

**November 26, 2013**

**USDA Forest Service  
Objection Reviewing Officer  
EMC, RPC-6th Floor  
Attn: Judicial and Administrative Reviews  
1601 N. Kent St  
Arlington, VA 22209**

**Emailed to: [objections-chief@fs.fed.us](mailto:objections-chief@fs.fed.us)**

Pursuant to 36 CFR 219 regulations, this is an objection to the Land Management Plan – 2013 Revision (LMP) and draft Record of Decision for the Kootenai National Forest (KNF) on behalf of the Alliance for the Wild Rockies. The Responsible Official is Faye Krueger, Regional Forester of Northern Region, USDA Forest Service.

The Alliance for the Wild Rockies (AWR), headquartered in Helena, Montana, is a non-profit member-based alliance of citizens and organizations working to secure the ecological integrity of the Northern Rockies bioregion. AWR has been actively participating in public land management in Washington, Oregon, Montana, Idaho, and Wyoming for over 23 years. Adoption of the LMP and FEIS into a final ROD would directly and significantly harm AWR its members. AWR stand to be directly and significantly affected by the activities authorized under the LMP and ROD. These activities, if implemented, would adversely impact and harm the natural qualities of the KNF and would further degrade the watersheds and wildlife habitat. Individuals and members use the area for recreation and other forest related activities.

Selection of Alternative B-modified and approval of the LMP would not be in accordance with the legal requirements of the National Environmental Policy Act (NEPA), 42 U.S.C. 4321 et seq., and its implementing regulations, the National Forest Management Act (NFMA) 16 U.S.C. 1600 et seq., and its implementing regulations, the Administrative Procedures Act, 5 U.S.C. Sec. 706, and its implementing regulations, the Multiple-Use Sustained Yield Act and its implementing regulations, the Forest and Rangeland Renewable Resources Planning Act of 1974 and its implementing regulations, the Clean Water Act, and its implementing regulations, state water quality regulations, and the Endangered Species Act (ESA) and its implementing regulations.

## **NEPA AND NFMA PROCEDURES FOR RESPONDING TO PUBLIC COMMENT**

**OBJECTION STATEMENT:** The National Environmental Policy Act (NEPA) regulations contain provisions directing how government agencies are to respond to comments on Environmental Impact Statements (EISs). Also, the Forest Planning Regulations state that while conducting forest planning procedures under the National Forest Management Act (NFMA), public comments shall be analyzed according to NEPA procedures. NEPA regulations at 40 CFR §1503.4 state:

(a) An agency preparing a final environmental impact statement shall assess and consider comments both individually and collectively, and shall respond by one or more of the means listed below, stating its response in the final statement. Possible responses are to:

- 1) Modify alternatives including the proposed action.
- 2) Develop and evaluate alternatives not previously given serious consideration by the agency.
- 3) Supplement, improve, or modify its analyses.
- 4) Make factual corrections.
- 5) Explain why the comments do not warrant further agency response, citing the sources, authorities, or reasons which support the agency's position and, if appropriate, indicate those circumstances which would trigger agency reappraisal or further response.

From our reading of the FEIS Response to Public Comments (Appendix G), it is obvious that few of Objectors' comments resulted in the Forest Service taking any of the steps outlined in subparts a(1) through a(4). However, we note numerous instances where the approximate wording, gist or the meaning of our comments was omitted from the summary Response to Public Comments, and therefore no responses appeared. In those cases, the Forest Service failed to comply with FEIS requirements under 40 CFR §1503.4(a)(5).

Based upon so few substantial and meaningful changes resulting from comments, the contents of this Objection are quite voluminous. It will come as no surprise to the Responsible Official that we request a Supplemental EIS be prepared to remediate the many unresolved issues remaining because of the inadequacies of the FEIS and LMP.

## **RANGE OF ALTERNATIVES**

Our comments stated: **“The Draft Forest Plan does not include an adequate range of alternatives.”**

The difference between the alternatives seems in many cases to be insignificant. This is apparent when we look at the output of timber and the assessment of net benefits. Given that the Plan models or predicts outputs, the range of alternatives for these factors might not even be statistically significant, or only marginally so.

...(A) true conservation alternative would have offered far more wilderness (see wilderness assessment comments above) and it would have provided a real emphasis on ecosystem management. In addition, the range of alternatives for the land area allocated for over-snow vehicles show little variation and certainly no real spread between alternatives, as noted above.

Alternative C is not a conservation alternative or anything close to it. Alternative D is much more of a development alternative than C is a conservation alternative. Quite simply stated, the DEIS does not assess a true conservation alternative. As a result, the Proposed Alternative B does not strike a balance. Alternative C comes closest to a balanced alternative, but because the KNF did not offer a more extreme 'conservation' alternative, there is nothing to compare it to.

REMEDY:

- Prepare a Supplemental Draft EIS that includes a truly wide range of alternatives. We request that the KNF base a true conservation alternative on the contents of this Objection, on the December 1, 2002 scoping comments submitted by the Ecology Center “on the proposed EIS and Plan Revision for the Kootenai and Idaho Panhandle National Forests.”

**FOREST PLAN DIRECTION AND PLAN ELEMENTS**

OBJECTION STATEMENT: Many LMP Objectives are not linked with LMP Goals, as required.

REMEDY:

- Link each Objective with a corresponding Goal.

OBJECTION STATEMENT: The use of the word “Should” in Forest Plan Direction raises red flags in terms of the level of discretion it allows land managers to have in following the letter of the Standards, Guidelines, etc. AWR comments stated:

...Guidelines state that something “should” occur, instead of “shall” or “will” occur. The word, “should”, although according to the dictionary imparts duty and obligation, is not the Forest Service’s preferred interpretation, as the 9<sup>th</sup> Circuit stated in *Lands Council v.*

*McNair* (Case: 09-36026):

“We cannot conclude that (should) creates a mandatory rule that strictly limits...” Rather, this Court explained, “[t]he section is cast in suggestive (i.e., “should” and “may”) rather than mandatory (e.g., “must” or “only”) terms. . . . It suggests how old growth should be managed, not how it must be designated.”

REMEDY:

- The Forest Service must replace “should” with more unambiguous wording or state the intent of its use in several sections of this Objection.

OBJECTION STATEMENT: “Short term” and “long term” are not defined. AWR comments stated, “The Forest Service’s definition of ‘short-term’ has always been elusive.”

REMEDY:

- The Forest Service must define “Short term” and “long term” in each instance where they are used in the LMP.

**VEGETATION**

OBJECTION STATEMENT: FW-DC-VEG-01. The desired ranges for dominance groups are not supported by reliable historic data taken from KNF surveys or scientific research that we are aware of. The Forest Service has not explained how the effects of climate change and white pine blister rust affect the attainability of those desired ranges.

With regard to white pine and larch (presumably species the agency wants to bring back, their competitors--Doug-fir, grand fir, and western red cedar--also do well in conditions that favor early seral species. Also Doug fir is very fire resistant making it highly adapted to fire. Thus, the question must be asked if recent changes in climate are not favoring those other competitors and the previous assumed dominance of the pines and larch was either a point-in-time that changes or the result of a new and likely irrevocable climatic region to which the competitors are better adapted.

Scientific evidence suggests efforts to short circuit evolutionary time and bring back white pine are doomed to failure. The process we are dealing with is one of evolutionary time. In any case, the full benefits of white pine return won't be present for at least 200 years. Further, the historical dominance of white pine is based on stand data. (NOTE: historical photographic data is unreliable for overall forest conditions as early photos were generally not taken at random, statistically valid grid points and early photos are fairly rare). However, stand data protocol was different at the time, specifically in how dominance was defined. It was a much lower percentage than in current protocols. Thus, comparing stand data from the early 1900s may not be possible to stand data from today, especially if the raw data, original data sheets and protocols from the early 1900s are no longer in existence.

#### REMEDY:

- Disclose the information sources and scientific research basis that has been used to demarcate these desired ranges for each of the Dominance Groups.
- Disclose the scientific information regarding the effects of climate change and white pine blister rust that has been used to demarcate these desired ranges.
- Correlate historic white pine abundance with the current day abundance, based upon data, recognizing protocols have changed and that dominance was previously defined at a lower level than it is today.
- Assess whether it makes any scientific and social sense to try and increase white pine abundance versus allowing natural processes to, over the long term, recover white pine to whatever level it may be capable of achieving given changes in climate.
- Modify/correct this Desired Condition, as well as the corresponding MA6 Desired Condition, based upon the above data and science.

OBJECTION STATEMENT: FW-DC-VEG-02. The desired ranges for Size Class are not supported by reliable historic data taken from KNF surveys or scientific research that we are aware of. The Forest Service has not explained how the effects of climate change and white pine blister rust affect the attainability of those desired ranges. AWR's comments stated: "In the KNF FP FEIS, please include an indication of what action or natural event led to the distribution of size classes that currently exists on the forest as indicated in Figure 8."

The use of only four "size classes" also oversimplifies the heterogeneity found across the KNF. For one example, the highly important habitat features found in old growth are not recognized. For stands to start meeting the old growth criteria, trees would have to be roughly 150 years older depending on forest type, to allow time for other important stand characteristics not recognized by the "size class" categorization to develop—still at a relatively young age of 150 years. The LMP entirely fails to even mention the "Large/Very Large" size class, as discussed in

the FEIS. The FEIS discussion of Spectrum modeling the KNF uses a “Very Large” size class (20”+ dbh, age starting anywhere from 131 to 181 years), separate from the “Large” size class. There is no explanation why there are differences in size classes between the LMP and the Spectrum modeling.

**REMEDY:**

- Disclose the information sources and scientific research basis that has been used to demarcate these desired ranges for each of the Size Classes.
- Disclose the scientific information regarding the effects of climate change and white pine blister rust that has been used to demarcate these desired ranges.
- Adjust LMP Desired Conditions to include the additional size class, “Very Large” or else “old growth” that meets all LMP criteria.
- Disclose why there are differences in size classes between the LMP and the Spectrum modeling.
- Modify/correct this Desired Condition based upon the above data and science.

**OBJECTION STATEMENT: FW-DC-VEG-03.** The term “substantial amounts” is not defined. The desired “greater increase” related to the identified tree species is not supported by citation to specific reliable historic data taken from KNF surveys or scientific research. The Forest Service has not explained how the effects of climate change and white pine blister rust affect the attainability of those increases.

**REMEDY:**

- Define the term “substantial amounts” for each of the contexts this Desired Condition describes.
- Disclose the information sources and scientific research basis for each desired “greater increase.”
- Cite scientific research that explains how the effects of climate change and white pine blister rust affect the attainability of those increases.
- Modify/correct this Desired Condition based upon the definitions, data, and science requested.

**OBJECTION STATEMENT: FW-DC-VEG-04.** The implied assertion that trees are generally too dense on the KNF is not supported by specific reliable historic data gathered from KNF surveys or science that we are aware of. The DEIS admits that “it is difficult to quantify historical forest densities” and only “general inferences can be made...” (p. 69). Utilizing this Element as Plan implementation direction would be ecologically damaging over much of the KNF.

Also, Selkirk Conservation Alliance comments noted that FW-DC-VEG-04 may not be appropriate, “given that it could conflict with management direction for lynx and having decreased tree densities and canopy layers might be scientifically questionable.”

**REMEDY:**

- Disclose the information sources and scientific research basis for this LMP direction for each of the various Biophysical Settings and Dominance Groups.

- Reconcile this Desired Condition with the management direction for lynx.
- Modify/correct this Desired Condition based upon that data and science.

OBJECTION STATEMENT: FW-DC-VEG-05. The desired increase in size of forest patches in the seedling and sapling size classes and decreases in size of forest patches in the small and medium size classes is not supported by specific reliable historic data gathered from KNF surveys or science that we are aware of.

REMEDY:

- Disclose the information sources and scientific research basis for this LMP direction for each of the desired increases and decreases.
- Modify/correct this Desired Condition based upon that data and science.

OBJECTION STATEMENT: FW-DC-VEG-06. The implied assertion that root fungi and forest insects are causing too much tree mortality on the KNF is not supported by specific reliable historic data gathered from KNF surveys or science that we are aware of.

REMEDY:

- Disclose the information sources and scientific research basis for this LMP direction.
- Modify/correct this Desired Condition based upon that data and science.

OBJECTION STATEMENT: FW-DC-VEG-07. The desired ranges for snags are not supported by reliable historic data taken from KNF surveys or scientific research that we are aware of. The scientific basis for the delineation of snags into two diameter groups using 20" d.b.h. as the division point is not disclosed.

REMEDY:

- Disclose the information sources and scientific research basis that has been used to demarcate these desired ranges for snags.
- Disclose the scientific basis for the delineation of snags into two diameter groups using 20" d.b.h. as the division point.
- Modify/correct this Desired Condition based upon that data and science.

OBJECTION STATEMENT: FW-DC-VEG-11. The desired ranges for forest composition, structure, and pattern for each biophysical setting are not supported by reliable historic data taken from KNF surveys or scientific research that we are aware of. Also, the Forest Service has not explained how the effects of climate change and white pine blister rust affect the attainability of those desired ranges.

The KNF does not use any scientifically-validated or peer reviewed metrics, in order to describe the "complex (landscape) pattern" created predominantly by fire and therefore reflective of the vegetative HRV. Therefore the KNF cannot make any assurances that its management actions result in habitat conditions for wildlife that actually contribute to viability for wildlife, to adequately compensate for the unavoidable adverse effects of the mechanical treatments.

And as AWR quoted from Frissell and Bayles, 1996, “Any simple index for measuring the range of variation will likely exclude some physical and biotic dimensions important for the maintenance of ecological integrity and native species diversity.”

At p. 13, the FEIS Appendix B describes a process from the 1990s that “completed assessments of landscape pattern.” The FEIS does not cite the documents that represent this assessment of landscape patterns.

#### REMEDY:

- Disclose the information sources and scientific research basis that has been used to demarcate all of these desired ranges, including those resulting from the process in the 1990s that “completed assessments of landscape pattern.”
- Cite scientific research that explains how the effects of climate change and white pine blister rust affect the attainability of those desired ranges.
- Modify/correct this Desired Condition based upon that data and science.

#### FURTHER VEGETATION REMEDY:

- Modify/correct FW-OBJ-VEG-01 based upon the modifications and corrections of each of the Vegetation Desired Conditions requested above.

OBJECTION STATEMENT: FW-STD-VEG-01. This Standard’s allowance of active mechanical treatments in old growth ignores the scientific fact that such active management is the very antithesis of old growth. The Forest Service cites no scientific research or monitoring results from the KNF that demonstrate such manipulations will create net ecological benefit and not net ecological harm to old growth and old-growth associated wildlife.

AWR’s comments criticized that “industrial logging would eventually occur not only on every suitable acre, it would occur in unsuitable areas such as grizzly bear core, **old growth**, and other sensitive areas that theoretically have been removed from the suitable timber base...” Also, “The Draft RFP contains no binding requirement to protect the largest, oldest live trees from logging, which provide vital long-term habitat components even in logged areas.”

Under the LMP’s old-growth management scenario, the Forest Service could choose to log large, old trees down to the degree that a stand could barely qualify as old growth, and that would be consistent with the Forest Plan. Detrimentially disturbed soil conditions would affect much of the treated old-growth areas, some being dedicated (essentially permanent) skid trails affecting soil productivity over the long term, and that would be perfectly consistent with the Forest Plan. Logged stands would no longer need to remain effective habitat for any particular species of wildlife, and in fact could lose a large proportion of existing snags, large logs, canopy cover, ground vegetation, and other characteristics so vital for supporting wildlife. And if the KNF continues to treat monitoring as optional, the chance for managers to change to a wiser course would be minimized.

AWR comments also stated, “The Draft FP contains no requirement to protect old-growth habitat from the damaging effects of firewood gathering.” AWR’s comments criticized that “The Draft FP allows road construction in old-growth groves.” Current roads adjacent to and through old

growth result in the loss of important habitat components when snags and down logs are removed for firewood.

REMEDY:

- Modify this Standard to prohibit firewood gathering and active mechanical treatments in all old growth.
- Delete FW-GDL-VEG-01.
- Modify FW-GDL-VEG-02 to prohibit all road construction in old growth.

OBJECTION STATEMENT: Old Growth. As discussed in AWR's comments, the LMP contains no minimum acreage or distribution requirements for maintaining old growth, as does the 1987 plan. Those acreage and distribution requirements responded to 36 CFR 219.19 viability provisions, their purpose being that large areas of the Forest would not become devoid of old growth or old-growth associated wildlife.

AWR's comments further stated:

The Draft FP contains no requirement to re-establish and maintain an inventory of old growth on the forest based on levels that existed historically.

The 1987 KNF FP requires that “[a]t any time 10% of the KNF land base below 5500 feet in elevation **will be** in an old-growth timber condition, providing habitat for those wildlife species dependent on old growth timber for their needs. The old growth will be spread evenly through most major drainages...” 1987 KNF FP at II-22. Emphasis added.

In its place the Draft FP has inserted the following weak and non-binding Forest Wide Desired Condition for wildlife...

There is no guarantee in the Draft FP that the amount of OG that will “exist” on the KNF will be adequate to maintain viable populations of OG dependent species. None of the DCs, or GDLs that are cited require a specific percentage of OG to be maintained on the KNF. This is a Desired Future Condition which puts it in the realm of ‘wishful thinking’, i.e., “we’re hoping to achieve this” but the reality is, it may never happen, given the fact that there are no definitive requirements in the Draft FP to maintain historic levels of OG that are necessary to support the wide range of species that prefer or are dependent on OG habitat for their survival.

...The 1987 KNF FP (Appendix 17) states that OG should comprise 8-10% of the KNF forested areas. OG Units, about 10,000 acres in size, below 5500 ft elevation were established. Sub-units within OG Units are required to contain at least 5% OG; the entire OG Unit is required to contain 10%. In cases where an OGMU is below 10% OG, mature stands of timber (“recruitment OG”) that would make up the difference are set aside (not logged) and allowed (theoretically) to become OG. OG inventories have been conducted under the current FP to determine the amount of OG and recruitment OG that exists on the Forest and within OG Units. These inventories will be discontinued if the Draft FP is adopted.



... Eliminating the 10% OG requirement and other stipulations regarding inventories of OG that have been in place for 25 years for the reasons stated is another example of the arbitrary elimination of all standards in the current Forest Plan that actually ensure (to some degree) the viability of native species – in this case old growth dependent species – on the Forest.

There are no standards in the Draft FP that guarantee that the DC, which merely indicates that an increase in OG is desirable, will be accomplished. The non-binding, vague Guidelines, Goals, Objectives and Standards that purport to address OG in the Draft FP fail to guarantee that current levels of OG will be maintained, let alone that OG habitat will be increased to historic levels on the KNF.

Recent scientific literature regarding historic levels of OG on the KNF indicate that historically well over 10% of the Forest was comprised of OG:

Information from the KNF's Gautreaux (1999) indicates that about 22% old forest or old growth is at the lower limit for "reference conditions" on the KNF. The KNF's Dueker and Sullivan, 2001 state: "We recognize that historical conditions probably provided a higher level of old forest habitat through time than what is provided by the Forest Plan direction (a mean of 27.7% as opposed to 10%)." So even utilization of the current Forest Plan's 10% old-growth Standard is not consistent with the KNF's own best available science on "reference conditions." Lesica (1996) stated that use of 10% as minimum old-growth Standard may result in extirpation of some species. This is based on his estimate that 20-50% of low and many mid-elevation forests were in old growth condition prior to European settlement.

The KNF has never completed an analysis, based upon the best scientific information available, that adequately analyzes the wildlife viability implications of managing the KNF well outside the historic range of variability (HRV), i.e., at 10% OG. The Draft FP's proposal to eliminate the minimum OG standard will have dire consequences for old growth dependant species.

Moreover, there is no scientific basis to support the KNF's proposed selection of MIS species, none of which are OG dependant. As a result, populations of OG dependant species such as pileated woodpecker, black-backed woodpecker, fisher, flammulated owl, northern goshawk are likely to diminish which could lead to listing. Adding insult to injury, the Draft FP does not include any requirement for monitoring the status and abundance of these species. Therefore it will fail to assure old-growth species' viability.

The Forest Service has never completed an analysis, based upon the best scientific information available, that adequately analyzes the wildlife viability implications of managing the KNF well outside the HRV for old growth. The LMP's elimination of quantitative old-growth standards poses dire consequences for old-growth associated wildlife species.

The Forest Service itself developed the concept that “well-distributed” means that analysis should occur at approximately 10,000-acre divisions, which is roughly the size of the timber compartments used for old growth analysis under the 1987 Plan.

AWR’s comments also stated:

The Draft FP contains no requirement to maintain old growth in large enough contiguous blocks to meet the habitat requirements of old-growth associated wildlife.

The 1987 KNF FP contains a lengthy description of the positive attributes of OG habitat for a whole host of vertebrate species. It also includes a discussion about the optimal sizes of OG stands that research indicated would support viable populations of OG dependent and associated wildlife. It states that 1000 acre stands are optional for all OG dependent wildlife and that 50 acre stands are marginal in terms of supporting OG dependent species and therefore should be the absolute minimum stand size for designated OG and should be “the exception rather than the rule.” 1987 KNF FP at App. 17-9. It also discusses the fact that isolated small patches are not likely to sustain viable populations of some OG dependent species with short dispersal distances. It also states that “an ideal situation could be described as a drainage with: 1) variably sized OG stands no more than 1 mile apart, 2) OG stands ranging up to several hundred acres in size in a well distributed pattern, and 3) interconnected with timbered corridors.” 1987 KNF FP at App. 17-10. All of these stipulations have been eliminated in the Draft FP.

The Draft FP contains no requirement to designate specific stands of mature forest, i.e., “recruitment” old growth, to be protected from logging so that they evolve into old growth for the future.

Under the current Forest Plan, recruitment old growth has been an integral part of old growth monitoring and inventories. Mature timber stands in OG units that did not meet the minimum percent requirement have been designated as recruitment OG and eliminated from timber management plans. Recruitment OG must be identified and delineated as no logging zones in order for the true HRV for OG is achieved.

...The Draft FP contains no requirement that would prohibit clearcutting or other intensive logging methods adjacent to old-growth groves so that “edge effects” would be minimized.

The Vegetation section of the FEIS indicates that the medium size class (ranging in age up to 100 years old) “became a larger percent of the landscape and the average patch size generally became much bigger.” This means that the KNF now has the opportunity to identify those specific areas where the medium size class can evolve into the very much below HRV large and very large size classes, and in the proper patch size to support wildlife.

Zack et al. (1997) is the Coeur d’Alene River Ranger District’s proposal to respond to the Columbia Basin scientific studies, for management of mature and old growth forests of the Coeur d’Alene River Basin. The IPNF specialists were responding to the belief that the Columbia Basin scientific studies (part of the ICBEMP process) would result in major

amendment or forest plan revision for the IPNF and other national forests. Zack et al. (1997) state:

Desired condition maintains **30% total mature and old forest** on National Forest lands, assessed at the scale of the entire National Forests ownership in the Coeur d'Alene Geographic Area. Desired future condition is **15% mature forest and 15% old forest**. **However, since there is not currently that much old forest, a compensating amount of mature forest will be designated as replacement old forest.**

The new Forest Plan must also include minimum standards that require at least 30% of the Forests be managed for old growth and old growth recruitment, well-distributed across the landscape, in accord with scientific information. Areas should be designated for recruitment future old growth. Past logging and natural disturbances have reduced the current amounts below the historic norm. Present old growth will eventually be lost over time due to successional forces such as fire, insects, windstorms, and other natural events.

