United States Department of Agriculture
Forest Service
Region 1
200 East Broadway
P. O. Box 7669
Missoula, MT 59807

File Code: 1570 (215)
Date: September 3, 1999
Route To:
Subject: Douglas-fir Beetle Project FEIS/ROD, Appeal #99-01-00-0164, Idaho Panhandle National Forests
To: Appeal Deciding Officer

This is my recommendation on disposition of the appeal filed by Jeff Juel on behalf of The Lands Council, The Ecology Center, Kootenai Environmental Alliance, Jules Gindraux, Idaho Conservation League, Western Fire Ecology Center, Forest Guardians, John Muir Project, Friends of the Clearwater, National Forest Protection Alliance, Alliance for the Wild Rockies, Kettle Range Conservation Group, Native Forest Network, American Wildlands, and Cove-Mallard Coalition protesting the Douglas-fir Beetle Project Record of Decision (ROD) signed by the Idaho Panhandle National Forests Supervisor.

The Forest Supervisor's decision adopts Alternative A (No Action) for the Steamboat and Bumblebee Watersheds, and Alternative D of the Final Environmental Impact Statement (FEIS) for all other watersheds on the Coeur d'Alene River and Priest Lake Ranger Districts.

My review was conducted pursuant to, and in accordance with, 36 CFR 215.19 to ensure the analysis and decision are in compliance with applicable laws, regulations, policy, and orders. The appeal record, including the Appellants' objections and recommended changes, has been thoroughly reviewed. Although I may not have listed each specific issue, I have considered all the issues raised in the appeal and believe they are adequately addressed below.

The Appellants allege violations of the National Environmental Policy Act (NEPA), the National Forest Management Act (NFMA), the Clean Water Act (CWA) and the Endangered Species Act (ESA). The Appellants request the decision be withdrawn or remanded. An informal meeting was held, but no resolution was reached. Interested Party comments were filed by James Riley on behalf of Intermountain Forest Industry Association; Susan Weller on behalf of the National Audubon Society; L. Michael Bogert on behalf of the Governor of Idaho; and Robert A. Maynard, Esq. on behalf of the Idaho Forest Owners Association and other private landowners.

FINDINGS

CONTENTION 1: ***The Forest Service has disregarded public involvement in forest planning process and has a history of chronic mismanagement and catering to the timber industry at the expense of other resources (see appeal attachment 1).***

Several large-scale assessments provide the broad frame work from which the Beetle Project has been developed (FEIS, pp. I-2 through I-4). Based on these assessments, the Forests developed a strategy for responding to the beetle epidemic (1998 Outbreak Incident Assessment Report). The assessments identified many areas that need attention on the landscapes; however, given the urgency, the Forest(s) directed their energies to addressing this issue. The purpose of this project is to respond to the Douglas-fir beetle outbreak by restoring vegetation and aquatic ecosystems, and utilizing timber harvest and the recovered value to accomplish the restoration objectives. This is not irresponsible management. It would be irresponsible to ignore this situation and not take the opportunity to take corrective action.

As noted in the FEIS, pp. II-1 through II-3, and the Project File (PF), this project has undergone extensive public involvement. Over 200 comments had been received prior to the publication of the Draft Environmental Impact Statement (DEIS), and over 800 comments were received on the DEIS. In addition, the Idaho Panhandle National Forests organized a meeting of scientists and Forest Health Protection personnel to discuss the current beetle outbreak, the predicted course of the outbreak, and appropriate responses (FEIS, p. II-2; PF, NP-206). It is clear that the alternatives and changes between the Draft and Final EIS were based on public comment.

In my review of the record, it is clear that the management direction is based on providing a sustainable environment by improving watershed conditions, reducing fuel accumulations and improving vegetative composition. Over half of the harvest on the Coeur d'Alene District and one-third of the Priest Lake District will be helicopter-logged, which indicates the sensitivity given to the landscape.

I find that the public involvement for this project has been extensive and the Forest has appropriately responded to concerns.

CONTENTION 2: ***The decision to choose alternative D is not supported by the record and is not consistent with the stated "purpose and need."***

Appellants contend that the "entire basis for a distinction between Alternatives B (the Proposed Action) and Alternative D (the Selected Action) has not been established in the DEIS, FEIS, and ROD." The Appellants further contend that the Selected Action does not clearly indicate which units will and will not be logged, in violation of NEPA.

