

January 25, 2018

ATTN: Docket No. FWS-R6-ES-2017-0057
U.S. Fish and Wildlife Service, MS: BPHC
5257 Leesburg Pike
Falls Church, Va. 22041-3803

Re: Comments on Habitat Based Recovery Criteria for Grizzly Bears

Dear Fish and Wildlife Service,

Thank you for the opportunity to comment on the Supplemental Draft Habitat-Based Recovery Criteria for the Northern Continental Divide Ecosystem (NCDE) population of grizzly bears. Please enter these comments on behalf of Brian Peck and Swan View Coalition into the official record and keep us informed as this process moves forward.

Comments and Concerns:

(1) Although the U.S. Fish and wildlife Service has been considering the issue of Habitat-Based Recovery Criteria for some time, and took public comment on the Draft HBRC more than 18 months ago, the current document is still a Draft Supplement rather than the Final HRBC that, as part of a Final Conservation Strategy, will play a pivotal role in whether grizzly recovery can be achieved and maintained.

Yet the Final HBRC and Final Conservation Strategy will not be issued until Spring 2018, and the public will apparently be denied the opportunity to comment on these key documents, despite earlier assurances from Acting Grizzly Recovery Coordinator Wayne Kasworm to the contrary. Such intentional exclusion of the public from their “public process” is unacceptable and must be corrected.

(2) P: 2 of the Draft Supplement says: “Due to a settlement agreement regarding the 1993 Recovery Plan, we are required to publish habitat-based recovery criteria for the Northern Continental Divide Ecosystem (NCDE). As part of the settlement agreement, we also agreed to hold a workshop for the public to provide input.”(USFWS, 2017).

Unfortunately, we are still waiting for the promised/required “Workshop.” Neither the meeting of July 7, 2016, nor the one held on January 3, 2018 to hear public comment were workshops. Rather, they were little more than listening sessions where each member of the public was limited to a 10 minute comment period with little to no interaction or discussion with agency personnel.

Nowhere was there time set aside for detailed discussions between agency and independent scientists regarding various ways to develop real Habitat Based Recovery Criteria. In fact, there was no evidence that such independent scientists had been specifically invited, much less included in the process. The end result was a “drive by” public process so FWS could check off one more item from their required “to do list” by claiming they’d held a “Workshop” where none existed – or was ever intended.

(3) In addition to the Supplemental Draft HBRC, FWS has provided peer reviews by Dr. Michael Proctor (Proctor 2017) and Dr. Bruce McLellan (McLellan 2017). While both individuals have long histories as grizzly bear researchers and provide some important recommendations, there are some problems with these reviews, as follows:

- * Given the depth and complexity of the HBRC issue, both reviews appear to be fairly cursory “reports” that touch on a few key issues rather than going in depth.

- * Referring to the FWS use of the 2011 Baseline regarding habitat conditions, McLellan says, “The logic appears rational to me provided the important conditions do remain similar.” And Proctor comments, “This is not so much a ‘science’ conclusion as a logical conclusion that seems reasonable.” Unfortunately, what seems “logical” is not necessarily sound science, and FWS is required to use “Best Available Science” – not simply logic, or what it feels is “reasonable.”

- * It has been noted by some that both peer reviewers have a long history of working with the U.S. Fish and Wildlife Service and U.S. Forest Service, thus stretching any FWS claim of Independent Peer Review to the breaking point. For an issue of this magnitude, I would suggest adding reviews by independent scientists who have been skeptical of the government’s approach in the past, including: Dr. David Mattson, Dr. Lance Craighead, Dr. Barrie Gilbert, and Dr. Brian Horejsi.

