### STATEMENT OF MIKE BADER INDEPENDENT CONSULTANT MISSOULA, MONTANA

March 25, 2020

### Introduction

My name is Mike Bader, residing in Missoula, Montana. I am an independent natural resource consultant and sole proprietor of Ecological Research Services. I sent a letter (attached) to Governor Bullock requesting that he appoint me to the Technical Advisory Committee so I could supplement the information you have received from the State and federal agencies with information from non-agency affiliated scientists with vast expertise and experience with grizzly bears. Unfortunately, I was not provided the courtesy of a reply.

I have been an independent consultant for the past 19 years. I have more than 35 years of experience in landscape conservation of habitats suitable for recovery of grizzly bears, bull trout and other species. I have been employed and done contract work as a National Park Ranger, executive director of a non-profit regional conservation organization, para-legal researcher, project developer for state and national organizations, producer of State of Montana funded environmental education programs.

My field experience associated with bears includes bear management as a National Park Service ranger in Yellowstone National Park. In addition to my ranger work, I was a part-time field assistant with the Yellowstone Interagency Grizzly Bear Study Team, including involvement in research and management trapping and relocation of grizzly and black bears, radio-tracking, collection of scat samples, separating bears from people, carcass monitoring and extensive visual observations of grizzly bears.

I have authored and co-authored numerous peer-review papers and professional reports. These have been widely cited in the peer-reviewed literature, books, grizzly bear management plans published by state and federal agencies, environmental analyses by land management agencies including the U.S. Fish & Wildlife Service and U.S. Forest Service and in statements from professional societies including the American Society of Mammologists.

#### Statement

Regarding the prospects of survival and recovery of grizzly bears in the Northern Rockies I offer the following observations.

A viable, self-sustaining population of grizzly bears will number from 2,500-5,000 individuals and must have demographic linkage through a system of protected habitats.

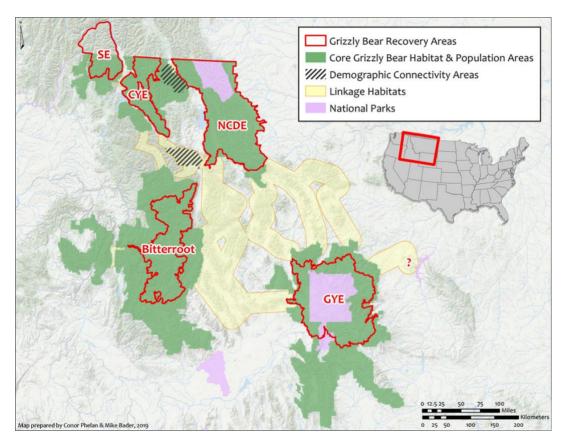
In a series of published papers (two which were used for the 2006 Statewide Grizzly Bear Management EIS) I concluded:

1) roadless areas are source habitats for grizzly bears and the source value of roadless areas increased following the cessation of grizzly bear hunting;

2) none of the isolated Grizzly Bear Recovery Areas are large enough to support 2,500 grizzly bears and that the core recovery areas should be expanded and linked together with connected and protected habitats;

3) that sufficient high quality, secure habitat currently exists to provide for the spatial requirements of a viable northern Rockies grizzly bear meta-population.

The map below incorporates the findings of five leading independent experts on grizzly bears (Drs. Allendorf, Metzgar, Mattson, Craighead, Horejsi, copy attached). As you can see, the majority of the essential linkages are located within Montana and are in urgent need of protection.



The experts also recommend the U.S. Fish & Wildlife Service develop an updated and comprehensive Grizzly Bear Recovery Plan based upon sound scientific principles and findings. The 1993 plan is woefully outdated and there is abundant new science to be considered and incorporated.

An area of chronic neglect and with extensive habitat restoration needs is the Cabinet-Yaak, the area around it and the areas between it and the NCDE and Bitterroot Recovery Areas. These small recovery zones need to be expanded and linked with the other areas as shown on the map.

# Grizzly Bear Hunting Is A Bad Idea

I have studied the effects of hunting and post-hunting distribution of grizzly bear mortality in the NCDE and GYE. It is an impediment to emigration and population linkage and I believe hunting of grizzly bears threatened the distribution, abundance and social structure of the population. Another researcher found that female mortality on the Rocky Mountain Front was unsustainable during hunting. We can't simply shoot certain behaviors out of the population. One of my mentors said "death is not a teacher."

Any plan that proposes sport hunting of grizzly bears dressed up as "scientific management" would not only face public outcry, it would certainly face legal challenge. Many proponents of grizzly bear hunting are basing their support on political and social concerns, rather than scientific and biological considerations.

Hunting creates numerous problems while not solving any. Existing strategies for management of bear-human conflicts is sufficient if properly resourced. Hunting grizzly bears would send absolutely the wrong message that everyone can let their guard down at exactly the wrong time when we are seeing the beginning stages of population distribution into historically-occupied habitats vital to long-term persistence and recovery of grizzly bears. Grizzly bear hunting is also objectionable on spiritual and moral grounds.

## Summary

The Grizzly Bear Advisory Council needs to consider more than population numbers and bearhuman conflict prevention and resolution, as critical as these are to any meaningful set of recommendations. Moreover, the Council must incorporate information from non-agency affiliated scientists. Equally critical needs are effective habitat protection standards in all grizzly bear habitats including linkage areas supporting demographic occupancy. The Forest Service is not providing that protection and they continue to target the major linkages with large-scale roadbuilding and logging projects. Effective demographic (male and female) passage structures across the major highways in the region are another vital component of this effort.

Sincerely,

Mike Bader

Montana Governor Steve Bullock State Capitol, Helena March 21, 2019

Dear Governor Bullock,

My name is Mike Bader. I am an independent natural resource consultant in Missoula. I request that you appoint me to the Technical Advisory Committee to assist the grizzly bear citizen advisory council with technical information, support and advice.

My qualifications include 35 years of experience in grizzly bear science and management. I have authored and co-authored several professional papers on grizzly bear habitat assessment and management, the importance of roadless areas, and hunting/post-hunting mortality. Two of these were used to help form the Montana Statewide Grizzly Bear Management EIS (see attachment) for which I was a member of an informal group of advisors. With Dr. John J. Craighead, the Craighead Institute and Timothy Bechtold I co-authored Alternative 4 in the FEIS for Grizzly Bear Recovery in the Bitterroot Ecosystem, working with Dr. Chris Servheen.

As an independent consultant I have authored numerous reports including an assessment of the conservation value of Plum Creek lands in the Swan Valley which led to all the high value lands transferred to public ownership, which has benefited grizzly bears. I also worked for several years with Montana Fish, Wildlife and Parks as the contractor responsible for production and distribution of Trout Identification Guides and produced a three-part program and teachers guide on bull trout recovery, vetted by the Department.

I maintain professional relationships with several leading non-agency scientists with expertise in grizzly bear population ecology, genetics, population viability and habitat management as well as GIS mapping and analysis. I am currently the co-author and director of a study of potential denning habitat for grizzly bears in Montana west of the Divide.

There is new, relevant information on potential linkage or connectivity areas for grizzly bears that is just as important as population numbers. Other considerations include genetics and the effects of isolation and assessments of habitat suitability and security in historically occupied habitats that grizzly bears are beginning to explore.

Moreover, the citizen advisory council would benefit from receiving scientific data and advice from nonagency scientists who sometimes have different perspectives and conclusions. For the council to succeed, it must have a broad diversity of input from the technical advisors.

I look forward to your reply.

Sincerely,

Mike Bader

C: Martha Williams, Patrick Holmes