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May 10, 2016

Sally Jewell, Secretary U.S. Department of the Interior
Daniel Ashe, Director, U.S. Fish and Wildlife Service
Public Comments Processing
Division of Policy, Performance, and Management Programs
U.S. Fish and Wildlife Service
MS: BPHC
5275 Leesburg Pike
Falls Church, VA 22041-3803

Re: FWS-R6-ES-2016-0042; Greater Yellowstone Ecosystem Grizzly Bears

Dear Secretary Jewell and Director Ashe:

We submit Buffalo Field Campaign's comments to express our strong opposition to the proposal by the U.S. Fish and Wildlife Service (FWS) to remove the grizzly bears (*Ursus arctos horribilis*) living in the Greater Yellowstone Ecosystem (GYE) from protection as a threatened species under the Endangered Species Act.

Buffalo Field Campaign was founded in 1997 to stop the slaughter of Yellowstone's wild buffalo herds, protect the natural habitat of wild free-roaming buffalo and native wildlife, 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 across the country and 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 indigenous buffalo in North America to occupy their original range. Buffalo Field Campaign publicizes the plight of the buffalo, works to end their slaughter and abuse by government agencies, and advocates for the long-term protection of viable populations of wild buffalo and other native wildlife species and their 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 within the Yellowstone and Madison River drainages. These direct experiences with buffalo on their native habitat inform our actions and strengthen our commitment to gaining permanent protections for America's last wild buffalo.

Grizzly bears and wild, migratory bison share the Yellowstone landscape, which is a mere fraction of both species' historic range, both having been extirpated from most of their original habitat in the contiguous United States. Current bison management actions that occur along the northern and western boundaries of Yellowstone National Park, where bison migrate into the state of Montana, have direct and negative impacts on grizzly bear behavior and nutritional needs.

Bison are an important food source for grizzly bears (Gunther, Haroldson, 1997), particularly winter-killed bison, which help sustain grizzly bears in the spring, after denning. Grizzly bears obtain nearly a quarter of all ungulate meat from bison (Mattson, 1997). Bison flesh is becoming increasingly important to grizzly bears due to the sharp decline of Yellowstone cutthroat trout and whitebark pine, as well as the unknown long-term availability of army cutworm moths (Yellowstone Science, 2015).

The Interagency Bison Management Plan as well as the new bison management plan being developed by Yellowstone National Park and the state of Montana, aims to significantly reduce the country's only wild, migratory bison population and maintain a politically-driven population cap of 3,000 animals, which means fewer bison will be available to grizzly bears. Additionally, the seasonal bison management actions of hazing, capture-for-slaughter, capture-for-quarantine and research, as well as the excessive harvest of bison, poses serious disturbances to the ecosystem and also removes this important, high-quality grizzly bear food source from the landscape in Yellowstone National Park as well as the southwest Montana portion of the Greater Yellowstone Ecosystem. Until wild bison are recovered and restored in the GYE, grizzly bears will be negatively impacted by politically-driven bison management decisions, which directly affect grizzly bear health and recovery.

Buffalo Field Campaign stands in solidarity with grizzly bear advocates, including the grizzly bear expert and author Doug Peacock; Dr. Jane Goodall, The Jane Goodall Institute; David Mattson, Wyoming Wildlife Advocates; Louisa Willcox, founder of Grizzly Times, and the Native American Hey Bear ~ GOAL Tribal Coalition. We incorporate their language and positions against grizzly bear delisting as our own.

OVERVIEW AGAINST DELISTING

- The government's promise to remove all current federal protections for grizzlies constitutes the greatest threat to the bears stranded in the Yellowstone ecosystem. (Doug Peacock, 2015)
Yellowstone grizzlies are currently facing two great threats to their survival: global warming, which has already decimated the most important grizzly food in Yellowstone; and delisting, with the attendant plans to open up trophy hunting in Montana, Idaho, and Wyoming. (Peacock, 2016)
- At the time that Lewis and Clark dragged their keelboats up the Missouri River, some 50,000-to-100,000 grizzly bears roamed the West from the Arctic Sea to the Sierra Madre Mountains of Mexico. Today, as few as 1,500 grizzly bears survive south of Canada, most of them in or around Glacier and Yellowstone national parks. The Yellowstone population [estimated at fewer than 700 individuals] is isolated to an island ecosystem cut off geographically and genetically from bears along the Canadian border. (Peacock, 2016)
- The decision to remove federal protections from Yellowstone grizzly bears is required by law to be based on "the best available science." Nonetheless, tremendous controversy remains concerning the wisdom of delisting Yellowstone's great bear. Considerable debate rages among independent scientists and conservationists about what constitutes the best science, and how the federal government has interpreted that science. (Peacock, 2016)

