo Field Campaign questions the purpose of replicating this costly management scheme again.

Buffalo Field Campaign requests the Park review and disclose why the purpose and need of its proposal cannot be met using the buffalo cohorts already removed from the Park but remaining in the public trust.

There are two sources of quarantined buffalo descended and taken from the Yellowstone population that could meet the Park's stated purpose and need. These sources of quarantined buffalo present a reasonable alternative to the Park's proposal to permanently quarantine buffalo by continually removing them from the wild and reducing a migratory animal to captivity for the rest of their lives. We believe this reasonable alternative is the environmentally preferred route that also avoids the continuing taxpayer costs of a permanent Park program for quarantining buffalo.

The Park also needs to inform the public in its analysis what has happened to the buffalo it permitted to be taken for quarantine (YNP 2006) and be allowed to examine the track record already

established. The public deserves a full objective accounting of how these buffalo are managed both now and for the foreseeable future.

* Include in the Park's analysis disclosure of acreages available, management techniques, whether buffalo are tagged, micro-chipped, vaccinated, culled or removed or taken and how. Include current and future plans for the buffalo and whether the cohorts will remain confined behind fences. Describe the legal classification of the buffalo consigned to quarantine. Disclose adverse consequences observed from sending all-calf buffalo cohorts to quarantine.

The public expects a detailed review and analysis of what has become of the buffalo taken for quarantine so the public can be informed of the consequences of the Park's proposed action.

Here is a brief summary of what we know about the Park's role (YNP 2006) in quarantining buffalo and the outcomes achieved.

By the end of 2014 the majority of quarantined buffalo offspring on Ted Turner's Green Ranch will become the private property of Turner Enterprises Inc. (Montana Fish, Wildlife & Parks et al., 2010). The buffalo no longer belong in the public trust. As property, the buffalo will no longer be public or tribal wildlife for future generations but private, domestic livestock in perpetuity. The buffalo on the Green Ranch are ear-tagged, rotated through fenced pastures and subject to annual round-ups for testing.

The state of Montana has made no commitment or required that the remaining quarantined public trust buffalo on the Green Ranch be conserved as wildlife. Instead, Montana Fish, Wildlife & Parks (2014, 2) has stated its "desire" that requests for these buffalo "contribute to the long-term conservation of bison in North America" but "will ultimately consider all feasible options as necessary."

The buffalo transferred to the Fort Peck Reservation and Fort Belknap Reservation remain in a domesticated state per the quarantine and political requirements imposed upon the tribes (Montana Fish, Wildlife & Parks and the Assiniboine and Sioux Tribes of the Fort Peck Reservation 2012). The cohort has limited range (currently 2,322 acres and 10,788 acres total), is ear-tagged,

and subject to confinement behind electrified fences. A wildfire led to the fatality of ten of the quarantined buffalo (*Indian Country Today Media Network*. 25, Sept. 2012).

Confinement is not a natural state for a migratory species like the buffalo. Destroying the families as the Park did, and sending only calves to quarantine has had adverse consequences for the surviving members:

"Tribes have observed uncharacteristic behaviors among the first QFS bison . . . and were again required to break up the family structure when bison were moved to Fort Belknap . . . Bison have a tendency to follow the biggest bull in the herd, despite the fact that they would typically follow one of the lead females." (Fort Peck Assiniboine and Sioux Tribes 2014)

While an outcome of quarantining buffalo might help meet some of the nutritional needs of some American Indian Tribes who participate, stating this as a purpose of the Park's proposal reduces the migratory buffalo of Yellowstone National Park to a mere commodity. In an attempt to influence public opinion to go along with the Park's proposal to quarantine migratory buffalo, the Park is misleading the public by making this claim a purpose of its proposed action.

The entire buffalo population of Yellowstone National Park could be removed for quarantine to supply food and still not meet the nutritional needs of tribal members who suffer disproportionately from health diseases. Let us be clear: the campaign does not stand in the way of meeting people's nutritional needs; for the Park to state this as a purpose of removing migratory buffalo to quarantine is deceptive and manipulative. How could a person possibly object to meeting people's nutritional needs?

Quarantine is domestication; we know of no migratory buffalo that have been freed from this unnatural state of captivity.

According to public statements made by a Park official (*Reuters*. 30 July 2014), the buffalo confined to quarantine will remain "controlled" herds.

* Please disclose the Park's intent and management requirements for "controlling" the herd. Analyze and disclose to the public how "controlled" buffalo herds serve the conservation purpose that the Park claims.

While the Park claims a conservation purpose in removing migratory buffalo for quarantine, *Char-Koosta News* (14 Aug. 2014) reports plans by the Confederated Salish-Kootenai Tribes that are clearly commercial in nature:

"... construct a terminal facility for bison from Yellowstone National Park" to hold and slaughter up to 200 bison annually. The CSKT is also evaluating combining the slaughter facility with quarantine where "... brucellosis free bison would be sold." Another option would "... start an on-reservation genetically pure strain herd program of 150 bison cows ... and acquire the brucellosis free bison from YNP, or Ted Turner's ranch." The latter option projects net profits of \$434,700 after 15 years. CSKT's evaluation identified competition from domestic bison operations as a weakness.

Buffalo Field Campaign concludes our scoping comments with the words of our late co-founder who foresaw that some tribal organizations would seek the migratory buffalo as a commercial commodity through the Park's manipulative plans and proposals:

"Traditional people must guide our tribal leadership in a manner that reflects the integrity of our historical and cultural relationship with our relative, the buffalo. Montana politics has made a mockery of a keystone species. The capitalist culture has commodified the buffalo for shameless profit. The slaughter of the buffalo is not about a disease, really. It is about a commodity and profiting from that commodity. We, as a species, must take into account how our beliefs and actions are affecting the future of all species. We must make every effort to acknowledge the need for a care-taking culture that respects and honors the role of a sacred species." Rosalie Little Thunder, An Open Letter to Tribal Leaders and the American People, April 29, 2014.

Sincerely,

Daniel Brister, Executive Director

Buffalo Field Campaign

Daniel Brute

The following bibliography is incorporated by reference and all documents are provided on CD to assist Yellowstone National Park in disclosing additional new information and science as submitted in our scoping comments for further evaluation and public review.

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