

February 11, 2018

Objections Reviewing Officer
USDA Forest Service, Northern Region
26 Fort Missoula Road
Missoula, Mt. 59804

Dear Objections Reviewing Officer,

Thank you for the opportunity to file Objections regarding documents relating to the Final EIS for the Flathead Forest Plan, and Final EIS for Forest Plan Amendments related to NCDE Grizzly Bears. Please enter these comments and objections on behalf of independent wildlife consultant Brian Peck into the formal record, and keep me updated as this process unfolds. Please also include by reference the Objections of Swan View Coalition and Friends of the Wild Swan.

Because so many of the following objections apply to both of the above processes and documents, I have chosen to file a single objection document, marking each objection with FFP if it applies to the Flathead Forest Plan, or GRAM if it applies to the Grizzly Amendments, or both.

OBJECTION 1: (FFP/GRAM) Inappropriate Reliance on the Draft NCDE Conservation Strategy

A key purpose of the Flathead Forest Plan and Grizzly Bear Amendments for NCDE Forests is to incorporate elements of the NCDE Grizzly Conservation Strategy (CS) to demonstrate that “adequate regulatory mechanisms” are in place to protect grizzlies post-delisting. However, the documents currently available for public comment and objection are based upon a Draft Conservation Strategy (Draft CS), while the NCDE forests are required to incorporate provisions of a Final Conservation Strategy (Final CS), which won’t be released until later Spring 2018.

The NCDE Forests have responded that they aren’t concerned because they anticipate changes to the Final CS will be minor and if necessary these can be handled by further amendments to the various forests plans. There are several problems with this approach, as follows:

(a) If few, or no changes will be made to the Final CS, this implies that the U.S. Fish and Wildlife Service (FWS) has reached a pre-determined conclusion; intends to improperly ignore tens of thousands of public comments on the Draft CS; and that NCDE forests are onboard with this subversion of the public process.

(b) If the NCDE forests need to amend the forest plans they've just amended, it will require significant additional staff, time, and dollars to correct the problem – all unnecessarily at taxpayer expense.

(c) At the recent Fall 2017 NCDE Grizzly Bear Subcommittee meeting FWS Grizzly Recovery Coordinator Hilary Cooley made it clear that there will be no opportunity for public comment on the Final NCDE Grizzly Conservation Strategy when it finally comes out, although it will be the document underpinning grizzly management post-delisting. And presumably the forests of the NCDE will follow suit and refuse public comment on their final documents incorporating the Final CS provisions. A more blatant attempt by both the NCDE forests and the U.S. Fish and Wildlife Service to throw the required public process under the agency bus would be hard to imagine.

Solution: Withdraw the current Flathead Forest Plan/Grizzly Amendments until the Final NCDE Conservation Strategy is issued; incorporate any changes from the Final CS; re-issue all of these documents along with the Final CS for a full and appropriate public inclusion process.

OBJECTION 2: (FFP/GRAM) Premature claims of a “recovered” NCDE population undermine the Flathead Forest Plan, NCDE Grizzly Amendments, and The NCDE Conservation Strategy.

The scientific and legal problems of this approach are as follows:

(a) 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). Unfortunately the Forests of the NCDE have chosen to follow FWS off this legal and scientific cliff.

First, it doesn't meet the legal requirements of recovery. As part of the court settlement referenced on P: 2 of the Draft Supplement: Habitat Based Recovery Criteria (USFWS 2017), 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.)

Unfortunately, FWS and the NCDE Forests have chosen to build their 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 20+ years ago. And, since FWS/USFS 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 recognize and adopt A19 standards ecosystem-wide, particularly since the current NCDE Grizzly Amendments, Volume 3, recognize its 19% OMRD, 19% TMRD, and 68% Core as the “recommended levels” for all ecosystem forests (USDA 2017 Vol. 3, Pages 53,68,78,and 89);
- * 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.

(b) Population numbers, growth rate, and distribution are not one of the Endangered Species Act’s Section 4 Delisting Criteria (USFWS 1988).

(c) Most independent grizzly researchers estimate that true recovery will require a lower 48 population of 2500-3000 grizzlies in a linked “metapopulation”, with some estimates as high as 5000 (Allendorf and Ryman 2002, P: 51, Bader 2000, Reed et al. 2003, P: 23, Shaffer 1992, P: 10, Traill et al. 2010, P: 32). Yet, the current population in the lower 48 states is only 1800 bears, with recovery areas/ecosystems largely isolated.

(d) Dr. Richard Harris, a contributor to the Draft Conservation Strategy, stated that the 3% growth rate claimed in that document does not meet “the conventional level of statistical certainty” (USFWS 2013, Appendix 2, P: 9).

OBJECTION 3: (FFP/GRAM) Failure of the NCDE Forests, working with the U.S. Fish and Wildlife Service to develop and adopt the Habitat Based Recovery Criteria required by the court.

The ESA’s first listing/delisting criteria is, “the present or threatened destruction, modification, or curtailment of its habitat or range.” Yet long-term, ecosystem-wide grizzly habitat studies have never been conducted in the NCDE by any federal or state agency, hence, the agencies have no habitat baseline against which to measure these criteria.

And while the commitment in the Draft CS, Flathead Forest Plan, and Grizzly Amendments to measure/maintain motorized route density, new recreational developments, grazing allotments, mining and oil and gas permits at 2011 levels could address some habitat security issues, monitoring these will tell us little about the actual quantity, quality, distribution, or connectivity of key habitat types, or the priority foods on them – the exact criteria required by the federal court in establishing HBRC. We remind the Forest Service 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), and the Forest Service that they can gauge habitat condition and trend by monitoring bear weights, body condition and isotope levels rings hollow as well (Costello et al. 2016). 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 important 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 the phony, surrogate, “habitat-related” recovery criteria above.

Before the Forest Service uses the standard excuse that the development of Habitat Based Recovery Criteria is the sole responsibility of the U.S. Fish and Wildlife Service, and NCDE Forests have nothing to do with it, we remind you of the following from Volume 3, FEIS for Grizzly Amendments (USDA 2017), P: 34:

“In section 2 of the Endangered Species Act, it is ‘declared to be the policy of the Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this act.’”(emphasis added).

No single act is more critical to the conservation of any listed species than the identification and protection of its key habitat types, and the development of HBRC is central to that mission. And since the forests of the NCDE directly manage more than 60% of the ecosystem’s habitat, they cannot continue to duck this responsibility.

To begin correcting this deficiency of long-term, ecosystem-wide habitat research in the NCDE, we recommend that the agencies begin with Volume 1 – FEIS Wildlife Section 3.7 to the Flathead Forest Plan (USDA 2017a), Pages 499-501. Here we find an excellent listing of key NCDE habitat types and high-energy foods important to grizzly bears.

Step one would be to work with Montana FWP and Glacier National Park on a comprehensive NCDE habitat-mapping project. Step two should be “ground-truthing” these habitat types and comparing them to the locations of GPS-collared grizzlies from Mace and Roberts (2014) and Costello et al. (2016). Step three is developing, funding, and conducting the actual research needed to form a true habitat baseline for recovery, and track changes over time. This cannot be a “quick and dirty” effort to grease the skids for a premature delisting. Rather, it must involve a long-term and ongoing commitment to science-based decision making.

Of particular importance is the research of Bruce McLellan (2015) from page 500 of FEIS Volume 1 – Section 3.7:

“McLellan stated that a significant implication of his 30-year study is that the abundance of a high-energy food source growing in undisturbed portions of his study area enabled the grizzly bear population to increase in spite of intense industrial development and the highest density of hunter-killed grizzly bears in British Columbia. Once the high-energy food source declined, the grizzly bear population declined because of reduced reproduction (either directly or indirectly). He stressed that managers should identify which high-energy foods are important in various ecosystems and try to maintain or enhance these foods while reducing human access into habitats where they are abundant.” (USDA 2017a).

OBJECTION 4: (FFP/GRAM) Abandonment of the NCDE’s only science-based, bear-based, access management standards and replacing them with an entirely arbitrary 2011 Baseline.