- To compensate for the loss of critical foods, or decline in carrying capacity, due to warming temperatures, any given grizzly population in Yellowstone will need to increase its range and be allowed to naturally recolonize its historic range... Island ecosystems of grizzly bears are doomed by isolation, so linkages are essential for long-term survival. (Peacock, 2014)

DELISTING WILL RESULT IN TROPHY HUNTING BY STATES WHO SHOW NO RESTRAINT

- The only certain outcome of delisting the Yellowstone grizzly bears is that it will result in trophy hunting. With delisting, the federal government will turn over grizzly management decisions outside of the park's boundaries to three states that will show no restraint in killing grizzlies. (Peacock, 2016) The Service has fiercely maintained that even if problems arise [under state management], it will not relist the population. Despite some laudatory language about co-existence with grizzly bears, the state grizzly bear management plans lack any binding commitments to do anything other than hunt bears. (Willcox, 2016)
- One of the biggest problems is the lack of regulatory controls on grizzly bear mortality once delisting has occurred. With the lowest reproductive rate of any mammal in North America, grizzly bears cannot sustain many deaths, especially among adults. Most grizzlies die because people kill them, so controlling the rates at which we kill these animals is crucial. In fact, the ESA has been vital to reducing rates of human-caused grizzly bear mortality. (Willcox, 2016)
- The growth of the grizzly population has leveled off; the current population estimate is down six percent from 2014. Mortality from all causes, as reported by the government, was 59 grizzlies in 2015. Reported mortality is about half of actual dead bears—an accepted rule of thumb. Start adding in the bears that will be shot in the trophy hunt and you could easily approach 200 dead grizzlies in a single year. Even a population of 700 grizzly bears would be doomed to extinction by such heavy mortality. (Peacock, 2016)
- The states of Montana, Idaho, and especially Wyoming exert huge pressures on the FWS to delist Yellowstone's grizzlies. Once delisted, the states will immediately sell trophy grizzly hunting permits for substantial amounts of money. (Peacock, 2014) Exactly how many hunting permits will be offered and how successful those hunts will be is unknown, but it is clear that an atmosphere will be created throughout the greater Yellowstone ecosystem where it is very easy to kill a grizzly—for any reason. Grizzlies have one of the lowest reproductive rates of any land mammal; once the number of bear deaths outstrip the number of cubs born, the Yellowstone grizzly is on the road to extinction. (Peacock, 2015)
- Even though the states may be somewhat cautious during the first five years of federal oversight that follows delisting, there is every reason to believe that, over time, state management will reverse the gains made over the last 40 years of endangered species protections. This is especially likely given the crisis that Yellowstone grizzly bears are facing now. During the past decade we have seen mounting numbers of grizzly bear deaths related to the collapse of important foods and rising conflicts organized around bears compensating by seeking more meat, especially from cows and the remains of hunter-killed elk. Indeed, this has been a record-breaking year for bear deaths, with 59 grizzly bears known to be dead, and another 30+ more that we don't know about, but which the government estimates probably are dead. This totals over 90 bears, or more than 12% of the population. And this with the

federal safety net of ESA protection. (Willcox, 2016)

- The ESA represents the conscience of the broader public when it comes to grizzly bears and other imperiled species. By contrast, our state wildlife management agencies in the Northern Rockies represent the views of a politically influential minority whose interests focus on extractive uses of the natural world. State wildlife managers do not want to adopt binding restrictions because anything of this sort would put them at odds with their hunter constituency and their politically powerful masters in the energy and agriculture industries. (Willcox, 2016)