The NEPA Implementing Regulations provide the guidance for application of the law. Included in this guidance is the underlying purpose of NEPA. The regulations state at 1500.1 (b), "NEPA procedures must ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken." At 1500.1(c), it states, "The NEPA process is intended to help public officials make decisions that are based on understanding of the environmental consequences, and take actions that protect, restore, and enhance the environment."

The FEIS, p. I-1, describes the situation at hand. It states, "Beetles are now emerging from trees infested in 1998 and are attacking additional live, standing Douglas-fir trees and killing them. Area entomologists estimate that mortality occurring in 1999 and subsequent years of the outbreak will equal that which occurred in 1997 and 1998. Douglas-fir beetles, regardless of how many beetles are in an area, prefer big trees because they provide the best conditions to complete their life cycle. The largest Douglas-fir are most susceptible to attack and mortality."

Based on past experiences and research, we understand the life cycles and needs of the Douglas-fir bark beetle. We understand the type and condition of stands normally affected. Through the Outbreak Incident Report, stands were modeled to determine the level of risk they had of bark beetle attack based on their stand characteristics (PF, doc. NP_161, p. 20). The Report includes maps showing short-term risk, long-term hazard, and the level of hazard (PF, doc. NP_162).

Alternative B, the proposed action, is designed to treat only the units which include known 1998 beetle infestations (FEIS, p. II-9). Alternative D takes a more adaptive approach and would treat the same stands as in Alternative B, although some would have a different prescription because the probability of additional mortality was high. Alternative D also would treat additional high hazard stands if they become infested. The FEIS, p. II-17, describes the differences between Alternatives B and D. The following table describes the acres in Alternative D that are dependent on the beetle infestation spreading.

Area	Type of Harvest	Total Acres Proposed in Alternative D	Acres of Alt D Dependent on beetle infestation spreading
Coeur d'Alene	Regeneration	1,176	325
Priest Lake	Regeneration	4,054	580
Coeur d'Alene	Selective Harvest	11,047	1,665
Priest Lake	Selective Harvest	3,429	1,525
Totals		19,706	4,095

Approximately 20 percent of the acres identified in the selected action are dependent upon future mortality. The reason for identifying and evaluating treatment in these areas is because of the high probability that additional mortality will occur in these stands and to ensure that this information was before the public and deciding official before a decision was made. The FEIS fully evaluated the effects of this additional harvest, if it occurs. It also fully evaluated the effects of Alternative B.

I find, based on the high probability that additional mortality will occur, that it is reasonable and within NEPA to evaluate and select an alternative which is adaptive to changing conditions. The effects of Alternative D have been fully analyzed, as well as the effects of Alternative B. As noted in the FEIS, p. II-16, "If the total future infestation spread is less than predicted, then the resulting treatments' corresponding effects would be proportionally less, and closer to those predicted in Alternative B."

I find that the additional harvest proposed in Alternative D is consistent with the Purpose and Need. If mortality occurs in these stands, then the need for treatment will be the same as it is in Alternative B.

Appellants do point out a need for clarification. They state the ROD indicates that the Bumblebee and Steamboat Creek aspects of the FEIS's Alternative D were <u>not</u> selected, and that the intent is clear by the text and the maps; however, the cutting units for these drainages are still listed in the ROD Appendix A, "Site Specific Road and Unit Information." The Appellants are correct in this finding. Therefore, I recommend the Forest Supervisor ensure no harvest occurs in the Bumblebee and Steamboat Watersheds under this decision.

CONTENTION 3: ***The IPNF continues to disregard or downplay the issue of noxious weeds. DFB project would increase spread of noxious weeds, in violation of NEPA and NFMA.***

Appellants contend the project violates NEPA, 40 CFR 1500.2(f) ["restore and enhance...avoid or minimize effects"], because it fails to consider stronger mitigation measures (appeal p. 19). They also contend the FEIS and ROD fail to "State whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not." (appeal, p. 19) in violation of NEPA 40 CFR 1505.2(c). Appellants further contend the FEIS and ROD violate NFMA (36 CFR 219.26; 219.27(a)(5); 219.27(g)) [provisions for diversity] by increasing the extent of undesirable weeds (appeal, p. 20).

As noted in the FEIS, pp. III-107, timber harvest, road construction, reconstruction, reconditioning, obliteration, fuel break construction, fireline construction and prescribed fire all provide opportunities for increasing weed species in the project area. The FEIS, p. II-29, describes Features Common to All Action Alternatives in regards to noxious weed management. This section states that weed prevention strategies for the Coeur d'Alene and Priest Lake Districts would be applied as described in their associated Environmental Impact Statements. These strategies apply biological, manual, cultural and chemical controls to limit or eradicate weed species (PF, doc. NW_11 and_12).