The best available science on grizzly habitat security and motorized access route density is Amendment 19 to the Flathead Forest Plan (USDA 1995) which, as noted above, has been accepted by the other NCDE Forests as the “recommended level” for Open and Total Motorized Route Density and Security Core (USDA 2017, Vol. 3).

Since the false rationale for “recovery” based on population, trend, and distribution has already been invalidated by the court, it follows that the arbitrary choice of a 2011 Baseline Year tied to that false recovery is equally invalid and must be abandoned. Similarly, all references justifying Standards, Objectives, Guidelines, or Desired Conditions in the Flathead Forest Plan or Grizzly Amendments because they were “in place at a time when the NCDE grizzly bear population was known to be increasing” are equally invalid and must be stricken. Yet the Flathead Forests continue to ignore both science and law in a misguided effort to duck its responsibility to decommission roads and trails under A19.

Volume 1 – Wildlife Section 3.7, P: 529 (USDA 2017a), contains the following statement:

“In order to meet amendment 19 numeric objectives for all three measures of motorized access density...an additional 518 miles of roads would need to be reclaimed. This total includes up to about 400 miles of roads in lands acquired through the Montana Legacy Project and about 57 miles of trails where wheeled motorized use would no longer be allowed unless site-specifically amended...”

“It is uncertain whether additional road or trail restrictions on NFS lands would reduce female grizzly bear mortality or increase the grizzly bear population because grizzly bears are a wide-ranging species and grizzly bear mortality may still occur on private lands...”

We remind the forests of the long-running research by Aune and Kasworm (1989) which found that sixty three percent (63%) of known, human-caused grizzly bear deaths on the east front of the Rocky Mountains occurred within 1km of a road, including ten of eleven known female deaths.

In addition, The Flathead’s own FEIS, Volume 1, P: 114-115 contains the following damning indictment of leaving a maze of roads on the landscape:

“ Road networks have been shown to have detrimental effects on water and aquatic resources in forested landscapes Road systems can change a natural hydrological regime by altering natural flow patterns and increasing sediment delivery to streams. Roads have been shown to destabilize side-casted material and hillsides, expand the lengths of gullies and stream

channels, increase sediment delivery, and alter streamflow and channel adjustments...”

“Natural drainage patterns can be affected over the long-term by the mere presence of roads (emphasis added). Roads intercept subsurface drainage in cutslopes, capture rainfall on hardened road surfaces, and route excess runoff into the stream channel system. These impacts increase as the road system becomes more connected hydrologically to the natural channel network...”

Clearly, the above applies to all of the forests ecosystem-wide. It’s time for the Forest Service and FWS to stop trying to “fix the facts” around recovery and delisting, formally adopt Amendment 19 ecosystem-wide, and get on with road decommissioning to protect public lands and wildlife.

OBJECTION 5 (GRAM) Population Objectives in the NCDE Grizzly Amendments, and based upon the Draft Conservation Strategy, will not maintain a “stable to increasing” NCDE grizzly population, and do not maintain the 2011 Baseline.

The Draft CS states that its objective is “...maintenance of habitat conditions that are compatible with a stable to increasing grizzly bear population.” However, this goal is contradicted by the following:

* In the absence of any comprehensive, long-term habitat research, neither FWS nor the Forest Service has the slightest idea of the current habitat conditions it’s pledging to maintain.

* Although the current population estimate is 960 (Costello et al. 2016), the Draft CS goal to maintain is 800 – a 17% decline.

* The current survival rate of independent females is 95.2%, while the goal of the Draft CS is merely >90% survival.

* The current mean annual mortality rate of independent males is 13.8% - 15.6%, but the Draft CS would allow 20% with no scientific basis for this higher level of allowable mortality.

* With the Flathead Forest Plan and Grizzly Amendments freezing motorized access at 2011 levels while 518 miles of roads remain unclosed

on the Flathead alone; approval of 5-Year “Projects” possible in every BMU Subunit; 57 percent of currently occupied grizzly habitat getting weaker protection post-delisting; lower female survival and higher male mortality sanctioned; and fictional Demographic Connectivity Areas (DCA’s) to other ecosystems, the probability of maintaining a “stable to increasing” grizzly population is Zero.

If the goal of federal agencies is truly to manage for a “stable to increasing population”, then the current population, occupied habitat, and female/male survival rates must be maintained.

OBJECTION 6: (FFP/GRAM) Standards for Zone 1, Zone 2, and Demographic Connectivity Areas (DCA’s) will not lead to or protect grizzly recovery, or allow connectivity to other ecosystems.

Zone 1:

The Draft CS designates a Management Zone 1 around the Primary Conservation Area (PCA) with the following claimed characteristics:

- “The objective in Zone 1 is continual occupancy by grizzly bears but at expected lower densities than inside the PCA.”
- “In these areas, habitat protections on Federal and Tribal lands will focus on limiting miles of open roads and managing current roadless areas as stepping stones to other ecosystems.”
- “Attractant storage rules would be implemented on Federal, Tribal, and most State Lands.”

These Objectives for Zone 1 make the objective of “continual occupancy” nearly impossible because (1) open road limitations will be based on the new 2011 Baseline standard that has no basis in science; (2) will calculate open road densities based upon the outdated and discredited “linear road density” of Boulanger and Stenhouse (2014); (3) contain no limitations on Total Motorized Route Density (TMRD) or on miles of motorized trails; (4) under the new Kootenai Forest Plan which guides management direction in part of the Salish DCA, 84 percent of IRAs are systematically denied more protective Recommended Wilderness status, with most designated

Motorized Backcountry instead (USDA 2015a); (5) Management control of food conditioned grizzlies (attractants) is the #2 cause of NCDE grizzly mortality (Costello et al. 2016); (6) and the Draft CS tells us that the State of Montana manages over 500,000 acres in the NCDE, yet does not control attractants on all of its lands. Given all of these factors, it is highly questionable how the Flathead can reasonably expect “continual occupancy” of grizzly bears in Zone 1 or DCA’s.

To address these serious shortcomings, the Forest Service and FWS must do the following:

Abandon the weak habitat “standards” currently being advanced outside the PCA, in particular, the unjustified standards of 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 numerous reasons why using these weaker standards are scientifically unacceptable:

- * Linear road densities, and averaging density across BMU’s or subunits, have been considered outdated techniques and not “best available science” under the ESA for 20 years. And while Alberta has no law comparable to the ESA 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.
- * The federal agencies have 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” (Boulander 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.”

The Flathead Forest would be well advised to revisit the findings of Mace and Manley (1993, P: 25-26) regarding averaging road densities across broad landscapes:

“Techniques for calculating road densities that average over large blocks of land (e.g. a BMA), inclusive of both high and low elevations, result in inadequate assessments of grizzly bear response to road densities . . . For example, our entire analysis area has an average open road density of 0.63 mi/mi² and meets current road density standards. Our precise [“moving window” GIS] open road density technique produces the same average open road density. However, from our method we know that 26% of the analysis area (70 mi² of habitat) exceeds the 1.0 mi/mi² standard. When all roads are included in calculations for our analysis area, the average total road density is 1.13 mi/mi² with 22% (58 mi²) of the area having >2 mi/mi². This 58 mi² of habitat was used less than expected by radio-instrumented bears . . . Apparently, grizzly bears adjust their habitat use patterns in part to both precise open road densities and precise total road densities. Unless a road has completely revegetated, managers should assume that some level of human use is occurring along closed roads, and grizzly bears will respond to that use . . . The preponderance of adult females in the population suggests that survival of individual bears is directly related to their selection for unroaded areas. To date, the data suggest that if unroaded habitats are reduced in quantity and size, the number of adult females will eventually decline.”

We remind the Forest 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. Rather than “research shopping” for weaker standards in a foreign country, the Forest Service must use the NCDE specific standards of Amendment 19, including TMRD and motorized trails.

Zone 2:

* 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. Thus it appears that the Draft Conservation Strategy, and any Forest Plan or Grizzly Amendments based upon it, intend to manage Zone 2 as a *mortality sink* not a *population link*.

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 than 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 computer model failed to find even one male movement between the two ecosystems.

