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These comments on the U.S. Fish and Wildlife Service Initiation of 5-Year Status Review of Grizzly Bear (*Ursus arctos horribilis*) in the conterminous United States (85 FR 2143) are respectfully submitted by Mike Bader, independent consultant on behalf of the Flathead-Lolo-Bitterroot Citizen Task Force, a 501(c)(3) public interest organization, Patty Ames, President; and on behalf of the Friends of the Clearwater, Wilderness Watch, Friends of the Bitterroot, Alliance for the Wild Rockies, Western Watersheds Project, WildWest Institute and Brian Peck, Independent Wildlife Consultant. The Task Force address is P.O. Box 9254, Missoula, MT 59807 and web: montanaforestplan.org

We incorporate by reference our comments on Habitat-Based Criteria for Grizzly Bear Recovery (attached). As we noted, the HBRC only applies to the NCDE Recovery Area and omits areas important to linkage between the other Recovery Areas.

Introduction

Current management plans for grizzly bears are in need of improvement in order to be compliant with the provisions and requirements of the Endangered Species Act (ESA).

The grizzly bear was listed pursuant to the ESA (16 U.S.C. § 1531 et seq.) in the lower 48 states as a threatened species in 1975. 40 FR 31,734 (1975). A "threatened" species is *"any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."* 16 U.S.C. § 1532(20). The ESA provides for the *"conservation of the ecosystems upon which threatened and endangered species depend."* Id. §1531(b) "Conservation" means *"the use of all methods and procedures which are necessary to bring any ... species to the point at which the measures provided pursuant to this chapter are no longer necessary."* Id. § 1532(3).

Thus, in addition to prohibition on illegal harassment and taking of individuals, the habitat essential to the survival and recovery of a listed species may not be adversely modified or destroyed.

The Service is required to develop plans to maintain and restore listed species in order to ensure their survival, recovery and eventual delisting under the ESA. Therefore, the designation of an adequate area of habitat critical to survival and recovery is inextricably linked with the recovery planning process. This process must identify the where (geographic location) and the what (habitat standards for the protection of the 'physical or biological features' of critical habitat).

Many aspects of the status of the grizzly bear remain unknown as the Service cannot manage what it has not measured. Examples: no comprehensive analysis of vegetation and other food sources in the NCDE and Bitterroot Recovery Areas and within habitat linkages; no measurement of potential climate change effects on these resources in all the recovery areas and linkages; incomplete measurement of road and motorized trail densities and impacts on grizzly bears; no assessment of the rapidly expanding human population and infrastructure including more high-speed highways and the increase in visitors and backcountry recreational use.

Significant New Information

We submit significant new information that must be addressed in depth within the Five Year Review, as itemized and discussed below.

Current Plans Do Not Provide Enough Habitat for Biological Recovery of Grizzly Bears

A panel of five scientists with expertise on grizzly bears totaling more than 150 years authored a compendium of professional statements (Drs. Allendorf, Metzgar, Mattson, Horejsi and Craighead 2019) which conclude that the current recovery areas will not support enough grizzly bears to constitute a population with viability over several hundred years. They presented their findings at a public event at the University of Montana. The compendium is submitted with these comments.

These scientists all agree the only way to recover grizzly bears in the Northern Rockies is to link the five isolated recovery areas with linkages of protected habitat with sufficient security to allow occupation by both male and female grizzly bears as shown in Figure 1. Recovery of grizzly bears requires reestablishment of a third major breeding population in the Selway-Bitterroot region in Idaho to provide core habitat and regional linkage between the other Recovery Areas.

Summary

- (1) The Greater Yellowstone Ecosystem (GYE) population is not viable in the long-term without genetic connectivity to other populations.
- (2) The Northern Continental Divide Ecosystem (NCDE) population cannot be delisted because it is not an entity under the Endangered Species Act.
- (3) The only way to “recover” grizzly bears in the lower 48 states is to protect habitat linkages between the isolated recovery areas.

Allendorf (2019).