The FEIS also includes mitigation measures (p. II-39) for noxious weeds. These include measures to (1) treat existing infestations; (2) minimize the weed dispersal from off-road equipment by pre-washing vehicles; (3) minimize weed dispersal on temporary roads, skid trails and other areas of ground disturbance by seeding disturbed sites; (4) minimize weed dispersal from mitigation applied to reduce sediment (use of straw bales) by requiring weed free hay; and (5) reduce infestations on existing roads that would be obliterated by pretreating sites. The FEIS discloses that the effectiveness of these treatments is expected to be moderate in preventing noxious weed establishment and reducing the spread of noxious weeds, especially new invaders.

The FEIS, p. III-108, describes that even under No Action noxious weeds could increase. The FEIS, p. III-836 describes "Adverse Effects Which Cannot Be Avoided." It discloses that, "Any activity has a risk of introducing and spreading weeds. Vehicle use and travel associated with timber harvesting, road construction and other actions will increase the risk of spread. Mitigation measures such as washing vehicles and closure of temporary roads will help reduce, but not eliminate, the risk of weed spread due to proposed activities."

Appellants contend that Alternative G should have been selected because of its reduced effects from noxious weeds. In my review, there is an obvious need for action; and the action prescribed by the Forest Supervisor is a reasonable course to reduce fuel loadings and potential for catastrophic wildfires, especially adjacent to private lands. In addition, this course of action will provide money for much needed restoration work, including the reclamation of roads which will further reduce the spread of noxious weeds.

I find that the Forest Supervisor took a hard look at the potential for increasing noxious weeds with the action alternatives. The Forest Supervisor applied appropriate mitigation to reduce the effects of noxious weeds on species diversity to the extent practicable, while still meeting overall multiple-use objectives. I find the analysis and decision is consistent with the requirements of NEPA and NFMA.

CONTENTION 4: ***The FEIS is based upon an inadequate and destructive fire policy and includes a faulty analysis of fire risk.***

4a. The FEIS failed to incorporate essential information from the Federal Wildland Fire Management Policy and Program Review.

The FEIS and PF contain documentation that the Federal Wildlands Fire Management Policy and Program Review was considered and incorporated into the analysis (FEIS, pp. III-220, 542, and 766; and PF, doc. REF_F/F_51_52). I find that all substantive comments were responded to (FEIS, Appendix A, pp. A-79-94) and in a manner consistent with NEPA (40 CFR 1503.4).

4b. The beetle project fails to analyze the impacts of continued fire suppression in the action alternatives.

The analysis completed for Alternative A (FEIS, pp. III-227-229) shows the effects of successional trends on potential fire intensities, as well as the effects of the beetle infestation on those trends. These effects are based on continued fire suppression. These effects are applicable to the untreated acres in the action alternatives. The action alternative analysis discloses effects of different management scenarios on successional trends and resulting potential fire intensities (FEIS, pp. III-229-233, and 551-555). Table III-84 (p. III-32) and Table 210 (p. III-554) disclose acreage of beetle infestation that is treated by each alternative and the acreage of beetle infestation that is not treated. Tables III-85 and 211 disclose acreage of treatment method. These tables enable the reviewer to determine changes in successional trends over the entire area for acreages not treated, as well as treated, and compare those changes to

successional trends in areas not infested with bark beetles; therefore the effects of continued fire suppression are analyzed for all alternatives.

4c. The beetle project increases both short- and long-term fire intensity.

On individual sites short-or long-term fire intensity increases. In regeneration units the short-term fire intensity increases because the fine fuel level increases (until prescribed burning is completed) due to the harvest residue, but long-term intensity is decreased on these units. In salvage units long-term fire intensity increases, but to no greater extent than untreated stands with a beetle infestation. Figures III-5 (FEIS, p. III-228), III-6 (p. III-231), III-12 (p. III-550), and III-13 (p. III-553) show how bark beetle accelerates successional trends, and FEIS pp. III-226 and III-548 address effects of successional changes on fire intensity. Tables III-81 (p. III-227) and III-207 (p. III-549), with footnotes, show fire behavior changes that could be expected with these successional changes and how that would affect fire fighting efforts. Cumulatively across the project area the fire intensity would decrease due to the creation of fuel breaks (i.e., regeneration areas) and reduction of total available fuels (by removal of beetle-killed trees).