Here again, 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 to meet “manager preferences” because USFS manages less than 75% of a subunit.

Demographic Connectivity Areas:

Since DCA’s are Demographic connectivity areas, the NCDE Forests must take steps to ensure that these are landscape scale areas that function as both residential and movement linkages for female grizzlies as well as males.

Unless the Service implements science-based habitat standards in DCA’s based upon the known security needs of grizzlies (Amendment 19), these bears 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 linkages necessary to maintain a connected metapopulation; recreate the NCDE as an isolated DPS; and make recovery and delisting biologically and legally impossible.

OBJECTION 7: (FFP/GRAM) Excessive Female mortalities are sanctioned with no prompt corrective Action required.

Although Draft Conservation Standard 3 states that mortality of independent female grizzly bears will not exceed ten percent, it contains absolutely no timely consequences if that level is even approached, much less exceeded (USFWS 2013). In fact, despite the fact that grizzlies are one of the slowest-reproducing mammals in North America, with female mortalities being especially serious, the Draft CS throws the Precautionary Principle completely out the window. And the Flathead Forest Plan and Grizzly Amendments, by adopting the flawed Draft CS, incorporate the same error. For example:

“As an example of the application of the management review triggers, if independent female survival was between .89 and .90 for 12 consecutive 6-year intervals such as 2014-2025, a management review would be triggered” (USFWS 2013).

Thus, it would be twelve years before even a review of this serious decline would start, and potentially much longer before any corrective action is taken, by which time it would likely be too late. We remind the forests of the Doak (1995) research showing an 8-13 year lag time between habitat decline and population decline.

With current NCDE female mortality at 4.6 percent, we see no rational explanation why any responsible federal agency would be willing to watch that rise to 10 percent (an increase of 117%), and to do so for 12 years, before sounding the alarm.

The Forests of the NCDE, and FWS, must adopt the following standards to correct this critical management error:

An immediate, non-discretionary management review will be required if – female grizzly mortality breaches allowable levels for 2 consecutive years, or in 3 out of any 5 year period; or male mortality exceeds allowable levels for 3 consecutive years, or in 3 of any 5 years.

OBJECTION 8: (FFP/GRAM) “Temporary” Increases in OMRD, TMRD, and decreases in Security Core have no basis in science and will not protect grizzlies.

The Flathead Forest Plan and Grizzly Amendments allow “temporary increases” in Open Motorized Route Density (+5%); increase Total Motorized Route Density (+3%), and reduce Security Core (-2%). This is based upon seven national forest projects – five on the Flathead, one on the Lolo Forest, and one on the Kootenai Forest between 2003 and 2010 (Ake and Kuennen 2017). Since these projects occurred at a time when FWS claimed that the NCDE grizzly population “is known to have been increasing” the Forest Service claims that these standards must be adequate for the entire ecosystem. Such highly questionable assumptions are flawed decision-making at its worst, as follows:

* It should be obvious that 7 projects affecting just 16 subunits would not cause the entire NCDE grizzly population on 5.7 million acres to crash. However, concluding from this tiny data set that similar reductions in habitat security can be extended to every non-wilderness subunit in the ecosystem borders on delusional, and throws science completely out the window. It’s akin to saying that since someone shot in the arm didn’t die, it’s OK to shoot them in other body parts, and that this will have no detrimental effect.

* According to Dr. Richard Harris, neither population nor trend was known at the time the Draft CS was developed (USFWS 2013, Appendix 2, P: 9). Thus, how could the FWS “know” that the population was increasing at the time, or what impact just 7 projects might have?

* Five of the seven projects (71%) occurred on just one of the NCDE’s five National Forests, which is hardly representative of an entire ecosystem.

* Such “temporary” increases in motorized density and “temporary” decreases in security core for projects can span five years, with another year for restoration (with some “exceptions”). Displacing grizzlies, particularly females with cubs, from important habitat for five years is hardly “temporary,” and would likely have serious consequences for grizzly feeding, breeding, denning, and perhaps survival (USFWS 2014).

Female grizzlies forced out of their home ranges for such extended periods may be pushed into unfamiliar habitat, substandard habitat, conflicts with

other bears, particularly adult males, and will produce one or more litters of cubs with no institutional memory of the original home range. Efforts by the forests to dismiss such impacts as inconsequential are indefensible.

* Finally, we are concerned that employing a “ten-year running average” for such projects is being used to artificially “average” the true impact of “temporary” projects out of existence. Grizzly bears don’t have to survive the 10-year “average” of a project, but rather the actual changes to Security Core during the 4 year project shown in Table C-6, Forest Plan Appendix C, P: C-66 (USDA 2017b). When this is calculated, we see that the true damage to habitat is as follows:

* OMRD increases +12%

* TMRD increases +3%

* Security Core decreases -5%

* It should be obvious to anyone with knowledge of grizzly bear ecology that habitat disruptions of 4-5 years duration with extensions, and possible in multiple subunits ecosystem-wide will not be “temporary” from a grizzly’s perspective and must be fully mitigated in advance.

Therefore, before any such project can occur it must be mitigated in advance, in the same subunit, with habitat of at least equal quantity, quality, and connectivity that will remain in place for the duration of the project plus restoration period. In addition, projects cannot occur in adjacent subunits at the same time.

OBJECTION 9: (FFP) Flathead Forest is improperly trying to avoid science-based road decommissioning, and is impermissibly trying to re-define decommissioned roads.

The Flathead Forest has an obligation under Amendment 19 to its current forest plan to close and decommission an additional 518 miles of roads, and 57 miles of motorized trails. Unfortunately, using the claims of the NCDE Draft Grizzly Conservation Strategy (2013) that grizzly were recovered as of 2011, the Forest is improperly trying to avoid these additional road/trail closures.

However, as noted above on page one, FWS bases its “recovery” claim on population numbers and occupancy of BMU’s – standards invalidated by the

federal court in 1997. And, with false claims of recovery dismissed, the Flathead can no longer follow the arbitrary 2011 Baseline on OMRD, TMRD, and Core, but must return to fully decommissioning roads and trails under A19.

Decommissioning means that all culverts must be pulled, the route re-vegetated, and the the route treated in such a manner that it no longer functions as a road or trail. Only fully decommissioned/reclaimed routes can be removed from the TMRD mileage list.

Intermittent stored service (ISS) routes under all alternatives cannot be substituted for decommissioned routes, and cannot be removed from TMRD miles since they are available for re-opening. Similarly, the new category of “Impassable Roads”, recently invented out of thin air by the Flathead Forest, is not the same as a decommissioned road, does not meet Amendment 19 decommissioning standards, and cannot be removed from TMRD road calculations. Attempts to do so clearly violate both science and law.

OBJECTION 10: (FFP/GRAM) With no basis in grizzly bear science, NCDE forests seek to impermissibly drop high-intensity use, non-motorized trails from being buffered by 500m, and removed from core habitat calculations.

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, and that this displacement has real, negative consequences for grizzlies (particularly females with cubs), all NCDE Forests must take a “precautionary principal” approach and re-instate high intensity non-motorized trails as areas to be buffered by 500 meters, rather than try to artificially create Security Core where none exists. Grizzlies should not have to die in the middle of trails before the Forests and FWS do their job and

protect them and their habitat security.

OBJECTION 11: (FFP) Flathead Forest Plan standards for Riparian Zones type are weak; prioritize “management” over “conservation”; and impermissibly encourage “timber harvest” (logging) in critical wildlife habitat.

From personal experience, we know that riparian zones in the Rockies provide vital habitat for more than 80 percent of the wildlife inhabiting an area. As such, they require the highest levels of protection possible, not minimum standards and weakened protection. Unfortunately, that is not what we see in Forest Plan Volume 1, P: 138-145 (USDA 2017a), and elsewhere.

* The change of name from Riparian Habitat Conservation Areas (RHCA) in the 1986 plan to Riparian Management Zones (RMZ) now is not cosmetic. It’s clear that the Forest priority for these areas is no longer conservation” but has shifted to heavy-handed “management.” The Forest needs to return to RHCA’s and conservation as the priority mission.