(4) In its Draft Conservation Strategy for the NCDE, the Fish and Wildlife Service unilaterally declares that the NCDE population was recovered in

2011, sets that year up as a Baseline Year against which to measure changes, and requires no habitat improvements beyond those of the baseline year. This declaration is based upon an estimated population of 960, a trend estimate of 2.3%, and full occupancy of all Bear Management Units in the PCA (Primary Conservation Area) (Costello et al. 2016). There are a number of problems with this unsupported assumption, as follows:

First, it doesn't meet the legal requirements of recovery. As part of the court settlement referenced on P: 2 of the Draft Supplement: HBRC, Judge Friedman said the following:

“The FWS has not explained how minimum bear population and grizzly distribution goals consider how much habitat and of what quality is necessary for recovery, or how the answers to these questions can be derived from the ‘females with cubs’ and ‘occupancy’ criteria. Nor does the Recovery Plan’s requirement that a Conservation Strategy (that will include minimum habitat values and additional monitoring methods) be implemented before any delisting process is commenced address this deficiency. The promise of habitat based recovery criteria sometime in the future is simply not good enough. The purpose of the habitat recovery criteria is to measure the effect of habitat quality and quantity on grizzly recovery See FWS Recovery Guidelines, A.R. Tab 78 at I-5. Such monitoring is not possible if there is no scale against which to gauge the status of the habitat.” (Fund for Animals v. Babbitt, Civil Act. No. 94-1021 (PLF) and National Audubon Society v. Babbitt, Civil Act No. 94-1106 (PLF) (Consolidated) 1997.)

Yet the Draft NCDE Conservation Strategy (2013) repeats this error by presenting no comprehensive Habitat Based Recovery Criteria (HBRC) capable of measuring or monitoring “the effect of habitat quality and quantity on grizzly recovery”, or “objective, measurable criteria” by which to assess “present or threatened destruction, modification, or curtailment” of that habitat, as required by the Endangered Species Act, section 4 (USFWS, ESA 1973).

And while the Draft Conservation Strategy’s commitment to measure/maintain motorized route density, new recreational developments, grazing allotments, mining and oil and gas permits at 2011 levels could address some security issues, they tell us little about the actual quantity, quality, or connectivity of key habitats or the priority foods on them – the

exact qualities required by the federal court in establishing HBRC.

Unfortunately, the Service has chosen to build its claims for a 2011 “recovery” on this same house of cards – that because of an estimated population of 960, a trend of 2.3%, and full occupancy of all BMU’s (Costello et al. 2016), the NCDE population is recovered. This is the exact claim the federal court tossed out 23 years ago. And since FWS can’t claim recovery based on these false criteria:

- * It can’t claim any scientific justification for its arbitrary 2011 Baseline;
- * It can’t claim any scientific justification for tossing out Amendment 19 (A19) to the Flathead Forest Plan as the best available science on grizzlies and motorized access;
- * There’s no basis not to extend A19 standards ecosystem-wide;
- * There are no grounds on which to allow the U.S. Forest Service “temporary increases” in Open Motorized Route Density (OMRD +5%), Total Motorized Route Density (TMRD +3%), or decreases in Security Core (-2%) – particularly not for 5-year “Projects” with 1-year restorations, and “extensions” all around.

Second, when we examine the research history of the NCDE, we find that neither Federal nor State agencies have ever conducted comprehensive habitat mapping of the ecosystem, and there are no long-term, ecosystem-wide studies of grizzly habitat generally or preferred foods specifically.

Thus the Draft Conservation Strategy’s commitment to freeze conditions at the discredited 2011 Baseline level rings hollow, because no agency – federal or state - has any idea of what those habitat levels or arrangements were. And with no knowledge of actual habitat in its Baseline Year, there’s absolutely no benchmark from which to gauge future habitat improvement or decline and its impact on bears. We remind FWS of Judge Friedman’s admonition from more than two decades ago – “Such monitoring is not possible if there is no scale against which to gauge the status of the habitat.”

This is particularly serious given the findings of Doak (1995) that there was an 8-13 year “lag time” between habitat decline and grizzly population decline – and that was in Yellowstone, with decades of habitat research. In the NCDE with no such research, the agencies will be flying blind, making decisions without adequate habitat information, and endangering the long-term recovery of grizzlies in this ecosystem, and the lower 48 states.