THE SCIENCE OF THE IGBT IS SERIOUSLY FLAWED AND DOES NOT REFLECT THE BEST AVAILABLE SCIENCE

- The Service should use a much more cautious tone when invoking Interagency Grizzly Bear Study Team (IGBST) science in the Rule and remove what is currently a pattern of systematically inflated claims based on this body of science. The Service also needs to give serious consideration to patterns of evidence that call into question IGBST science, many of which are described in this review. (Mattson, 2016)
 1. Virtually none of the most recent science published in peer-reviewed journals by the IGBST and used by the Service in this Rule is reliable. (Mattson, 2016)
 2. Peer review is unlikely to detect much less correct for bias in IGBST science introduced by monopolistic arrangements. (Mattson, 2016)
- The frames currently used by the U.S. Fish & Wildlife Service (Service) and the IGBST to organize information about the interrelations of food quality and quantity, hazards, and birth and death rates are deficient and do not reflect the best available science. (Mattson, 2016)
 1. The Service fails to coherently address the joint dimensions of diet that include food quality and the characteristic hazards associated with consumption of a given food. Because of this failure, the Service's representation and analysis of the interaction of hazards with quality/quantity is haphazard and prone to selective manipulation in service of the immediate argument. This translates into patently deficient logic and analysis throughout the Rule and Conservation Strategy. (Mattson, 2016)
 2. The Service fails to adequately frame and address the many environmental changes that have occurred in Yellowstone's grizzly bear range during the last 15 years. As a result, the Service has no basis for judging the effects of any single change, including loss of whitebark pine. This problem partly derives from the fact that the Service relies almost exclusively on science produced by the IGBST, which is similarly deficient in its conceptualizations. (Mattson, 2016)
 3. The Service fails to use the best available science in its conceptualization of factors driving levels of human-caused grizzly bear mortality. As a result, the Service conflates static spatial delineations of so-called secure habitat with what is, in fact, a highly dynamic set of factors driving current increases in human-caused mortality. (Mattson, 2016)
- The Service employs a simple-minded and unsubstantiated conception of carrying capacity as a basis for making unsubstantiated claims regarding the number of bears able to be sustained in the Primary Conservation Area (PCA) and Demographic Monitoring Area (DMA), and past and likely future effects of food quality and quantity on Yellowstone's grizzly bear population. (Mattson, 2016)

- The Service employs “density-dependent effects” in this Rule with little apparent understanding of the concept and with no reference to, and in contravention of, the most reliable and straight-forward scientific reckoning of trends in grizzly bear density in the Yellowstone ecosystem. (Mattson, 2016)
- The Service fails to acknowledge the empirically and theoretically well-established likelihood of lag effects, which includes lags in time between when deteriorating environmental conditions occur and when they are manifest in population growth and size. As a result, the Service fails to anticipate foreseeable declines in population as a result of food losses that have occurred during the last 10 years. (Mattson, 2016)
- The Service fails to use the best available science when describing the taxonomy and evolutionary biogeography of Yellowstone’s grizzly bears. Instead, the Service uses outdated science to categorize Yellowstone’s grizzly bears as part of a purported continent-spanning subspecies when the best available science clearly shows that the Yellowstone population is part of a clade (Clade 4) with an ancient and unique history, a restricted distribution, and warranting consideration as an evolutionarily unique and threatened genetic lineage. (Mattson, 2016)

FAILURE TO ACCOUNT FOR WIDESPREAD LOSS OF WHITEBARK PINE

- The Service fails to account for the nutritional ecology of grizzly bears in its assessment of recent dietary shifts because it inaccurately, incompletely, and erroneously represents the best available science. This arises from the extent to which the Service engages in tortuous logic and selective even grossly incomplete representation of relevant research. Because of this, the Service reaches patently erroneous conclusions. (Mattson, 2016)
- The Service fails to account for the effect of recent widespread losses of whitebark pine by its reliance on fatally flawed science produced by the IGBST. This IGBST research fails to account for temporal and spatial variation in availability of whitebark pine seeds as well as temporal and spatial variation in other critically important bear foods. As a result, no confidence can be placed in conclusions reached by the Service regarding the effects any driver of grizzly bear birth and death rates, including losses of whitebark pine. (Mattson, 2016)
 1. The Service fails to accurately account for the spatial distribution of cone-producing whitebark pine trees when making its many claims regarding the lack of historical importance of pine seeds. This failure follows, in part, from the Service’s near exclusive reliance on spatial analyses produced by the IGBT that were based on a map of whitebark pine distribution containing substantial errors of omission. (Mattson, 2016)
 2. The Service fails to account for the impacts of recent widespread losses of whitebark pine on Yellowstone’s grizzly bears because it relies on fatally flawed science. This IGBST science conflates the extent of whitebark pine forests with levels of cone and seed availability, thereby misrepresenting periods of pine seed abundance as periods of pine seed shortage, and periods of pine seed shortage as periods of pine seed abundance. (Mattson, 2016)
- The Service fails to account for – or even acknowledge – convincing evidence of major deleterious consequences arising from losses of whitebark pine in the Yellowstone ecosystem. Most prominently, these consequences include compensatory increases in consumption of meat from ungulates by Yellowstone’s bears, and, with that, dramatic increases in meat-related bear-human conflicts and resulting human-caused bear deaths. (Mattson, 2016)
- Ever since Judge Donald Molloy found in favor of the Greater Yellowstone Coalition in US District Court in 2009, the key to once again delisting the grizzly has been its level of dependence