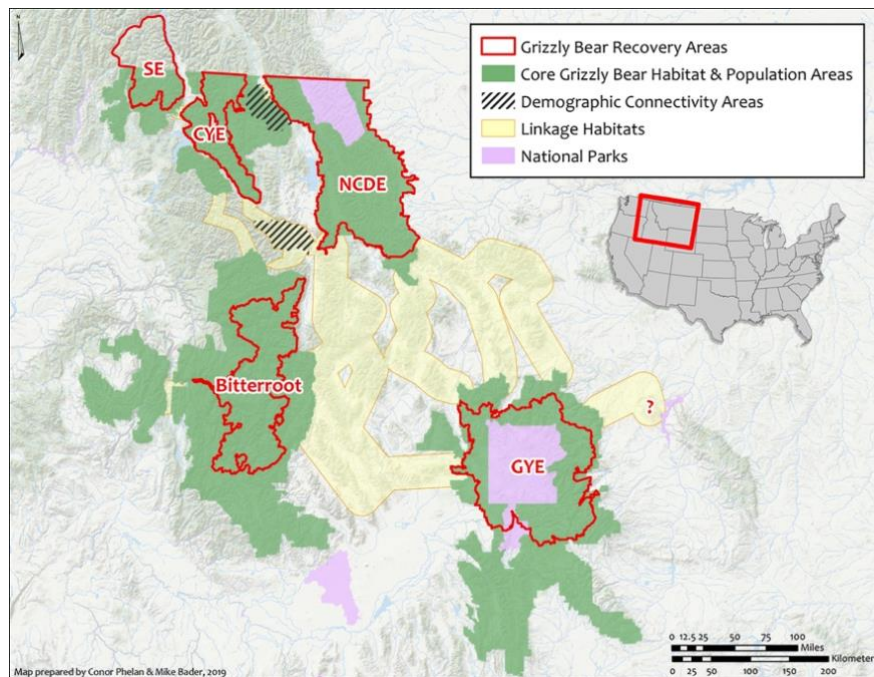


Figure 1. One or more potential linkages for grizzly bears have been identified by Picton 1986; Bader 1991; Shaffer 1992; Bader and Bechtold (1997, 2000); Walker and Craighead (1997); Bader 2000c; Servheen, et al. 2001; Peck, et al. 2017; U.S. Fish and Wildlife Service 2018.

As shown in Figure 2, grizzly bears have sporadically occupied these linkage areas over the past 20 years. However, almost all have been males and genetic exchange between isolated populations has not yet been observed. Only one female with cubs has barely crossed Interstate 90. These facts indicate that habitat management in these linkages has not been effective at providing both demographic and genetic connectivity. Additional habitat management standards are required.

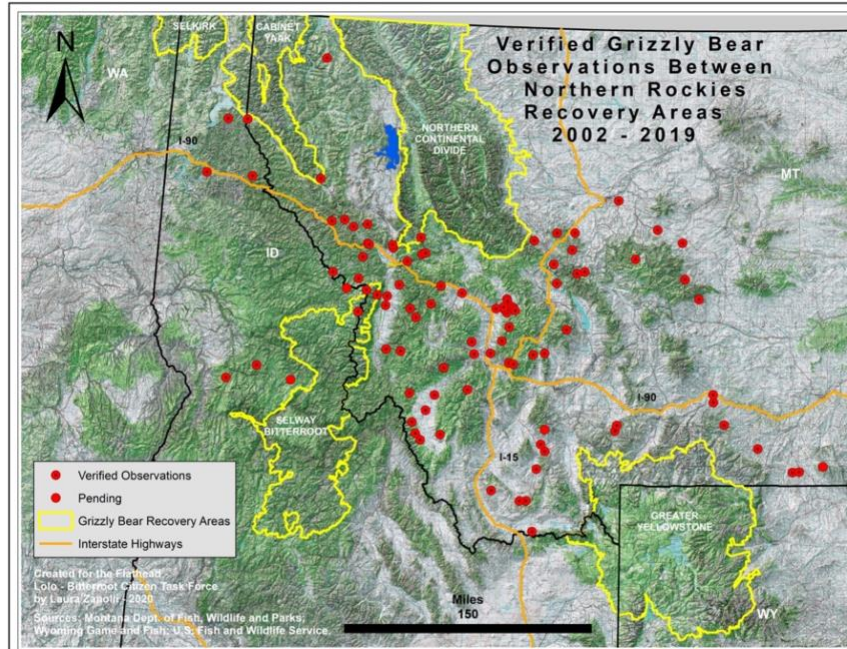


Figure 2.