* As the Forest Plan, Vol. 4, Figure 1-7 shows, the Flathead’s riparian areas run like arteries and veins of connectivity throughout the entire Forest, and are just as vital as the arteries and veins in our bodies (USDA 2017(c)). As such, they must be given a separate Management Area designation of their own. Otherwise, they can end up in MA 6a-c – logging, MA 5b-d – Motorized “Backcountry”; or even MA 7 Focused Recreation - all likely to compromise or destroy their pivotal ecological function.

* The discussion of riparian zones on P: 138-145 makes it clear that the Flathead is focused almost entirely on fish, water temperature, and sediment, and for those issues, perhaps buffers of 100-300’ might be appropriate minimums. However, riparian zone are virtual wildlife highways – both residential and movement – for larger terrestrial species like deer, elk, bears, wolves, lynx, wolverine – and a host of mid-size carnivores as well. For those animals, as well as many bird species, 300’ foot buffers are entirely too narrow to provide security, and can cause the entire riparian zone to be made up of disrupted “edge habitat.”

* Buffer descriptions refer to “300 feet slope distance (600 feet total...)” and says this is “from the edges of the active channel to the top of the inner

gorge.” For very steep valleys/gorges this could easily mean that the functional buffer is only 100’ feet wide (horizontal distance) on either side of the stream – perhaps less. For larger species such as elk or grizzlies this is completely inadequate – particularly given the Flathead’s ill-advised plans to “harvest” trees in riparian zones. For that reason, all buffers must be at least 300’ horizontal distance on either side of the active channel for perennial water bodies, and 150’ horizontal distance if they’re intermittent.

* Quoting L.E. Benda et al. (2016) from coastal Oregon forests, the Flathead tries to use his Pacific Northwest data to justify designating inner and outer riparian management zones. The transparent goal of course is not to conserve these vital habitats, but to allow the Forest to engage in “active management” involving “timber harvest” – aka. Logging.

The result, obviously intentional, is that the inner riparian zone on category 1 & 2 streams, where the resource is theoretically protected, drops from 300’ on paper down to just 150’. And for Category 4a Ponds, lakes, reservoirs, and wetlands >0.5 acres, the buffer drops from 300’ of “paper protection” down to a miserly 50 feet. The Flathead Forest must stop using inappropriate research from different forest types in Pacific Coast states to try and slip riparian intrusions by the public.

On P: 142 (USDA 2017c), we see that, “As described in FW-STD-RMZ-01, there are qualifiers on the total widths of riparian management zones based on site-specific conditions...” Such Loophole Language appears throughout the RMZ sections, and in fact the entire Forest Plan, meaning that further reductions in habitat protection will be at manager discretion, with average citizens unlikely to catch all of the retreats in time – the obvious intent. To avoid this habitat “shell game” by the Flathead Forest, minimum buffers for all riparian Zones must start at 300 horizontal feet on perennial water bodies, and 150 horizontal feet for intermittent streams – no inner and outer zones, no real protection vs. fake protection, no logging disguised as “timber harvest.”

In addition, before the Forest contemplates entering any riparian zone for the purpose of active management or “harvest”, it must conduct a comprehensive, site-specific, ecological analysis based upon NCDE-specific research, and unless that analysis demonstrates a clear, compelling ecological need for the management (Not a manager preference), the proposal must not proceed.

OBJECTION 12: (FFP/GRAM) The Flathead Forest Plan and the Grizzly Bear Amendments fail to protect grizzlies from snowmobile intrusions, both during the denning season, and during unwarranted late-season snowmobiling.

The 2016 Flathead DEIS (Volume 1, P: 413) revealed that during the main grizzly denning season (Dec.1 to March 31) the Flathead Forest provides 788 miles and 513,654 acres for snowmobile use – 3.6 times the miles of Yellowstone National Park, one of the premier snowmobiling areas in the Rockies. Additionally, during the non-denning period (April 1 to Nov 30), the FNF allows late-season snowmobiling on 666 miles of routes, again 3 times that of Yellowstone.

In addition, the 2017 FEIS for Grizzly Amendments, Volume 3, P: 227 shows that the other four forest provide 2836 mi. of snowmobile routes and 1,251,281 acres in the PCA and Zones 1 and 2. And outside the denning season in the PCA, they still provide late-season riding on 398 miles on 243,385 acres.

The forests of the NCDE twist themselves into knots trying to claim that snowmobiles have no impact on grizzlies with statements like – “The impacts of winter activities on denning bears have not been well studied, but there is no evidence to indicate that current levels of snowmobile use are inhibiting the recovery of the grizzly bear population in the NCDE.”

There are at least three problems with this claim. First, it says “we have little evidence regarding impacts, and based on that lack of information there are no impacts”. Second, it throws out the obvious “red-herring” argument that because snowmobile use isn’t causing an NCDE-wide population decline, current use levels must be just fine. Third, it omits the fact that the lack of data is largely caused by the failure of the Forest Service to conduct comprehensive research and to closely monitor use levels and impacts – because to do so might find a problem that they would have to act on, and that wouldn’t be politically correct.

For example, in its 2016 DEIS, the Flathead Forest claimed that, “The agencies have not detected any conflicts due to over-snow use on the Flathead National Forest.” Yet the Forest knew this was false since a Montana Fish, Wildlife and Parks biologist at the April 2014 NCDE Grizzly

Subcommittee meeting displayed photos of snowmobile tracks passing within less than 100 yards of a den (Mike Madel, Montana FWP, pers. comm.). The snowmobiles had illegally entered the area from the late-season Skyland-Challenge “play area” and had gone undetected by the Forest.

Needless to say there are probably numerous such instances of illegal trespass each winter and the NCDE Forests are simply not doing a good enough job of finding and prosecuting the perpetrators.

With the forests already providing a 4-month season on more than 3500 miles of routes and more than 1,764,935 acres, there can be no justification for risking peril to grizzlies, Canada lynx, and wolverine in the name of recreation in high-elevation “play areas” beyond March 31st. All action alternatives must end all late-season snowmobiling in all occupied/ modeled grizzly denning habitat beyond that date – No exceptions.

OBJECTION 13: (FFP) The Flathead Forest Plan actively subverts habitat connectivity on at least 4 of the 6 Geographic Areas, and undermines it on the other two as well.

The Flathead National Forest holds a unique place in the NCDE, and is critically important for wildlife connectivity throughout the ecosystem. In his pivotal report, “Conservation Legacy on a Flagship Forest: Wildlife and Wildlands on the Flathead National Forest, Montana” Dr. John Weaver (2014) found that “The community of carnivores (17 species) on the Flathead National Forest appears unmatched in North America for its variety, intactness, and density of species that are rare elsewhere (P: 114)...” and “Consequently, many scientists advocate the need for conservation corridors or linkages between habitats (existing and future) to support necessary movements and greater viability (P: 5)...”

These findings echo the earlier conclusions of Weaver (2001, P: 5) that, “Due to these unique characteristics and its strategic position as a linkage between National Parks in both countries, the transboundary Flathead may be the single most important basin for carnivores in the Rocky Mountains. The challenge is to develop and implement a transboundary conservation plan that honors these outstanding values. Key principles for carnivore conservation include to: (1) maintain food resources with management of habitat and prey populations, (2) provide security from excessive mortality with networks of core reserves and other precautionary

measures, and (3) maintain regional connectivity with landscape linkages.” (emphasis added).

In his pivotal research on connectivity and fragmentation in the transboundary region of SE British Columbia and the northern NCDE, Michael Proctor recommended the following:

“We recommend that the entire regional metapopulation be considered, that multiple jurisdictions work together on a larger strategy to manage the system for inter-area connectivity, particularly of females, and that larger core subpopulations be managed as potential sources of bears for adjacent smaller threatened subpopulations.” (Proctor, et al 2012, p. 39).