The assurances from FWS and Montana Fish, Wildlife and Parks (FWP) that they can gauge habitat condition and trend by monitoring bear weights, body condition and isotope levels rings hollow as well. As federal agencies repeatedly remind us, grizzlies are “opportunistic omnivores”, have a wide-ranging plant and animal diet, and can shift from one food to another as conditions warrant. As Doak (1995) warned, grizzlies facing a gradual decline in high-calorie key foods will switch to other emergency or fall back foods – often with fewer calories - in a slowly failing effort to make up the difference, thus masking declines in body condition and increases in mortality, for a decade or more.

And while isotope studies can tell us if bears are eating plants or animals, and if corn or livestock are going up in some grizzly diets, they cannot tell us what is happening to habitat ecosystem-wide, or among key foods. Only the comprehensive, long-term habitat studies that federal and state agencies have failed to do since the federal court order 20+ years ago can tell us that, and they’re busy coming up with phony, surrogate, “habitat-related” recovery criteria.

On P: 2 of the FWS Supplemental Draft (USFWS 2017), the Service throws out the following “red herring” to distract us from its failure to follow the courts clear orders when it says:

“There is no published method to deductively calculate minimum habitat values required for a healthy and recovered population.”

Yet this is precisely what FWS has done by arbitrarily, and with no basis in science, choosing a 2011 Baseline year to declare recovery a success and then choosing surrogate “Habitat-Related” Recovery Criteria geared to security issues – while refusing to develop real habitat criteria based on habitat quantity and quality for 2011, or any other year.

The public, and the court, are demanding that the Service stop making excuses and develop a comprehensive, ecosystem-wide assessment of key habitat types, key grizzly bear foods, a mapped distribution of those, and ongoing research to monitor their condition over time. Contrary to FWS claims there is nothing impossible about this at all – it’s called basic research, and the only thing lacking is a commitment by federal and state agencies to Do Their Jobs.

Third, the Service's claim that the 2011 Habitat Baseline is valid and can be maintained indefinitely assumes that the Future will look like the Past – an obvious fallacy.

* Human population in the NCDE – particularly on the west side - is one of the fastest growing in the state and is projected to continue. With Flathead County at a population of 96,165 and the twelve NCDE counties collectively at nearly 377,000 (USDA 2016), the outlook for grizzlies is not rosy. And the Flathead Forest DEIS, Volume 2, P: 180-181 states that the population of the four-county area west of the Flathead and Mission Valleys is projected to increase 39 percent from 2010-2035, and 35 percent from 2035 to 2060 (USDA 2016a).

Research by Mattson (2002) found that grizzly mortality is driven by frequency of human contact and lethality of that contact. Costello et al. (2016) found that the top causes of current NCDE grizzly mortality are: poaching, management control related to attractants, and self-defense – all likely to increase as human population rises.

* Since 2000, several hundred thousand acres of the NCDE have burned in wildfires, and under a climate change scenario reported in the current FEIS for the Flathead Forest Plan (USDA 2017, Vol.1) and the FEIS for NCDE Grizzly Amendments (USDA 2017a, Vol.3) this pattern is expected to continue and increase, with fires becoming larger and more severe. Yet there is no ecosystem-wide research looking at the implications for grizzly habitat.

* Recent research by Dr. David Mattson (personal communication 2016) has found that climate change is also likely to result in significant declines in most berry species in upcoming decades. Every bear manager in the NCDE knows that years of widespread berry collapse see spikes in grizzly mortality. What happens if those failures become permanent? Nowhere in these Habitat Based Recovery Criteria do we see any effort to work with other federal agencies to find out.

* Glacier National Park has some of the best habitat in the ecosystem and is considered a key “source” population (Kendall et al. 2009, Costello et al. 2016). Yet Glacier has repeatedly broken visitation records since 2010, with visitation in 2017 another record at 3.3 million (Kalispell Daily Inter Lake 2018). Recall Mattson's warning about frequency of human contact, and lethality of that contact.

These are just a few examples of key upcoming habitat stressors, none seriously considered by the Draft Conservation Strategy, or dealt with realistically by a 2011 Baseline grounded in wishful thinking and “manager preferences” rather than sound science.