AWR comments stated, "The Draft FP contains no requirement to protect old-growth habitat from the damaging effects of firewood gathering."

#### REMEDY:

- The KNF must set forestwide Standards for setting a minimum amount of old-growth on the Forest, which includes a buffer amount above what is considered the minimum to insure viable populations of old-growth associated species, so that natural processes that result in loss of old growth do not result in threats to species' viability.
- The KNF must set Standards for distribution of old growth within each timber compartment.
- The KNF must set a minimum size of blocks of **effective** (meeting all criteria) old growth, below which existing block sizes do not contribute to the forestwide minimum Standard or distribution Standard.
- The KNF must adopt a forestwide Desired Condition that maintains 30% total mature forest and old growth on National Forest lands, assessed at the scale of the entire National Forests ownership and at the scale of each Geographic Area. Desired future condition is 15% mature forest and 15% old growth. Where there is not currently that much old growth, a compensating amount of mature forest will be designated as replacement future old growth.
- The KNF must adopt a forestwide Standard that requires that NEPA documents for site-specific project areas identify the areas of forest to meet the above Desired Condition in each Old Growth Management Unit affected by the project.
- Protect old growth and recruitment old growth under Management Area designation such as MA3 Botanical – "unique, unusual, or important characteristics." Alternatively, old growth and recruitment old growth would be designated as MA4 Research Natural Areas – "a long-term network of ecological reserves established as baseline areas for non-manipulative research, education, and the maintenance of biodiversity." Some of the MA Elements would be adjusted to serve the ecological and aesthetic character of old growth.

OBJECTION STATEMENT: FW-GDL-VEG-03. The Forest Service does not cite the scientific basis for the minimum amounts of coarse woody debris to be retained under this Guideline. It is

unclear if the use of the word “should” is intended to recognize the second consistency requirement on page 4 of the LMP, or if it is intended to render the entire Guideline to be discretionary, as courts have interpreted “should.” Also, the exception allowed where minimum amounts “are not available” could lead to a delay in the development of coarse woody debris in treated stands because of retaining too few snags or live replacement trees as recruitment.

#### REMEDY:

- Disclose the scientific basis that has been used to set these minimum amounts of coarse woody debris to be retained under this Guideline.
- Modify the Guideline as necessary to be consistent with the science.
- Clarify the Forest Service’s intention in using the word “should” in this Guideline.
- Also see Remedy for FW-GDL-VEG-04.

OBJECTION STATEMENT: FW-GDL-VEG-04. The Forest Service does not cite the scientific basis for the minimum amounts of snags to be retained under this Guideline. The scientific basis for the delineation of snags into two diameter groups using 15” d.b.h. as the division point is not disclosed. AWR comments stated:

The Draft FP’s use of only two size classes of snags and live tree recruitment threatens more widespread loss of diversity and vital structures for wildlife. USDA Forest Service, 1990 uses an index of the “Number of potential nesting trees >30” dbh per acre” for the pileated woodpecker, and McClelland and McClelland (1999) found similar results in their study in northwest Montana, with the average nest tree being 73 cm. (almost 29”) dbh. The Table 4 guideline fails to address viability for this species. Whereas the guideline says “Emphasize retention of the largest...” that still needs to be more prescriptive towards retention **starting with the very largest available on the specific site** to provide the desired diversity.

The Guideline also does not utilize science which recognizes that western larch and other tree species are disproportionately important in providing cavity habitat for wildlife. The Guideline allows removal of snags > 20” d.b.h. by use of the word “generally.” The Guideline does not specify the area over which “per acre” is to be applied. It is unclear if the use of the word “should” is intended to recognize the second consistency requirement on page 4 of the LMP, or if it is intended to render the entire Guideline to be discretionary, as courts have interpreted “should.” Also, the exception allowed where minimum amounts “are not present” could lead to a delay in the development of snags in treated stands because of retaining too few live replacement trees as recruitment.

AWR’s comments stated:

The Draft FP’s use of only two size classes of snags and live tree recruitment threatens more widespread loss of diversity and vital structures for wildlife. USDA Forest Service, 1990 uses an index of the “Number of potential nesting trees >30” dbh per acre” for the pileated woodpecker, and McClelland and McClelland (1999) found similar results in their study in northwest Montana, with the average nest tree being 73 cm. (almost 29”) dbh. The Table 4 guideline fails to address viability for this species. Whereas the guideline says “Emphasize retention of the largest...” that

still needs to be more prescriptive towards retention **starting with the very largest available on the specific site** to provide the desired diversity.

REMEDY:

- Disclose the information sources and scientific research basis that has been used to set these minimum amounts for snags.
- Disclose the scientific basis for the delineation of snags into two diameter groups using 15" d.b.h. as the division point.
- Modify/correct this Guideline based upon the science requested.
- Modify the Guideline to prohibit the removal of any snag > 20" d.b.h.
- Modify the Guideline to specify the area over which "per acre" is to be applied is in each treatment unit.
- Modify retention requirements in this Guideline and in FW-GDL-VEG-04 to insure that where minimum amounts of coarse woody debris and/or snags are not present, the total of each component plus recruitment from its source component (snags and green tree replacements for coarse woody debris, and green tree replacements for snags) would be the same as if there are adequate amounts of each component to meet all minimums.
- Clarify the Forest Service's intention in using the word "should" in this Guideline.

OBJECTION STATEMENT: FW-GDL-VEG-05. It is unclear if the use of the word "should" is intended to recognize the second consistency requirement on page 4 of the LMP, or if it is intended to render the entire Guideline to be discretionary, as courts have interpreted "should." Also, the "fire salvage" provision for using untreated areas to meet snag requirement would lead to insufficient retention in logged areas.

REMEDY:

- Clarify the Forest Service's intention in using the word "should" in this Guideline.
- Delete the bullet sentence allowing untreated areas be used to meet snag requirements in "fire salvage" areas.

OBJECTION STATEMENT: FW-GDL-VEG-06. It is unclear if the use of the word "should" is intended to recognize the second consistency requirement on page 4 of the LMP, or if it is intended to render the entire Guideline to be discretionary, as courts have interpreted "should."

REMEDY:

- Clarify the Forest Service's intention in using the word "should" in this Guideline, or make this a Standard and substitute the word "shall" for "should".

OBJECTION STATEMENT: FW-GDL-VEG-08. The first sentence, coupled with the consistency requirement on page 4, suggests that any silvicultural system may be used in any proposed treatment unit, regardless of its appropriateness.

REMEDY:

- Omit that first sentence, or modify it to state, "All silvicultural practices may be considered for managing forest vegetation."

## **FIRE**

OBJECTION STATEMENT: FW-DC-FIRE-02. Essentially, this Desired Condition can be used to justify treatments regardless if they result in forest conditions that would not likely occur naturally, or if the biophysical setting would require frequent, intensive fuel treatments to maintain the Forest Service’s desired fuel conditions. Regardless of natural fire regime, “Fire behavior is characterized by low-intensity surface fires with limited crown fire potential.” Also, this Desired Condition prioritizes fuel reduction over natural processes that create important wildlife habitat components and maintain soil productivity. The LMP Glossary definition of WUI under (A) has allowed entities other than the general public to set WUI boundaries outside of NEPA and NFMA processes, and under (B) defines it so vaguely as to expand the delineation of the WUI greatly—again outside NFMA and NEPA processes.

The FEIS does not adequately analyze the impacts on forest resources from treatments generally favored in a given WUI. Our understanding is that the WUI has been defined, and can be re-defined, without any NEPA process. Given the uncertain location of the WUI, the FEIS cannot possibly analyze the implication of Plan implementation of WUI management.

Further, this Desired Condition would be applied beyond the Wildland Urban Interface, vaguely to “areas where values are at risk.” In other words, just about anywhere in the forest. The Desired Condition does not contain any scientific perspective regarding the home ignition zone, nor does it prioritize treatments in the WUI where property owners have taken proper steps to minimize fire risk on their own property. The language of this Desired Condition would nullify the language in FW-DC-FIRE-03 that recognizes the desirability of wildland fire because of the latter’s vague language.

### **REMEDY:**

- Rewrite this Desired Condition to state, “Hazardous fuels are reduced within the WUI”—period.
- Add language that prioritizes treatments on national forest land within the home ignition zone, after steps are taken by landowners to minimize fire risk on adjacent private property.

OBJECTION STATEMENT: MA6-GDL-FIRE-01. This Guideline directs “fuels are reduced, particularly within the wildland urban interface, to reduce the threat of wildland fire” and has the same problems as FW-DC-FIRE-02. It is also redundant.

### **REMEDY:**

- Remove this Guideline from the LMP.

OBJECTION STATEMENT: FW-DC-FIRE-03. It is likely that the vague language in this Desired Condition would essentially nullify its intent that recognizes the desirability of wildland fire.

### **REMEDY:**

- Rewrite this Desired Condition to add detailed specificity to the term, “many areas.”

OBJECTION STATEMENT: FW-OBJ-FIRE-02. The numbers must specify acres rather than fire starts; and this should affect a much more significant portion of the KNF than the wording of this objective implies—to be determined subject to the test of good science and full and fair analysis.

REMEDY:

- Rewrite this Objective to specify acres (rather than fire starts) so as to be adequate to meet the Desired Conditions that recognizes the desirability of wildland fire.

OBJECTION STATEMENT: FEIS analysis of fire suppression. The wildland fire issue is, in many ways, the most daunting and perplexing one facing management of the KNF. On one hand, the LMP implicates it as a “catastrophe”, a threat to life and property, a natural force to be controlled at all costs—even if those costs bust the agency budgets. On the other hand, it is recognized as a vital creative force that sustains practically all components of the forest ecosystems—wildlife, fish, soil productivity, species composition, landscape pattern and structure—you name it. In addressing the issue of wildland fire, we see the occasion of the revision of the forest plan as the defining moment when overall management of the KNF can shift boldly towards sustainably, or continue misguidedly onward in the present direction towards ecological disintegration.

Given that a predominant driving purpose for much of the vegetation management is to compensate for what is often claimed to be landscape-level adverse effects of fire suppression, we are encouraged that the LMP and FEIS recognize the 1987 Plan as out-of-date on this issue, and propose solutions that would allow fire to play a much more natural role. We fear, however, that the pressing unmet need for public education on this issue, coupled with the vested economic interests in carrying on fire suppression (limited only by equipment and firefighter availability), other political forces that prioritize timber over ecology, and the culture of the agency itself (favoring manipulation and control rather than embracing wildness)—all stand as significant barriers to accomplishing the necessary change in fire policy.

Furthermore, as the numbers in the LMP and FEIS indicate, foreseeable agency budgets would not even result in enough vegetation management under the agency’s paradigm to “fix” the problems perpetuated by fire suppression. The FEIS discloses that, with the likely scenario of a constrained budget, the Alternative B-modified would be able to “Move towards Desired Vegetation Conditions” only 15,815 acres/year, only 7.1 % of the KNF over the next 10 years.

Clearly, the Draft Plan Elements needs much stronger direction and certainty for use of wildland fire for resource benefits. The FEIS does not present an analysis that faces up to this constrained budget scenario, in regards to the LMP’s strong management emphasis to “Move towards Desired Vegetation Conditions” using active management, mostly mechanical manipulations.

The FEIS’s implication is clear: fire suppression will continue to dominate, except in those weather situations when and where suppression actions are ineffective, in which cases fires of high severity will occur across relatively wide areas. The FEIS’s analysis fails to adequately recognize or consider that scenario’s likelihood.

**REMEDY:**

- Prepare a Supplemental Draft EIS that fully analyzes a scientifically based Conservation alternative utilizing natural processes as the prime method of vegetative restoration outside a wildland urban interface that is delineated using the NEPA process including the best scientific information available.

**WATERSHED**

The FEIS at p. 151 acknowledges that previous land management activities “continue to affect watershed health and the aquatic ecosystem” and that human induced disturbances “are likely to continue to accumulate, and the press-nature of those disturbances still exists.”

The FEIS at p. 151 discloses that this will not change, since the priority of the IPNF remains the same as it did since 1987 Forest Plan—watershed restoration will continue take a back seat to logging activities:

With the direction and emphasis in the Forest Plan, watershed restoration may tend to be prioritized and directed by more commodity-based resource decisions, such as restoration associated with timber harvest activities.”

The agency has drenched the LMP with so much discretion as to render the aquatic standards ineffective. The standards pertaining to watersheds and water quality, riparian, aquatic species and habitat are limited, narrowly focused, and contain language that could subvert the intent of the standard. The standards are written to allow reliance on discretionary judgment, which can result in little to no consistent significant environmental protection as mandated by NFMA.

The major flaw in the Watershed Condition Ratings is that there is no enforceable threshold associated with the conditions of the watersheds to impede or approve of a level of permitted activities. ...No matter how badly degraded a drainage might be, in this LMP there are no aquatic standards or thresholds that would limit timber sale activities. Without them there is no assurance that the watersheds and aquatic habitat and species will receive the protection mandated by NFMA.

**REMEDY:**

- Prepare a Supplemental Draft EIS, utilizing the Watershed Condition Ratings to set nondiscretionary aquatic standards (numeric thresholds) that would limit road building and timber sale activities.
- The Supplemental Draft EIS must disclose the impacts due to the “press-nature of those disturbances” caused by chronic damage because of deferred maintenance of roads and motorized trails.

**OBJECTION STATEMENT: Watersheds, Soils, Riparian And Aquatic Habitat/Species.** AWR comments stated:



The Introduction to this Section of the DEIS contains the following statements regarding the status of watershed, riparian and fish habitat and species under the current (1987) Forest Plan:

Legacy effects from past timber harvest, mining, and other human-caused disturbances continue to effect (sic) watershed condition and health. As amended by INFISH (USDA 1995a and USDA 1995b), the 1987 Forest Plan direction reduces the risk to watersheds and aquatic biota from new and ongoing activities. For some resources, INFISH standards and guidelines contain general direction for repairing past damage from land management associated with roads, grazing, and recreation activities, although it is lacking for other resources (e.g., grazing and mining). Generally, under the direction of the 1987 Forest Plan, the intensity and the risks associated with new and ongoing developments and human-induced disturbances has been, and will be, greatly reduced as compared to the last several decades. **However, they are likely to continue to accumulate, and the press-nature of those disturbances still exists.**

There will continue to be localized improvements to watershed, soil, and riparian conditions, as projects are implemented, but wholesale watershed-scale improvements will occur more slowly. **With the direction and emphasis in the [current] Forest Plan, watershed restoration may tend to be prioritized and directed by more commodity-based resource decisions, such as restoration associated with timber harvest activities.**

**Current condition and trends show that native aquatic species are in decline. ... Under the current direction, some areas will likely see a slow improving trend, others will continue to chronically degrade, and the viability of native species will continue to be at risk.** DEIS at 132. Emphasis added.

Whether the Revised LMP will reverse the trend towards increasingly degraded watersheds, riparian habitat and non-viability of native aquatic species on the KNF is the question.

Unfortunately this section of the DEIS, like all others, is rife with discretionary language. As a result, the aquatic Standards, Guidelines, Goals and Objectives are arbitrary. The Guidelines, etc. pertaining to watersheds and water quality, riparian, aquatic species and habitat are limited, narrowly focused, and contain language that could rescind their intent. The Guidelines, etc. are designed to allow reliance on discretionary judgment, which can result in little or no consistent environmental protection as mandated by NFMA.

The Desired Conditions (DCs) for Watersheds and Water Quality, Riparian Habitat, Aquatic Habitat and Aquatic Species (Draft FP at 31-36) are essentially a fairly detailed listing of ideal (wishful thinking) conditions for each of these categories. ...However, as is true for other resources, there are no mandatory standards in the Draft FP that will ensure that progress will be made toward achieving these DCs, much less that they will be achieved.

OBJECTION STATEMENT: FW-OBJ-WTR-01. This Objective provides a very minimal target of improving only 15% of subwatersheds over 15 years. Given the depressed populations of native fish, this Objective would lend little toward recovery for bull trout or insuring well-distributed populations of other native aquatic species.

REMEDY:

- Rewrite this Objective to specifically target a reasonable number of watersheds containing depressed populations of native fish.

OBJECTION STATEMENT: FW-OBJ-WTR-02. This Objective seems to prioritize management (logging, fuel reduction) because of its language “improve... across **acres** of subwatersheds...”

REMEDY:

- Rewrite this Objective to focus management on risk factors such as sources of erosion, pollution, sedimentation, excessive water yield, and the like.
- Include a statement that prioritizes meeting existing TMDLs (and future TMDLs when they are developed).

OBJECTION STATEMENT: FW-GDL-WTR-01. This guideline offers little to no protection to the impaired waters on the KNF. Even with an approved TMDL, there is no legal authority to enforce a violation of the TMDL. Over the life of the 1987 forest plan, the KNF has proposed and logged, supposedly with State concurrence, regeneration timber sales in numerous 303(d) impaired drainages, without implementing any required validation and effectiveness monitoring to determine the validity of the predicted effects of the timber sales.

Also, it is unclear if the use of the word “should” is intended to recognize the second consistency requirement on page 4 of the LMP, or if it is intended to render the entire Guideline to be discretionary, as courts have interpreted “should.”

“Short term” and “long term” are not defined. AWR comments stated, “The Forest Service’s definition of ‘short-term’ has always been elusive.”

REMEDY:

- Delete the sentence, “A short-term or incidental departure from state water quality standards may occur where there is no long-term threat or impairment to the beneficial uses of water and when the state concurs.”
- Clarify the Forest Service’s intention in using the word “should” in this Guideline, or make this a Standard and substitute the word “shall” for “should”.

OBJECTION STATEMENT: FW-GDL-WTR-02. The meaning of “hydrologic stability” is unclear.

REMEDY:

- Clarify that the intention is to leave decommissioned or stored roads and trails in a condition that has no adverse watershed effects.

OBJECTION STATEMENT: As AWR comments recognized, the Watershed Disturbance Rating strongly suggests forestwide direction to attain watershed restoration. Yet there are no forestwide standards for those parameters, which would provide much stronger prioritization towards meeting forestwide Watershed and Water Quality Desired Conditions than the LMP includes.

REMEDY:

- Include in the LMP forestwide Standards for each of those factors (Percent equivalent clearcut acres, Percent intact riparian, Stream crossing density, Percent detrimental compaction, and Riparian area road density).

**SOILS**

OBJECTION STATEMENT: FW-DC-SOIL-01. This Desired Condition states, “Physical, biological, and chemical properties of soil are within the recommended levels by soil type as described in the KNF soil inventory.” The properties are not explicitly described to provide meaningful direction.

REMEDY:

- Define or describe the “Physical, biological, and chemical properties of soil.”
- Cite a specific document meant by “KNF soil inventory.”

OBJECTION STATEMENT: FW-DC-SOIL-02. The meaning of the sentence “Areas with sensitive and highly erodible soils or landtypes with mass failure potential are not destabilized as a result of management activities” is unclear.

REMEDY:

- Define “sensitive and highly erodible soils or land types with mass failure potential” by reference to existing descriptions of KNF soils, so it can be objectively determined if a given area on the Forest is subject to this Desired Condition.
- Define “destabilized.”

OBJECTION STATEMENT: FW-DC-SOIL-03. The meaning of the term “Managed areas” is unclear. The areal extent could be delineated as a certain area of a few square feet, a logging unit, a timber sale contract area, an entire watershed, or even a Ranger District.

REMEDY:

- Define “Managed areas.”

OBJECTION STATEMENT: FW-OBJ-SOIL-01. The Forest Service sets as its only soil Objective for the next 15 years what it would take a trained operator to do in 15 days. The meaning of “not meeting soil quality criteria” is unclear.

REMEDY:

- Define the term “not meeting soil quality criteria.”

- Disclose the total acres on the KNF that are “not meeting soil quality criteria.”
- Rewrite this Objective to restore a reasonable percentage (50%) of those acres over 15 years, to ensure a genuine effort is made during that time period towards restoring ecological sustainability of productivity of the Forest’s soils, including fully contributing towards sustained yield.

OBJECTION STATEMENT: There are no soil quality standards in the LMP. AWR comments stated:

Current FP standards for Soils:

Forest Service Manual at 2500-99-1 and Northern Region direction outline specific soil quality requirements that are tiered to site-specific programmatic plans, including a mandate to "maintain or improve soil quality".

Failing to meet any of these standards or requirements represents a violation of the law and jeopardizes soil resources on National Forest lands. Failing to meet all of these standards and requirements assures procedural dysfunction and facilitates illegal soil degradation on the part of the Kootenai National Forest. The Draft FP is unclear as to whether these standards will be mandatory under the Revised FP.

In order to meet NFMA direction and manage National Forest System lands without permanent impairment, the policy of the Northern Region is to “...not create detrimental soil conditions on more than 15 percent of an activity area” (FSM 2554.03). Detrimental soil disturbance is not equivalent to permanent damage. At no point has the Forest Service determined that projects may permanently damage 15 percent of the soil in an activity area.

And in response to extensive AWR comments on this topic, the FEIS Appendix G states, “The Forest is also required to maintain Regional Soil Quality Standards (FSM, R1 Supplement No. 2500-99-1)”. We are not aware of any public process (NEPA, forest planning) that went into the preparation of FSM-2500-99-1. That was a 1999 rewrite of similar earlier directives—themselves never subject to public process. FSM-2500-99-1 was also not included in the LMP Appendix B Retained Decisions. Many provisions of FSM-2500-99-1 are written with language that resembles guidelines, objectives, or other more discretionary components found in the LMP, so no Forest Service statement exists that insures everything in them is mandatory despite the FEIS using the word “required” in referring to them. Nowhere does the LMP or FEIS state that they are a part of the LMP and to be applied like other standards written in the LMP. There is no assurance that the Regional Forest Quality Standards would not be rewritten to weaken their soil protective measures, or eliminated altogether at any time without following the forest plan amendment process.

Nowhere in the LMP or FEIS did the Forest Service demonstrate that will actually prevent irreversible soil damage. To the contrary, in practice the agency interprets and implements FSM-2500-99-1 to **allow** permanent soil disturbance on 15% of every proposed logging unit. In addition, logging units are re-mapped for each project and may be “gerrymandered” to avoid areas of past disturbance in order to address the 15% limit. Perhaps even more significant is the fact that some land managers do not even make site visits to determine actual soil disturbance,

but instead use a computer model to guess at existing disturbance. This is significant because the soil disturbance model may only consider past timber harvest and not consider other important factors such as compaction from livestock grazing, weeds, compaction and erosion from illegal ATV use, etc.

Moreover, in practice district-level land managers interpret and implement these standards to allow **more than** 15% soil disturbance so long as they promise mitigation, regardless of the actual efficacy of the mitigation measures or the likelihood that mitigation will even be funded.

The Forest Service is not ensuring that the LMP will not allow irreversible soil damage on the KNF, simply by adopting FSM-2500-99-1. The failure to ensure that soils are not irreversibly damaged violates NFMA. Additionally, NEPA requires that the Forest Service ensure the scientific integrity of its management decisions and reference the scientific studies it relies upon for its conclusions. Nowhere in the LMP or FEIS does the Forest Service cite to any science that demonstrates that the implementation of the FSM-2500-99-1 will ensure that soils are not irreversibly damaged. Thus, the LMP also violates NEPA in this respect.