Unfortunately, when we look at the Forest Plan’s Geographic Area maps B-19 through B-24, it’s clear that the Flathead has made a conscious decision to ignore all of this advice, decades of research on connectivity, and set course in the exact opposite direction, as follows:

North Fork Geographic Area

- * Although there are several small bright spots where Management Areas (MA’s) have been changed from 6a to 5a (South Fork Coal Creek, Hallowat Creek, and SE of DNRC lands) the overall tide continues in the direction of creating a fractured landscape in one of the most critical areas of the Forest for carnivores.
- * Stringers of 6b moderate-intensity logging extend most of the way from the North Fork Road west toward the Whitefish Divide along Whale, Red Meadow, Hay, Coal and South Coal, and Big Creeks. In the process they sever otherwise large blocks of 5a Backcountry Non-motorized (all of which north of Big Creek should be unified as 1b Recommended Wilderness) into smaller, narrower, less functional bands of 5a habitat impeding north/south connectivity.
- * The Flathead has literally choked the entire southern end of the North Fork GA with large blocks of 6b logging, a significantly enlarged MA 7 Focused Recreation sacrifice zone, with some snowmobile areas thrown in the middle of it for good measure. This effectively creates a habitat minefield for any carnivores trying to move north/south, or west toward the Salish DCA. Both of these designations must be dramatically reduced and changed to the 5a

and 1b designations of last years Alternative C, or better still, the Citizen reVision alternative submitted by Hammer and Montgomery (2014), and arbitrarily discarded by the Flathead.

* Finally, in the extreme northwest corner of the GA the Flathead's portion of the Ten Lakes WSA has been improperly designated 5a, and must be reassigned to 1b – Recommended Wilderness.

Hungry Horse Geographic Area

* The damage to connectivity created in the southern end of the North Fork GA is compounded in the north end of the Hungry Horse GA with a bottleneck of 6b and 6c logging mixed in with private land, making the non-existent Coram Connectivity Area even more fictional than it was last year. To complete the blockage, the Flathead has designated the NW corner of the GA down to Clayton Creek as Backcountry motorized year-round.

To repair the damage, all 6b/6c areas need to revert to 6a, while the entire western side of the GA must adopt the 1b Recommended Wilderness designation of Alternative C or the Citizen revision to the Flathead Forest Plan (Hammer and Montgomery, 2014). Only this can restore a credible claim of connectivity in this area.

* Hungry Horse Reservoir bracketed by high-use roads, focused recreation, and 6b logging in summer and large areas of 5c snowmobiling in winter, create a dangerous linear fracture zone for wildlife generally, and carnivores specifically. Of course grizzlies can swim the reservoir, but when they must also cross roads, areas of high-use recreation, and broad swaths of moderate-intensity logging, the odds of success and survival go down significantly. Any claims of connectivity in this area (north/south or east/west) have been rendered a joke by the Forests MA choices, and can only be repaired by adopting Alternative C coupled with a renewed commitment to completing Amendment 19 road decommissioning, and doing so within a decade or less.

Swan Valley Geographic Area

* While Alternative B from 2016 was problematic enough for any sort of connectivity (USDA 2016), the Forest seems determined under Alternative B Modified to put the damage on steroids. Where the entire valley-bottom was clogged with 6b logging last year, it has now been turned into a total

sacrifice zone for 6c High-Intensity logging!

* To make connectivity even more impossible, the high-intensity logging is bracketed by moderate-intensity logging and expanded snowmobiling areas along the Mission Range.

* The 1993 Grizzly Bear Recovery Plan (USFWS 1993) says that for recovery to be achieved (and maintained) the Missions must be occupied by grizzlies. Yet with increasing human population, development and attractants in the Flathead and Mission Vallies to the west, and the motorized, industrialized moonscape that the Flathead Forest has in store for Swan Valley, it's difficult to see how that will remain possible.

We remind the Flathead that there is no Final NCDE Conservation Strategy; no legally and scientifically valid Habitat Based Recovery Criteria; delisting by Distinct Population Segment has been struck down by federal courts (See *Humane Society of the United States v. Zinke*, 865 F. 3d 585, 603 (D.C. Cir. 2017).); and no FWS petition to delist grizzlies. That means that current law and Amendment 19 will remain the law of the land for years to come and must be fully implemented.

This is especially true in the vital Swan Valley where the Montana Legacy Project acquisitions have made A19 road decommissioning possible, and mandatory. We remind the Forest of its statement that this acquisition adds about 400 miles of roads in the Swan Valley that require decommissioning (USDA 2017a, P: 529). This massive network of damaging roads, combined with the switch to high-intensity logging in the critical valley bottom under Alternative B modified, represents a clear and present danger to connectivity in this vital corridor. The Forest must undo this senseless damage by implementing Alternative C, plus Amendment 19.

Finally, we object to the Flathead's renewed attempt to designate Krause Basin as MA 7 Focused Recreation (GA-SV-MA7-Krause, 2017b, P:111 & 150-151). The stated Objective is to maintain 13 miles of wheeled motorized trail opportunities in July and August connecting to Alpine #7. It also says that "Routes are typically ungroomed but are often signed and marked, with additional areas for traveling cross-country. The accompanying Desired Condition says, "Existing trails provide summer (July and August) wheeled motorized trail experience on designated and signed routes.

This appears to be a clear violation of a USFWS Biological Opinion (USFWS 1988) which said that old logging roads could be used provided the routes would “not be marked on the ground.” The intent was that the area not be promoted as an ATV destination. Further, Forest Planning record #00172, A19 implementation would require that all the ATV trails in Krause Basin be closed to motorized use. (See file 00172_FNFModelingForAlternativeAtoFullyMeet19-19-6820151015.pdf in Folder 13). Yet the new Forest Plan would designate the area MA 7, promote it widely as such, and mark routes on the ground. Clearly, this all violates the 1988 BiOp, Amendment19, and breaches even the 2011 Baseline. These decisions must be withdrawn and brought into compliance, with only the Peters Ridge and Strawberry Lake Roads open to motorized use.

Salish Mountains Geographic Area

* As bad as the 2016 Alt. B proposal was for this area, the Flathead Forest has managed to make it worse. Any tenuous claim by the U.S. Fish and Wildlife Service or the Flathead Forest that this area would function as a Demographic Connectivity Area (DCA) has gone out the window with the MA designations seen here.

A DCA designation requires that an area function both as a residential and a movement linkage zone in the long term, and for females as well as males. Although a handful of unusually resilient male and female grizzlies continue to use this area, the 2017 Forest Plan makes it nearly impossible for that to continue.

* In the new plan, most of the areas shown as 6b moderate intensity logging in the 2016 DEIS are gone, replaced by even more 6c high-intensity logging, and creating a nearly solid wall of logging and roading to make sure no biodiversity or connectivity gets through. And to plug any holes accidentally left in the wall – several areas of MA 7 Focused Recreation moonscapes. The only solution is to adopt Swan View Coalition’s Citizen reVision (Hammer and Montgomery, 2014). Otherwise federal agencies must stop claiming this as a viable DCA to the Caninet-Yaak Ecosystem (CYE).

Middle Fork Geographic Area

The Middle Fork GA is critical to maintaining ecosystem connectivity between the Bob Marshall Complex and Glacier National Park. Yet to hold that linkage open, wildlife generally, and grizzlies specifically, must already traverse the roadblocks of the heavily used Burlington and Northern Sante Fe railroad tracks, the Middle Fork Flathead River, private land attractant minefields, and the high-volume traffic (May-October) of the Highway 2 traffic corridor. What happens on NFS lands south of the highway therefore, becomes pivotal to whether connectivity is maintained, or not.

Research by Waller (2005) found that while grizzlies were still crossing this corridor, they were already avoiding it during peak hours of vehicle and train traffic, a problem likely to increase as traffic volumes pick up, and the volume of human visitors to the surrounding national park and forests increases. As noted earlier, Glacier National Park has now seen record visitation in multiple years, with no end in sight. Also important, is Kate Kendall's 2015 warning to the NCDE Grizzly Subcommittee that while north/south connectivity hadn't been completely severed, it was imperiled along the west end of the Middle Fork corridor by development, high traffic volumes, and attractants.