In fact, the NCDE, the largest population in the Northern Rockies, is also demographically isolated from populations to the north by extensive habitat fragmentation (Horejsi 2019). The CYE and SE populations now both have heterozygosity lower than the long isolated GYE. For example, one male in the CYE sired 33 offspring and low genetic diversity and inbreeding effects expressed as lethal equivalents are a significant concern (W. Kasworm, U.S. Fish and Wildlife Service public presentation).

Assessment of Linkages Long Overdue

The Service remains way behind in identifying and protecting linkages. Linkages for grizzly bears are not hypothetical and there is now near-universal agreement they are integral to grizzly bear recovery. Isolation was one of the factors identified in the 1975 listing rule for grizzly bears. Linkages for grizzly bears in the Northern Rockies have now been identified and analyzed by several sources using different methodologies and the major landscape-scale linkages have cumulatively been identified and mapped according to biological considerations (Figure 1).

Verified observations of these linkages by grizzly bears, including female/cub groups show these are not limited to “vagrant” individuals. Linkage is a key recovery goal in the Grizzly Bear Recovery Plan. The Recovery Plan also recommends that, until the Service analyzes linkages, “*land management agencies take precautions not to degrade the potential linkage areas.*” Recovery Plan at 24-26. As noted below, these precautions have been thrown to the wind and these linkages are at imminent threat of being lost.

Servheen, et al. (2001) wrote: “*Boyce, et al. (2001) have demonstrated the value of multiple populations with some dispersal between them to the survival of the grizzly bear in the*

Northern Rockies. Thus, management of linkage zones to maintain and enhance movement opportunities is a critical part of the successful application of metapopulation theory to grizzly bear conservation." (emphasis provided).

The Interagency Grizzly Bear Committee (2001) wrote: *"To address the issue of habitat fragmentation, the IGBC supports the identification of those areas within and between the major grizzly bear ecosystems where wildlife can live or move between large blocks of relatively secure habitat. Wildlife habitat conservation and the eventual recovery of listed species such as grizzly bears will require connections between populations."* (emphasis provided). Thus, grizzly bear survival and eventual recovery is dependent on demographic linkages where male and female bears can successfully live and move.

Yet, 27 years after publishing the Recovery Plan the Service has still not presented a comprehensive, multi-resource analysis of linkages including modeling of improved habitat conditions as a result of road decommissioning and removal of other barriers to occupancy and movement.

The paper by Peck, et al. (2017), while very instructive and consistent with other analyses, is one study that analyzed some, but not all previously identified linkages. The linkages between the NCDE, CYE, Bitterroot and GYE, including the Ninemile and Salish Demographic Connectivity Areas and the Sapphire and Pintlar Ranges were not included. The analysis was also restricted to male grizzly bears, while geneticists and population ecologists call for demographic linkages providing for overlapping occupancy by male and female grizzly bears.

This one study cannot replace the "five-year analysis of linkages" described in the Recovery Plan. The five-year analysis *"...will be the basis for future actions regarding the linkage zone question."* Recovery Plan at 25. Obviously, the five-year analysis must be a U.S. Fish and Wildlife Service study and document.

Servheen, et al. (2001) wrote: *"Dramatic changes are occurring in the remaining possible linkage areas due to ongoing human development. Time to maintain connection opportunities is growing short due to the pace of development on these lands."* However, 19 years later effective actions and precautions have not been taken by the Service, even though it acknowledges linkages are important to the survival and eventual recovery of the grizzly bear, nor have standards been developed or applied.