#### REMEDY:

- Prepare a Supplemental Draft EIS and LMO which adopt standards in the LMP that carry out the full intent of the FSM-2500-99-1, following the proper public process.
- The FEIS must ensure the scientific integrity of FSM-2500-99-1 by referencing the scientific studies it relies upon for its conclusion that the implementation of FSM-2500-99-1 will ensure that soils are not irreversibly damaged.

**OBJECTION STATEMENT:** There is no LMP requirement to quantify, minimize, or even consider the total amount of detrimentally disturbed soils. After several years of claiming it's irrelevant for project NEPA analysis purposes, the KNF finally employs a measure of cumulative detrimental soil disturbance in a geographic area larger than a timber sale "activity area." In describing factors relevant to its "Watershed Disturbance Rating" the FEIS at Appx. E p. 209 states:

**Percent Detrimental Compaction** – The amount of detrimental soil compaction within a subwatershed. Coefficient values were assigned based on activities that have occurred in a timber stand. Activities include timber harvests, along with date of the harvest and the type of equipment used to accomplish the harvest, site preparation and the type of equipment used to accomplish the site prep, and fires along with the type of fire, the time of year the fire occurred, and the aspect of the stand in which it occurred.

The decrease in future timber yield due to cumulative soil damage forestwide is not quantified in the FEIS. Even if timber were the only accepted use of the KNF, it would make no sense for the Forest Service to never factor in management-induced decreases in productivity, leading to unanticipated significant reductions over time in timber yields. Sustained yield was defined in the Kootenai Forest Plan, 1987, (Vol. 1, Chapter VI, Glossary) as "the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the National Forest System without permanent impairment of the productivity of the land." Sustained yield is based on the land's ability to produce.

REMEDY:

- Include a standard in the LMP which requires site-specific project NEPA documents to disclose the percentage of a subwatershed considered to have detrimental soil disturbance for each subwatershed affected by project activities.
- Include a standard in the LMP which places a scientifically-derived upper limit on subwatershed-level detrimental soil disturbance.

**OBJECTION STATEMENT:** The Forest Service utilizes a proxy—detrimental disturbance—rather than more direct measures of management-induced losses or reductions of soil productivity. The definition of detrimental disturbance does not recognize some effects that damage soils and/or reduce soil productivity, such as noxious weeds taking over a site. The LMP and FEIS do not consider cumulative losses of soil productivity due to noxious weeds in assumptions concerning timber growth and yield, or any biological feature positively correlated to the productivity of soils.

The Forest Plan did not implement any standards for noxious weed management that address the cause of the problem through prevention.

REMEDY:

- Quantify the forestwide extent of soils with impairment or experiencing detrimental impacts based upon the presence of noxious weeds.
- Add standards for noxious weed management that address the cause of the problem through prevention.

**OBJECTION STATEMENT:** In response to public comments on the Kootenai NF's Brush Creek Environmental Assessment, the Forest Service stated:

Forest ("land") productivity is "the summation of productivities of the individual landscape elements (stands) that comprise the forest and is the integration of soil productivity, species composition and stocking, and stand history (Grgal 2000)". If soil productivity is adversely affected due to compaction, then this will have an impact on the overall productivity of the forest. Forest productivity is difficult to measure, so oftentimes, soil quality is used to estimate the potential productivity (Little et al., unknown year).

The Forest Service's utilization of its proxy (amount of detrimental disturbance) results in some levels of observable or measurable soil damage to be zero, because it falls below a threshold amount—even though it may cumulatively affect the productivity of the soil. So some level of damage will always be disregarded in any analysis.

We are aware of no scientific information based upon KNF data that correlates the proxy (areal extent of detrimental soil disturbance in activity areas) to metrics of long-term reductions in soil productivity in activity areas, in order to validate the use of the proxy as a scientifically meaningful estimate of changes in soil productivity.

REMEDY:

- Disclose scientific data that correlates measures of detrimental disturbance on the KNF with measures of changes in soil productivity.

OBJECTION STATEMENT: FW-GDL-SOIL-01, 03, 04, and 05. It is unclear if the use of the word “should” is intended to recognize the second consistency requirement on page 4 of the LMP, or if it is intended to render these entire Guidelines to be discretionary, as courts have interpreted “should.”

**REMEDY:**

- Clarify the Forest Service’s intention in using the word “should” in these Guidelines, or make them Standards and substitute the word “shall” for “should”.

OBJECTION STATEMENT: FW-GDL-SOIL-04. Activities on landslide-prone activities can always be avoided.

**REMEDY:**

- Clarify this direction to explicitly exempt soil and watershed restoration activities such as decommissioning roads, or upgrading drainage structures where needed.

**RIPARIAN**

OBJECTION STATEMENT: FW-OBJ-RIP-01. The wording of this objective (including “maintain or”) renders it aimless.

**REMEDY:**

- Remove the words “maintain or” from this Objective.

OBJECTION STATEMENT: FW-STD-RIP-01, 02. The meaning of “intact and ...functioning at desired conditions” is unclear. There is no reference to any established objective criteria.

**REMEDY:**

- Clarify the meaning of “intact and ...functioning at desired conditions” by specific reference to established objective criteria.

OBJECTION STATEMENT: FW-STD-RIP-02.

“When RCAs are not intact and not functioning at desired condition, management activities shall include restoration components that compensate for project effects to promote a trend toward desired conditions. Large-scale restoration plans or projects that address other cumulative effects within the same watershed may be considered as compensatory components and shall be described during site specific project analyses.”

The last sentence is a vast loophole that allows this standard to be ignored in project development as long as the project documents make any claim that the project has some “large scale” restoration component. It has been typical for at least a decade for the Forest Service to state that every timber sale restores the affected watersheds, even if there were no measurable or demonstrable large-scale direct benefit to riparian functioning.

Also, FW-STD-RIP 02 contradicts the INFISH direction, which states:

WR-3. Do not use planned restoration as a substitute for preventing habitat degradation (i.e., use planned restoration only to mitigate existing prob[lems] not to mitigate the effects of proposed activities).

Inexplicably, the KNF omitted INFISH WR-3 from the LMP Summary of Retained Decisions.

This illustrates a problem with the LMP including only a **Summary** of the Retained Decisions. Obviously, the KNF was selective in which portions it included, making it difficult for the public to know what is actually included as LMP Direction, and misleading the public into thinking that the “Summary” is comprehensive.

**REMEDY:**

- Delete the final sentence from the Standard.
- Delete the phrase, “that compensate for project effects” from the Standard.
- Include within the LMP the entire text of the documents that are Retained Decisions.
- Include INFISH WR-3 as an LMP forestwide Standard.

OBJECTION STATEMENT: FW-GDL-RIP-01, 02, 03, 04, and 05. It is unclear if the use of the word “should” is intended to recognize the second consistency requirement on page 4 of the LMP, or if it is intended to render these entire Guidelines to be discretionary, as courts have interpreted “should.”

**REMEDY:**

- Clarify the Forest Service’s intention in using the word “should” in these Guidelines, or make them Standards and substitute the word “shall” for “should”.

OBJECTION STATEMENT: FW-STD-RIP-03. This Standard incorporates the INFISH direction in the 1995 forest plan amendment. The LMP and FEIS fail to acknowledge the known limitations of the INFISH direction by supplementing it with sufficient other LMP Direction.

INFISH standards in the LMP fail to provide sufficient protection to watersheds and aquatic biota and bull trout for several reasons. INFISH deals primarily with riparian zone protection, and does not consider instream and stream bank erosion and sediment deposition during high water yield events, such as spring runoff and rain-on-snow (ROS). It also fails to adequately consider cumulative effects or acknowledge that ROS events are not limited to occur between 3000 and 4500 feet elevation. There are many areas of 2500 feet or less where ROS events occur on the Forest.

According to the August 1998 Bull Trout Biological Opinion regarding INFISH (BO) high water yield events are an important factor and need to be considered.

Patterns of stream flow and the frequency of extreme flow events that influence substrates are anticipated to be important factors in population dynamics (Rieman and McIntyre 1993). With overwinter incubation and a close tie to the substrate, embryos and juveniles may be particularly vulnerable to flooding and channel scour associated with the rain-on-snow events common in some parts of the range (Rieman and McIntyre 1993). DLMP at p. 265.



INFISH, established in 1995 was supposed to be an interim strategy lasting 18 months—it is now 18 years old. According to the BO, INFISH does not provide sufficient protection for bull trout and thus the reliance of the LMP and FEIS on INFISH does not ensure against further violations of the Endangered Species Act.

In considering both PACFISH and INFISH the BA (USDA and USDI 1998 a) concluded that indefinite extension of PACFISH and INFISH aquatic conservation strategies delays the recovery of bull trout and increases the risk that key population segments will be irretrievably lost. The PACFISH and INFISH aquatic conservation strategies maintain a fragmented network of habitats in degraded condition, where they presently exist, because they lack a comprehensive management strategy which protects and restores bull trout watersheds. The interim direction does not provide adequate assurance that future actions will not result in adverse effects to listed bull trout DPSs.

REMEDY:

- Prepare a Supplemental Draft EIS that utilizes the direction in the 1998 Bull Trout Biological Opinion to create riparian, watershed, and fisheries standards into the LMP.

## AQUATIC HABITAT

OBJECTION STATEMENT: FW-OBJ-AQH-01. The Forest Service sets as an Aquatic Habitat restoration Objective for the next 15 years an inadequate length of stream channels, hardly addressing the LMP Goal for this topic. AWR comments stated, “The AQS Objectives for impaired streams that contain sensitive or T&E Aquatic Species are minimal... Furthermore “Objectives” are not mandatory targets that must be met.”

REMEDY:

- Disclose the total miles on the KNF that have restoration needs for “structure, composition, and function of habitat for fisheries and other aquatic species” and designate those on a map.
- Rewrite this Objective to restore a reasonable percentage (50%) of those miles over 15 years, to ensure a genuine effort is made during that time period towards restoring structure, composition, and function of habitat for fisheries and other aquatic species.

OBJECTION STATEMENT: 36 CFR 219.27. NFMA regulations at 36 CFR 219.27(e) state: “No management practices causing detrimental changes in water temperature or chemical composition, blockages of water courses, or deposits of sediment shall be permitted within these areas which seriously and adversely affect water conditions or fish habitat.” (Emphasis added.) The LMP does not contain direction that explicitly limits the **amount** of sediment that would be allowed to enter water bodies from management activities.

AWR’s comments stated:

One important component of aquatic habitat that that can be measured and appears to missing is sediment loading. Will the KNF collect stream data in order to monitor cobble embeddedness, turbidity and/or total suspended solids? Have desirable levels of these factors been established?

Apparently not... the only mention of sediment as a detrimental impact on aquatic habitat is in Aquatic Species Guideline 01:

**FW-GDL-AQS-01.** Management activities that may disturb native salmonids, **or have the potential to directly deliver sediment to their habitats**, should be limited to times outside of spawning and incubation seasons for those species, as identified in Table 7.

Draft FP at 39. Emphasis added. In other words, according to the Draft FP, it is acceptable to proceed with management activities that have the potential to deliver sediment to native salmonid habitat, as long as it is not during spawning or incubation. The Final KNF FP should include strict limits on the amount of sediment delivered to fish bearing streams due to ground disturbing activities.

Also, due to the inability of the Forest Service to perform routine maintenance, a very substantial portion of the KNF road system is not up to BMP standards, meaning that sediment and other pollution that result are violations of the Clean Water Act (CWA).

Neither the CWA nor NFMA make “budget constraints” a provision to allow the deposition of sediment into streams from roads that are inadequately maintained. It is common knowledge that the KNF is woefully behind on its road maintenance. Many Operational Maintenance Levels roads 1-5 are being neglected.

The KNF states that, “The revised Forest Plan does not include any objectives specifically for road construction as it relates to soil and aquatic resource protection or restoration; however, the Plan does include an objective for 10 to 15 miles of road decommissioning or placing roads into intermittent storage as an annual average over a 5 year period.” Given this statement and the notorious lack of road maintenance, the KNF cannot justify the current violations of the Clean Water Act. There is inadequate direction in the LMP that will guarantee compliance with the Clean Water Act regarding pollution from roads.

#### REMEDY:

- Standards must be included, along with their associated monitoring methodology, for cobble embeddedness, turbidity and total suspended solids.
- The LMP Monitoring Program must include a Monitoring Question and Monitoring Indicators to confirm that water conditions and fish habitat are in compliance with 36 CFR 219.27(e), state water quality standards and the Clean Water Act.

OBJECTION STATEMENT: NFMA regulations and fish passage barriers. USDA, 2008<sup>1</sup> addresses fish passage barrier issues on NFS lands in the Northern Region. Page three of USDA, 2008 specifically states the Forest Service has legal mandates that concern fish passage barriers. These include NFMA at 36 CFR 219.19 which requires the FS to maintain viable populations of fish populations, and 36 CFR 219.27(e) which concerns management practices that cause blockages of water courses.

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<sup>1</sup> Assessment of Aquatic Organism Passage at Road/Stream Crossings for the Northern Region of the USDA Forest Service, USDA Forest Service, Northern Region, Hendrickson, et al, 12pp, March 2008

The 1987 Forest Plan includes the following Standard from the INFISH Amendment: “**RF-5.** Provide and maintain fish passage at all road crossings of existing and potential fish-bearing streams.” USDA, 2008 reveals the 1987 Forest Plan and the revised LMP are not in compliance with NFMA regulations. We also note that the LMP changes INFISH Standard RF-5 from a Standard to a more discretionary Guideline.

REMEDY:

- The LMP must contain watershed Standards that require full compliance with NFMA regulations regarding fish passage barriers, including those currently located in watersheds on the KNF. INFISH Standard RF-5 in the LMP must be changed to a non-discretionary Standard so that any project affecting a stream with an existing fish passage barrier on national forest land or on a road under the jurisdiction of the Forest Service must eliminate the fish passage barrier.
- The LMP Monitoring Program must include a Monitoring Question and Monitoring Indicator that annually disclose the number and location of fish passage barriers on the KNF.

OBJECTION STATEMENT: Management Indicator Species. AWR comments included: The Plan does not include endangered & threatened species as management indicator species; ... bull trout should have been included on the list of MIS. The Plan does not include a management indicator species for other species ...with special habitat needs. ...The Forest Plan does not identify any commonly fished species or sensitive species; a common choice in this category is westslope cutthroat trout.

The draft revised Plan’s failure to designate *appropriate* management indicator species according to the requirements of the 1982 planning regulations violates NFMA.

At 36 CFR 219.19(a)(1) the 1982 NFMA regulations state, in regards to Management Indicator Species (MIS) selection:

In order to estimate the effects of each alternative on fish and wildlife populations, certain vertebrate and/or invertebrate species present in the area shall be identified and selected as management indicator species and the reasons for their selection will be stated. These species shall be selected because their population changes are believed to indicate the effects of management activities. In the selection of management indicator species, the following categories shall be represented where appropriate: **Endangered and threatened** plant and animal species identified on State and Federal lists for the planning area; species with special habitat needs that may be influenced significantly by planned management programs; species commonly hunted, **fished**, or trapped; non-game species of special interest; and additional plant or animal species selected because their population changes are believed to indicate the effects of management activities on other species of selected major biological communities or on water quality.

The LMP’s selection of the aquatic Macroinvertebrate Assemblage as MIS does not comply with 36 CFR 219.19(a)(1), because the Forest Service does not explain how it assures well-distributed, viable populations of bull trout, westslope cutthroat trout, inland redband trout, western pearlshell mussel, and other native aquatic species will be maintained.

## REMEDY:

- The Forest Service must prepare a Supplemental DEIS and LMP that designates bull trout, westslope cutthroat trout, inland redband trout, and western pearlshell mussel as MIS.

## DIVERSITY

### OBJECTION STATEMENT: Sensitive species.

The LMP includes Guideline FW-GDL-VEG-07 which states, “Evaluate proposed management activities and project areas for the presence of occupied or suitable habitat for any plant species listed under the Endangered Species Act or on the regional sensitive species list.” The LMP also contains other Guidelines such as FW-GDL-WL-21 which states, “Management activities on NFS lands should avoid/minimize disturbance at known active nesting or denning sites for other sensitive, threatened, or endangered species not covered under other forestwide guidelines.”

The Glossary defines Sensitive Species as “those plant and animal species identified by a regional forester for which population viability is a concern as evidenced by significant current or predicted downward trend in numbers or density” and... “habitat capability that would reduce a species’ existing distribution.”

The FEIS states:

#### Sensitive Species

The sensitive species analysis in this document and the wildlife specialist’s report in the project record meet the requirements for a biological evaluation as outlined in FSM 2672.42.

Sensitive species are administratively designated by the regional forester (FSM 2670.5) and managed under the authority of the National Forest Management Act. FSM 2670.22 requires the maintenance of viable populations of native and desired non-native species and to avoid actions that may cause a species to become threatened or endangered.

The National Forest Management Act (36 CFR 219.19) directs the Forest Service to manage habitat to maintain viable populations of existing native and desired non-native vertebrate species. A viable population is defined as one that has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area, the KNF.

Region 1 updated the sensitive species list in 2011.

Then the FEIS presents analyses for some of the Sensitive wildlife species which conclude that implementation of the LMP “may impact individuals or habitat, but is not likely to result in a trend towards federal listing or loss of viability” for each species. However, the FEIS does not disclose the minimum viable population of any of the Sensitive species (plant, wildlife, or aquatic), nor does it describe the quantity and quality of habitat needed to maintain viable

populations of any of the Sensitive species. Missing from LMP direction are science-based habitat Standards that conform to the needs of Sensitive species.

The LMP does not contain any requirement for the Forest Service to insure that its management activities will maintain viable populations of Sensitive species. The LMP does not even include a definition of viable population in its Glossary.

The fact that “Sensitive species are administratively designated by the regional forester” also highlights a weakness of the biodiversity provisions of the LMP. At any time, the Regional Forester may change or even eliminate the Sensitive species list for the KNF, without following any public process such as a forest plan amendment. It is clear that under the LMP, no Sensitive species has any genuine protections.

For example, in 2011 the Regional Forester’s “update of the sensitive species list” apparently removed the white-headed woodpecker from the list of Sensitive species on the Idaho Panhandle National Forests. Historically the white-headed woodpecker has been present on the IPNF and may be locally extirpated do to past logging of old-growth ponderosa pine stands. A previous Regional Forester update deleted the northern goshawk from the list of Sensitive species on the KNF, despite site-specific NEPA documents such as the Northeast Yaak Draft Supplemental EIS which disclosed that **forestwide** for the goshawk:

Using the modeled nesting habitat acres from Johnson (ibid), the minimum PPI for the Forest would be 139 goshawk pair. The most recent data show 34 known or suspected pairs and an additional 10 known individual goshawks on the Forest (Kootenai NF records).

The Boise National Forest has adopted the black-backed woodpecker as one of its MIS:

The black-backed woodpecker depends on fire landscapes and other large- scale forest disturbances (Caton 1996; Goggans et al. 1988; Hoffman 1997; Hutto 1995; Marshall 1992; Saab and Dudley 1998). It is an irruptive species, opportunistically foraging on outbreaks of wood-boring beetles following drastic changes in forest structure and composition resulting from fires or uncharacteristically high density forests (Baldwin 1968; Blackford 1955; Dixon and Saab 2000; Goggans et al.1988; Lester 1980). Dense, unburned, old forest with high levels of snags and logs are also important habitat for this species, particularly for managing habitat over time in a well-distributed manner.

(USDA Forest Service, 2010<sup>2</sup>.) The Boise National Forest chose the black-backed species partly because of its unusually heavy reliance on high-severity burn habitat, and because “Habitat that supports this species’ persistence benefits other species dependent on forest systems that develop with fire and insect and disease disturbance processes.” (Id.) That rationale is a good one for KNF MIS selection.

According to official Forest Service policy, the KNF “must develop conservation strategies for those sensitive species whose continued existence may be negatively affected by the forest plan or a proposed project.” FSM 2670.45. These strategies must contain quantifiable objectives, and

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<sup>2</sup> USDA Forest Service, 2010. Final Environmental Impact Statement, Forest Plan Amendments Proposed to Facilitate Implementation of the Plan-Scale Wildlife Conservation Strategy Phase I: Forested Biological Community, Boise National Forest, July 2010

must be adopted prior to implementation of projects that would adversely impact that species habitat. FSM 2622.01, 2670.45.

**REMEDY:**

- The Forest Service must prepare a Supplemental DEIS and LMP that discloses the minimum viable population of all of the Sensitive species (plant, wildlife, or aquatic), and disclose the quantity and quality of habitat needed to maintain viable populations of each of the Sensitive species.
- The Forest Service must prepare a Supplemental DEIS and LMP that adopts the current list of species on the Regional Forester's list of Sensitive species on the KNF as a component of the LMP that would require the amendment process to remove species.
- The Forest Service must prepare a Supplemental DEIS and LMP that includes scientifically credible conservation strategies.

**OBJECTION STATEMENT: NFMA requirements for viability.** AWR's comments included:

The Draft Plan fails to cite 36 CFR 219.19 ("Fish and wildlife resource") specifically except noting vaguely that it establishes "Forestwide standards and guidelines as required by 36 CFR 219.13 through 219.27." 36 CFR 219.19 begins by stating:

Fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area. For planning purposes, a viable population shall be regarded as one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area. In order to insure that viable populations will be maintained, habitat must be provided to support, at least, a minimum number of reproductive individuals and that habitat must be well distributed so that those individuals can interact with others in the planning area.

Maintaining viable populations of native fish and wildlife species is a longstanding and widely recognized legal and ecological benchmark for complying with NFMA's diversity requirements. Yet the words "viable population" or any variance thereof are not found anywhere in the Draft Plan. For a government agency with a mission to maintain and protect natural resources including fish and wildlife to omit this fundamental 36 CFR 219 requirement from its land management plan is outrageous and illegal.

Still, the LMP does not contain any requirement for the Forest Service to insure that its management activities will maintain viable populations of Sensitive species. The LMP and FEIS do not even include a definition of viable population.

**REMEDY:**

- The Forest Service must include in the LMP a forestwide standard that reads, "Fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area."
- The Forest Service must include in the LMP the definition of viability as found in 36 CFR 219.19: "(A) viable population shall be regarded as one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is

well distributed in the planning area. In order to insure that viable populations will be maintained, habitat must be provided to support, at least, a minimum number of reproductive individuals and that habitat must be well distributed so that those individuals can interact with others in the planning area.”

OBJECTION STATEMENT: Old Growth Management Indicator Species. The 1987 Forest Plan EIS stated, “Maintaining viable populations of (sensitive and old growth dependent species) will require special considerations.” Unfortunately, the LMP takes a huge step backwards in regard to old growth. In apparently rejecting NFMA responsibilities for maintaining viable populations of native wildlife, the LMP drops all requirements to monitor the population trends of old-growth associated species. The 1982 regulations require the selection of management indicator species (MIS), because their population changes are believed to indicate the effects of management activities on other species and on selected major biological communities such as old growth. The LMP completely drops old-growth management indicator species, which means there would be no monitoring of wildlife whose special habitat needs are best found in old growth, such as pileated woodpeckers, woodland caribou, Canada lynx, northern goshawks, flammulated owls, fishers, and many others. Instead of taking bold steps to reduce the controversy and gridlock this issue has led to in the past two decades, the Forest Service now wants to basically sweep this issue under the rug. AWR comments on this topic include:

The Draft FP has eliminated the current KNF Plan’s one OG Dependant Species - pileated woodpecker - from the list of designated MIS for the Forest.