The Management Area map for the Middle Fork GA (B-20) shows some improvements such as an expanded area of 5a Backcountry Non-motorized east of Essex to Devil Creek, and an expansion of 1b Recommended Wilderness along Puzzle Creek. Yet serious threats to connectivity remain due to poor choices of MA by the Forest. Figures B-20 and B-30 show that the key, low-elevation, wide linkages of the Nyack/Pinnacle and Essex Connectivity areas are threatened by a near continuous band of 5c snowmobiling, made worse by 6c high-intensity logging – changed from 6b in the 2016 DEIS (Figure B-33).

An additional problem compromises the South Glacier Connectivity Area (Figure B-30) where extensive snowmobile areas and 6b Moderate-Intensity logging threaten important riparian linkages around Granite, Skyland, and Challenge Creeks. We remind the Forest that this is the area where late-season snowmobilers illegally entered the Badger-Two Medicine in 2014, passing within a few hundred feet of an occupied grizzly den. Under the existing Flathead Forest Plan, this is supposed to cause a late-season use closure, but that apparently is not the case in the proposed Forest Plan.

To remedy these connectivity problems, the Flathead must remove the wall of snowmobiling and 6c logging from the Nyack/Pinnacle and Essex CA's, replacing it with 1b Recommended Wilderness and 5a Backcountry Non-motorized. In the South Glacier CA, Alternative C must be adopted changing 6b areas to 6a, and 5c areas along Hwy. 2 and the NW boundary to 1b Recommended Wilderness.

South Fork Geographic Area

While this GA is in generally good condition connectivity-wise due to the large amounts of Wilderness and Recommended Wilderness (Figure B-23) the Flathead Forest has unnecessarily created a number of "choke-points" with inappropriate MA designations.

We understand the need to protect the facilities around the Spotted Bear Ranger Station from fires, however, the large area of 6c high-intensity logging is excessive, and beyond 100 yards should be changed to 6b. Areas shown as 6b Moderate-intensity logging along the South Fork and Spotted Bear Rivers are inappropriate along 2a and 2b Wild and Scenic River sections and should be changed to 6a, with the stringer of logging up Bunker Creek pulled back to the South Fork Flathead.

The large lobe of 5c snowmobiling west of the Spotted Bear Ranger Station is an unwarranted fracture of an otherwise intact region of 5a Backcountry Non-motorized. We recommend following Alternative C and making this entire western margin, from Bunker Creek north 1b Recommended Wilderness.

Overall Connectivity Conclusions:

When we look at the new Forest Plan, its supporting documents, and specifically to the manner in which Alternative B Modified would actively subvert connectivity, we Object for the following reasons:

* Alt. B modified (ABM) abandons the scientifically valid Amendment 19 in favor of an arbitrary and illegal 2011 Baseline, leaving open 518 miles of roads and 57 miles of motorized trails.

* Alt. B modified (ABM) weakens protection of Riparian Zones with its RMZ designations, risking one of the most important habitat types for connectivity on the Forest.

* ABM lowers habitat-protecting 1b Recommended Wilderness; favors Fake 5b-5d Motorized “Backcountry” over Real 5a Non-motorized Backcountry.

* Routinely changes MA 6a low-intensity logging to MA 6b moderate-intensity logging, and habitat fracturing MA 6c High-Intensity logging – particularly in the Swan Valley GA, Salish Mountains GA, and Hungry Horse GA.

* Greatly expands MA 7 Focused Recreation sacrifice zones in the south end of the North Fork GA, Salish Mountains GA, and Swan Valley GA (Krause Basin).

* In FEIS Volume 2, P:116-117, ABM calls for 465,200 acres of Timber Production, plus 447,200 acres of Timber Harvest, for a total of 912,400 acres subject to some form of logging – 38 percent of the Forest (USDA 2017e).

In addition, Volume 2, P: 122, indicates that ABM calls for 68 percent of Decade 1 logging (“treatment”) to be Even-aged Regeneration, with Decade 2 at 67 percent.

* Finally, Alternative B Modified approves of “Harvest” in Riparian Zones (USDA 2017d, P: 139-145) and Inventoried Roadless Areas (USDA 2017e, P: 110 and 124). In fact, thanks to “exceptions” to the 2001 Roadless Rule, “harvest” would be allowed on 186,500 acres under ABM (P: 124).

Loophole Language goes a long way in this Forest Plan.

From the above, it’s clear that the Flathead Forest Plan is filled with empty promises and “Paper Protection” when it comes to Connectivity.

Solutions to Flathead Forest Plan and Grizzly Amendments Objections:

1. (FFP/GRAM) Since agency Claims of “recovery” for the NCDE population are illegally based upon population size, trend, and distribution – standards struck down in federal court in 1997 – all such claims, and

standards, objectives, guidelines, and desired conditions based on them must be rescinded.

2. (FFP/GRAM) In the absence of a “recovered” population, the adoption and use of the 2011 Baseline, based on neither science, nor law, must be removed from all Forest Plan documents. Similarly, all decisions and statements that arise from the 2011 Baseline must be removed from the Forest Plans.

3. (FFP/GRAM) Before the NCDE population can even be proposed for delisting, the U.S. Fish and Wildlife Service – along with the Forest Service – must develop scientifically valid Habitat Based Recovery Criteria. As noted above, that has not happened, but the forests of the NCDE could encourage FWS to begin complying immediately.

A first step would be to contact the USGS unit at Glacier National Park which has completed an accurate habitat map for the Park. Second, the Flathead should follow up with the information from FEIS Volume 2, P: 59, as follows: “...the Forest analyzed the U.S. Geological Survey Gap Analysis Program national land cover data set version (USGS, 2011). The dataset provides detailed (30-meter resolution) information on vegetation and land-use patterns of the United States using consistent satellite base data and classification systems.” (USDA 2017e). Combine this with Cumulative Effects Model (CEM) satellite mapping layers from Kathy Ake, and you’re on your way to the NCDE habitat map that should have been done a decade ago.

4. (FFP) Since grizzly bears are still listed as Threatened, and likely to remain so, the Flathead Forest must return to motorized access decisions based upon Amendment 19, and must make a firm commitment to the decommissioning of 518 miles of roads, and 57 miles of trails in the next 10 years – no more foot-dragging.

In concert with this, the Flathead Forest must immediately stop using the term “Impassable Roads”: suggesting that they are the same as Decommissioned Roads – A19 makes it clear that they are not; and attempting to leave such roads on the road network, but not count them in TMRD is unacceptable.

(GRAM) The other four NCDE forests must immediately begin building their own road/trail decommissioning programs, and these must be based upon Amendment 19 standards

5. (FFP/GRAM) All claims that OMRD levels can be increased by +5%, TMRD by +3%, and Security Core reduced by -2%, and that this can be done in every Non-Wilderness subunit with no consequences to grizzlies, are without scientific merit and must be abandoned immediately.

In addition, the requirement that such “temporary” increases/decreases shall be issued for Projects of 5 years (with extensions), and 1-year restorations (with extensions), must be revoked, and Administrative Use periods of 30 continuous days shall count as a Project.

The science-based A19 is clear that there can be no net increases in OMRD or TMRD, or net decreases in Security Core. As the NCDE Forests propose projects under these standards, they must provide mitigation habitat at the same time, in the same subunit, and of equal or greater quantity, quality, and connectivity. Projects may not occur in two adjacent subunits at the same time.

6. (FFP/GRAM) High-Intensity Use Non-motorized Trails must be immediately restored to the Forest Plans as features that must be buffered by 500m per side and removed from consideration as Security Core. It’s clear that such trails displace grizzlies; that this displacement causes negative consequences; and that the attempt to remove them is an effort to claim “Fake Core” where none exists.

If the Forests and U.S. Fish and Wildlife Service believe that the >20 parties per week standard is incorrect, then they must conduct the scientific research to clarify what the number should be. Until then, the agencies must stop trying to throw out long accepted standards aimed at protecting grizzlies.

7. (FFP) It’s clear that the shift from Riparian Habitat Conservation Areas (RHCA’s) to Riparian Management Zones (RMZ’s) is an effort to lessen protection, narrow buffers, and allow timber harvest in this critical habitat type – all unacceptable. The Flathead must return to RHCA’s; minimum buffers for all riparian Zones must start at 300 horizontal feet on perennial water bodies, and 150 horizontal feet for intermittent streams – no inner and outer zones, no real protection vs. fake protection, no logging disguised as

“timber harvest.”

