

In my previous comment letter dated 10 May 2016, I detailed reasons why the loss of the critical food resource, whitebark pine nuts, has not been adequately addressed in the delisting rule. The cumulative loss of whitebark from the 1988 fires, mountain pine beetle attack, and whitebark pine blister rust infection will continue to result in loss of this critical food resource. In particular, recent research indicates that habitat for all whitebark in the entire Greater Yellowstone Ecosystem will continuously be favorable for mountain pine beetle by 2070. This research has been accepted for publication, and will appear in *Ecological Applications*, the lead applied journal of the Ecological Society of America. I have attached a proof copy of this article and I will submit a final version immediately after it becomes available with the request that you substitute the final version for the attachment. The substance will be unchanged.

Several of the peer reviewers indicated that the rule was inadequate in treatment of climate change impacts on Yellowstone's grizzlies. I concur that Ignoring potential impacts of Climate Change on Yellowstone's grizzlies is reason enough to reject the USF&W delisting proposal. Statements that climate change is the single greatest threat to the National Parks ranging from those of President Obama to Yellowstone Superintendent Dan Wenk, cannot be summarily dismissed by the blithe statement, "Most grizzly bear biologists in the United States and Canada do not expect habitat changes predicted under climate change scenarios to directly threaten grizzly bears." How can it be that somehow, miraculously, Yellowstone's grizzlies are immune from the impacts of climate change when every other species is anticipated to suffer severe detrimental impacts? The answer to this rhetorical question is: they are not immune, and a serious, scholarly assessment of climate change impacts, including those that have already occurred, must be made before any delisting decision is made.

I fully agree that a full, unbiased review of the delisting rule needs to be made before this important decision can be made. However, the USF&W has repeatedly demonstrated that they are not serious about such an unbiased review. It seems highly unlikely that the peer reviews submitted could be invariably supportive of delisting when peer reviewed research (attached) indicates a preponderance of acknowledged grizzly bear experts oppose delisting?

If 'best science' supports delisting; why then do three out of four recognized grizzly bear scientists think that T&E status should be continued for Yellowstone's grizzly (Attached)? These same authors documented a disturbing bias in the scientists responsible for making this important decision, "We found those working for state or federal wildlife agencies were 2-3 times more likely to recommend delisting grizzlies than those employed by academic institutions." This bias is problematic, "Especially when the individuals charged with providing guidance on species recovery are comprised entirely of one of these groups - in the case of GYE grizzly bears, members of state and federal agencies who were 2-3 times more likely to advocate delisting."

Serious enough questions have been raised regarding the selection of peer reviewers that a truly objective review needs to occur. In fact, nothing less than a National Academy of Sciences panel convened to consider the scientific credibility of the delisting rule is adequate.

Delisting Yellowstone's grizzlies and turning management over to the states of Montana, Idaho, and Wyoming is scientifically unsound for a variety of reasons, but the trophy hunting of this geographically and genetically isolated populations alone is reason enough to reject removal of

threatened status. The way in which returning grizzly management to these three states subverts best science (or even good science) is exemplified by the American Society of Mammalogists/Society for Conservation Biology comment letter to the USF&W on delisting (attached). They point out that not only have IGBST scientists misinterpreted published scientific literature, but they have actively fabricate results from published work. In summary, " ... which would mean the current GYE population is only half the minimum effective size necessary for longterm persistence." One half the minimum effective population size! And at the same time, the three involved states are advocating trophy hunting when last year's (known and probable deaths) grizzly mortality exceeded 14% of the total GYE population for the second slowest reproducing mammal in all of North America. And, this was with Federal protection and no hunting.

Any reasonable evaluation of the peer review process or turning management over to the three states of Idaho, Montana and Wyoming results in the unavoidable conclusion that Yellowstone's grizzlies warrant continued Threatened Species status.