The purpose of monitoring old growth dependant species presence and abundance is to determine whether the habitat that is available to them has been altered in such a way that they are no longer present or their use of a particular area has declined, i.e., fewer, or no nesting pairs of pileated woodpeckers in an area where the results of previous surveys indicated that they were abundant.

By eliminating OG dependant MIS species and population monitoring at the Forest or project level, the Draft FP indicates that the impacts on OG dependant species from alteration of old growth and other habitat types as a result of logging will no longer be acknowledged or considered. It very clearly states that the elk will be used as an indicator of security not habitat and likewise the landbird assemblage will be used as an indicator of achieving the DFCs for Vegetation, not how land management, i.e., logging, is affecting their habitat and their viability.

Established science-based descriptions of optimal habitats for individual species (goshawk, for example) will not be considered in impacts analyses for projects. Thus the viability of native old growth dependent species will not be ensured by the KNF. This is a blatant violation of the 1982 NFMA planning regulations.

The Draft FP proposes to eliminate all threatened, endangered, candidate and sensitive species from the list of MIS for the Forest.

The fact that threatened, endangered and sensitive species are no longer designated as MIS indicates the KNF has no intention of monitoring how land management affects their

viability. The 1982 NFMA planning regulations – which were used to create the revised Forest Plan – require that the Forest Service ensure the viability of all native wildlife species. There is nothing in the Draft FP that indicates that threatened, endangered and sensitive species viability will be monitored, let alone ensured. This is a blatant violation of the 1982 NFMA planning regulations.

The LMP fails to recognize good science recognizing that the pileated woodpecker is a **keystone wildlife species**. The Committee of Scientists, 1999 defines Keystone species as a:

...species whose effects on one or more critical ecological processes or on biological diversity are much greater than would be predicted from their abundance or biomass (e.g., the red-cockaded woodpecker creates cavities in living trees that provide shelter for 23 other species).

Consistent with this notion of the pileated woodpecker as a keystone species, USDA Forest Service 2011c<sup>3</sup> states:

Many types of disturbances, such as timber harvest, fuel reduction, road construction, blow-down, wildland fire, or insect or disease outbreaks, can affect old growth habitat and old growth associated species. This is well illustrated by **the pileated woodpecker, a “keystone” species**, which provides second-hand nesting structures for numerous old growth species such as boreal owls, kestrels, and flying squirrels (McClelland and McClelland 1999, Aubry and Raley 2002). A disturbance can reduce living tree canopy cover to levels below that needed by the pileated woodpecker's main food source, carpenter ants, forcing the pileated to forage and possibly nest elsewhere. Carpenter ants, which live mostly in standing and downed dead wood, can drastically reduce populations of species such as spruce budworm (Torgersen 1996), the most widely distributed and destructive defoliator of coniferous forests in Western North America.

(Emphasis added.) Recognition of the pileated woodpecker as keystone species as outlined above would bring the KNF into a better understanding of the ecological role played by its current MIS, as providing priceless, irreplaceable ecosystem services.

The LMP and FEIS do not include scientific justification for the adoption of the landbird assemblage (olive-sided flycatcher, hairy woodpecker, chipping sparrow, Hammond's flycatcher and dusky flycatcher) as an MIS for other wildlife (including old-growth associated wildlife species) on the KNF. In fact, in a giant leap into the realm of faith alone, the LMP EIS contains the explicit assumption that its implementation cannot possibly affect viability of its chosen MIS:

These MIS, elk and insectivores, **were not proposed because of a viability concern**. Additionally, viability of these MIS will not be analyzed in future projects, nor will they be monitored at the project level.”

(Emphasis added.) The landbird assemblage cannot fulfill the requirements of the regulations concerning **Management Indicator Species** if no monitoring will be performed to verify the LMP assumption that the impacts of **management** on them will not affect viability.

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<sup>3</sup> USDA Forest Service, 2011c. Griffin Creek Resource Management Project Environmental Assessment. Tally Lake Ranger District, Flathead National Forest, December 2011.



Furthermore, the selected MIS are migratory birds, and nowhere does the FEIS or LMP disclose the habitat conditions on other, off-Forest sites these species depend upon for viability. This has implications as the Forest Service transitions to the 2012 NFMA regulations, which exempt the Forest Service from those regulations' viability provision in cases where "...the responsible official determines that it is beyond the authority of the Forest Service or not within the inherent capability of the plan area to maintain or restore the ecological conditions to maintain a viable population of a species of conservation concern in the plan area... ."

Similarly, "Self-sustaining Populations" (the LMP's weaker version of viable populations) as those "that are sufficiently abundant, interacting, and well-distributed in the plan area, within the bounds of their life history and distribution of the species and the capability of the landscape, to provide for their long-term persistence, resilience and adaptability over multiple generations." (Emphasis added.)

The Plan does not include endangered & threatened species as management indicator species; the Canada lynx and bull trout should have both been included. The Plan does not include a management indicator species for species that have special habitat needs; the goshawk (old growth), pileated woodpecker (large snag habitat), pine marten or fisher (mature forest with coarse woody debris), are widely recognized on other national forests as management indicator species for species with special habitat needs. Even if the KNF wanted to use different species, it still needs to designate a management indicator species to determine the impacts to the species dependent on these distinct types of habitat. Other special habitat types that were not addressed included ecotone, woody draws, riparian areas, and post-fire ecosystems. The LMP does not identify any commonly trapped species as management indicator species such as the pine marten. The LMP does not identify any commonly fished species; common choices in this category are bull trout and westslope cutthroat trout.

Lindenmayer, et al, 2000<sup>4</sup> lists 7 types of indicator species citing various authors:

1. A species whose presence indicates the presence of a set of other species and whose absence indicates the lack of that entire set of species (eg. USFS MIS)
2. A keystone species, which is a species whose addition to or loss (from) an ecosystem leads to major changes in abundance or occurrence of at least one other species.
3. A species whose presence indicates human created abiotic conditions such as air or water pollution (often called a pollution indicator species).
4. A dominant species that provides much of the biomass or number of individuals in an area.
5. A species that indicates particular environmental conditions such as certain soil or rock types.
6. A species thought to be sensitive to and therefore to serve as an early warning indicator of environmental changes such as global warming or modified fire regimes
7. A management indicator species, which is a species that reflects the effects of a disturbance regime or the efficacy of efforts to imitate disturbance events.

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<sup>4</sup> Lindenmayer, D, Margules, C & Botkin, D 2000, 'Indicators of biodiversity for ecologically sustainable forest management', Conservation Biology, vol. 14, no. 4, pp. 941-950.

The revised Plan's failure to designate management indicator species according to the requirements of the 1982 planning regulations violates NFMA.

On the subject of conservation strategies, the Committee of Scientists (1999) state:

To ensure the development of scientifically credible conservation strategies, the Committee recommends a process that includes (1) scientific involvement in the selection of focal species, in the development of measures of species viability and ecological integrity, and in the definition of key elements of conservation strategies; (2) independent scientific review of proposed conservation strategies before plans are published; (3) scientific involvement in designing monitoring protocols and adaptive management; and (4) a national scientific committee to advise the Chief of the Forest Service on scientific issues in assessment and planning.

#### REMEDY:

- To ensure the development of scientifically credible conservation strategies, follow the process recommended by the Committee of Scientists in the above paragraph.
- The LMP must include MIS specific to habitat for old-growth associated species, such as the pileated woodpecker, northern goshawk, and those on the Sensitive species list that are associated with old growth.
- Disclose the best available scientific information on the biology of the olive-sided flycatcher, hairy woodpecker, chipping sparrow, and Hammond's flycatcher and dusky flycatcher, including scientific justification for its use as an MIS for other wildlife (including old-growth associated wildlife species) on the KNF, and the cumulative effects on habitat in the off-Forest sites the species depend upon for viability.

#### WILDLIFE

OBJECTION STATEMENT: Use of VMAP base data causes unacceptable inaccuracy in the wildlife analysis. As discussed in AWR's comments, we don't believe that the use of vegetation (the habitat proxy) is valid for insuring viable populations of wildlife. For example, "It very clearly states that ...the landbird assemblage will be used as an indicator of achieving the DFCs for Vegetation, not how land management, i.e., logging, is affecting their habitat and their viability."

Under the 1987 Plan the KNF FS failed to follow its obligations to monitor populations of old-growth associated wildlife, in favor of striving towards "desired future conditions" of habitat (vegetation) in the context of project NEPA planning.

AWR's comments stated:

The theory, expressed in the Draft FP, is that achievement of the DCs for vegetation will restore ecological balance that other resources such as habitat for aquatic and terrestrial species will be restored. The Draft FP thus implies that achievement of the DCs for vegetation will insure healthy, viable populations of native species.

Thus the Draft Plan relies upon achieving its Vegetation direction as a surrogate for wildlife habitat. In other words, the Forest Service believes meeting the desired conditions for forest composition and structure will result in wildlife habitat that resembles historic conditions, and therefore provide for wildlife population viability. However the DEIS fails to acknowledge the controversy of such a position. Thirteen years ago, as the FS began a process of revising NFMA regulations, the agency commissioned the Committee of Scientists. The Committee of Scientists (1999), take issue with wildlife management that emphasizes manipulation of habitat as the primary management methodology for insuring wildlife viability, "...in recognition that focusing only on composition, structure, and processes may miss some components of biological diversity."

The Committee of Scientists (1999) report states:

Habitat alone cannot be used to predict wildlife populations...The presence of suitable habitat does not ensure that any particular species will be present or will reproduce. Therefore, populations of species must also be assessed and continually monitored.<sup>5</sup>

The Wildlife Habitat Assessment for the Kootenai and Idaho Panhandle Plan Revision Zone states: "Much of the vegetative data used in this analysis was based on the Region One Vegetation Mapping Program (R-1 VMap), which is composed from satellite imagery." However, high error in VMap data used for wildlife analysis exacerbates errors created by compounding spatial models and invalidates LMP assumptions about viability ("self-sustaining populations").

Producer accuracy is the probability of a reference site being correctly classified. Producer accuracy assessments for Tree Canopy Cover and Tree Size are inaccurate. The VMap Version 042 Accuracy assessment Error Matrices shown below reveal poor agreement with reality. For example, the tree size category 45 (15" dbh+) has producer accuracy of 44.6%. The Tree Canopy Cover Map Class 3, 60-100% canopy cover, has a producer accuracy of 60.4% (Appendix\_E\_V042 p E8).

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<sup>5</sup> The Draft Plan's failure to require population monitoring for wildlife species, including sensitive species and old growth dependent species is addressed elsewhere in these comments.

### Tree Canopy Cover:

	Reference										
Map Class	1	2	3	3100	3300	5000	7000	Total	User	Fuzzy	
1	100	58	11	5	18		3	195	51.3%	66.2%	
2	91	636	201	11	18	3	2	962	66.1%	81.3%	
3	18	227	326	1	1		1	574	56.8%	76.6%	
3100	37	15	2	397	76	1	46	574	69.2%	79.8%	
3300	50	19		54	240	1	5	369	65.0%	73.0%	
5000				1	3	105	3	112	93.8%	93.8%	
7000	1			4	2	1	64	72	88.9%	93.1%	
Total	297	955	540	473	358	111	124	2858			
Producer	33.7%	66.6%	60.4%	83.9%	67.0%	94.6%	51.6%		65.4%		
Fuzzy	49.0%	81.5%	79.0%	90.1%	77.9%	94.6%	72.2%			78.7%	

### Tree Size (DBH):

Map Class	Reference									User	Fuzzy
	1	2	3	45	3100	3300	5000	7000	Total		
1	29	21	22	6	4	10		2	94	30.9%	42.0%
2	20	151	145	75	5	8		1	405	37.3%	57.7%
3	31	200	295	127	1	10	1	1	666	44.3%	68.8%
45	20	125	218	183	7	9	2	2	566	32.3%	51.6%
3100	4	24	19	7	397	76	1	46	574	69.2%	79.8%
3300	9	25	23	12	54	240	1	5	369	65.0%	73.0%
5000					1	3	105	3	112	93.8%	93.8%
7000			1		4	2	1	64	72	88.9%	93.1%
Total	113	546	723	410	473	358	111	124	2858		
Producer	25.7%	27.7%	40.8%	44.6%	83.9%	67.0%	94.6%	51.6%		51.2%	
Fuzzy	34.5%	47.9%	65.9%	60.1%	90.1%	77.9%	94.6%	72.2%			67.3%

There are not only producer errors but locational errors are extreme. [Note: We use examples from the Idaho Panhandle National Forests (IPNF), because the Wildlife Habitat Assessment for the Kootenai and Idaho Panhandle Plan Revision Zone combined both the IPNF and the KNF.]

The image below shows the Green Monarch area along Pend Oreille Lake. The image is approximately 3.9 miles across, the area consists of open steep slopes and cliffs with small patches of trees. The area has a map classification of large diameter trees (15"+) without accounting for canopy cover. When canopy cover is added it is only slightly more accurate. In addition a substantial portion is classified as water as seen in the center left of the image.

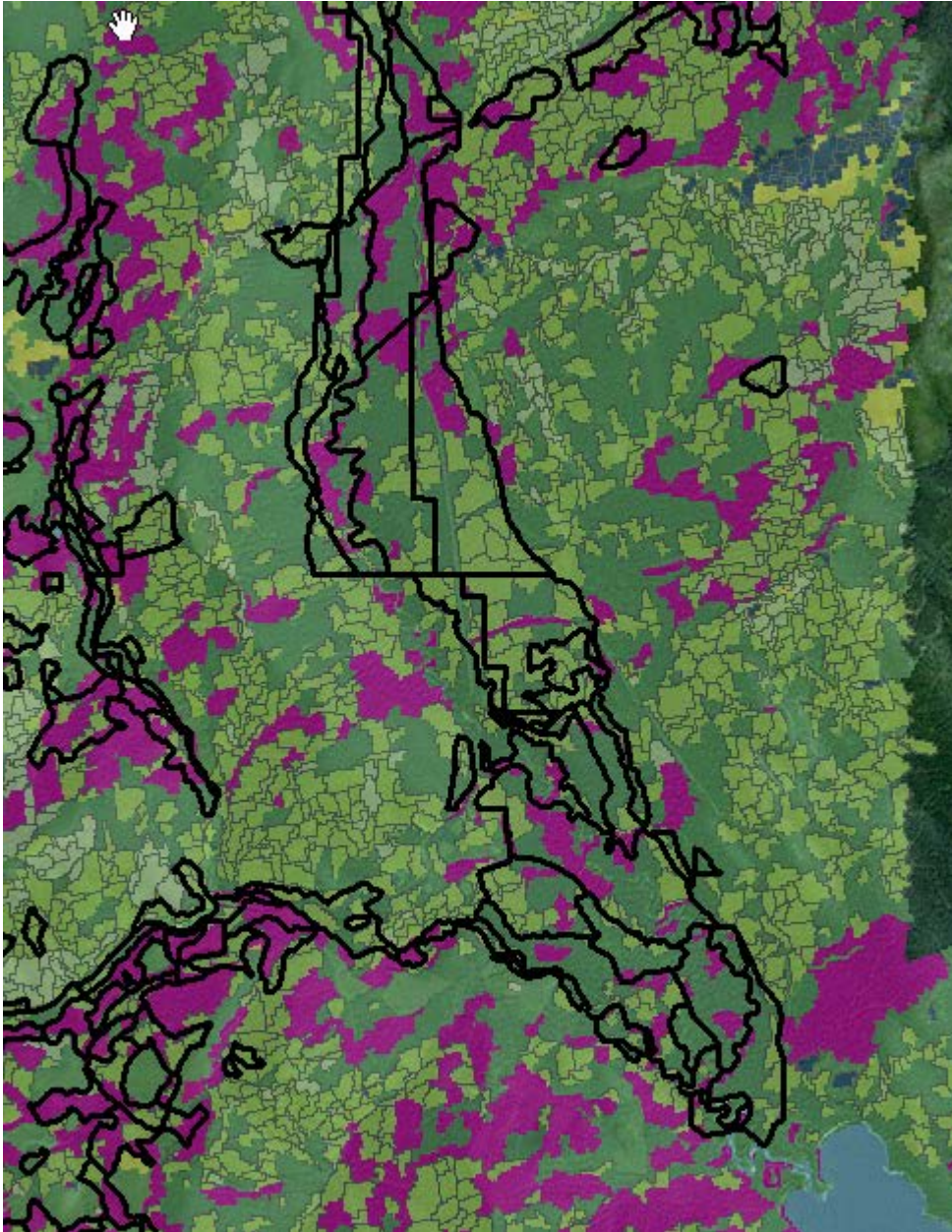


The image below is a close-up as it is difficult to determine which areas are forested or not from the image above. Areas classified as large timber are the transparent areas between the lake and colored smaller size classes to the south.



The next image is of a Research Natural Area just north of Priest Lake. This contains one of the largest old growth stands in the PNW, outlined in black. The VMap classification shows 15"+ dbh trees in magenta. Most of this old growth stand is classified at the 10-14.9" dbh range and smaller (dark and lighter green).





A simple GIS based spatial query called intersect cut out the VMap polygons that occurred in IPNF allocated old growth. Only old growth that was field verified (codes 2 and 9) was used. A logical assumption is that most old growth on the IPNF would fall into the 15''+ dbh classification. The forestwide results are in the table below. About 27% of the VMap large tree polygons occurred in IPNF field verified old growth (Table 1 below). And approximately 43% of the codes 2 and 9 old growth from the IPNF stand-level mapping inventory falls within the 10-14.9'' dbh size class, which doesn't logically follow from the LMP Glossary's definition of old growth.

The base vegetation data portrays a very different spatial arrangement of polygons than the actual boundaries of field verified old growth on the IPNF. Even though old growth was

apparently incorporated into the SIMPPLLE map, the locational distribution of other tree size classes was not. The same scenario of wrongly classified polygons likely applies to all VMap size class data. Because the VMap polygons are producer and locationally inaccurate, incorporation of this map into a spatially explicit habitat modeling program, relying on fire and climate change modeling would degrade modeling results.

*Table 1 Comparison of VMap tree size classification to confirmed old growth*

SIZE CLASS	ACRES	Percent
Herb	1364	.05
Shrub	2400	0.94
DBH 0-4.9"	11010	4.65
DBH 5-9.9"	61603	24.1
DBH 10-14.9"	110243	43.1
DBH $\geq 15$ "	67876	26.5
WATER + SPVEG	493	0.2

Because the SIMPPLLE model is a spatially explicit model, it allows for the evaluation of available habitat over time and the arrangement of that habitat in terms of patch size. For example, the analysis for American marten includes a species-specific habitat assessment and an examination of general changes in patch size and habitat connectivity over time, and assumes that the assumption that long-term habitat persistence may be important for any or all wildlife species.

(KIPZ Wildlife Habitat Assessment, p. 2.) The classification for the SIMPLE model is further exacerbated by re-sampling VMap's irregular polygons into 5 acre cells.

Combining these data layers resulted in a dataset of irregular polygons that have variation in size and shape. This variability can impact the spread of disturbance processes and regeneration from adjacent plant communities. Thus a SIMPPLLE toolkit for ArcGIS was used to make the conversion from irregular polygons to equal sized cells. The polygon size used depends on analysis objectives and the issues to be addressed; five acre cells were selected to model the effects of the proposed management activities.

(KIPZ Wildlife Habitat Assessment, pp. 5-6.) An example is the fisher analysis. The wildlife analysis made a leap of faith considering small dbh size classes as suitable fisher habitat. For the query design they selected tree size classes  $> 10$ "dbh. Although fisher may use younger stands for foraging, they clearly select for large diameter trees. There is also location error for the size class polygons of VMap to consider. Schwartz et al (2013)<sup>6</sup> states that female fisher select for large trees at the stand and landscape level. Lumping small size classes with large larger size classes and calling all of it "fisher habitat" is not warranted based on this study. Schwartz et al (2013) state:

(I)t appears in our study area that the most preferred stands with large DBH trees (average maximum DBH in used habitats = 107.77 cm versus 64.224 cm in unused habitats) also

<sup>6</sup> Schwartz, M., DeCesare, N., Jinenez, B., Copeland, J. & Melquist, W. (2013). Sand- and Landscape-scale selection of large trees by fishers in the Rocky Mountains of Montana and Idaho. *Forest Ecology and Management* 305 (2013) 103-111.

occur in landscapes with large trees (used landscapes were composed of 47% large tree stands versus 29% in available landscapes). Thus, we recommend that silvicultural treatments of stands consider not only the retention of large trees, but consider the larger landscape when managing for fishers.

The KIPZ Wildlife Habitat Assessment states:

Much of the vegetative data used in this analysis was based on the Region One Vegetation Mapping Program (R-1 VMap), which is composed from satellite imagery. As such data inevitably contains errors in classifications, including cover type, size class, and crown closure, we regularly compared R1-VMap data with other available broad-scale analyses based on different data sources.

(Emphasis added.) Yet there is no accuracy assessment with confidence intervals in the public documentation of the wildlife analysis. Layering models over models decreases the accuracy of the end result.

## **REMEDY**

- Use a combination of LIDAR and Hyperspectral imagery of the KNF to construct an accurate map of all successional stages, tree species and other metrics needs along with an accuracy assessment including confidence intervals.
- Rerun the habitat models and conduct an accuracy assessment of the results.
- Disclose the accuracy of combining all models and show confidence intervals of the model runs through all time steps. Discuss and analyze locational accuracy, where VMAP polygon boundaries do not reflect ground truthed size class boundaries. This can have implications when some species prefer larger stand sizes.
- Prepare a Supplemental Draft EIS and updated LMP following the results of those steps.

OBJECTION STATEMENT: FW-DC-WL-01. This Desired Condition states, “Individual animals that establish nests and den sites near areas of pre-existing human use are assumed to be accepting of that existing level of human use at the time the animals establish occupancy.” We are unaware of any scientific research that validates the inclusion of this blanket assumption for all wildlife. Logically, nesting/denning success would be a better index of the species’ tolerance of human use in the area. The LMP does not consider the fact that the quality of some such occupied areas may be acting as “sink” habitats that harm, rather than support, populations.

## **REMEDY:**

- Limit this statement only to specific wildlife species based upon peer-reviewed scientific research applicable to the KNF that validates this assumption, or else delete this sentence entirely from the LMP.
- Include nondiscretionary direction for performing field observations by biologists for detecting nesting/denning success and include results in biennial LMP monitoring reports.

OBJECTION STATEMENT: FW-DC-WL-06. The provision directing management to promote large-diameter trees in eagle nesting territories is not based upon any information source from



the KNF that demonstrates its need, or on recommendations of any scientific research on bald eagles, as far as we are aware.

**REMEDY:**

- Disclose information source from the KNF that demonstrates the need for such active management, and disclose the peer-reviewed scientific research applicable to the KNF that recommends such a practice, or else delete this sentence entirely from the LMP.

**OBJECTION STATEMENT: FW-OBJ-WL-01.** AWR's comments stated:

The outcome is the maintenance or restoration of wildlife habitat on 1,000 to 5,000 acres of NFS lands, emphasizing restoration of habitats for threatened and endangered listed species and sensitive species annually.