Fourth, even if we were to assume that the Conservation Strategy and its 2011 Habitat Baseline is based upon rock solid science, its implementation, and the demonstration of “Adequate Regulatory Mechanisms” required by the ESA, rests in large measure on the five National Forests of the NCDE. Unfortunately, the U.S. Forest Service’s 2012 Planning Rule removed most enforceable standards, making Forest Plans “aspirational” rather than “regulatory.” Thus, even if the NCDE forests sign on to the Conservation Strategy’s Memorandum of Agreement, it will be based on Forest Plans that have been stripped of most of their regulatory teeth.

Fifth, the Service’s Draft Conservation Strategy budget reveals absolutely no intention to comply with the federal court’s directive that Habitat-Based Recovery Criteria must demonstrate the quantity and quality of actual habitat needed to reach recovery.

Instead, when we look at Draft Conservation Strategy (2013) Appendix 16, “Annual Cost Estimates by Agency for Implementing this Conservation Strategy” we find a total budget of \$1,822,621, with \$9400 available for “Habitat management”, and \$15,290 for Habitat condition (isotope ratio & body condition monitoring) for a total of \$24,690 or 1.35% of the budget. None of this suggests a federal or state commitment to monitoring habitat condition or trend – once more leaving those agencies flying blind.

(5) Finally, the Service must clearly re-commit itself to motorized access standards based upon the “best available science”, not an artificial 2011 Baseline driven by a Political decision that NCDE grizzlies were “recovered.”

In its 2011 5-Year Grizzly Bear Status Review, FWS correctly stated that until all subunits are in full compliance with “scientific access management standards” threats to grizzlies will not have been substantially eliminated (USFWS 2011, P: 39).

For the NCDE, the best available science is still Amendment 19 to the Flathead Forest Plan providing that Open Motorized Route Density (OMRD)

must be 19% Or Less of each BMU subunit exceeding 1 mi./sq.mi; Total Motorized Route Density must be 19% Or Less exceeding 2 mi./sq.mi; and At Least 68% of each subunit be in Core Areas of at least 2500 acres (USDA 1995). To adequately protect habitat, those standards must be fully implemented ecosystem-wide.

Note that the 19/19/68 standard is a minimum. Subunits that are currently better than this – for example 16/16/70 – meet the A19 standard, they do not “exceed” it, and NCDE Forests are not allowed to increase motorized routes in these subunits until they reach 19/19/68.

(6) As the recent wolf delisting case from the Great Lakes Case demonstrates See *Humane Society of the United States v. Zinke*, 865 F. 3d 585, 603 (D.C. Cir. 2017), delisting by Distinct Population Segment (DPS) does not pass either scientific or legal muster – not only for wolves, but for slow-reproducing grizzlies as well.

This in turn makes it absolutely clear that true grizzly recovery requires linked “metapopulations”, not only within recovery ecosystems, but also in landscape-scale Linkage Zones between them with bear-based habitat standards – not the politically contrived Demographic Connectivity Areas (DCA’s) designed for human convenience. And as the term “Demographic” correctly implies, these linkages must function for residential females as well as males. To accomplish this, FWS must do the following:

(a) Abandon the weak habitat “standards” currently being advanced outside the PCA.

In an apparent effort to justify the excessive route densities called for in Zone 1, Zone 2, and DCAs, FWS and the Forest Service repeatedly rely on work by Boulanger and Stenhouse (2014) from Alberta as follows:

“ Road densities less than or equal to 2.4 linear mi./sq. mi. appeared to be a threshold for grizzly bear occupancy in Alberta. Bear mortality was reduced when road density was reduced below 1.6 mi./sq. mi., and areas with less than 1.2 mi./sq. mi. were described as being capable of serving as core conservation areas.” (USDA 2016, Volume 3 at 39).