The Peck, et al. (2017) study modeled 20,000 simulations of male grizzly bears traveling identified linkages between the NCDE and Yellowstone sub-populations. Not a single one made the trip successfully indicating that habitat fragmentation issues remain unresolved. Further deterioration of conditions is unlawful and the Service and other agencies must implement adequate regulatory mechanisms to arrest this decline. The failure to propose management standards that will prevent the loss of these linkages violates the ESA requirement to *"conserve the ecosystems upon which the species depends."*

Emerging Threats

Record High Mortality

The issue of record high mortality in the NCDE and GYE is a major concern. Population growth in both areas may have stalled out far short of viability and new mortality threats are coming from highways, railways, chicken farmers and poachers (Mattson 2019). The U.S. Highway 2/railroad corridor between Glacier National Park and the areas south has long been a high mortality area, and in 2018 and 2019 the NCDE suffered record high mortality from automobile and train strikes. This taking of grizzly bears remains unmitigated.

A new mortality threat is the Interior Department plan to assume ultimate authority over bear “removal and control” decisions on the Rocky Mountain Front and shift significant management authority from the Montana Department of Fish, Wildlife and Parks to the federal Wildlife Services. The five year review must address this new source of potential increased mortality which is based upon social rather than biological considerations. This new policy of increased management removals could result in reduction of both the grizzly bear population in the NCDE and occupied grizzly bear habitat. Reductions in numbers and distribution are critical factors in listing, uplisting and critical habitat determinations.

Inadequate Regulatory Mechanisms and Violations of the ESA and the CS

The U.S. Forest Service is violating both the rule and spirit of the Grizzly Bear Conservation Strategy, the Flathead National Forest Plan, the Four Forests Amendments and Habitat-Based Recovery Criteria. It is using loopholes and a shell game to expand the road network and increase motorized and mechanized use across vast areas of grizzly bear habitat (see also comments from Swan View Coalition and Friends of the Wild Swan, attached). The advent of mega-projects on U.S. Forest Service lands within grizzly bear habitat is a direct threat to grizzly bear survival and recovery regionwide. The Forest Service is expanding the road network well beyond the status quo while renegeing on previous commitments to decommission roads. Major linkages between grizzly bear recovery areas are targeted for large-scale multi-year development. The combination of increased roads and loss of security cover will be detrimental to grizzly bear recovery.

Moreover, in the October 3, 2019 ruling (*Alliance for the Wild Rockies v. Probert* (CV 18-67-M-DWM)), the federal court determined the Forest Service does not effectively prevent illegal use of closed roads, in violation of road management standards for grizzly bears. This is a problem regionwide. For example, the Lolo National Forest has 6,200 miles of system roads and over 1,200 miles of non-system roads and motorized trails, including many illegal user-created roads and motorized trails. The Lolo has a history of road closure violations including smashed gates. These have not been accounted for in Sec. 7 consultations and Biological Opinions.

A central component of the mega-projects are roads, both newly constructed and those previously closed for wildlife protection but reopened for several years of commercial log

hauling and administrative traffic. Many are located within linkage areas and core habitats. These are just a few examples:

- Mid Swan Project, Flathead National Forest, dozens of miles of roads, millions of board feet, within grizzly bear habitat and linkage zones between the Mission and Swan Mountain Ranges in the Swan Valley.
- Soldier-Butler Project, Lolo National Forest, within the Ninemile Demographic Connectivity Area. Includes 14 miles of road, clearcutting, 14 million board feet, reverses previous decision to decommission 39 miles of road.
- Redd-Bull Project, Lolo National Forest, within identified linkage habitat between the CYE and the Bitterroot Ecosystem along the northern Bitterroot Divide. New roads, logging in roadless areas.
- Black Ram Project, Kootenai National Forest, within the CYE Recovery Area. Approximately 60 million board feet, clearcutting, dozens of miles of roads.

The Forest Service is using “storage roads” to evade road density standards for grizzly bear habitat. These “stored” roads can be opened at any time for administrative or other purposes. Thus, these project roads are actually permanent additions and increase the footprint of the road network.