What is the KNF definition for maintenance and restoration? It seems likely, based on past, often used rationales for proposed timber sales, that silvicultural prescriptions that the Forest Service often claims will "maintain" or "restore" wildlife habitat will continue to be touted as achieving this objective. Meanwhile, neither the Draft FP nor the DEIS includes any information that indicates that there is a scientific basis for the Forest Service's determination that certain silvicultural "treatments" have achieved, and therefore will continue to achieve the maintenance or restoration of wildlife habitats. If species abundance monitoring is discontinued there will be no way of determining the effects of silvicultural "treatments" on wildlife populations and viability.

Meanwhile the objective or "outcome" is to treat 1000 to 5000 acres of NFS lands annually in order to achieve Wildlife Goal 01 of the Draft FP. In other words the Draft FP in essence, mandates that between 1000 and 5000 acres of wildlife habitat will be "managed" annually, i.e., subjected to whatever silvicultural prescriptions the Forest Service asserts will result in the maintenance and/or restoration of habitat. Please cite the science that supports the Forest Service claim that certain silvicultural prescriptions result in the maintenance and/or restoration of habitat in the FEIS.

**REMEDY:**

- Disclose the scientific information source(s) that support the Forest Service's claim that certain silvicultural prescriptions result in the maintenance and/or restoration of habitat for each of the various MIS and Sensitive species.

**OBJECTION STATEMENT:** Forestwide Wildlife Guidelines: It is unclear if the use of the word "should" is intended to recognize the second consistency requirement on page 4 of the LMP, or if it is intended to render these entire Guidelines to be discretionary, as courts have interpreted "should."

**REMEDY:**

- Clarify the Forest Service's intention in using the word "should" in these Guidelines, or make them Standards and substitute the word "shall" for "should".

OBJECTION STATEMENT: FW-GDL-WL-01, 02, 08, 11, 16, 17, 18, 19, 20, and 21. The words, “or minimize” are not objectively defined and threaten to nullify these guidelines. Since the intent of the use of Guidelines in the LMP (pp. 3-4) is to provide some management discretion, the inherent uncertainty of the words “or minimize” is entirely unjustified.

REMEDY:

- Remove the words “or minimize” from those Guidelines.

OBJECTION STATEMENT: FW-GDL-WL-05. While in some ways the intent of this Guideline may be seen as protecting diversity, its wording can also be read to provide direction to log areas that scientific consensus recognizes as some of the worst places to do so, because of the ecological sensitivity and often rarity of such habitats. AWR comments on this Guideline stated, (S)pecial habitat types that were not addressed included ...post-fire ecosystems.”

Scientific consensus exists that there are no ecological benefits of logging dead trees following disturbance events such as wildland fire, especially on lands not suitable for timber production. The FEIS fails to acknowledge this scientific consensus.

REMEDY:

- Remove the first sentence of this Guideline.
- Replace the words “should be left” in the second sentence with “shall persist.”
- Identify and adopt the best scientific information to re-write FW-GDL-WL-08 as a binding Standard.

OBJECTION STATEMENT: FW-GDL-WL-10 Big Game. AWR comments questioned the Draft LMP assumption that 30% security is adequate for elk. Now, the LMP has no numerical big game security standard, the Objective now stating “...subunits should maintain existing levels of security...”

This assumes that subunits are currently functioning as adequate security, and seems to identify a static security measure, (“existing”) without stating what that is.

REMEDY:

- Include a scientifically-based numerical security standard for big-game species in the LMP that doesn’t reduce security from existing levels.

OBJECTION STATEMENT: FW-GDL-WL-16. This Desired Condition states, “(Raptors) that establish nests near pre-existing human activities are assumed to be tolerant of that level of activity.” We are unaware of any scientific research that validates the inclusion of this assumption for all raptors. Logically, nesting success would be a better index of a raptor’s tolerance of human use in the area. The LMP does not consider the fact that the quality of some such occupied areas may be acting as “sink” habitats that harm, rather than support, populations.

REMEDY:

- Limit this statement only to specific raptors based upon peer-reviewed scientific research applicable to the KNF that validates this assumption, or else delete this sentence entirely from the LMP.
- Include nondiscretionary direction for performing field observations by biologists for detecting nesting success and include results in biennial LMP monitoring reports.

OBJECTION STATEMENT: FW-GDL-WL-21. This Desired Condition states, “Individual animals that establish nests and den sites near areas of pre-existing human use... are assumed to be accepting...” We are unaware of any scientific research that validates the inclusion of this assumption for the remaining species “not covered under other forestwide guidelines.” Logically, denning/nesting success would be a better index of a species’ tolerance of human use in the area. The LMP does not consider the fact that the quality of some such occupied areas may be acting as “sink” habitats that harm, rather than support, populations.

**REMEDY:**

- Limit this statement only to specific species based upon peer-reviewed scientific research applicable to the KNF that validates this assumption, or else delete the last two sentences entirely from the Guideline.
- Include nondiscretionary direction for performing field observations by biologists for detecting denning/nesting success and include results in biennial LMP monitoring reports.

OBJECTION STATEMENT: Landscape Connectivity. AWR comments voiced support for establishing a **Management Area 8: Wildlife Linkage Zones**: “Given their importance to wildlife generally, and the Threatened grizzly bear in particular, it is imperative that the Kootenai Forest Plan include an MA-8 category: Landscape Linkages and Habitat Connectivity, in the revised Forest Plan. Linkage Zones for grizzly bears, other wildlife and aquatic species must be identified and established as a special management area...” The KNF responded, “The KNF connectivity direction may even be more flexible in that it is better suited for the dynamic nature of the habitats on the KNF and is more consistent with natural disturbance processes rather than being static, permanent, inflexible, mapped polygons.” This ignores the fact that the Forest Service itself often states that some landscape features are well-suited for maintaining habitat connectivity. Riparian zones are most often identified by the agency, also saddles that connect riparian areas across hydrologic boundaries and ridge tops are often identified. At a larger landscape scale, connectivity between roadless and other undeveloped lands should be emphasized, and areas of unsuitable timber can be incorporated into that scheme.

**REMEDY:**

- Prepare a Supplemental Draft EIS that uses peer-reviewed biological research as the basis for establishing a Management Area 8: Wildlife Linkage Zones.

## **ACCESS AND RECREATION**

OBJECTION STATEMENT: Inadequate direction to designate the minimum road system. AWR’s comments addressed this issue directly, stating:

The Draft Plan does not contain adequate direction to designate the minimum road system. Forest Service leadership issued a directive memorandum to the field in November of 2010 requiring every forest to identify its Minimum Road System (MRS) and roads for decommissioning by 2015, and fully comply with 36 CFR 212 subpart A. The memorandum directs units to begin implementing the MRS immediately following its approval by the Regional Forester. Ideally, the KNF would have completed its travel analysis and identified its MRS and included it in the Draft FP and DEIS. This order of events was envisioned by the Forest Service when it promulgated 36 CFR 212 subpart A, also known as the Roads Rule. However, at a minimum, the KNF must ensure that the requirements in the directive memorandum and 36 CFR 212 subpart A are reflected in the Draft Plan and its plan components.

At the bottom of page 1 in the Directive Memorandum, it states: “By completing the applicable sections of Subpart A, the Agency expects to identify and maintain **an appropriately sized and environmentally sustainable road system** that is responsive to ecological, economic, and social concerns” (Emphasis added). In order to do this, the KNF must bring its road system to a size and design commensurate with available funding. By all indications, the current funding levels are not close to those needed to maintain the current road system on the Forest.

AWR comments also stated:

Despite the obvious need to reduce the miles of road on the Forest to reduce these impacts, the DEIS fails to provide a Needs Assessment for the KNF’s System Roads. A Needs Assessment should be included that would identify roads that need to be removed due to their unacceptable impacts on watersheds and wildlife habitat and roads that are no longer needed for forest management that could be obliterated.

REMEDY:

- The LMP must include nondiscretionary direction to identify and maintain an appropriately sized and environmentally sustainable road **system** that is responsive to ecological, economic, and social concerns, by 2015.

OBJECTION STATEMENT: FW-DC-AR-04. This Desired Condition is a forest plan decision that prioritizes vast but unspecified acreages of the KNF for motorized recreation, in the absence of the travel planning required by regulation to be completed in 2015. In addition, because of the existing degraded condition of many motorized travel routes and the implications of the Table 7 acreage, this Desired Condition conflicts with FW-DC-AR-07 and 08.

REMEDY:

- Delete Table 7 (and the sentence referring to it) from this Desired Condition.

OBJECTION STATEMENT: FW-OBJ-AR-04. This Objective is a forest plan decision that designate unspecified mileages of the KNF for motorized recreation, in the absence of the travel planning required by regulation to be completed in 2015. In addition, because of the existing degraded condition of many motorized travel routes this Desired Condition conflicts with FW-DC-AR-07 and 08. AWR comments stated, “The KNF proposes far too much of the KNF for over-snow vehicles in all alternatives.” AWR also stated:

Many high elevation remote areas that are proposed to be open to motorized winter recreation are within areas known to be denning habitat for wolverines and grizzly bears.

This kind of motorized access - whether current or proposed under any alternative - represents a major decision by the KNF. The DEIS insufficiently assesses impacts from this level of motorized winter use. This should be addressed in a separate NEPA travel plan as was completed by the Flathead National Forest in 2000.

In response to comments by Selkirk Conservation Alliance, the FEIS states, “Thus, the revised Forest Plan will not open areas currently closed to snowmobiling. A site-specific travel planning effort will be completed to change or revise any winter travel plan restrictions that will include public input.” Yet in Table 118, in regards only to roadless areas, the differences in acres of winter motorized between the current condition (Alt. A) and the proposed Alternative B modified for the category MA5c Backcountry – Winter Motorized, Summer Non-motorized is 81,375 acres more in Alternative B modified.

**REMEDY:**

- Delete the references to motorized trails from these Objectives.
- The LMP must include nondiscretionary direction to identify and maintain an appropriately sized and environmentally sustainable travel system that is responsive to ecological, economic, and social concerns, by 2015.

**OBJECTION STATEMENT: Road Density.** Outside of grizzly bear habitat specified by the Access Amendment, the LMP has no road density standards. AWR comments stated:

The draft KNF FP contains no standards that limit road densities in bull trout occupied and critical habitat/watersheds. At the very least, a road density standard, at the level suggested by the 1998 BiOp, should be established for bull trout occupied and critical habitat and this standard should be mandatory. The interim target to reduce total road densities in bull trout streams should also be incorporated into the FP.

...The 1998 BT BiOp indicates that bull trout are absent when road densities exceed 1.71 mi./sq. mi., depressed when the road density = 1.36 mi./sq. mi. and strong when road density equals or is less than .45 mi./sq. mi. (1998 BT BiOp at 67.)

The Conservation Recommendations in the 1998 BT BiOp include the following:

1. *Roads within key, priority, and special emphasis area watersheds:* Seek a net reduction of roads in bull trout watersheds. Overall, watershed road densities of less than 1.0 mile per square mile, especially where there are bull trout stronghold populations, may be necessary to assure future survival and recovery to self-sustaining populations. An interim target should be to reduce total road densities in all Key, Priority and special emphasis watersheds containing bull trout and to prevent any increase in road densities in those. Rehabilitation of road-miles cannot be accomplished alone by gating, berming, or otherwise blocking the entrance to a road permanently or temporarily, or seasonally closing roads, but will require obliteration, recontouring, and revegetating.

(1998 BT BiOp at 92.) The Draft Plan contains no standards that limit motorized route (road & trail) densities in bull trout occupied habitat/watersheds. A binding motorized route density Standard of at 0.67 mi./sq.mi., from the 1998 BT BiOp (Draft Plan at 303), must be established for bull trout habitat, in order to begin restoring populations from a “Depressed” status.

... the Desired Conditions are merely aspirational and will not be accomplished unless the KNF adopts explicit binding Standards in terms of motorized route densities and the protection and restoration of bull trout habitat.

Also, AWR comments stated, “Christensen, et al. 1993<sup>7</sup> is a Region One publication on elk habitat effectiveness. Meeting a minimum of 70% translates to about 0.75 miles/sq. mi. in key elk habitat.” And the EIS points out, “Elk are of high social importance and are sensitive to road densities.”

**REMEDY:**

- The KNF must prepare a Supplemental Draft EIS that sets biologically based road density standards.

**OBJECTION STATEMENT: MA3 - Special Areas.** AWR’s comments noted that, the 2006 KIPZ Draft Comprehensive Evaluation Report (2006 CER) contained many more special areas than the draft LMP recommended. Comments stated:

Please provide an explanation in the FEIS for the Revised FP for the non-designation of the 14 missing Special Areas listed above and for why existing/established Special areas are on the Draft FP’s recommended list.

Furthermore, please explain why many of the Proposed Special Areas in the 2006 CER are not being recommended to be designated as Special Areas in the Draft FP.

...Please provide a detailed explanation for this discrepancy and the rationale for eliminating many currently designated and proposed MA3 areas in the Revised FP FEIS.

In response to comments, the FEIS stated, “These areas were dropped because they were either not unique, not areas that required special management (i.e., forest plan direction already protected them), or were areas that were not appropriate for public use.” However, FEIS disclosed no analysis of the specific characteristics of those proposed special areas which disqualified them.

**REMEDY:**

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<sup>7</sup> Christensen, Alan G.; L. Jack Lyon and James W. Unsworth, 1993. Elk Management in the Northern Region: Considerations in Forest Plan Updates or Revisions. United States Department of Agriculture, Forest Service Intermountain Research Station, General Technical Report INT-303 November 1993.

- The KNF must prepare a Supplemental Draft EIS that evaluates all of the areas dropped, so that the public may comment on the evaluations, prior to final designations.

## **INVENTORIED ROADLESS AREAS**

**OBJECTION STATEMENT:** FW-GDL-IRA-01. This Guideline implies direction to the Forest Service to remove (or at least allow degradation of) Wilderness potential on 84% of the inventoried roadless areas on the Forest. Because Wilderness is a nonrenewable resource, there must be no more loss of Wilderness potential.

### **REMEDY:**

- Convert FW-GDL-IRA-01 to a Standard that reads, “Existing Wilderness potential will not be degraded on any inventoried roadless area on the Forest.”

## **ROADLESS/WILDERNESS: RANGE OF ALTERNATIVES**

**OBJECTION STATEMENT:** Under FEIS “Alternatives Considered But Eliminated From Detailed Study”, the Forest Service correctly notes:

“Federal Agencies are required by NEPA to rigorously explore and objectively evaluate All reasonable alternatives and to briefly discuss the reasons for eliminating any alternatives that were not developed in detail (40 CFR 1502.14).” (Emphasis added.) Unfortunately, the LMP and FEIS fail in analyzing an inadequate range of alternatives, in violation of NEPA.

And whereas the draft’s Proposed Action (Alternative B) recommended a total of 112,800 for wilderness, the FEIS’s preferred Alternative B-modified proposes 105,300 acres—7,500 acres less. And no different inventoried roadless areas were recommended, just less total acres of the same four.

While Alternative A provides the status quo option, all Action Alternatives are unabashedly pro-logging, pro-motorized use (year-round), pro-mechanization of the forest, and decidedly anti-Wilderness, anti-non-motorized, and anti-wildlife, particularly when it comes to ESA-listed species. Even the “Best” of the bad alternatives (Alt. C) would sacrifice 67% of the forest to motorized vehicles, 82% to snowmobiles, 86% to mechanized use, and 58.7% to general forestry, while grudgingly allowing a miserly 4.6% as Recommended Wilderness.

A “Conservation Alternative” is briefly mentioned in two paragraphs and then dismissed out of hand with: “The IDT felt that the conservation emphasis outlined in this proposed alternative were adequately addressed in Alternatives B and C”—a statement so demonstrably false that it cannot be taken seriously.

The “Wilderness/Roadless Related Alternatives” are dispatched with an analysis that is flawed from start to finish. First, Forest Service mentions that all 43 IRA’s have been through the Capability/Availability/Need (CAN) process and the handful of survivors “represents the maximum potential for wilderness recommendation.” As detailed below, the CAN effort, rather

than being the “rigorous and objective” process required by NEPA, is completely subjective, biased, and arbitrary – and violates the clear intent of Congress.

Second, the analysis notes that the LMP is being developed under the 1982 planning procedures and that these “...require alternatives to be distributed between the minimum and maximum resource potential to reflect, to the extent practicable, the full range of major commodity and environmental resource uses and values that could be produced from the Forest.” (Emphasis added.)

Such a management philosophy is an entirely utilitarian centered view of the public lands as little more than a commodity conveyor belt whose primary purpose is to crank out “products” to meet human needs and “wants”. Such a world-view largely disregards ecological integrity, habitat quality and security, linked landscapes, and the demonstrated needs of Threatened and Endangered Species.

Given that, in the FEIS and LMP the Forest Service did nothing positive in regards to recommending wilderness or providing more protections for the wilderness or natural values in roadless areas, we find no reason that any of our comments on the draft EIS and LMP would be inapplicable or inappropriate. Therefore they are repeated below in their entirety, but presented in blue text to note their original placement in our comments. Black text interspersed is additional discussion for the purposes of this Objection.

This section of the Draft FP and DEIS evaluates all Inventoried Roadless Areas (IRAs) on the KNF to determine whether they should be recommended as Wilderness (MA 1b) or relegated to other less protective MAs. The process by which IRAs are eliminated from consideration as Wilderness is based on three sets of criteria under the headings of Capability, Availability and Need. The criteria used to judge IRA’s in terms of these three criteria as Wilderness are clearly biased toward eliminating the majority of IRAs from consideration as Wilderness areas, which was in fact the end result of the process.

Total IRA acres on the KNF - 638,034 acres (DEIS at 299) (29% of Total KNF Acreage - 2,219,100 acres)

Total IRA acres currently (Alt. A) and proposed Recommended Wilderness (MA 1b). Table 66. Acres of Recommended Wilderness by Alternative (KNF DEIS at 304.)

Alt. A - 76,500

Alt. B - 112,800 [18% of IRA acres; 5% of Total KNF acres]

Alt. C - 217,300 [34% of IRA acres; 10% of Total KNF acres]

Alt. D - 32,300

Thus the KNF reduced the number of IRA for recommended Wilderness from 16 IRAs and 217,348 acres in Alt. C to 9 IRAs and 112,800 acres for Proposed Alternative B. Thus 82 percent of the total IRA acres is not be recommended for Wilderness if Alternative B is selected for implementation.



Wilderness is one of the rarest land types in the United States, and yet the KNF is proposing to reduce its reserve by 82 percent. The rejected IRAs will, in many cases, be opened to motorized use year round or winter motorized use (snowmobiling) and/or active forest management. In addition, the KNF's final designation of IRAs as MA 1b does not include all acres within the IRA boundaries as currently delineated. Portions of each MA 1b IRA are allocated to other MAs. Thus thousands of acres which are within the IRA boundaries are now proposed for other uses in Alternatives B and C, and D. For detailed information regarding the number of acres see the WILDERNESS ASSESSMENT RESULTS Section of these comments below.

Appendix C of the DEIS describes in detail the three tests used to evaluate IRAs for suitability for potential wilderness. A summary of the three tests:

**Capability** – The capability of a potential wilderness is the degree to which that area contains the basic characteristics that make it suitable for wilderness recommendation without regard to its availability for or need as wilderness. This includes environmental as well as manageability considerations.

**Availability** – The determination of availability is conditioned by the value of and need for the wilderness resource compared to the value of and need for other resources. Other resource demands and uses were evaluated. Constraints and encumbrances were also reviewed to determine the degree of Forest Service control over the surface and subsurface area.

**Need** – This is an analysis of the degree to which the potential wilderness area would contribute to the overall national Wilderness Preservation System. This evaluation was conducted at the regional level.

In 2003 a Wilderness Needs Assessment was completed for the USDA Forest Service Northern Region. Need is described as an analysis of the degree to which an area contributes to the local and national distribution of wilderness (FSH 1909.12, chapter 70). Social and ecological factors are considered in the Northern Region assessment. DEIS App.C at 88.

Overall, this process blatantly ignores the high ecological value of IRAs as islands of intact, untrammelled habitat that have not been “managed” for timber or other product oriented categories such as motorized recreation. They are the only areas on the Forest where wildlife and people can find respite from landscapes dominated by roads and the legacy effects of “active forest management” on KNF lands.

The Northern Region's 2003 Wilderness Needs Assessment is a document so hopelessly biased, subjective and arbitrary that its clear intent was to minimize the elevation of IRAs to Recommended Wilderness wherever possible.

### **A. Capability**

The DEIS summarizes the components of Capability:

The five basic characteristics identified in FSH 1909.12, chapter 70 to evaluate the capability of an area are: natural, undeveloped, outstanding opportunities for solitude or

primitive and unconfined recreation, special features and values, and manageability. App. C at 88.

These five characteristics were then expanded to include more detailed criteria which were then used to rate each IRA. In some cases the desirable attributes seem to cancel each other out, which raises questions regarding the validity of this exercise.

For example:

Under “Natural and Free from Disturbance” an IRA is rated High for “has only a minor disturbance such as a trail” and Medium if there is “more than one minor disturbance” (trail). Whereas, under Hiking Opportunities, Backpacking Opportunities and Saddle Stock Opportunities an IRA is rated High if it has “Two or more trails, class 3 or above that are routinely maintained” and Low if there are “no system trails that are maintained.”

Under Provides Challenge and Adventure an IRA is rated High for “rugged terrain” and “Requires above average physical ability” and Low for “gentle and rolling” terrain and “Area easily accessible, requires average physical ability.”

Likewise, under Snowmobiling Opportunities, IRAs where snowmobiling would be discouraged due to steep terrain and/or dense vegetation are rated High and areas with gentle open terrain are rated Low.

Conversely, under Primitive and Unconfined Recreation – Hiking Opportunities, Hunting Opportunities, Skiing and Snowshoeing Opportunities an IRA is rated High for gentle terrain is and open vegetation and Low for steep terrain and dense vegetation.

Under Manageability (one of the five characteristics) there are four sub-characteristics: 1) Area Boundaries are Recognizable, 2) Promote Remoteness, 3) Manageable and 4) Constitute a Barrier to Prohibited Use.

Under 1) Area Boundaries are Recognizable, there are strict requirements for existing boundaries to be clearly defined by a road, creek or other topographical feature – if these are not met the IRA is downgraded. This, like many other sub-characteristics, ignores more important values provided by IRAs and skews the results of this process in that it is given equal weight with sub-characteristics that are far more important in terms of intact wildlife and aquatic habitat and other ecological values.

Under 3) Area Boundaries are Manageable, IRAs that have private inholdings are rated Low which makes sense on the one hand. On the other hand if the IRA has other attributes that are unusual or high value, such as diverse wildlife habitats or even scenic values, the IRA should not be downgraded but rather solutions sought – such as altering the boundaries to eliminate the inholdings.<sup>8</sup>

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<sup>8</sup> The Forest Service seems to have no qualms about altering IRA boundaries given the fact that all IRA boundaries were altered during final designation of MA 1b acres.

Under 2) Promote Remoteness an IRA is rated High if the “area is accessed by trail, or closed or re-vegetated road” and Low if the Boundary is adjacent to an open road and there are farm houses, pastures or other rural features nearby.

Though it might be considered ideal for a Wilderness area to be difficult to access, actual conditions may make that impossible. To give an area a low score because there is an adjacent open road ignores and overrides the most important attributes of these areas.

Furthermore, as the Magruder Corridor in the Frank Church Wilderness of No Return demonstrates, Congress and the nation agree that it is appropriate to designate national forest land as “Wilderness” within thirty feet of a road traveled by motor vehicles.