There are several reasons why using these weaker standards are scientifically unacceptable:

- * Linear road densities have been considered outdated and not “best available science” under the ESA for 20 years. And while Alberta has no law comparable to the ESA and requiring that best science be used, that is certainly not the case here.
- * U.S. research is based upon the critical female segment of the population, while the Alberta study used data from both male and female bears with significantly different road tolerances.
- * The best available science of Amendment 19 is specific to the NCDE, while the Boulanger and Stenhouse study comes from a Canadian Province where habitat mismanagement has reduced the historic grizzly population estimate from 6000 to barely 600.
- * FWS has neglected to report two other findings from this same study, (a) “If lower survival rates of females with dependent offspring is considered, then the threshold of road density that bears can tolerate is reduced further (Fig. 4).” And (b) “Currently the Alberta government is attempting to manage identified core and secondary conservation zones within each BMA at road densities of 0.6 km/sq.km. and 1.2 km/sq.km” (Boulanger and Stenhouse 2014, P: 15) - which translates to .96 mi./sq. mi. and 1.92 mi./sq. mi. – both slightly lower than A19’s 1.0 OMRD and 2.0 TMRD respectively – although still based on the unscientific “linear route density.”

We remind the Service that the Interagency Grizzly Bear Task Force (1998) recommended that the percentages of OMRD, TMRD, and Core be evaluated using a “Moving Windows” analysis method – not linear miles, not averaged miles, and definitely not 2.4 miles/ sq.mi.

- * In the Draft Conservation Strategy (2013) we are told that the purpose of Management Zone 2 is “...to provide the opportunity for grizzly bears, particularly males...to move between the NCDE and adjacent ecosystems...”

In addition, the Draft CS says, “...there are no habitat standards specifically related to grizzly bears because the objectives in these zones do not require them” and “The objective is to maintain existing resource management and recreational opportunities and allow agencies to respond to demonstrated conflicts...” In other words, extractive industry and motorized recreation as usual, and grizzlies that prove “inconvenient” will be killed.

To see how this “business as usual” approach is working in the vital Zone 2 linkage between the NCDE and Greater Yellowstone we need look no

further that the research of Peck et al. (2017) – “Potential Paths for Male-mediated Gene Flow to and From an Isolated Grizzly Bear Population” – where 20,000 runs of their model failed to find even one male movement between the two ecosystems.

Rather than going shopping for weaker motorized route standards in another country, We recommend that FWS and the Forest Service stick with the proven NCDE standards of A19, and apply them to all USFS lands regardless of the percent of Forest Service management control, including in Zone 1, Zone 2, and all DCA's. The security requirements of grizzlies do not change because USFS only manages 65% or 70% of a subunit.

(b) Since DCA's are Demographic connectivity areas, FWS must take steps to ensure that these are landscape scale areas that function as both residential and movement linkages for female as well as male grizzlies.

(c) Unless the Service implements science-based habitat standards in DCA's, these grizzlies will be the first ones killed in any likely hunting season that Montana Fish, Wildlife and Parks (FWP) may implement. This will simultaneously destroy any functional DCA's; sever the linkage necessary to maintaining a metapopulation; recreate an isolated DPS; and make recovery and delisting biologically impossible.

(7) Reinstate limits on high intensity use non-motorized trails.

Both the Draft CS, this HBRC Supplement, and new Forest Service Plans and Grizzly Amendments impermissibly drop high-intensity use non-motorized trails (>20 parties per week for at least one month during the non-denning season) from being buffered by 500 meters as roads are, and from being discounted as Core habitat.

This unwarranted decision is based on the conclusion that “none of the cited studies documented increased mortality risk from foot or horse trails or population level impacts to grizzly bears from displacement.” However, the Draft CS (2013) states that, “multiple studies document displacement of individual grizzly bears from non-motorized trails to varying degrees (Schallenberger and Jonkel 1980; Jope 1985; McLellan and Shackleton 1989; Kasworm and Manley 1990; Mace and Waller 1997; and White et al. 1999).” And as noted above, USFWS (2014) found that such displacement has consequences for grizzly breeding, feeding, denning, and survival.