In addition, before the Forest contemplates entering any riparian zone for the purpose of active management or “harvest”, it must conduct a comprehensive, site-specific, ecological analysis based upon NCDE-specific research, and unless that analysis demonstrates a clear, compelling ecological need for the management (Not a manager preference), the proposal must not proceed.

8. From the analysis of MA’s by Geographic Area above, it’s absolutely clear that Alternative B Modified will fracture most of the Flathead’s key linkages rather than advancing connectivity. In fact, as detailed above, in 4 of 6 GA’s the Forest has chosen to intensify logging and motorized use at the expense of vital habitat protection.

Rather than adopting the reckless path layed out under Alt. B Modified, we recommend that the Flathead replace it with Alternative C, which is not only lighter on the land, but lighter on the Forest’s budget as well, as follows:

“Because of low timber harvest levels, alternative C does not require the entire current budget level; rather, it is 2.2 million dollars below current levels.”

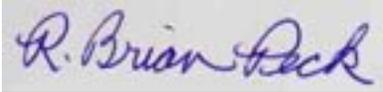
If the Flathead is interested in protecting riparian zones and water quality; securing a viable future for grizzlies, lynx, and wolverine; and providing functional connectivity to other forests and Canada, and saving taxpayer dollars, it must replace Alt. B Modified with Alternative C plus a restored A19, and the modifications we have recommended above.

The combination of 506,905 acres of Recommended Wilderness, with 97 percent of Inventoried Roadless Areas included; significantly less Phony 5b-5d Backcountry Motorized; much better protection of RHCA/RMZ’s; more low-intensity and less high-intensity logging will provide the Flathead a second chance to get it right.

Sincerely,

Brian Peck
Independent Wildlife Consultant

96 Trap Lane
Columbia Falls, Mt. 59912-4801
glrbear@centurytel.net



References Cited

NOTE: All References below are either from the Flathead Forest Plan or NCDE Grizzly Amendments, or from comments I filed in 2016 in concert with the Sierra Club or Wild Earth Guardians, with a CD of all references included.

Allendorf, Fred, and Nils Ryman. 2002. The Role of Population Viability Analysis. P: 50-85 *in* Population Viability Analysis, S.R. Beissinger and D.R. McCullough (ed.) University of Chicago Press, Chicago, Ill.

Boulanger, J.,m and G.B. Stenhouse. 2014. The Impact of Roads on the Demography of Grizzly Bears in Alberta. PLOS ONE. Doi: 10.1371/journal.pone.0115535.Dec. 22, 2014.

Claar JJ, Bertram T, Naney R, Warren N and Ruediger W. 2004. Wildlife linkage areas: an integrated approach for Canada lynx. IN: Proceedings of the 2003 International Conference on Ecology and Transportation, Eds. Irwin CL, Garrett P, McDermott KP. Center for Transportation and the Environment, North Carolina State University, Raleigh, NC: pp. 234-239.
(<http://repositories.cdlib.org/jmie/roadeco/Claar2003a/>) (map available through <http://databasin.org/datasets/0659dded-ba41-4f0f-a38c-fa930ab1eb85>)

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 Dept. of Fish, Wildlife and Parks, Helena, Mt.
- Dombeck, Michael, Chief of the U.S. Forest Service. 2001. "Unite and Conserve." Washington Post, April 28, 2001, P. A21.
- Flathead Beacon. 2015. Flathead National Forest Unveils Vision for Future Management. March 9, 2015
- Fund for Animals v. Babbitt, 903 F Supp. 96, 113,118(D.D.C. 1995)
- Fund for Animals v. Babbit, Civil Act. No. 94-1021 (PLF) and National Audubon Society v. Babbitt, Civil Act. No. 94-1106 (PLF) (Consolidated).
- Gese, Eric M., Dowd, Jennifer L.B., and Aubry, Lise M. 2013. The Influence of Snowmobile Trails on Coyote Movements During Winter in High Elevation Landscapes. PLOS ONE.
- Hammer, K. and A. Montgomery. 2014. Citizen revision of the Flathead Forest Plan. Swan View Coalition and Friends of the Wild swan. 56 pp.
- Joep, K.L. 1985. Implications of Grizzly Bear Habituation to Hikers. Wildlife Society Bulletin 13: 32-37.
- Kasworm, W.F., T.G. Radandt, J.E. Teisberg, A. Walander, M. Proctor, and C. Servheen. 2015. Cabinet-Yaak Grizzly Bear Recovery Area 2014 Research and Monitoring Progress Report. U.S. Fish and Wildlife Service, Missoula, Mt. 96 pp.
- Kasworm, W.F., and T. Manley. 1990. Road and Trail Influences on Grizzly Bears and Black Bears in Northwest Montana. International Conference on Bear Research and Management 8: 79-84.
- Lamb, Clayton, T., G. Mowat, B.N. McLellan, S.E. Nielsen, and Stan Boutin. 2016. Forbidden Fruit: Human Settlement and Abundant Fruit Create an Ecological Trap for an Apex Carnivore. Journal of Applied Ecology. DOI: 10.1111/1365-2656.12589

- Mace, Richard D., and L.L. Roberts. 2014. Northern Continental Divide Ecosystem Grizzly bear Monitoring Team Annual Report, 2013. *In Unpublished data*. Montana Dept. of Fish, Wildlife and Parks. Kalispell, Mt.
- Mace, R.D. and J.S. Waller. 1997. Final Report: Grizzly Bear Ecology in the Swan Mountains. Montana Fish, Wildlife and Parks, 1920 6th Ave. East. P.O. Box 200701, Helena, Mt. 59620-0701.
- Mace, R.D., and J.S. Waller. 1996. Grizzly Bear Distribution and Human Conflicts in Jewel Basin Hiking Area, Swan Mountains, Montana. *Wildlife Society Bulletin* 24:461-467.
- McLellan, B.N., and D.M. Shackleton. 1989. Grizzly Bears and Resource-extraction Industries: Habitat Displacement in Response to Seismic Exploration, timber harvesting and road maintenance. *Journal of Applied Ecology* 26:371-380.
- McRae et al 2015. Pacific Northwest Terrestrial Local Landscape Permeability. Map available at <http://databasin.org/datasets/b41a83f4348f41cfa33d2a0996dd3fa0>
- Mowat, G. and Clayton Lamb. 2016. Population Status of the Southern Rockies and Flathead Grizzly Bear Populations in British Columbia, 2006-2014. ResearchGate Technical Report, DOI: 10.1010.13140/RG.2.1.3520.3446, May 2016.
- Proctor, M.F., D. Paetkau, B.N. McLellan, G.B. Stenhouse, K.C. Kendall, R.D. Mace, and C. Strobeck. 2012. Population Fragmentation and Interecosystem Movements of Grizzly Bears in Western Canada and the Northern United States. *Wildlife Monographs* (180) 1-46 doi: 10.1002 wmon.6
- Proctor, M.F., B.N. McLellan, C. Strobeck, and R.M.R. Barclay. 2004. Gender-specific Dispersal Distances of Grizzly Bears Estimated by genetic Analysis. *Canadian Journal of Zoology* 82:1108-1118.
- Reed, David H., J.J. O'Grady, B.W. Brook, J.D. Ballou, R. Frankham. 2003. Estimates of Minimum Viable Population Sizes for Vertebrates and Factors Influencing Those Estimates. *Biological Conservation* 113