Under Special Features, one sub-characteristic is Variety and Abundance of Wildlife which includes “Provides critical linkage between wildlife areas or habitats” which is one of four conditions that are rated “High”.

Elsewhere in these comments we have included a discussion on the importance of wildlife linkage zones and the KNF’s failure to address this important issue while developing the Revised Plan. The fact of the matter is that many of the IRAs eliminated from consideration as recommended Wilderness have the potential or already provide secure areas that due to their location are important linkage zones throughout the KNF.

The recovery of grizzly bears south of Canada is based on achieving viable populations in six Recovery Zones or Ecosystems and linking them together into one “Metapopulation.” Yet in its Wilderness Evaluation process, the KNF chose as Recommended Wilderness virtually none of the IRA’s that could provide the linkage called for in that research, or discussed by the Task Force—of which the KNF was a key member.

The USFWS 1993 Grizzly Bear Recovery Plan recognizes the importance of linked populations as follows:

“It is widely accepted in conservation biology that island populations of any species are subject to high rates of extinction and that these rates are directly related to the size of the [habitat] islands. Wide ranging mammals are particularly sensitive to the detrimental effects of insular distribution...Ideally, preserving linkage between populations is a more legitimate long-term conservation strategy than are attempts to manage separate island populations...Linkage zones enhance the viability of populations that are separated by some distance by facilitating the exchange of individuals and maintaining demographic vigor and genetic diversity.”

USFWS Grizzly Recovery Coordinator Chris Servheen and members of the Cabinet-Yaak/Selkirk Grizzly Subcommittee have repeatedly discussed the importance of linking the small, isolated CYE & SE populations to each other, to Canadian populations, and as the closest links to the Selway-Bitterroot Ecosystem. During 2004-2005 Servheen chaired an IGBC Linkage Taskforce that looked specifically at potential linkages across Hwy. 200 and I-90 south of the Cabinets, and Hwy. 2 between the Cabinet and Yaak portions of the CYE.]

- \* IRA's providing vital links to the Selway-Bitterroot include # 24, 30, 31, 33, and 35-42. Only #30 is proposed to be recommended for Wilderness.
- \* IRA's providing potential links W-NW toward the Selkirks include IRAs # 6, 15, 16, 17, 12, and 13 – with only #16 being proposed for MA 1b.
- \* Potential linkages to British Columbia include IRAs # 9, 10, 11, 12, 2, 3, and 4. Out of these only 3 & 4 are proposed for MA 1b.
- \* IRA's chosen to promote linkage E-NE to the Northern Continental Divide Ecosystem are precisely Zero.
- \* IRA #18 Flagstaff is the sole IRA that could provide badly needed linkage between the Cabinet Mtns and Yaak portions of the Cabinet/Yaak Grizzly Bear Recovery Zone and it is not proposed for MA 1b. A portion of a grizzly bear home range is located in the Flagstaff IRA.<sup>9</sup>

As noted above, the 1993 Grizzly Bear Recovery Plan, and its success or failure at recovering grizzlies, is based upon achieving a linked “metapopulation” connecting all six recovery zones. Because of its central location bridging the north-south gap between British Columbia and the Selway-Bitterroot Ecosystem as well as east-west between the Northern Continental Divide Ecosystem and the Selkirks Ecosystem, the Cabinet-Yaak is the keystone holding the metapopulation, and recovery together.

Yet the LMP/FEIS, with its near total failure to protect key linkage IRAs as Wilderness, or even as Non-Motorized Backcountry in many cases, puts the future of grizzly recovery in doubt. The token inclusion of linkage as criteria #22 of 47 under “Capability” has obviously done nothing to address, much less reverse, this dangerous outcome.

The KNF needs to take a harder look at the IRAs' potential to provide secure linkage zones within the Forest and between the Cabinet/Yaak and other Grizzly Bear Recovery Zones, i.e., the Selkirk and NCDE Recovery Zones. IRAs that have this potential should be rated High on this criteria alone.

## **B. Availability**

The DEIS states:

While capability evaluates the wilderness characteristics of an area, availability considers other resources. Direction from FSH 1909.12, chapter 70 and internal and external comments were used to identify other resources for evaluation and establish the rating process. Eight resource categories were identified by the Forest wilderness program manager. DEIS App. C at 115.

The eight resource availability categories include:

### **RESOURCES**

1. Areas that are of high value for water yield or on-site storage and where installation and maintenance of improvements may be required.
2. Areas needing management for wildlife or aquatic animals that MIGHT conflict with wilderness management.

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<sup>9</sup> The Flagstaff IRA also contains the headwaters of a bull trout occupied stream.

3. Areas needing active aquatic restoration activities.
4. Areas needing active vegetative restoration activity due to specific species survival, or identifiable fuel reduction activity to reduce the risk of catastrophic wildfire, or known areas of severe insect infestation that will lead to tree mortality.
5. Areas of high value mineral deposits of economic or strategic importance.
6. Areas having such unique characteristics or natural phenomena that general public access should be developed to facilitate public use and enjoyment including winter sports sites.
7. Lands committed through contracts, permits, or agreements that would be in conflict with wilderness management (some minor permitted uses may still be allowed.)
8. Forest Service does not have sufficient control to prevent development or irresolvable, incompatible uses that would lessen wilderness character and potential.

#### **RATING**

HIGH = Areas having evidence and a high priority need for treatment in the resource category. Availability [as Wilderness] would equate to Low.

MODERATE = Areas having a need for treatment in the resource category. Availability [as Wilderness] would equate to Moderate.

LOW = Areas have no to little need of treatments in the resource category. Availability [as Wilderness] would equate to High.

Table 36. Area Availability Resource Assessment DEIS App. C at 116.

The purpose of most of this section – to weigh the value of IRAs according to the perceived “need” for treatment(s) - is an indication that the KNF views IRAs through its Land Management lens, just like the rest of the Forest, rather than as areas that meet the intent of the Wilderness Act, i.e., areas where “the earth and the community of life are untrammelled by man.”

Essentially, forest managers are asked if each IRA should be excluded from Wilderness consideration because:

1. They are “of high value for water yield”, i.e., building a dam.
2. They **need** management for wildlife or aquatic animals that would likely conflict with wilderness values.
3. They **need** active aquatic restoration.
4. They **need** active vegetative restoration (logging), including fuel reduction (logging), or suppression of insects & disease (logging) – just like the rest of the Forest.
5. They are “areas of high value mineral deposits of economic or strategic importance” and Wilderness classification might interfere with obtaining permits (for mines, etc.)
6. They have unique characteristics or natural features should be accessible to the general public rather than only those willing to use non-motorized means of visiting them.
7. They are already committed through contracts, permits or agreements to uses that conflict with wilderness values.
8. The KNF doesn’t have sufficient control to prevent development or irresolvable, incompatible uses in them.<sup>10</sup>

Numbers 2-6 six are based on the Forest Service’s standard purpose and need for active forest management actions. Clearly the intent is to actively manage the IRAs that the Forest Service

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<sup>10</sup> Please include clarification of this statement in the FP FEIS.

(looking through its “management” lens) perceives are in “need” of treatment as these were rated Low in this part of the assessment.

## Need

App. C summarizes the basis for the Need portion of the IRA analysis:

Evaluation of need determines the degree to which an area can contribute to the overall National Wilderness Preservation System. There should be evidence of current or future public need for additional designated wilderness in the general vicinity of the area being considered. Need analysis uses such factors as the geographic distribution of areas, representations of landforms and ecosystems, and the presence of wildlife expected to be present in a wilderness environment. App. C at 90.

App. C indicates that the Needs assessment is based on a Region 1 Wilderness Need Assessment completed in 2003.

A Wilderness Needs Assessment was completed in 2003 by an interdisciplinary team at the Region 1 office. This allowed the assessment to cover Montana, northern Idaho, and parts of the Dakotas (a much larger area than the KNF). The assessment focused on *social and ecological factors*.

The social factors included *current levels of use* in designated wilderness in the Northern Region, *national and local trends in outdoor activities*, and *population statistics*. Ecological factors included representation of vegetative cover types and ecological sections, fisheries, and wildlife. App. C at 125.

The KNF selected 6 Resource Criteria to judge whether an IRA meets the Needs portion of the assessment.

**Table 48. Area Needs Assessment**

Resource Criteria	High	Moderate	Low
1. Areas having the presence of Westslope cutthroat, Yellow cutthroat, or bull trout.	Presence of 2 fish	Presence of 1 fish	None of the species present
2. Presence of sensitive plant species.	Sensitive plant(s) identified in IRA are globally rare	Sensitive plants identified in IRA would benefit from wilderness designation moderate/high Sensitive plants present IRA = moderate/low	No sensitive plants identified in IRA.
3a. Areas adjacent to existing Wilderness (larger reserve beneficial for wildlife conservation.)	IRA is adjacent to existing Wilderness boundary	IRA adjacent but separated by corridor	Not applicable
3b. IRAs could be combined to form large habitat patches	Two or more IRAs adjacent and separated only by narrow corridor, such as a road.	Two or more IRAs could be connected by a wildlife travel corridor.	IRA not adjacent or close to another IRA

4. Ecological Sections represented in Wilderness	Ecological Section represented by not more than 10,000 acres.	Ecological Section represented by 1 to 100,000 acres.	Ecological Section represented by more than 100,000 acres.
5. Number of Wilderness areas within 100 miles of Kalispell or Couer (sic) d'Alene.	Wilderness acres of approximately 100,000	Wilderness acres of approximately 500,000 acres.	Wilderness acres of approximately 1,000,000
6. Under-represented plant communities.	VRU 2, 5, or 8 and AR forest-dominated  Riparian covers more than 1/3 of the IRA	VRU 2, 5, or 8 and ARU forest-dominated  Riparian covers 1/3 to 2/3 of the IRA	VRU 2, 5, or 8 and ARU dominated  Riparian covers less than 1/3 of the IRA

## Needs Criteria 1. Presence of Fish Species

Among the problems with Needs Criteria #1 is the fact that Yellowstone cutthroat trout are not native (and not found) in any KNF watersheds. In addition there are very few watersheds in the KNF that contain bull trout and westslope cutthroat (WSC) have been extirpated from most of their historic range. In addition, streams rarely support both bull trout and WSC. Given these factors and that there are only 2 potentially present fish species, it would be almost impossible for any of the KNF IRAs to get a “high” score for fisheries.

For example, in the Yaak River there are no bull trout above Yaak Falls, which is a barrier to fish migration. The falls are a few miles above the Yaak’s confluence with the Kootenai River in a deep canyon. There are no bull trout in the mid/upper Yaak River where 9 IRAs (IRAs 9-17) are located.

Thus, regarding the fish criteria, the bar has been set unreasonably high for the IRAs in the Yaak and other IRAs that do not include bull trout streams. None of those IRAs could receive a High score (2 out of 2 fish species) and most would be unlikely to get a moderate score (1 of the 2 fish species). Thus this part of the assessment is biased toward low scores.

Tributaries to the Kootenai River that support Bull Trout are Callahan Creek, Quartz Creek, Upper Libby Creek, Bear Creek, O Brian Creek, Pipe Creek and West Fisher Creek. The headwaters of Quartz Creek are located in IRA 18 Flagstaff (#690). Bull trout are present in the Kootenai River for 2.86 miles downstream of the Libby dam to the Fisher River. USFWS 2009. Bull Trout Core Area Status Assessment – Kootenai River.

Several tributaries to the Lower Clark Fork River also support bull trout: East Fork and South Fork of the Bull River, Rock Creek, Graves, Swamp, Prospect Creeks and the Vermillion River. USFWS 2009. Bull Trout Core Area Status Assessment – Clark Fork (Lower). Again, there are no Yellowstone Cutthroat present.

The logical (and fair) way to score KNF IRAs would be to rate IRAs with streams that support bull trout or WSC as High.



The ecological needs section should also include a category for Threatened and Endangered terrestrial species, most notably, the grizzly bear. See comments below regarding grizzly home ranges that are located in IRAs.

## **Needs Criteria 2. Presence of Sensitive Plants**

Under this Resource Criteria an IRA can only be rated as High only if there are globally rare sensitive plant species present; Moderate/High if the sensitive plants would benefit from Wilderness designation and Low if none are known to be present.

First, how many IRAs have been surveyed for sensitive plants? How thorough were the surveys? It seems doubtful that sensitive plant surveys in IRAs have been a high priority for the KNF – for good reason: sensitive plant habitat in IRAs is not likely to be damaged or destroyed, as opposed to sensitive plant habitat in timber sale project areas.

The 2003 Wilderness Needs Assessment states, “[d]etails regarding these rare plant species and their distributions on specific National Forests can be obtained from the Regional Office, using the GIS layers from the state Natural Heritage Programs. These data could be made available to the Forest planning teams, for use in evaluating alternatives for additional wilderness acreage in Region 1.” 2003 Wilderness Needs Assessment at 9.

Did the KNF obtain the rare plant species GIS layers and use them to determine what the status of sensitive plant species is in individual IRAs? How comprehensive/current are the Regional Office and Natural Heritage rare plant species and distribution information for the KNF? Please provide maps of the IRAs that indicate which ones have been surveyed for rare/sensitive plants and the results of the surveys, in the Final EIS.

The 2003 Needs Assessment (p. 12) displays IRAs with sensitive plants that are not in wilderness. These include IRAs that are south and west of the Cabinet Mountains Wilderness: (24) Barren Creek #183, (30) McKay Creek #676, (31) Allen Peak #185, (33) Cataract Creek #665, and (34) Galena #677. With the exception of McKay Creek, a portion of which would be MA 1b and (33) Cataract Creek which would be 5a, these IRAs are relegated to MA 5b Backcountry Motorized under Alternative B.

Additional IRAs that have sensitive plants are (16) Roderick #684, the majority of which is proposed 1b; (25) Scotchman #662, a portion of which is proposed 1b; (26) Berray Mtn #672, (27) Government Mtn #673, (28) Chippewa #682, which are adjacent to one another and Scotchman, are proposed 5a; (21) Cabinet Face West #670, the majority of which is proposed 5a; (35) West Fork Elk #692, (36) East Fork Elk #678, (37) Lone Cliff West #674a, which are adjacent to one another are proposed 5a, 5c and 5b respectively (42) Trout Creek #664 which is proposed 5a and 5b and (6) Big Creek #701 which is proposed 5c.

Since the presence of sensitive plants is one of six resource criteria considered a high priority by the Regional Wilderness Needs assessment it would seem that the IRAs that contain this rare resource should be a priority for wilderness consideration, particularly the IRAs that are adjacent to one another (Needs Criteria 3b). Berray Mtn #672, Government Mtn #673 and Chippewa



#682 fulfill this criterium and are also adjacent to Scotchman which is proposed recommended wilderness. Barren Creek #183, McKay Creek #676, Allen Peak #185, ) Cataract Creek #665, and Galena #677 also fulfill the 3b criteria and are adjacent to the CMW. Only a portion of McKay Creek is proposed 1b. Cabinet Face West #670, the majority of which is proposed MA 5a, is adjacent to the CMW.

Apparently these IRAs (or portions thereof) were eliminated from consideration as designated wilderness as a result of low ratings in the Capability and/or Availability assessment, since they certainly meet the 3b Needs criteria and in some cases the 3a Needs criteria.

**Needs Criteria 3a.** Areas adjacent to existing Wilderness (larger reserved size beneficial for wildlife conservation.) High: IRA is adjacent to existing Wilderness boundary; Moderate: IRA adjacent but separated by corridor; Low: Not applicable.

**Needs Criteria 3b.** IRAs could be combined to form large habitat patches. High: Two or more IRAs adjacent and separated only by a narrow corridor, such as a road; Moderate: Two or more IRAs could be connected by a wildlife travel corridor; Low: IRA not adjacent or close to another IRA. This criteria has the potential to recognize the importance of IRAs that are adjacent or close to one another as Linkage Zones/Habitat Connectors, an extremely important ecological factor, as discussed elsewhere in these comments.

Appendix C states: “Question 3 was split based on whether the area was located adjacent to an existing wilderness or located near another area. **A rating was determined for either 3a or 3b, but not both.**” App. C at 125. As discussed below some clusters of IRAs are also adjacent to the Cabinet Mountains Wilderness (CMW). The arbitrary separation of these ratings eliminated the possibility that IRAs that meet both were not rated higher than those that meet only one.

#### **Needs Criteria 4. Ecological Sections represented in Wilderness**

The 2003 Wilderness Needs Assessment states:

For the purpose of a wilderness needs assessment for the Northern Region, it was determined that Ecological Sections is the appropriate level of mapping. This assessment looks at ecological sections across the entire region, which of those sections contain designated wilderness, and then which, if any, of those sections that do not currently have wilderness, or have very little wilderness, are found in roadless. If so, this provides a line officer with an opportunity to recommend wilderness areas so that the ecological section is represented in wilderness. Needs Assessment at 25.

The KNF is located in the Flathead Valley and Bitterroot Mountains Ecological Sections of the Northern Region. Acres of Ecological Sections within Wilderness Map 2003 Needs Assessment at 34. The Cabinet Mtn. Wilderness (CMW) is the only designated Wilderness Area on the KNF portion of the Flathead Valley and Bitterroot Mountains Sections (most of the CMW is within the Flathead Valley Section; its southern tip crosses the line into the Bitterroot Mountains Section). It is important, according to the 2003 Needs Assessment, to make sure that wilderness is well represented in these ecological sections:

“In conclusion, of the twenty ecological sections found in the Northern Region, four of the sections have no acreage in designated wilderness. More importantly, nearly 90 % of the designated wilderness acres in the Northern Region fall within four ecological sections. In addition, five sections which currently have very little wilderness would gain significant acreage of under-represented cover types with the addition of the IRA into the wilderness system. Those sections are: Belt Mountains, Beaverhead Mountains, Okanogan Highlands, **Flathead Valley, and Bitterroot Mountains.**” 2003 Needs Assessment at 32. Emphasis added.

**Flathead Valley Section**—This section contains glaciated mountains, glacial moraines, large glacial troughs, and glacial and lacustrine basins. Elevations range from 2000 to 7000 feet. Vegetation includes Douglas-fir, ponderosa pine, hemlock, cedar, and grand fir.

Forest Service Acres: 2,808,251

Wilderness Acres: 82,891 (1.6% of this section)

Roadless Acres: 692,841 (13.2% of this section)

**Bitterroot Mountains Section**— This area comprises steep dissected mountains, some with sharp crests and narrow valleys. Elevations range from 1200 to 7000 feet. Vegetation is cedar-hemlock-pine forest, Douglas-fir forest and western ponderosa pine forest.

Forest Service Acres: 4,541,661

Wilderness Acres: 118,718 (1.4% of this section)

Roadless Acres: 1,908,531 (23.3% of this section)

All 42 IRAs were given a rating of Moderate for this criteria, which renders it meaningless.

#### **Needs Criteria 5. Number of Wilderness acres within 100 miles of Kalispell or Coeur d’Alene (sic).**

The KNF had the option of selecting Coeur d’Alene or Kalispell as the population center to be used for the “population statistics” section of the Needs analysis. This criteria is intended to indicate whether there is an adequate supply of the Wilderness “commodity” near major cities. First, potential Wilderness is not a “commodity” to be managed to meet ever expanding human uses in regards to recreation. It is first and foremost an ecological niche that should be preserved and protected for its wilderness values.

Kalispell was selected by the KNF. Kalispell is within 100 miles of 1.6 million acres of Wilderness and 2.6 million Roadless Acres, while Coeur d’Alene is within 100 miles of only 100,000 Wilderness acres. The KNF selected Kalispell which, due to its proximity to over a million acres of Wilderness, means that there’s little need for additional Wilderness on the KNF and as a result all IRAs were rated as Low.

Had the Kootenai picked the equally distant Coeur d’Alene - with a population 78% higher than Kalispell – the analysis would have shown just 104,000 Wilderness acres within 100 miles and a clear need to recommend more IRA’s as Wilderness. All IRAs would have received a High score. Such transparent efforts to avoid recommending IRAs as Wilderness are entirely inappropriate and arbitrary, and must be corrected in the FEIS.

## Needs Criteria 6. Under-represented Plant Communities and Percent of IRA that is Riparian Habitat.

According to Appendix C: “the Forest produced a map that showed the four selected under-represented plant communities that occur in the KNF.” App. C at 125. “The four plant communities selected were VRU 2 (ponderosa pine), VRU 5 (western red cedar and western hemlock), and VRU 8 (western red cedar and western hemlock – wet) and aquatic response unit (ARU) types representing forest-dominated riparian areas.” App. C at 126. Please disclose the source of the data that was used to produce this map in the FEIS.

How the final ratings for the Needs assessment were determined:

An overall rating was then applied for each area based on the following parameters:

- The overall rating would be **high** if:
  - Three or more questions were rated high; or
  - Two questions were rated high and at least two of the remaining four questions were rated moderate.
- The overall rating would be **moderate** if:
  - Two questions were rated high and not more than one of the remaining four questions was rated moderate; or
  - One question was rated high and at least one of the remaining five was rated moderate; or
  - No question was rated high but two or more were rated moderate.
- The overall rating would be **low** if:
  - Five of the questions rated low; or
  - No question was rated high and no more than two were rated moderate.

As noted above all IRAs were rated Low due to the selection of Kalispell for Needs Criteria 5 and all IRAs were rated Moderate under Needs Criteria 4. Ecological Sections represented in Wilderness. In order to eliminate the bias toward lower ratings that this causes, those two criteria should not have been considered in the final scoring for the Wilderness Needs Assessment.

Overall the selection process for MA 1b is based on biased conclusions that are inherent in the Capability, Availability and Regional Needs Assessments. The KNF used this process to eliminate IRA’s from Recommended Wilderness consideration.

The Kootenai needs to give the “habitat connectivity” category the high priority it deserves. IRAs should be rated High that provide or contribute to linkage zones and habitat connectivity within the Forest and/or to adjacent ecosystems. The assessment fails to acknowledge the ecological importance of linkage zones and the IRAs that provide them.

In addition, a category that should be included in the Wilderness Assessment is threatened and endangered species habitat and use of IRAs by T&E species. For example parts of many grizzly bear home ranges are located in IRAs.

While it's appreciated that the Forest Service has belatedly include an Ecological Needs category, its coverage is so "minimalist" that it is robbed of its effectiveness.

### **Grizzly Bear Home Ranges in IRAs**

The Endangered Species Act (USFWS 1973) requires all federal agencies to conserve listed species and the ecosystems upon which they depend; to avoid creating "Jeopardy" to listed species; and "Harm" to these species and their habitat. Yet the LMP and FEIS fail to do all three.

The KNF is home to grizzly bears, wolves, lynx, and the soon to be listed as Threatened wolverine. All of these species, and others on the Sensitive species list, rely on big, wild, interconnected landscapes for their survival and recovery. Yet despite repeated references to the importance of large habitat blocks, landscape connectivity, and the role of Wilderness in achieving both, the Plan functionally leads to the exact opposite—a fractured landscape with a few comparatively small, isolated Recommended Wilderness "islands" in a sea of roads, "general forestry", and mechanized/motorized "Backcountry" and IRAs. Such a landscape paints a bleak picture for the future of the Cabinet-Yaak Ecosystem's critically endangered grizzly bear population.

Wayne Kasworm's (USFWS) 2011 report on grizzly research for the Cabinet-Yaak Ecosystem (CYE) has home range maps for every grizzly since 1983. The grizzly home ranges from 2005-2010 were compared to IRA locations to determine which ones overlapped IRA boundaries.