upon whitebark pine. The Judge ruled that in removing the Yellowstone grizzly from Endangered Species Act (ESA) protection on April 30, 2007, the US Fish and Wildlife Service (FWS) had failed to adequately address what impact the diminishment of the food source would have on the bears, and he ordered the grizzly relisted. In November 2011, the US Court of Appeals for the 9th Circuit overruled some of the lower court's opinions, but upheld the ruling pertaining to the potential threat from declining whitebark pine, and vacated FWS's delisting Rule. FWS's "grizzly bear czar," Chris Servheen, needed to demonstrate that Yellowstone's grizzlies are not reliant upon whitebark pine, for without it, he could not move forward with a new Rule to delist. It was up to van Manen and the IGBST to provide the needed material. (R Bear Stands Last, 2014)

CHANGES IN ABUNDANCE OF OTHER KEY GRIZZLY BEAR FOOD SOURCES SUCH AS ELK, BISON, CUTTHROAT TROUT, AND ARMY CUTWORM MOTHS

- The Service fails to account for major changes in abundance of other key bear foods besides whitebark pine because of its reliance on unsubstantiated rhetorical arguments and fatally deficient IGBST research in the Rule. This IGBST research does not include any explicit consideration of an epic decade-long drought or variation in abundance of cutthroat trout, elk, bison, and army cutworm moths in its analyses of movements and demography. The Service consequently has no scientific basis for any claims regarding drivers of change in the demography and movements of Yellowstone's grizzly bears. (Mattson, 2016)
- The Service fails to meaningfully account for past changes in major Yellowstone grizzly bear foods; this is on top of the problems with its analysis regarding whitebark pine. Among key foods that the Service essentially dismisses out of hand are elk, bison, cutthroat trout, army cutworm moths, and all of the vegetal foods that are affected by growing season drought. In short, not only does the Service fail to provide any useful basis for assessing past and prospective future changes in natural foods, but even more problematic, fails to acknowledge and address clear scientific evidence that the Yellowstone grizzly bear population is in trouble and threatened by further deterioration of habitat conditions (Mattson, 2016)
 1. The Service fails to use or acknowledge scientific evidence showing that there is a *prima facie* reason to expect that availability of ungulates, army cutworm moths, cutthroat trout, and drought have affected grizzly bear death rates, with prospects of leading to elevated death rates over the next decade to century. (Mattson, 2016)
 2. The Service fails to meaningfully account for declines in elk populations and foreseeable threats to this source of bear food in its assessment of current and prospective threats to Yellowstone's grizzly bear population. This failure further compromises the Service's attempt to disentangle drivers of recent and prospective near-future changes in demography of the bear population. (Mattson, 2016)
 3. The Service fails to meaningfully account for changes in bison populations and foreseeable threats to this source of bear food in its assessment of current and prospective threats to Yellowstone's grizzly bear population. This further compromises the service's attempts to disentangle drivers of recent and prospective near-future changes in demography of the bear population. The Service needs to critically assess past, present, and future likely trends for bison as part of its risk assessment for Yellowstone's grizzly bear population. The Service's encapsulation of state and federal management of bison due to brucellosis concerns in a blithe and meaningless reference to the objective of the current brucellosis management plan is grossly insufficient to the Service's analytic task. In fact, the dramatically negative recent trend of the Central Yellowstone bison herd no doubt reflects the current brucellosis management regime. The Service has no basis for its dismissal of brucellosis management as

a factor in bison abundance and as a potential threat to Yellowstone's grizzly bears. (Mattson, 2016)