Given the science demonstrating displacement impacts to grizzly bears, FWS and NCDE Forests must take a precautionary approach and re-instate high intensity motorized trails as areas to be buffered by 500 meters, rather than try to artificially create core habitat where none exists. Grizzlies should not have to die in the middle of trails before FWS does its job and protects them and their habitat security.

(8) Both Costello et al. (2016) and this Draft Supplement: HBRC (USFWS 2017) indicate that NCDE grizzlies currently occupy 21,313 sq. mi. (13,640,320 acres) while the Primary Conservation Area where grizzlies will retain a higher level of protection is 8926 sq. mi. (5,712,640 acres).

This means that under the Draft Conservation Strategy and this HBRC document, the moment delisting occurs, 12,387 sq.mi. or 7,927,680 acres of occupied habitat (58% of the total), and the grizzlies living there, will not be protected at the 2011 Baseline levels, and will see significantly less protection than under the ESA. Clearly, the Draft Conservation Strategy's empty commitment to a "stable to increasing population" will be impossible to achieve (USFWS 2013).

Recommendations for Real Habitat-Based Recovery Criteria

- * The Service must make a clear break with Draft Conservation Strategy's politically contrived 2011 Baseline and commit itself to habitat criteria based upon the quantity, quality, and connectivity mandated by the federal court 21 years ago.

- * FWS must work with all federal and state land managers to develop an ecosystem-wide habitat map and verify it with on-the-ground follow-up surveys. Glacier National Park has done this and the other agencies must follow suit.

- * FWS must identify priority landscapes for grizzlies in the NCDE, their locations, current conditions, and prospects for the future. Examples might include, but not be limited to, avalanche chutes, shrubfields, riparian zones, wilderness and roadless areas, army cutworm moth sites, big game wintering areas, and widespread berry patches. Every commercial berry picker in NW Montana knows where the best berry fields are. It shouldn't be too hard for

the Fish and Wildlife Service to follow suit. Once identified, these habitats must be subject to long-term research and monitoring to catch changes early.

- * Working with NCDE grizzly bear specialists and land managers, the Service must identify a list of high energy, top priority bear foods specific to this ecosystem – both east and west of the continental divide. At a minimum, this should include all commonly preferred berries, ungulates and livestock on the Rocky Mountain Front, army cutworm moths, and a suite of key plants. Here too, research and monitoring must be long-term, and ecosystem-wide. All foods are not created equal in terms of energy provided, and FWS needs to stop claiming that grizzlies can simply switch foods with no negative consequences – it's demonstrably false.

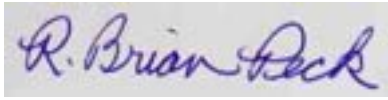
- * It's absolutely vital that FWS conduct a comprehensive analysis of the likely cumulative impacts of climate change on grizzlies and their habitat. The 2010 workshop on the topic reported in the Draft Conservation Strategy was more an exercise in "fixing the facts" around predetermined agency opinions, than an exercise in sound science (Servheen and Cross 2010). The Service has a rare second chance to get it right and should grab the chance to retrieve its credibility.

It can start by working with USGS climate/glacier expert Dan Fagre to see what his NCDE-specific models are showing in terms of climate change and habitat change/loss in terms of grizzlies. It will also be important for the Service to hold detailed meetings with grizzly expert David Mattson to review his models of climate change and region-wide berry loss.

- * Finally, the Service must replace the politically convenient but ecologically wrong 2011 Baseline on Motorized Access Route Density with the scientifically strong standards referenced above. Forests like the Flathead cannot simply be given a pass to leave open 518 miles of roads mandated for closure under A19, and to rebuild many of the 780 miles of road it has decommissioned since 1995.

Unfortunately, rebuilding of these previously decommissioned roads is taking place as we speak in Flathead Forest projects like Trail Creek Salvage, Hungry Lion, Taylor Hellroaring, and Bug Creek. Failure of FWS to require the science-based standards of A19 ecosystem-wide clearly undermines real grizzly recovery and the credibility of the Service as well.

Sincerely,



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