There are home range maps for 16 grizzlies (2005-2010) - 5 Male and 11 Female. It appears that the mapped grizzly home ranges are located in portions of 27 of the 43 IRAs. Six of the 27 IRAs with overlapping grizzly bear home ranges are recommended for Wilderness, while 21 are not.<sup>11</sup>

IRA's Recommended for Wilderness and number of home ranges they appear to contain:

IRA (16) Roderick - 2

IRA (21) Cabinet Face West – 4

IRA (22) Cabinet Face East – 4

IRA (25) Scotchman Peaks - 5

IRA (28) Chippewa - 6

IRA (29) Rock Creek - 4

Total Home Range Occurrences in MA1b IRAs - 25

IRA's NOT Recommended for Wilderness and number of home ranges they support:

IRA's that appear support at least one Grizzly Bear Home Range: (6) Big Creek, (9) Robinson Mtn, (10) Mt Henry, (13) Buckhorn Ridge, (14) Grizzly Peak, (15) Zulu, (18) Flagstaff, (34) Galena, (36) East Fork Elk, (37) Lone Cliff West, (38) Lone Cliff Smeads, (39) Huckleberry

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<sup>11</sup> Given the different scales of the USFWS Grizzly Home Range maps and the various IRA maps that are included in the Draft FP and DEIS, it is difficult to determine exactly where the IRA boundaries lie on the Home Range maps. Ideally, a large scale map with the grizzly home ranges superimposed on the IRAs can be produced in order to determine the exact location of the home ranges relative to the IRAs. It is highly likely that the home ranges overlap with the IRAs listed above and possibly additional IRAs not listed.

Mtn, (40) Devils Gap and (41) Trout Creek.

IRAs that appear to support multiple home ranges:

IRA (11) West Fork Yaak - 4

IRA (12) Northwest Peak - 3

IRA (19) Roberts - 4

IRA (20) Willard Estelle - 4

IRA (24) Barren Creek - 4

IRA (26) Berray Mtn - 6

IRA (27) Government Mtn - 4

Home Range Occurrences in non-MA1b IRAs - 43

All of the IRAs that contain one or more grizzly home ranges should be a high priority for Recommended Wilderness, notwithstanding their scores in the three assessment categories.

## **WILDERNESS ASSESSMENT RESULTS**

The FEIS engages in a Wilderness Evaluation process that largely elevates Manager Preferences over Protecting the Wilderness resource, and in so doing, ignores the stated intent of Congress.

In clear, simple language, the Wilderness Act of 1964 lays out the ground rules under which areas are to be judged for Wilderness:

A wilderness, in contrast with those areas where man and his works dominate the landscape, is hereby recognized as an area where the earth and the community of life are untrammelled by man, where man himself is a visitor who does not remain.

In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States...leaving no lands designated for preservation and protection in their natural condition, it is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness.

The conditions that Congress clearly intended to discourage or disallow were human dominance, settlement, overuse, or mechanization of wild landscapes. Conditions to be encouraged and guarded were untrammelled and uncontrolled landscapes and ecological processes, with areas protected and preserved in their natural condition. Finally, humans were to be temporary visitors only – not managers, manipulators, or highly mechanized recreationists.

Yet in the Wilderness Evaluation Process, we see that Forest Service has impermissibly stood this clear Congressional intent on its head, repeatedly injecting subjective manager values, management preferences, and human recreational “Wants” into areas where humans and their works were not to “dominate the landscape.” It is hard to imagine that a screening process so transparently Anti-Wilderness was created by accident.

In fact, it appears that the Forest Service still views this national forest as little more than “commodities” to be carved up and parceled out to local communities and special interests for

social, political, and economic gain, with no seat at the table for Wilderness. While we understand one of the Forest Service's roles is the provision of resources in a sustainable manner, the agency seems to have once more gone overboard, confusing its role with that of the Chamber of Commerce, timber industry, or local motorized access boosters.

Table 66 of the DEIS and Table 61 in Appendix C list the IRAs and acreage proposed for Recommended Wilderness (MA 1b) under Alternatives B, C and D as a result of the Capability, Availability and Needs assessment scoring.

**Alternative B** would designate:

Scotchman Peaks - 35,900 acres out of 54,439 total acres, as MA 1b;

Cabinet Additions - 29,900 acres out of a potential 95,757 acres (total Cabinet Face East and West, Chippewa, McKay Creek, Barren Creek and Rock Creek) + 100 acres outside an IRA);

Whitefish Divide - which Table 61 (App. C at 140) indicates includes 21,224 acres out of 29,378 in the Thompson Seton IRA and 2,277 acres that are not within an IRA;

Roderick – 22,719 acres (out of 29,658 acres) and 753 acres adjacent to the IRA (Table 61 at App. C p. 139).

Ten Lakes Contiguous Area - Appendix C Table 61: “All alternative include Ten Lakes WSA (26,000 acres within the Ten Lakes IRA, and 6,800 acres outside the IRA see MA 1b). Alt B & D allow for existing over snow motorized use to continue. Alt C includes finger west of Poorman Mountain within the WSA, Ten Lakes East, and boundary adjustments on southwest end.” The entire contiguous area is 48,510 acres according to Table 61.

We note that the area adjacent to Wigwam Creek and some of its tributaries, which are located within the Ten Lakes Contiguous Area, has been relegated to MA 5b motorized use. Wigwam Creek is the most productive bull trout stream (has the highest redd counts) on the KNF. Though most of the production is in the Canadian portion, its headwaters are located on the KNF. Protection of headwaters in order to avoid downstream degradation is critically important. Wigwam Creek and its tributaries on the KNF should be nominated to the National Wild and Scenic River System. Moreover, motorized use should NOT be allowed in the headwaters areas on the KNF.

In addition, two tributaries (Foundation and Divide) and part of a third Tributary to Grave Creek are designated MA 5b, in spite of their proposed designation as Wild and Scenic Rivers. Grave Creek is also an important and productive bull trout stronghold. Motorized use should NOT be allowed in its tributaries.

The total of proposed MA 1b acres under Alt. B is 112,738 acres – approximately 1/6 of the total 638,00 IRA acres on the KNF.

**Alternative C** proposes additional acres of MA 1b:

Scotchman Peak acres of MA 1b are increased to 37,225.

Cabinet Additions MA 1b are increased to 53,744, which includes 1,298 acres outside the IRAs.



Whitefish Divide increased to 40,136 acres (includes 7,887 acres in the Marston Face IRA, 2,153 acres in the Tuchuck IRA and an additional 6,730 acres in the Thompson Seton IRA that are not included in Alt. B

In addition, Alt. C proposes MA 1b status for the following IRAs:

Allen Peak - 20,462 acres out of a total of 29,618 acres

Big Creek - 6,400 acres out of 7,526 acres + 216 acres outside the IRA

Gold Hill West - 11,550 acres out of 15,070 total + 627 acres outside the IRA

Saddle Mountain - 10,796 acres out of total 14,666 acres + 3,495 acres outside the IRA

The total of proposed MA 1b acres under Alt. C is 217,319 acres – approximately 1/3 of the total 638,034 IRA acres on the KNF.

**Alternative D** proposes only the Cabinet additions for MA 1b – a total of 37,191 acres which is the sum of acres listed in Table 61 under Alt. D. Table 66 lists 37,300 for Cabinet Additions and 32,300 acres total for Alt. D.

#### **Proposed MA 1b acres are less than total IRA acres**

The discrepancies between the total acres listed for the IRAs (Table 62 Potential Wilderness Inventory by IRA and Suitability Ratings DEIS at 299) and the number of acres proposed for MA 1b raises questions. In all cases the number of acres in an IRA proposed as MA 1b is less than the total acres in an IRA and larger IRAs were reduced by several thousand acres. Please provide an explanation in the FEIS for the reductions in acres for each IRA that is proposed MA 1b.

#### **The Draft FP proposes to allow logging in the majority of IRAs (or parts thereof) that are not proposed for recommended wilderness.**

The Forest Service's stated intention to treat insect and disease outbreaks and employ "timber harvest for resource purposes" in a number of IRAs makes it clear that the agency intended to ignore the 2001 Roadless Rule's prohibition on logging or roading in IRAs.

In most cases the IRAs rejected for MA 1b status and portions of IRAs that were left out of the 1b designation have been designated MA5 a, b or c.

For MA5 Backcountry, the timber Standard is

**MA5-STD-TBR-01.** Timber harvest is limited, and may only occur to: improve habitat for listed or proposed threatened and endangered species; to maintain or restore ecosystem composition and structure; to reduce the risk of uncharacteristic wildfires; or to address insect and disease or other forest health concerns. Timber harvest may also be allowed for administrative uses as defined in 36 CFR 223.2. Timber harvest is not scheduled and does not contribute toward the allowable sale quantity.

Thus the allocation of IRAs, or portions thereof as MA5 opens the door to logging these areas. The list of reasons for allowing timber 'management' in these areas are the same excuses (Purpose and Need statements) the Forest Service has been using for logging and road construction in the rest of the Forest (improve habitat, reduce the risk of fire, address insect and

disease outbreaks, i.e., forest health and administrative use) for the last few years. That the “timber harvest is not scheduled and does not contribute toward the allowable sale quantity” provides no guarantee that it will not occur and does not change the fact that the Forest Service is proposing logging in these pristine, ecologically important areas.

Furthermore, according to FW-DC-TBR-03:

Timber cutting on other than suitable for timber production lands occurs for such purposes as salvage, fuels management, insect and disease mitigation, protection or enhancement of biodiversity or wildlife habitat, or to perform research or administrative studies, or recreational and scenic-resource management consistent with other management direction.

This reinforces the fact that ‘timber cutting’ will likely occur in roadless areas not recommended for wilderness. It also renders the distinction between “suitable timber land” and “unsuitable timber land” completely meaningless. Again, the purposes mentioned are the very same as found in practically every timber sale project Purpose and Need statement. As the Draft Plan stands, industrial logging would eventually occur not only on every suitable acre, it would occur in unsuitable areas such as grizzly bear core, old growth, and other sensitive areas that theoretically have been removed from the suitable timber base, e.g., the vast majority of the entire KNF.

According to Table 67. Acres of Inventoried Roadless Areas MA Allocation by Alternative (DEIS at 305), Alternative B would allocate 223,690 IRA acres to MA 5a non-motorized; 149,870 IRA acres to MA 5b motorized and 80,980 acres to MA 5c motorized winter recreation. Alternative C would allocate 322,861 IRA acres to MA 5a non-motorized; 33,607 IRA acres to MA 5b motorized and 9,967 acres to MA 5c motorized winter recreation. Table 67 indicates that the current number of IRA acres that are allocated to MA 5b is 1,349 acres (Alt. A).

There is extensive scientific consensus that undisturbed areas such as the roadless areas in MA5 represent the last areas of highest ecological integrity outside of designated Wilderness in the lower 48 states. This science is found in the federal government’s National Roadless Rule EIS and the ICBEMP EIS and in a vast body of scientific literature. The science indicates that there is no need to “maintain or restore ecosystem composition and structure; to reduce the risk of uncharacteristic wildfires; or to address insect and disease or other forest health concerns” in the KNF’s IRAs.

In regards to the need to control wildfires in IRAs:

"High road densities and their locations within watersheds are typically correlated with areas of higher watershed sensitivity to erosion and sediment transport to streams. Road density also is correlated with the distribution and spread of exotic annual grasses, noxious weeds, and other exotic plants. Furthermore, high road densities are correlated with areas that have few large snags and few large trees that are resistant to both fire and infestation of insects and disease. Lastly, high road densities are correlated with areas that have relatively high risk of fire occurrence (from human caused fires), high hazard ground fuels, and high tree mortality." (USFS 1996b, page 85, parenthesis in original).



"Areas that are more highly roaded actually have a higher potential for catastrophic wildfires than inventoried roadless areas. Other national assessments have arrived at the same conclusions. The fire occurrence data revealed the following key points:

- Nationally, the average size of a large wildfire is greater on NFS lands outside of an inventoried roadless area;
- Nationally, the average size of a large wildland fire started by humans is greater on land outside of inventoried roadless areas;
- Regardless of the cause, a wildland fire ignition was nearly 2 times as likely to occur outside of an inventoried roadless area;
- A human ignited wildland fire is nearly 4 times as likely to occur outside of an inventoried roadless area." (Forest Service Roadless Area Conservation DEIS, page 3-157; hereafter USFS 2000).

Moreover, the Roadless Rule which has recently been re-instated by the 10<sup>th</sup> Circuit clearly prohibits active forest management – logging and road construction - in IRAs. Thus allocating IRAs or portions thereof, to MAs that allow road construction and logging would be in violation of the Roadless Rule.

Furthermore, the DEIS states, "Because of limits access and additional analysis and public/agency involvement, unit cost for timber harvest are much higher with an IRA." (DEIS, p. 367) This statement prompts the question, if costs are "much higher" to access timber in IRAs, why is the KNF proposing to road and log some IRAs?

### **Changes in Backcountry MAs and Timber Suitability**

Table 5 in the DEIS reveals, among other things, that MA5a – Backcountry non-motorized year-round - would be reduced by more than 116,000 acres: from 343,800 acres (15.5% of the KNF) to 227,600 acres (10.3% of the KNF) as a result of implementing preferred Alt. B. DEIS at 35.

Table 6 in Appendix B Timber Suitability by Alternative indicates that the number of acres where 'management precludes timber production' (logging) as an objective will be reduced by 52,100 acres, which conversely increases the number of acres designated as Suitable Timber by 52,100 acres (from 739,300 to 791,400 acres) DEIS Appendix B at 17.

Please disclose in the FSEIS how those acres are currently designated, i.e., what "management" category or categories these areas currently are that precludes them from being suitable timber in the current FP. We assume there a connection between the reduction in backcountry non-motorized and the increase in suitable timber acres

Please also indicate in the FEIS which "backcountry" areas that are currently non-motorized are proposed to be converted to MA5b and 5c.

### **Suitability Ratings**

We note that the ratings for some IRAs that are proposed for MA1b status in Alt. C were somewhat low Examples would be:

Barren Creek, an addition to the CMW was rated as Moderate in all three categories; McKay Creek, also an addition to the CMW was rated as Mod/high for Capability and Moderate for both Availability and Need; Gold Hill West was rated Moderate - High – Low.

We are not suggesting that these IRAs should not be proposed for MA 1b status. However, we question why other areas that have similar or better ratings were not proposed for MA 1b status. For example, both Buckhorn Ridge #661 and Northwest Peaks #663 have triple High ratings and yet they were not proposed for MA 1b. They have been mostly relegated to MA 5a and MA 5c (a portion of Buckhorn Ridge is proposed MA 3 under Alt. B and Alt. C). As pointed out above, the Draft FP allows active forest management in MA5 areas.

McNeely #675 (6,653 acres) is rated Low, High, High; Devil's Gap #698 (5,349 acres), which is adjacent to McNeely, is rated Mod/high, High, High. These could have been combined into a recommended wilderness area in SW of the Clark Fork River. Trout Creek #664 (30,866 acres) is another prime area SW of the Clark Fork. Though its ratings were Moderate- Low- Moderate it has unique values. Not one of the IRAs SW of the Clark Fork River is proposed MA 1b. Therefore there is a 'need' for wilderness in that area.

**REMEDY:** A genuine Conservation Alternative must be developed and presented for public comment under a Supplemental FEIS, including the following:

- Completely revisit and revise the FEIS's list of Action Alternatives to provide the rigorous exploration and objective evaluation of all reasonable alternatives required by NEPA, rather than the current options, which are skewed toward industrial and motorized uses of the landscape.
- All or a substantial majority of IRA acreage recommended as Wilderness.
- IRA acreage not recommended for Wilderness assigned to Non-Motorized Backcountry – Year round.
- Immediate removal of illegally sanctioned snowmobile use in the Ten Lakes Wilderness Study Area.
- Given a half-century of excessive logging, roading, and habitat fragmentation of the KNF, restoring landscape connectivity is a critical need. To begin that process, the LMP must establish and give high priority to establishing an MA-8: Landscape Linkages and Habitat Connectivity. Key Wildlife Linkage Zones must then be identified, mapped, and protected in the LMP.
- The Forest Service must completely review and revise the hopelessly subjective and biased Capability, Availability, Need Criteria and the 2003 Wilderness Needs Assessment they are based on. New standards must be developed based on the clear, unambiguous language of the Wilderness Act, and the Congressional Intent that Wilderness and its ecological values were to be the primary driving force in designations—not USFS manager preferences.

## **UNINVENTORIED ROADLESS AREAS**

**OBJECTION STATEMENT:** Roadless inventory/boundaries. It is often the case that specific areas have been omitted from inventoried roadless areas, especially those immediately adjacent to IRAs, which have no disqualifying features.

## REMEDY:

- The Forest Service must prepare a Supplemental DEIS that updates roadless area boundaries utilizing standard procedures in order to evaluate unroaded areas contiguous with IRAs, and substitute an updated LMP for further consideration.
- Alternatively, the LMP must include a Standard requiring that, during site-specific project NEPA analyses, roadless area boundaries must be re-evaluated and updated, utilizing standard procedures, in order to evaluate unroaded areas contiguous with IRAs or Wilderness.

## TIMBER

OBJECTION STATEMENT: FW-DC-TBR-01. Including the sentence that begins with “Salvage...” perpetuates the longstanding conflict between timber production and natural processes that create wildlife habitat. The Desired Condition also includes the vague phrase, “associated desired conditions.” And the Desired Condition fails to recognize that, for decades, market demand has conflicted with ecological sustainability.

### Remedy:

- Remove the phrase “in response to market demand.”
- Remove the sentence that begins with “Salvage...”
- Clarify what is meant by “ecological ...desired conditions” so that the statement recognizes the balance needed between resource extraction and ecological sustainability.

OBJECTION STATEMENT: FW-DC-TBR-03: Logging in unsuitable acreage. AWR commented, “according to FW-DC-TBR-03:

“Timber cutting on other than suitable for timber production lands occurs for such purposes as salvage, fuels management, insect and disease mitigation, protection or enhancement of biodiversity or wildlife habitat, or to perform research or administrative studies, or recreational and scenic-resource management consistent with other management direction.”

This reinforces the fact that ‘timber cutting’ will likely occur in roadless areas not recommended for wilderness. It also renders the distinction between “suitable timber land” and “unsuitable timber land” completely meaningless. Again, the purposes mentioned are the very same as found in practically every timber sale project Purpose and Need statement. As the Draft Plan stands, industrial logging would eventually occur not only on every suitable acre, it would occur in unsuitable areas such as grizzly bear core, old growth, and other sensitive areas that theoretically have been removed from the suitable timber base, e.g., the vast majority of the entire KNF.

The wording of FW-DC-TBR-03 essentially nullifies any meaningful distinction between suitable and unsuitable land, and together with timber targets (FW-OBJ-TBR-01) and the ASQ (FW-DC-TBR-04), encourages logging in unsuitable land. One or more of the “purposes” of logging it allows in land that is “unsuitable” appear in all timber sale NEPA documents.

### Remedy:

- Remove FW-DC-TBR-03 from the LMP.

- Change the wording of Standard FW-STD-TBR-01 to read, “Timber harvest activities shall occur only on those lands classified as suitable for timber production.”

**OBJECTION STATEMENT: FW-DC-TBR-04.** The Allowable Sale Quantity (ASQ) of 80.2 – 90 million board feet annually is not based upon scientifically sound modeling that adequately considers ecological and economic constraints. It creates a sense of false expectations for forest products industries. It is simply not ecologically sustainable.

Remedy:

- Set the ASQ at an ecologically more conservative level of 20 mmbf maximum.

**OBJECTION STATEMENT: FW-OBJ-TBR-01.** Any timber target provides incentives which conflict with ecological sustainability. The annual target of offering 47.5 million board feet for sale is not based upon scientifically sound modeling that adequately considers ecological and economic constraints. It creates a sense of false expectations for forest products industries. It is simply not ecologically sustainable.

Remedy:

- Delete FW-OBJ-TBR-01 from the LMP.

**OBJECTION STATEMENT: FW-STD-TBR-02.** This Standard states:

If individual harvest openings created by even-aged silvicultural practices are proposed that would exceed 40 acres, then NFMA requirements regarding public notification and approval shall be followed. These requirements do not apply to the size of areas harvested because of catastrophes such as, but not limited to, fire, insect and disease attacks, or wind storms.

This highlights a problem we’ve long noted, there being an undefined category of natural processes the Forest Service calls “catastrophe”, which has generally translates to dead trees not being logged (not maximizing timber volume produced) as the catastrophe rather than there really being something truly ecologically harmful. Also, it seems redundant for a Standard to explicitly state that the law would be followed.

REMEDY:

- Re-write this Standard to prohibit harvest openings created by even-aged silvicultural practices to exceed 40 acres.

**OBJECTION STATEMENT: FW-GDL-TBR-01 and MA6-STD-TBR-01.** Together with the wording of FW-DC-TBR-03, this Guideline and Standard essentially nullify any meaningful distinction between suitable and unsuitable land, and together with timber targets (FW-OBJ-TBR-01) and the ASQ (FW-DC-TBR-04), encourages logging in unsuitable land. One or more of the “purposes” of logging it allows in land that is “unsuitable” appear in all timber sale NEPA documents.

REMEDY:

- Remove FW-GDL-TBR-01 and MA6-STD-TBR-01 from the LMP.

## **GRAZING**

OBJECTION STATEMENT: FW-DC-GRZ-03. Closing allotments can only increase the ecological integrity and economic efficiency of Forest management.

REMEDY:

- Change the wording of this Desired Condition from “may be closed” to “shall be closed.”

## **SOCIAL AND ECONOMIC SYSTEMS**

OBJECTION STATEMENT: FW-DC-SES-04. This Desired Condition risks perpetuating the Smoky Bear myth that protection from fire is a promise that the government can and should make. Unlike the direction provided in the LMP Fire section, there is no recognized balance with ecological considerations. This Desired Condition does not provide any further increment of public safety over and above the direction provided in the LMP Fire section, and is redundant.

REMEDY:

- Delete FW-DC-SES-04 from the LMP.

## **CARBON SEQUESTRATION**

OBJECTION STATEMENT: In recognition of the critical challenge posed by climate change to global ecosystems as well as the KNF, AWR comments listed scientific research and opinion identifying forest management as a contributor to climate change. The FEIS dismisses it without addressing the substance of that science. The Forest Service refused to include an alternative that considered this scientific research and opinion. Given that the alternatives all stress vegetation management, there could be no real comparison of management options. The FEIS even failed to utilize Climate Change as a topic for comparison of how the alternatives it did include respond to, or contribute to, climate change.

The FEIS Appendix G responses to the climate change issue

The 2010 KIPZ Climate Change Report states:

The average carbon density of these National Forests is among the highest in the Northern Rockies and interior western U.S. (Hicke et al. 2007; Potter et al. 2008). Preliminary estimates indicate that the Kootenai and Idaho National Forests is a net carbon sink, removing approximately 27 to 31 metric tons of carbon per acre per year. Harvested wood products increase the net sequestration on these forests by an undetermined amount.

The first two sentences are consistent with the scientific information AWR’s comments listed. However, the last sentence is directly counter. That claim, unsubstantiated by cited scientific research or information, is apparently the justification found in the FEIS Appendix G for the LMP’s vegetation management regime (increasing resilience, resistance, and moving towards desired conditions) and the KNF’s position that implementing the LMP will increase carbon sequestration. All without considering science and disclosing impacts of alternative courses of action.