4. The Service fails to meaningfully assess past (and future) threats posed by major declines in populations of Yellowstone Lake cutthroat trout by its use of convoluted logic organized around a distorted and selective representation of the best available science. (Mattson, 2016)
5. The Service fails to adequately address the effect of army cutworm moths on birth and death rates of Yellowstone's grizzly bears, and thereby fails to account for the past effects of dramatic increases in consumption of moths by bears and prospective future effects of losses of this food on Yellowstone's grizzly bear population. (Mattson, 2016)

LACK OF CONSIDERATION OF WOLF-BEAR RELATIONSHIP

- The Service disregards and misrepresents the best available science in its assessment of the impact of wolves on Yellowstone's grizzly bears on page 13212 of the Rule. In fact, the Service disregards wolves altogether as a factor to be considered in their own right. (Mattson, 2016)

SERIOUS LACK OF CONSIDERATION FOR EFFECTS OF CLIMATE CHANGE AND IMPACTS TO OTHER GRIZZLY BEAR FOOD SOURCES

- The Service fails throughout the Rule to account for the effects of climate change on past, present, and prospective future changes in habitat and demography of Yellowstone's grizzly bears. The Service neglects most of the relevant best available science; distorts what little it does cite; deploys otherwise faulty logic; and relies instead upon a single workshop publication and related assertions regarding the opinions of an amorphous "majority" of bear scientists. (Mattson, 2016)
 1. The Service fails to adequately represent the best available science of direct relevance to projecting environmental change in the Yellowstone ecosystem. (Mattson, 2016)
 2. The Service fails to adequately account for the prospective terminal loss of whitebark pine as a functional part of Yellowstone's grizzly bear habitat. There is little doubt that climate change has been a major driver of devastating – even catastrophic – losses of mature whitebark pine to bark beetles, especially since the early 2000s. (Logan et al. 2010 / Mattson, 2016)
 3. The Service fails to adequately account for the prospective terminal loss of army cutworm moths as a functional part of Yellowstone's grizzly bear habitat. While it is true that no one can say for sure how over-summering army cutworm moths will respond to loss of alpine environments, this does not in any way substantiate the assertions made by the Service that alpine environments will somehow be unaffected by climate warming, that moths will somehow adapt, and that grizzly bear foraging will be minimally affected. Such claims, in fact, defy not only the weight of evidence, but also everything we know about grizzly bears, cutworm moths, and prospective effects of climate change on the habitats that over-summering moths currently depend on. (Mattson, 2016)
 4. The Service fails to adequately account for the prospective terminal loss of cutthroat trout as a functional part of Yellowstone's grizzly bear habitat. (Mattson, 2016) Yellowstone cutthroat trout are a cold-water-adapted species that, together with bull trout, is amongst the most vulnerable of any fish to prospective warming of aquatic habitats. (Bear et al. 2007, Kaeding 2012)
 5. The Service fails to adequately account for the prospective effects of climate change on populations of elk and bison in the Yellowstone ecosystem. An assessment of how climate change might affect these ungulates, along with consequent effects on grizzly bears, is perhaps the most complicated of any for foods of recent importance to bears. Certainly, the Service's hasty conclusion that "fluctuations in the availability of ungulates are not a threat to

the GYE grizzly bear population now or in future” is irresponsible and simple-minded. Climate *is not* controllable by wildlife managers. There is no simple prognosis for elk and bison, especially given that populations of both are strongly affected by anthropogenic forces such as sport hunting (elk) and, increasingly, incidence and management of disease (elk and bison). (Mattson, 2016)

6. The Service fails to adequately account for nature, quality, and potential effects of alternate foods that may be used more heavily by Yellowstone’s grizzly bears in response to losses of currently-important foods. All of this begs the question whether Yellowstone’s grizzly bears will find alternative foods to eat that are of sufficient quality and quantity to offset past and prospective future losses of foods that were (and are) known to be important sources of energy and nutrients: whitebark pine seeds, cutthroat trout, army cutworm moths, elk, and bison. (Mattson, 2016)
7. Current management practices carried out under the Interagency Bison Management Plan and the new state-federal plan currently being developed, will continue to limit the number of wild, migratory bison on the landscape. A solution to this would be to manage wild bison like elk, which would limit lethal management actions and provide for more bison on a larger landscape.