Verified Grizzly Bear Observations and Requirements for Sec. 7 Consultations

The recent letter from the Service acknowledging grizzly bear occupancy of lands within and near the Bitterroot Recovery Area and informing the Forest Service of Sec. 7 obligations is a positive first step. However, the area where formal consultations are required cannot be arbitrarily limited to small areas around verified observations. These observations are only the ones verified using stringent requirements of a photo or video with date and time stamp, hair sample or other physical evidence. Many “likely” observations are not included and staff are not available to follow up on tracks, diggings, buried carcasses and so forth. Thus, the verified sample is certain to be a sub-set of total observations and the grizzly bears who were or remain undetected. There has been no comprehensive survey effort that would warrant exclusion of lands from likely occupancy and the formal consultation requirements.

Moreover, as shown in Figure 2, verified observations between recovery areas are not limited to the Bitterroot but have been documented on public lands throughout the Northern Rockies including all of the western half of Montana and most of northern Idaho.

Of course, any projects within the two Demographic Connectivity Areas identified in the Conservation Strategy (NInemile and Salish) must undergo formal Sec. 7 consultation.

The Five-Year Review Must Include a Meaningful Analysis of Climate Change Effects on Grizzly Bears and Their Habitat

Using stable isotope analysis as a surrogate for measuring changes in climate is a poor substitute for using extensive existing scientific climate research. The lag time in meaningful detection will result in management response that is too late.

“The Services (81 FR 7414-7440) anticipate that critical habitat designations in the future will likely increasingly use the authority to designate specific areas outside the geographical area occupied by the species at the time of listing following any generalized conservation strategy that might be developed for the species. As the effects of global climate change continue to influence distribution and migration patterns of species, the ability to designate areas that a species has not historically occupied is expected to become increasingly important. For example, such areas may provide important connectivity between habitats, serve as movement corridors, or constitute emerging habitat for a species experiencing range shifts in latitude or altitude (such as to follow available prey or host plants). Where the best available scientific data suggest that specific unoccupied areas are, or it is reasonable to determine from the record that they will eventually become, necessary to support the species’ recovery, it may be appropriate to find that such areas are essential for the conservation of the species and thus meet the definition of “critical habitat.”

The Service clearly must assess potential effects associated with climate change on habitat use and distribution of key food resources including *Vaccinium* spp. and ungulates. HBRC contained no assessment. This assessment must be regionwide in scope and encompass all the recovery areas and the linkage habitats between them.

New Recreation Threats

The five year review must take into account burgeoning mountain bike use within core grizzly bear areas and the increasing threat to both bears and people. The Board of Review report (Servheen, et al. 2017) points out these threats, as does the article in the Mountain Journal featuring Dr. Servheen. The Forest Service is actively promoting mountain biking in grizzly habitat. An example is the Taylor-Hellroaring Project on the Flathead National Forest in occupied grizzly habitat in the Whitefish Range. The project includes nearly 40 miles of new mountain bike trails including, according to the EA, within alpine habitats with avalanche chutes. There are no seasonal closures so mountain bikers may come into close contact with grizzly bears, including during the den site selection and excavation process.

Food Security and Attractants Storage Lacking on Public and Private Lands

It is well-known that grizzly bear expansion has outpaced management response. Several National Forests in the region are way behind in providing storage for food attractants at campgrounds, picnic areas, boat launches and other facilities. A comprehensive inventory and assessment is required and an action plan developed to remediate deficiencies.

Private lands may be an even larger challenge, particularly in linkage areas which include large areas of private land. The Service must increase its direct support of public bear aware programs and coexistence strategies including risk assessments. The issue of chicken-related grizzly bear mortality is a relatively recent phenomena and requires immediate action including increased funding for electric fencing and electrified doors and encouraging people to give up hobby chicken farming in grizzly habitat.

Black bear baiting within grizzly bear habitat in Idaho and Wyoming should be ended immediately as these unsecured attractants have very high potential for illegal taking of grizzly bears. For example, at least three different grizzly bears were photographed at bait stations in north-central Idaho in 2019. A grizzly bear from the CYE visited a bait site in northern Idaho in 2018 and was trapped and moved back to Montana to protect it. These baits are not just point sources of mortality risk. Due to the grizzly's tremendous sense of smell, these baits might be detected from 10-15 miles away. Thus, any grizzly within a 15-mile radius of a bait site faces highly elevated risk of being shot by mistaken identity. This practice is an impediment to successful natural recovery of grizzly bears in the Selway-Bitterroot and in linkages astride the Montana-Idaho border.