- (2003) 23-24.
- Ruby, M. 2014. Evaluation of Grizzly Bear (*Ursus arctos*) Movement and Habitat Use in Relation to Human Development in the Swan-Clearwater Valleys, Montana, Paper 4344 (Master of Science) University of Montana. Missoula, Mt.
- Schallenberger, A, and C.J. Jonkel. 1980. Rocky Mountain East Front Grizzly Studies, 1979. Annual Report, Border Grizzly Project Special Report No. 39, Border Grizzly Project. Missoula, Mt.
- Schwartz, C.C., M.A. Haroldson, and G.C. White. 2010. Hazards Affecting Grizzly Bear Survival in the Greater Yellowstone Ecosystem. *Journal of Wildlife Management* 74:654-667.
- Squires, John R., et al. 2013. Combining Resource Selection and Movement Behavior to Predict Corridors for Canada Lynx at Their Southern Range Periphery. *Biological Conservation* 157 (2013) 187-195.
- Swan View Coalition v. Chip Weber, Flathead National Forest Supervisor et al. CV 13-129-M-DWM, Document 51, Filed 9/25/14.
- Trall, Lochran W., B.W. Brook, R.R. Frankham, and C.J.A. Bradshaw. 2010. *Biological Conservation* 143 (2010) 28-34.
- Turner, James Morton, 2006. Conservation Science and Forest Service Policy for Roadless Areas. *Conservation Biology* V. 20, No. 3, 713-722. June 2006.
- USDA, Forest Service. 2017. Volume 3, Final Environmental Impact Statement for the Forest Plan Amendments: Incorporating Habitat Management Direction for the Northern Continental Divide Ecosystem Grizzly Bear Population. Helena-Lewis and Clark, Kootenai, and Lolo National Forests. December 2017.
- USDA, Forest Service. 2017a. Volume 1- Wildlife Section 3.7 of the Final Environmental Impact Statement for the Forest Plan, Flathead National Forest. December 2017.
- USDA, Forest Service. 2017b. Forest Plan, Flathead National Forest.

- December 2017.
- USDA, Forest Service. 2017c. Final Environmental Impact Statement for the Forest Plan, Flathead National Forest, Volume 4 – Appendices and Glossary. December 2017.
- USDA, Forest Service. 2017d. Volume 1 – Final Environmental Impact Statement for the Forest Plan, Flathead National Forest. December 2017.
- USDA, Forest Service. 2017e. Volume 2 – Final Environmental Impact Statement for the Forest Plan, Flathead National Forest. December 2017.
- USDA Forest Service. 2016. Draft Environmental Impact Statement, Volume 3. Forest Plan Amendments to Incorporate Relevant Direction From the Northern Continental Divide Ecosystem Draft Grizzly Bear Conservation Strategy. May 2016.
- USDA Forest Service. 2016a. Draft Environmental Impact Statement, Volume 2. Revised Forest Plan, Flathead National Forest. May 2016.
- USDA Forest Service. 2016b. Draft Environmental Impact Statement, Volume 1. Revised Forest Plan, Flathead National Forest. May 2016.
- USDA Forest Service 2016c. Draft Revised Forest Plan, Flathead National Forest. May. 2016.
- USDA Forest Service. 2015. FSH 1909.12 – Land Management Planning Handbook, Chapter 70 – Wilderness. 15 pp.
- USDA Forest Service. Land Management Plan, 2015a Revision, Kootenai National Forest.
- USDA Forest Service. 2015b. National Forest System Statistics, FY 2014. FS-905 (13), January 2015.
- USDA Forest Service. 2014. Assessment of the Flathead National Forest, Part 1 (234 pp.) and Part 2 (451 pp.), April 2014.

- USDA Forest Service. 2014a. Travel Analysis Report for Flathead National Forest. 12/30/14.
- USDA Forest Service. 2012 National Forest System Land Management Planning Rule, 36 CFR Part 219, April 9, 2012. 115 pp.
- USDA Forest Service. 2006. Draft Revised Land Management Plan, Flathead National Forest.
- USDA Forest Service. 2001. Roadless Area Conservation Rule. 36 CFR Part 294. RIN 0596-AB77. January 122, 2001. Federal Register/Vol. 66, No. 9, P: 3244.
- USDA Forest Service 2000. Roadless Area Conservation Final Environmental Impact Statement, Landscape Analysis and Biodiversity Specialist Report. November 2000. Prepared by Jon R. Martin, Ecologist1, Robert L. DeVelice, Vegetation Ecologist2, Seona Brown, Biologist3.
- USDA Forest Service. 1995. Flathead National Forest, Forest Plan Amendment 19, Allowable Sale Quantity and Objectives and Standards for Grizzly Bear Habitat Management. March 1995. 271 pp.
- USDA Forest Service. 1988. Decision Notice and Finding of No Significant Impact: Recreation Management Direction for the Noisy Face Geographic Unit. Flathead National Forest, Swan Lake Ranger District. 3/18/88.
- USFWS. 2017. Grizzly Bear Recovery Plan. Draft Supplement: Habitat-Based Recovery Criteria for the Northern Continental Divide Ecosystem. Prepared by: Grizzly Bear Recovery Office, U.S. Fish and Wildlife Service, University Hall #309, Univ. of Montana, Missoula, Mt. 59812. 27 pp.
- USFWS.2014. Biological Opinion on the Effects of the Flathead National Forest Amendment 19 Revised Implementation Schedule on Grizzly Bears. Montana Field Office, Helena, Montana. 157 pp.
- USFWS. 2014a. Final Biological Opinion on the Effects to Grizzly Bears From the Implementation of Proposed Actions Associated with Plan

- of Operations for the Montanore Minerals Corporation Copper/Silver Mine. March 31, 2014. 161 pp.
- USFWS. 2013. Northern Continental Divide Ecosystem Grizzly Bear Conservation Strategy. April 2013. 148 pp.
- USFWS. 2011. Grizzly Bear 5-Year Status Review: Summary and Evaluation. U.S. Fish and Wildlife Service, Grizzly Bear Recovery Office, Missoula, Mt. 108pp.
- USFWS. 2007. Biological Opinion on the Effects of the Ansbro Petroleum Project on Grizzly Bears, Blackfeet Indian Reservation. Montana Field Office, Helena, Montana. July 31, 2007. 86 pp.
- USFWS. 1995. Biological Opinion on Flathead National Forest Amendment 19. Issued January 6, 1995, Amended February 17, 1995.
- USFWS. 1995. Biological Opinion on the Swan Valley Grizzly Bear Conservation Agreement Between: Montana Department of Natural Resource Conservation, Flathead National Forest, Plum Creek Timber Company, LTD, and the U.S. Fish and Wildlife Service. December 4, 1995.
- USFWS. 1993. Grizzly Bear Recovery Plan. Missoula, Mt. 181pp.
- USFWS. 1988. Endangered Species Act of 1973. U.S. Dept. of Interior, Washington, D.C.
- Waller, John S. 2005. Movements and Habitat Use of Grizzly Bears Along U.S. Highway 2 in Northwestern Montana 1998-2001. Doctor of Philosophy Dissertation Univ. of Montana, Missoula, Mt.
- Weaver, J.L. 2014. Conservation Legacy on a Flagship Forest: Wildlife and Wildlands on the Flathead National Forest, Montana, Wildlife Conservation Society Working Paper No. 43. Bronx, New York, USA. 155 pp.
- | Weaver, J.L. 2013. Safe Havens, Safe Passages for Vulnerable Fish and Wildlife: Critical Landscapes in the Southern Canadian Rockies,

British Columbia and Montana. Wildlife Conservation Society, Canada Conservation Report, No. 6, March 201

Weaver, J.L. 2011. Conservation Value of Roadless Areas for Vulnerable Fish and Wildlife Species in the Crown of the Continent Ecosystem, Montana. Working Paper 40. Wildlife Conservation Society North America Program. Bozeman, Montana.

Weaver, J.L. 2001. The Transboundary Flathead: A Critical Landscape for Carnivores in the Rocky Mountains. Wildlife Conservation Society Working Paper No. 18, July 2001.

White, D., K.C. Kendall, and H.D. Picton. 1999. Potential Energetic Effects of Mountain Climbers on Foraging Grizzly Bears. Wildlife Society Bulletin 27(1): 146-151.

Wilderness Act of 1964. PL 88-577 (16 U.S.C. 1131-1136) September 1964.

Wilderness Society. 2015. Wilderness Inventory and Evaluation in National Forest Planning: An Analysis of Early Implementation of the 2012 Planning Rule, Principal author: Mike Anderson, Senior Policy Analyst, The Wilderness Society.