FAILURE TO MEANINGFULLY CONSIDER IMPACTS TO KEY GRIZZLY BEAR HABITAT

- The Service’s assertion on page 13197 of the Rule that “there are no data to indicate habitat fragmentation within this population is occurring [sic]” is wrong because it contradicts the totality of best available science. There is, in fact, ample evidence of habitat fragmentation within the current distribution of Yellowstone’s grizzly bears, which renders the Service’s assertion both wrong and arbitrary. (Mattson, 2016)
- The Service’s assertion that “we do not expect such development [of mining claims] inside the PCA will constitute a threat to the GYE grizzly bear DPS now, or in the future” is unsubstantiated, counter to the primacy of the 1872 General Mining Law, and thus arbitrary. (Mattson, 2016)
- The definition of “secure” habitat adopted by the Service is unsubstantiated by any referenced scientific research, roughly 72-times smaller than the compilation of best available science would recommend, and thus arbitrary. This gross underestimation of the dimensions of a secure area leads to inflated estimates of total secure habitat in Yellowstone’s Bear Management Units. Moreover, the Service argues against its own definition of secure habitat in excluding certain areas from being deemed “suitable.”

FAILURE TO CONSIDER NATURAL PREDATION, ESPECIALLY ON CUBS AND YEARLINGS

- The Service disregards and misrepresents the best available scientific information in its dismissal of natural predation as a threat to Yellowstone’s grizzly bears on page 13205 of the Rule. Evidence supports the conclusion that natural predation, especially on cubs and yearlings, has increased at the same time that survival rates of these younger bears has substantially declined, all with demonstrable effects on population growth rates. As such, weight of evidence would support concluding that natural predation does, in fact, pose a “threat” to the population, especially given that weight of evidence further supports concluding that increases in natural predation are due primarily to a deteriorating environment – shifts in diet driven by losses of key foods such as

whitebark pine seeds. (Mattson, 2016) The losses of key grizzly bear foods, in large part, are a result of climate change.

FAILURE TO ACKNOWLEDGE OR CONSIDER INCREASED HUMAN-CAUSED FATALITIES

- The claim by the Service on page 13207 of the Rule that “Because human-caused mortality has been reduced...this source of mortality does not constitute a threat to the GYE grizzly bear DPS now, or in the future” is an arbitrary, unempirical, and false assertion. Total human-caused mortality has risen steadily since roughly 1994, and risen dramatically since 2007. The inescapable conclusion is that all of the management actions referenced by the Service on pages 13206 and 13207 of the Rule at best kept increases in human-caused mortality from being worse than they already were, but not enough to prevent the major observed increases. (Mattson, 2016)

THE SERVICE USES SHAM METHODS FOR MONITORING POPULATION TREND

- The Service employs methods for monitoring population trend and mortality rates that are unreliable, optimistically biased, insensitive to unfolding conditions, and prone to producing nonsensical results. These methods do not provide dependable information regarding status and trend of Yellowstone’s grizzly bear population now or when prospectively applied after proposed removal of ESA protections. Moreover, the Service’s methods are likely to allow for over-killing. (Mattson, 2016)
 1. The Chao2 method adopted by the Service for monitoring population trends does not represent the best available science and is, moreover, beset by biases that have introduced systematically inflated and overly optimistic estimates of trend for the Yellowstone grizzly bear population. (Mattson, 2016)
 2. The so-called “model-averaged” approach adopted by the Service to produce estimates of population size and, from that, estimates of population trend, is insensitive to unfolding problematic conditions. Estimates of trend from this approach are also vulnerable to manipulation depending on the time period adopted for model specification. (Mattson, 2016)
 3. The Service employs a method for indexing annual mortality rates that has no known or unbiased relationship to the mortality standards/thresholds presented in Tables 1 and 3 of the Rule. As a result, allowable levels of mortality calculated using the Service’s proposed methods for post-delisting management entail a non-trivial risk of over-killing grizzly bears, and thereby pose a threat. (Mattson, 2016)
 4. The Service produces inflated estimates of population size and trend that are largely an artifact of implausibly high estimates of survival rates for male and female bears older than two years of age. Moreover, these survival rates are also insensitive to rapidly changing conditions. Together, these shortcomings constitute a methodological threat to the Yellowstone grizzly bear population. (Mattson, 2016)
 5. The method adopted by the Service for estimating total numbers of grizzly bear mortalities during a given year tends to under-estimate this total and is insensitive to unfolding trends that have likely increased rather than decreased the magnitude of this under-estimation. (Mattson, 2016)