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Literature Cited

Allendorf, F.W. 2019. Pages 2-4 *In*: Bader, M.G. (ed.) The Status of the Grizzly Bear and Conservation of Biological Diversity in the Northern Rocky Mountains. A Compendium of Expert Statements. Flathead-Lolo-Bitterroot Citizen Task Force, Missoula, MT. 21p.

Bader, M. 1991. The Northern Rockies Ecosystem Protection Act: a citizen plan for wildlands management. *Western Wildlands* 17(2):22-28.

Bader 2000c. Spatial Needs of Grizzly Bears in the U.S. Northern Rockies. Alliance for the Wild Rockies Special Report No. 10. 25p. Spoken Presentation at International Society for Conservation Biology Conference 2000.

Bader, M. and T. Bechtold. 1997, 2000. Alternative 4, DEIS and FEIS, Grizzly Bear Recovery in the Bitterroot Ecosystem. U.S. Fish and Wildlife Service.

Costello, C.M., R.D. Mace, and L. Roberts. 2016. Grizzly bear demographics in the Northern Continental Divide Ecosystem, Montana: research results (2004–2014) and suggested techniques for management of mortality. Montana Department of Fish, Wildlife and Parks. Helena. 121p.

Craighead, F.L. 2019. Pages 19-21 *In*: Bader, M.G. (ed.) The Status of the Grizzly Bear and Conservation of Biological Diversity in the Northern Rocky Mountains. A Compendium of Expert Statements. Flathead-Lolo-Bitterroot Citizen Task Force, Missoula, MT. 21p.

Horejsi, B.L. 2019. Pages 8-12 *In*: Bader, M.G. (ed.) The Status of the Grizzly Bear and Conservation of Biological Diversity in the Northern Rocky Mountains. A Compendium of Expert Statements. Flathead-Lolo-Bitterroot Citizen Task Force, Missoula, MT. 21p.

Interagency Grizzly Bear Committee. 2001. Re: Support for the concept of linkage zones. Cheyenne, WY 2p.

Mattson, D.J. 2019. Pages 13-18 *In*: Bader, M.G. (ed.) The Status of the Grizzly Bear and Conservation of Biological Diversity in the Northern Rocky Mountains. A Compendium of Expert Statements. Flathead-Lolo-Bitterroot Citizen Task Force, Missoula, MT. 21p.

Metzgar, L.H. 2019. Pages 5-7 *In*: Bader, M.G. (ed.) The Status of the Grizzly Bear and Conservation of Biological Diversity in the Northern Rocky Mountains. A Compendium of Expert Statements. Flathead-Lolo-Bitterroot Citizen Task Force, Missoula, MT. 21p.

Peck, C.P., F.T. van Manen, C.M. Costello, M.A. Haroldson, L.A. Landenburger, L.L. Roberts, D.D. Bjornlie and R.D. Mace. 2017. Potential paths for male-mediated gene flow to and from an isolated grizzly bear population. *Ecosphere* 8(10):1-17.

Picton, H.D. 1986. A possible link between Yellowstone and Glacier grizzly bear populations. International Conference on Bear Research and Management 6: 7-10.

Servheen, C. and T. Manley, D. Mucklow Starling, A. Jacobs and J. Waller. 2017. Board of Review Recommendations related to mountain bike safety in bear habitat based on the fatality of Mr. Brad Treat on June 29, 2016.

Servheen, C., J.S. Waller and P. Sandstrom. 2001. Identification and management of linkage zones for grizzly bears between the large blocks of public land in the Northern Rocky Mountains. ICOET 2001 A Time for Action Proceedings: 161-169.

U.S. Fish and Wildlife Service. 2018. Grizzly Bear Conservation Strategy