#### REMEDY:

- Disclose the scientific research specific to the KNF and IPNF that substantiates the KIPZ Climate Change Report statement, “Harvested wood products increase the net sequestration on these forests by an undetermined amount.”
- Provide responses to each of the scientific sources of information AWR’s comments cited, stating how and why they do or don’t apply to the KNF.
- Prepare a Supplemental DEIS that includes alternatives based upon the scientific sources of information AWR’s comments cited.

#### MONITORING PROGRAM

OBJECTION STATEMENT: The LMP’s Monitoring Program is inadequate for informing the agency and the public within any valid adaptive management framework. For many resources, Table 22 Monitoring Indicators (“specific resource measures used in answering the monitoring questions” p. 95) lack specific direction on what and how the indicators are to be measured, to the degree that one cannot determine if they would be valid or reliable measures. Some Vegetation Monitoring Indicators would largely be performed using the index of “Desired Conditions.” This would not be useful given the shortcomings of the LMP’s Desired Conditions, as identified in AWR’s comments:

(U)nder “Desired Conditions” it is clear that there will be no accountability for not meeting any of the four stated conditions, because each of those is worded so as to be full of loopholes, or are so vague that interpretation is completely up to the discretion of the Forest Service.

We also note that, in terms of demonstration of consistency with the Forest Plan’s Desired Conditions, condition #3 allows for adverse effects progress away from desired conditions in the short-term:

Maintain or make progress toward one or more of the desired conditions over the long term, even if the project or activity would adversely affect progress toward or maintenance of one or more desired conditions in the short term;

This invokes high levels of risk. Only in the long-term, after decades of implementation, might the results of such approaches compel managers to chart a more conservative or ecologically restorative course.

And what qualifies as “long term benefit” or “short term effects” will of necessity be discretionary, since these terms are not defined in the DLMP, DEIS or the Appendices.”

Moreover, there is no threshold value given for any indicator so anyone might judge whether adaptive management actions ought to be taken in response to the measurement. Many of the Monitoring Questions ask if a resource is “moving towards desired conditions” and this is too vague as discussed elsewhere in this Objection. It appears little thought went into the writing of Table 22, and thus little meaning would be gained from the results of monitoring.

#### REMEDY:

- Insert specific direction on how each of the Monitoring Indicators is to be measured.

- For each of the Monitoring Indicators, include an objective threshold above which adaptive management actions are to be taken in response.

**OBJECTION STATEMENT:** MON-VEG-01-01 forms a link in the grand chain of circular logic in the LMP's construction, which is that the only areas of the Forest that are resilient, resistant, meeting Desired Conditions, etc. are those areas that get logged. In other words, Monitoring Indicator MON-VEG-01-01 answers the question, "how will the Forest Service know if any stand in the forest is in a desirable condition with the answer, "those that we've just finished with." If this were a valid metric, the LMP and FEIS would disclose how many acres are not meeting Desired Condition forestwide. The Forest Service cannot do this, because the intention is to only address the question at the site-specific level with a map of the Proposed Action's treatment units. Even then, since the LMP has no valid, scientifically based metrics forming a definition of a stand that is resilient, resistant, meeting Desired Conditions, etc. it will always be cloaked in "professional judgment." Even old growth is not good enough, as the LMP directs that it be logged.

Vegetative conditions simply cannot be used as a substitute or proxy for monitoring populations, as the Forest Service's own science clearly indicates. The complex and subtle interplay between animals and vegetative components, structure, pattern, and processes is not well-understood, Offering Key Plan Elements for Vegetation as wildlife viability assurance is smoke and mirrors, assuring not viable populations of wildlife but perpetual manipulation of vegetation.

**REMEDY:**

- Include a Monitoring Indicator that annually discloses which stands are currently meeting Desired Condition forestwide.
- Include a definition in the LMP Glossary that uses a scientifically based set of forest metrics that defines a stand that is resilient, resistant, meeting Desired Conditions, etc.

**OBJECTION STATEMENT:** Indicator MON-VEG-01-02 merely reports on acres burned, and lacks any qualitative component. Forty acres of a timber unit that was burned badly during slash reduction would be equal to 40 acres that was prescribed burned and met all silvicultural, fuel reduction, and wildlife objectives.

**REMEDY:**

- Include a qualitative component for the measure of acres burned.

**OBJECTION STATEMENT:** The LMP's monitoring of old growth also would be potentially not useful. Indicator MON-VEG-01-04 relies upon the FIA program. The size of the plots used by the FIA methodology is 1/4-acre. The FIA survey methodology results in boots-on-the ground measurements very few acres of forest meeting old-growth criteria, whereas that the KNF claims in the FY 2012 forest plan monitoring reports that there is about 201,577 acres of field verified old growth on the KNF (its "stand-level mapping" inventory). The FIA survey methodology is not a statistically valid sample size to produce anything but a rough comparison to other forestwide old-growth inventory, the stand-level mapping.

It is also not very certain that the FIA program has the resources to monitor the fixed plots of the entire KNF every five years, as is planned. Also, FIA data is not subject to independent verification because plot locations are kept confidential.

**REMEDY:**

- Arrange for an independent scientific peer-review of the KNF's FIA old-growth inventory prior to using its results as a valid estimate of old growth on the Forest.

**OBJECTION STATEMENT:** Indicator MON-VEG-01-05, the annual measure of old growth and recruitment potential old growth, does not require that the old-growth definition as specified in the LMP Glossary be the measurement criteria utilized to determine if any acre is old growth. Also, AWR's experience with the old-growth inventory has led to serious questions as to its accuracy. Also, the measure of "recruitment potential old growth" is problematic due to its highly subjective definition. AWR's comments included:

The details of exactly how this will be accomplished and how frequently are not provided. How will information regarding stands that meet the Green et al. definition be gathered? How often? What percent of the OG stands be surveyed and mapped? Will the OG maps be updated annually? Will recruitment OG be included in the mapping effort? Will it be delineated as such?

Will information regarding the acres of OG treated and treatment type be gathered annually and displayed in an Annual Monitoring and Evaluation Report? Will the impacts of the treatments on OG habitat and OG dependant species be analyzed and disclosed in an Annual Monitoring Report?

**REMEDY:**

- Insure that the annual measure of old growth and recruitment potential old growth be based upon the numerical values of the old-growth definition as specified in the LMP Glossary.
- Write an objective definition of "recruitment potential old growth" based upon quantified levels of the components found in the old-growth definition as specified in the LMP Glossary.
- Require that old-growth monitoring include an internet-based map inventory with linked stand data, updated at annually with all changes fully explained, so the public can make informed judgments as to the accuracy of the stand-level inventory. Alternatively,...
- Arrange for an independent scientific peer-review of the KNF's "stand-level mapping" old-growth inventory prior to using its results as a valid estimate of old growth on the Forest.

**OBJECTION STATEMENT:** The logic behind Indicator MON-VEG-01-06 is obscure, since annually determining old-growth acres "treated" would reveal nothing about the outcome—positive or negative—of those treatments.

**REMEDY:**

- Include a statement in this Indicator that requires quantitative comparison of treated old growth with the old-growth definition as specified in the LMP Glossary.



OBJECTION STATEMENT: The Indicator MON-VEG-01-07 is a measure of the numbers of dead trees per acre on the KNF and itself lacks any relevance to resources. AWR comments stated:

How frequently will the percent of treated acres meeting snag numbers be determined? If annually, will only the acres treated during the previous year be surveyed for snags? What percent of the acres treated during the previous year will be surveyed?

Please describe what information is in the FIA regarding burned forest on the KNF? Will snag numbers/acre in burned acres be estimated? Or will there be on-the-ground snag surveys in burned areas? If so, what would be the extent of the surveys?

REMEDY:

- Change this Indicator to require annual monitoring of retained snags, by size class, in a representative sample of treated (logged, burned ) units.

OBJECTION STATEMENT: The Indicator MON-VEG-01-08 lacks relevance since it would merely measure the “Number of acres influenced by insects and disease.” Naturally, the outcome would be—every acre on the forest.

REMEDY:

- Delete this Indicator.

OBJECTION STATEMENT: The logic behind Indicator MON-VEG-02-01 is obscure, since annually determining acres of noxious weeds “treated” might reveal nothing about the effectiveness of those treatments.

REMEDY:

- Include an additional Monitoring Indicator requiring annual representative sampling of recently treated areas to determine the efficacy and economic efficiency of the various treatments used on various species of noxious weeds.

OBJECTION STATEMENT: The logic behind Indicator MON-VEG-02-02 is obscure. The definition of a “site of new non-native invasive plant species” is not given. A “site” could be as small as single Russian thistle on the shore of Priest Lake, or as large as the new occurrence of 100,000 hawkweed plants in the Lakeview-Reeder timber sale contract area.

REMEDY:

- Quantify “site of new non-native invasive plant species” in terms of acres.

OBJECTION STATEMENT: Indicator MON-FIRE-01-01. Effectiveness of fuel treatments is not evaluated.

REMEDY:

- Include a measure of the effectiveness of fuel treatments, based upon quantitative objectives in the pre-treatment prescription.

OBJECTION STATEMENT: Indicator MON-FIRE-02-01. There is nothing ecological about this indicator, since there is no spatial measure (acres burned that meet positive ecological outcomes.) It isn't even a decent bureaucratic indicator, since a fire—allowed to burn 300 acres to meet ecological objectives but then suppressed before it was allowed to potentially meet ecological objectives over untold thousands more acres—could be placed in either category of ignition.

REMEDY:

- Include a spatial measure (acres burned that meet positive ecological outcomes).

OBJECTION STATEMENT: Indicator MON-WTR-01-01. “Number of Best Management Practices...” . This Indicator is too vague to answer the Monitoring Question, “Are soil, water quality, and riparian and aquatic habitats protected and moving towards desired conditions?”

REMEDY:

- Change this Indicator to require that BMP evaluation data be taken from every documentation of daily Sale Area Administrator monitoring which includes BMPs. Insure that the full range of project BMPs be adequately sampled in each timber sale.

OBJECTION STATEMENT: Indicators MON-WTR-02-01, 02. It is unclear how measuring watersheds by “miles of restoration activities” would be useful. It is also unclear how measuring watersheds by “acres of restoration activities” would be useful since the definition of restoration in the LMP and in NEPA documents is so lax that every acre treated would be considered restoration. Indicator MON-WTR-02-02: Too general; the meaning of “trended toward” (as discussed elsewhere in this Objection) is highly vague and subjective. It is hard to understand how any of these three indicators would answer the Monitoring Question.

REMEDY:

- Clarify these Indicators to provide meaningful monitoring parameters.

OBJECTION STATEMENT: The monitoring program sorely lacks a focus on Water Quality Limited Segments and meeting state defined beneficial uses.

REMEDY:

- Include Monitoring Indicators to provide feedback on how restoration activities affect Water Quality Limited Segments and beneficial uses.

OBJECTION STATEMENT: The Watershed Disturbance Rating strongly suggests forestwide direction to attain watershed restoration. There are no correlations of the Watershed Condition Rating or Watershed Disturbance Rating with other measures, such as the condition or status of aquatic habitat such as attainment of INFISH RMOs, with measures of hydrological equilibrium/streambank stability in assessed subwatersheds, or with data gathered for the 1987 Plan monitoring items.

REMEDY:

- Include Monitoring Plan Questions and Indicators to validate Watershed Condition Ratings and Watershed Disturbance Ratings with other measures, such as the condition or status of aquatic habitat such as attainment of INFISH RMOs, and with measures of hydrological equilibrium/streambank stability in assessed subwatersheds, and with data gathered for the 1987 Plan monitoring items.

OBJECTION STATEMENT: Indicator MON-AQH-01-01. Good start, however it lacks a baseline of unconnected stream habitat for subsequent comparison.

REMEDY:

- Disclose the current number and location of fish passage barriers, and add an Indicator to require annual monitoring of the change in this inventory of fish passage barriers.

OBJECTION STATEMENT: The monitoring program lacks Monitoring Questions and Indicators for the Sensitive westslope cutthroat trout, inland redband trout, and western pearlshell mussel. This is necessary because monitoring elements for bull trout would not extend to large numbers of watersheds where the former inhabit.

REMEDY:

- Add a Monitoring Question and Monitoring Indicators that require annual monitoring of populations of westslope cutthroat trout, inland redband trout, and western pearlshell mussel in the waters where they are found.

OBJECTION STATEMENT: The LMP provides no information regarding which instream and biotic attributes and what instream and channel parameters will be monitored and measured, or how they will be summarized, to determine whether KNF watersheds are trending toward desired conditions. It also provides no information regarding the frequency and extent of the monitoring, or whether the monitoring results will be included in an Annual Monitoring Report. AWR's comments noted:

In comparison, the 1987 KNF FP is very specific regarding which instream and biotic attributes and instream and channel parameters will be measured in order to assess stream and watershed conditions. It also specifies the minimum extent and frequency of the monitoring and timelines for monitoring and reporting results:

Monitoring item F-1: "To determine if Regional and project soil and water conservation practices are adequate to meet state standards" the following instream attributes are required to be monitored: turbidity, stream temperature, total suspended solids, and streamflow. It requires the monitoring of these attributes on a minimum of one sale per district per year or 5% to 10 % of forest sales. The monitoring of these attributes is required to occur quarterly and is reported annually. 1987 KNF FP Vol. I at IV-11.

Monitoring item F-2: "Sediment impacts on fishery habitat" includes the following monitoring items: bedload movement, suspended solids and streamflow. It requires

monitoring these attributes on the 7 streams selected for monitoring on the KNF annually and reporting the results annually.

Monitoring item F-3 requires specific tools to be used in order to monitor “the cumulative level of water yield increases and the resultant effect on stream channels.” One of the requirements is channel surveys which occur annually. The results are reported annually.

Monitoring item C-10 Fisheries – Fish habitat and spawning habitat requires: stream surveys, which includes collecting core samples, stream temperature samples, debris recruitment analysis, redd counts and embeddedness samples to be collected from the seven streams selected by the KNF for monitoring.

**REMEDY:**

- Add a Monitoring Questions and Monitoring Indicators that match the intent of Monitoring items F-1, F-2, F-3, and C-10 from the 1987 Plan.

**OBJECTION STATEMENT:** The Monitoring Program lacks a measure for determining significant reductions in soil productivity due to land management activities in any timeframe short of forever. There is a lack of any measure of the areal extent of soil damage within any geographic scale.

**REMEDY:**

- Disclose the baseline forestwide acres of soil with permanent impairment. Disclose the baseline forestwide aerial extent of soil in a detrimentally disturbed condition based upon the current FSM-2500-99-1 definition of detrimental soil damage, and add an Indicator to require annual monitoring of the change from these baseline values.

**OBJECTION STATEMENT:** There is no monitoring of the accomplishment of soil restoration.

**REMEDY:**

- Add an Indicator to require annual monitoring of the number of acres of soil restoration accomplished using active management measures.

**OBJECTION STATEMENT:** Monitoring Question MON-FLS-01. This is worded too vaguely to provide meaningful answers. The overarching goal of ESA listing is population recovery, which is omitted from this Question. It is not sufficient to measure these parameters. A measure of population numbers of grizzly bears is essential for determining attainment of recovery, as is mortality information.

**REMEDY:**

- Add an Indicator to require annual monitoring of population trends of grizzly bears.

**OBJECTION STATEMENT:** Indicator MON-FLS-01-02. These parameters must be reported annually, however a measure of population numbers of Canada lynx is essential for determining attainment of recovery, as is information on trapping mortality.

REMEDY:

- Add an Indicator to require annual monitoring of population trends of Canada lynx.

OBJECTION STATEMENT: Indicator MON-FLS-01-03. Specific to the INFISH monitoring requirements that this Indicator adopts; since at age 18 years INFISH has long ago become more than “interim” the logical requirement is that the KNF must use monitoring data to determining if project implementation results in attainment of riparian goals and objectives—deemed to be “critical” monitoring by the Forest Service in Appendix B.

Also, the bull trout redd count data must be supplemented by fish survey data for numbers of bull trout in bull trout streams. It is also important to measure population trends of brook trout in bull trout streams for hybridization reasons.

REMEDY:

- Explicitly incorporate the monitoring required under INFISH and the 1998 Bull Trout Biological Opinion.
- Add requirements for using monitoring data to determining if project implementation results in attainment of riparian goals and objectives—deemed to be “critical” monitoring by the Forest Service in Appendix B.
- Add requirements for fish survey data for population numbers of bull trout in bull trout streams, and to determine population trends, measuring annually.
- Add requirements for fish survey data to measure population trends of brook trout in bull trout streams.

OBJECTION STATEMENT: Monitoring Indicator MON-MIS-01-01. This lacks a requirement to estimate baseline population numbers, and measure population trends in response to management actions.

REMEDY:

- Add requirements for using state agency data to measure population trends of elk, measuring annually.

OBJECTION STATEMENT: Monitoring Indicator MON-MIS-01-02. Nothing is required specific to any bird species, rendering it useless as a biological indicator. Also, both a) and b) are completely redundant with above inadequate Monitoring Indicators. AWR comments stated:

What specific monitoring data will be collected to determine habitat changes and causes for changes? How frequently and from what percent of the Forest will it be collected? Will the KNF do any of the monitoring?

AWR comments stated:

The Committee of Scientists (1999), take issue with a management focus that emphasizes manipulation of habitat as the primary management methodology for insuring wildlife viability, “...in recognition that focusing only on composition, structure, and processes may miss some components of biological diversity.”

...The Committee of Scientists (1999) state:

Habitat alone cannot be used to predict wildlife populations...The presence of suitable habitat does not ensure that any particular species will be present or will reproduce. Therefore, **populations of species must also be assessed and continually monitored.**

Also, AWR comments stated:

The Committee of Scientists (1999) mentions focal species in the context of more emphases on the importance of monitoring:

The proposal is that the Forest Service monitor those species whose status allows inference to the status of other species, are indicative of the soundness of key ecological processes, or provide insights to the integrity of the overall ecosystem. This procedure is a necessary shortcut because monitoring and managing for all aspects of biodiversity is impossible.

No single species is adequate to assess compliance to biological sustainability at the scale of the national forests. Thus, several species will need to be monitored. The goal is to select a small number of focal species whose individual status and trends will collectively allow an assessment of ecological integrity.

**REMEDY:**

- Add requirements for using survey data to measure population trends of each management indicator species, measuring annually.

**OBJECTION STATEMENT: Monitoring Sensitive Species.** AWR comments stated:

How the changes in forest structure and composition be interpreted in terms of changes to sensitive species habitat? Will this be done for each sensitive species? What are the “various methods” that would be used monitor status, trends and distribution of sensitive species? How frequently will the monitoring take place? Will each sensitive species be monitored? Will the results be available in an Annual Monitoring Report? These questions must be answered in the FP FEIS.

AWR comments were in response to the following the draft LMP:

Monitoring Question: Is current management providing for sufficient habitat of sensitive species on the KNF?

Measure: Habitat changes: Map and update changes in forest composition and structure. Various methods will be used as appropriate to the species or species group to monitor status, trends and distribution.

**The KNF dropped monitoring for Sensitive species from the LMP.**

**REMEDY:**

- Add requirements for assessing population trends of each Sensitive species, measuring annually.

OBJECTION STATEMENT: Indicator MON-MIS-01-03. This relies upon a measurement system that is not explained anywhere in the LMP. It merely commits to monitoring “changes” in the parameter, measured vaguely somewhere every five years.

REMEDY:

- Add requirements for using survey data to measure population trends of invertebrate assemblage management indicator species, in streams not fully functioning, measuring annually, to determine responses to management and restoration.

OBJECTION STATEMENT: Indicator MON-WDL-01-01. Nothing is required specific to any wildlife species, rendering it useless as a biological indicator. It is also highly redundant with above inadequate Monitoring Indicators. It is also unclear how measuring “acres of habitat restored or enhanced” would be useful since the definition of restoration in the LMP and in NEPA documents is so lax that every acre treated would be considered restored or enhanced.

REMEDY:

- Replace this Indicator with Indicators requiring the use of survey data of the wildlife species featured in Forestwide Guidelines and the other wildlife species on the Sensitive Species list, to receive feedback as to the validity and efficacy of those Guidelines, and to measure population trends.

OBJECTION STATEMENT: Monitoring Question MON-AR-01. With the wide variety recreation impacts on the wide variety of recreation sites throughout Forest, there is a need for more specific monitoring and reporting.

REMEDY:

- Add a requirement to prepare a narrative-type annual report, based upon a baseline measure of identified problem sites, an explanation of the steps taken to address each problem site, and an evaluation of the effectiveness of the remedies taken.

OBJECTION STATEMENT: Monitoring Question MON-AR-02. Identification of the minimum transportation system necessary is a regulatory requirement, so the KNF must complete forestwide travel planning in 2015.

REMEDY:

- Complete the forestwide travel planning in 2015 to identify the minimum transportation system necessary.
- Use parameters like those for Indicators MON-AR-02-01 through MON-AR-02-05 to monitor “trending towards” the minimum transportation system necessary.
- Specific to Indicator MON-AR-02-03, a more important parameter to annually measure and report is the flipside—miles of roads in each maintenance level with deferred maintenance needs.

OBJECTION STATEMENT: Monitoring Question MON-AR-03. Specific to motorized recreation, once again identification of the minimum transportation system necessary is a regulatory requirement, and the KNF must complete its forestwide travel planning in 2015. Once

completed, Monitoring Indicators MON-AR-03-01 through MON-AR-03-05 will at least have a starting baseline.

**REMEDY:**

- Complete the forestwide travel planning in 2015 to identify the minimum transportation system necessary.
- Use parameters like those for Indicators MON-AR-03-01 through MON-AR-03-05 to monitor “trending towards” the minimum transportation system necessary.

**OBJECTION STATEMENT: Monitoring Question MON-WLDN-01.** The KNF has so many acres of roadless areas that deserve protection as Wilderness. The public would be well-served with a Monitoring Question and Indicators that assess wilderness conditions and trends in roadless areas.

**REMEDY:**

- In order to address a more important long-range question, add Monitoring Questions and Indicators to monitor the maintenance and attainment of wilderness characteristics affected by recreation and management in all roadless areas, especially those recommended for wilderness by the LMP.

**OBJECTION STATEMENT: Indicator MON-MIN-01-01.** Good start, however the baseline number of unreclaimed abandoned mine sites must be disclosed. Additionally, including monitoring items for water quality and soil productivity in abandoned mine sites is important for biological resources including human health and safety.

**REMEDY:**

- Disclose the baseline number of unreclaimed abandoned mine sites on the KNF.
- Include additional monitoring items to test for water quality and soil productivity in abandoned mine sites.

**OBJECTION STATEMENT: Monitoring Question MON-SOC-01.** Data on the contribution to the economy from those gathering non-timber products, hunters, anglers, and recreationists would lead to a more balanced understanding by the agency of how the Forest sustains local and regional economies.

**REMEDY:**

- Include Monitoring Questions and Indicators for permitted non-timber products.
- Include Monitoring Questions and Indicators for dollars spent by hunters, anglers, and other recreationists.

## **CONCLUSION**

Objectors Alliance for the Wild Rockies remains committed to participating in the development of ecologically sound management direction for the Kootenai National Forest.



Sincerely submitted,

A handwritten signature in black ink, appearing to read "Mike Garrity", written in a cursive style.

(for)

Michael Garrity

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