STATE MANAGEMENT POST-DELISTING IS SERIOUSLY FLAWED

- The Rule and the accompanying Memorandum of Agreement (MOA) developed by the states for managing Yellowstone’s grizzly bears post-delisting are inadequate in provisions for calculating and managing total allowable mortality. Moreover, both the MOA and the Rule are deficient in terminology and provisions for managing grizzly bear distribution. (Mattson, 2016)

1. The methods described in the Rule to account for ‘background’ mortality are not only discrepant with methods described in the MOA, but also fail to account for unknown/unreported grizzly bear deaths, thus constituting a major methodological threat to the Yellowstone grizzly bear population. (Mattson, 2016)
2. A guideline for total mortality rate, with the intent of producing population growth, is needed in both the Rule and the MOA for an estimated population size of approximately 600 bears. (Mattson, 2016)
3. Review of current management approaches should be mandated whenever mortality guidelines are exceeded during any two consecutive years for any of the three specified cohorts of bears, rather than the standard of three consecutive years specified in the current Rule and MOA. (Mattson, 2016)
4. Both the Rule and the MOA need to commit to resetting or recalibrating all aspects of the methods used to monitor trend, calculate allowable total mortality, and trigger various outside reviews if and when new methods are adopted for estimating total population size. Without this provision, the existing approach constitutes a methodological threat to the population. (Mattson, 2016)
5. The MOA and the Rule need to explicitly specify that population monitoring will continue indefinitely at the same intensity (neither more nor less) and according to the same design as occurred during the five years prior to delisting. (Mattson, 2016)
6. Terminology for referring to bear mortality should be changed in the Rule and MOA from ‘Discretionary’ versus ‘Non-discretionary’ to ‘Management’ versus ‘Other’. (Mattson, 2016)

KILLING FEMALES WILL FURTHER HARM GRIZZLY POPULATION

- Occupancy provisions for adult females need to apply to all portions of the DMA, not just the PCA, stratified on the basis of what are currently called ‘Flight areas.’ Preferentially killing females that would otherwise have given birth to cubs the following year would introduce yet other unpredictable outcomes. The approach described in the Rule and the MOA will lead to fewer females on the ecosystem periphery and less predictability regarding the consequence of management actions. (Mattson, 2016)

SERVICE HAS FAILED TO UPHOLD CONSULTATION OBLIGATION WITH TRIBES

The grizzly bear holds significant cultural and spiritual importance to many Great Plains and Western tribes. More than fifty tribal nations and organizations have expressed strong opposition to the delisting of grizzly bears, yet the Service and the IGBST have ignored these voices and have failed to hold meaningful consultation with the tribes, as required by law.

Executive Order 13175, implemented under the Clinton Administration and reaffirmed by the Obama Administration states that a *meaningful* consultation process is to be held – by all federal agencies – when decisions that effect Native American tribes are being considered.

“My Administration is committed to regular and meaningful consultation and collaboration with tribal officials in policy decisions that have tribal implications including, as an initial step, through complete and consistent implementation of Executive Order 13175. Accordingly, I hereby direct each agency head to submit to the Director of the Office of Management and Budget (OMB), within 90 days after the date of this memorandum, a detailed plan of actions the agency will take to implement the policies and directives of Executive Order 13175. This plan shall be developed after consultation by the agency with Indian tribes and tribal officials as defined in Executive Order 13175. I also direct each agency head to submit to the Director of the OMB, within 270 days after the date of this memorandum, and annually thereafter,

a progress report on the status of each action included in its plan together with any proposed updates to its plan.” ~ President Barack Obama, November 5, 2009

The Service has grossly failed to uphold this obligation, though tribes have repeatedly requested consultation. Numerous communications shared by the impacted tribes demonstrated no compliance from the Service, and it appears the Service acted deliberately in ignoring these consultation requests. The Service should not have to be asked to fulfil their federal trust obligations and, in fact, should issue a moratorium on the delisting process until tribes have been consulted in accordance with Presidential Executive Order 13175. Failing to do so is illegal.

The Service has taken the standard arrogant, colonialist position of informing tribes, rather than seeking meaningful input from tribes prior to the development of the Rule, in a manner that is consistent with the government-to-government consultation process. The Service wrote and published the Rule without seeking input from the tribes who had repeatedly expressed interest and desire in being part of the process, and more importantly, being strongly opposed to the removal of federal protections from Yellowstone grizzly bears.

The conduct of the Service in accommodating states’ interests over those of federally recognized Indian Tribes in the matter of delisting and trophy hunting the grizzly bear on ancestral tribal and treaty lands threatens irreparable harm to tribal rights. (Kingman, 2016)

Almost two-thirds of grizzly bear biologists canvased for a recent study supported the positions of tribal nations that the scientific data does not justify removing federal protections from the grizzly. (Kingman, 2016)

CLOSING STATEMENTS

Under ESA protections numerous human-caused bear deaths have taken place within the GYE; without this safeguard the Yellowstone grizzly bear will be on a fast track to extinction. Forty years of ESA protection has still failed to recover Yellowstone grizzly bears, so the Service needs to increase, rather than remove, federal protections. More grizzly bears are dying every year, and without increased ESA protection, the states that will take on management will realize the demise of this great bear. The Service must take a hard look at all of the cumulative impacts of climate change, food source shortages, human-caused fatalities, changing landscapes and habitat availability that have and will continue to have negative impacts on grizzly bear survival even under the ESA. Removing ESA protections will guarantee that Yellowstone grizzly bears will not survive to realize their evolutionary potential. The Service must also fulfil its trust responsibility of meaningful tribal consultation *prior* to rulemaking. Because the Service has failed to do each of these things, delisting the Yellowstone grizzly bear is illegal, immoral, and ill advised.

Thank you for considering our comments.

Sincerely,

A handwritten signature in black ink that reads "Daniel Brister". The signature is written in a cursive, flowing style.

Daniel M. Brister, MS
Executive Director,
Buffalo Field Campaign

SOURCES AND SHARED OPINIONS TO BE INCORPORATED INTO BUFFALO FIELD CAMPAIGN'S COMMENTS

Letter from Dr. Jane Goodall and 58 other prominent scientists who strongly oppose Yellowstone grizzly bear delisting (2016)

<https://drive.google.com/file/d/0B7Ec-KrsWzt4LTNNeXJvbmU5bnc/view?pref=2&pli=1>

Extirpations of grizzly bears in the contiguous United States circa 1850-2000 (Mattson, Merrill, 2002)

http://www.buffalofieldcampaign.org/habitat/documents2/Mattson_and_Merrill_Extirpations.pdf

Grizzly bear nutrition and ecology studies in Yellowstone National Park (Robbins, Schwartz, Gunther, and Sevheen, 2006)

<http://cahnrs.wsu.edu/soe/wp-content/uploads/sites/19/2015/07/YS-Bear-Story.pdf>

Delisting the Grizzly: A Recipe for More Bear Deaths (Louisa Willcox, 2016)

<http://www.counterpunch.org/2016/01/01/delisting-the-grizzly-a-recipe-for-more-bear-deaths/>

Delisting the Grizzly Bear...or Not (Interview with Doug Peacock, Huffington Post, 2014)

<file:///Users/stephany1/Desktop/grizzly%20bear%20comments/Delisting%20the%20Grizzly%20Bear...or%20Not.html>

Do Killer Grizzlies Deserve Death? (Doug Peacock, The Daily Beast, 2015)

<http://www.thedailybeast.com/articles/2015/08/22/do-killer-grizzlies-deserve-to-die.html>

Don't Delist Yellowstone Grizzly Bears (Doug Peacock, Outside Magazine, 2016)

<http://www.outsideonline.com/2061226/op-ed-dont-delist-yellowstone-grizzly-bears>

Manage Wild Bison Like Wild Elk in Montana (Buffalo Field Campaign, 2015)

<http://www.buffalofieldcampaign.org/comments/BFC-scoping-comments-Yellowstone-Bison-Management-Plan-EIS-06-12-15.pdf>

Whitebark Pine: Keystone to Afterthought in the Quest to Delist (Hey Bear ~ GOAL Tribal Coalition)

<http://www.heybear.com/#!/white-bark-pine-issue/c166a>

Great Plains Tribal Chairman's Association letter to the U.S. Fish & Wildlife Service

http://media.wix.com/ugd/c09466_0bcedec9a3084bb098de97469843569b.pdf

Presidential Memorandum on Tribal Consultation, November 5, 2009

<https://www.whitehouse.gov/the-press-office/memorandum-tribal-consultation-signed-president>

Lee Juan Tyler, Vice President of Shoshone-Bannock Tribes, Speaks for Endangered Grizzlies

<http://www.goaltribal.org/#!/shoshone-bannock-reaffirm-griz-support/c1ako>