Project File references (REF-F/F-9, 10) document the use of the Fire Fuels Extension of the Forest Vegetation Simulation model to make fire projections. They also discuss that the proper use of model results is to compare trends between alternatives and not as absolute values (i.e., flame lengths). The results for all stands modeled are found in PF, doc. FF_5. Alternative G was looked at across the entire area, where treatment with fire (without harvest) was appropriate (p. A-77). FEIS, p. II-25, shows the required conditions for inclusion in Alternative G. Acres treated under Alternative G are summarized on p. II-28. The best scientific information available was used in an appropriate and professional manner.

4d. The beetle project uses the least efficient methods for reducing natural fuels.

Reduction of natural fuels is accomplished through timber removal and down fuel treatments. The last paragraph on FEIS, p. III-231, describes table III-84 and p. III-554 describes Table III-210. Values in these tables are treated and untreated acres of beetle infestation, after implementation of action alternatives. It is clear that natural fuel levels are greatly reduced across the analysis areas. Project File, doc. NP-59, discloses an alternative developed, but later dropped, that would have treated nearly all beetle-infested areas with prescribed fire. It includes a cost analysis. FEIS, p. I-58, discusses that alternative and why it was eliminated.

4e. The beetle project uses the least efficient methods for reducing activity fuels (logging slash).

Comments on the DEIS regarding fuel treatments were responded to (FEIS, Appendix A, pp. A-73-75, 77, and 78). Responses to those comments indicate that the proposed action would not likely reduce the incidence of wildfire, but the potential of severe fire can be reduced. References cited suggest that fire intensity can be reduced through active forest health restoration (PF, docs. REF_F/F_13, 16, and 19). Alternative D fuel treatment acres are summarized on FEIS, p. II-19. The ability of the Forests to manage the burn program proposed for this project is discussed in the FEIS, p. A-83. Accomplishment of this proposed burn program is assured by looking at past performance as documented in the PF (REF-F/F-23). The effects of the various activity fuel treatment methods are disclosed.

4f. Private interface fuel reduction is discounted in decision.

Full consideration of the private interface fuel reduction concern was given and clearly documented. Alternative F (FEIS, pp. II-22-26) was designed to concentrate treatment activities in the urban-wildland interface. Public comments on this issue were responded to in Appendix A (pp. A-73-76). Additional fuel treatment was incorporated into Alternative D in areas adjacent to private lands (FEIS, p. III-230). The effects of actions in the interface are disclosed on pp. III-230-232 and III-552-554. I have reviewed

the maps of the proposed units, juxtaposed with private land and juxtaposed with beetle infestation. Where beetle infestation occurs near private land, treatments are proposed.

4g. The FEIS privileges personal opinion over scientific facts regarding the role of large-diameter fuels in fire spread.

Comments on this issue were responded to in Appendix A (p. A-86). Supporting references are in the PF (docs. F/F_13, 25, and 28). Fuel characteristics that contribute to fire spread are disclosed (FEIS, pp. III-225, 227-228, and 548-551; and PF, doc. F/F_5). The FEIS quote (p. III-228) cited by the Appellants as "personal opinion" is a personal communication from Elizabeth Reinhardt, a noted Rocky Mountain Research Station research forester from the Fire Sciences Lab. It reflects her professional opinion concerning heavy fuels, severity and resistance to control based on her scientific research as documented in the PF (FF-9, 33, and 41). She was also a coauthor on the FFE-FVE model. I find that scientific facts are behind the professional opinion.

4h. The decisionmaker misinterpreted the intent of Congress regarding the use of prescribed burning to reduce hazardous fuel loads.

Prior comments on this point were responded to in Appendix A (p. A-74). The 1999 Appropriations Bill, Title II -- Related Agencies, Department of Agriculture, Forest Service, section on WILDLAND FIRE MANAGEMENT reads: "The committees direct that the responsible line officers see to it that prescribed burns on land classified in the national forest land management plan as timber base will not consume commercial wood products that could be removed in a commercially viable manner." Commercial viability is determined through species composition (FEIS, pp. III-221-223, and 543-546), and level of harvest, as determined by mortality level due to either beetles or fire susceptibility (FEIS, pp. III-7-13, 366-374). Alternative G does include some felling and lopping of commercial wood (FEIS, p. II-27). Scientific information was used in a sound professional manner.

4i. The decisionmakers misinterpret findings by the Government Accounting Office regarding western national forests.

The Government Accounting Office (GAO) report (PF, doc. F/F_53 and 54) is addressed (FEIS, pp. III-223, and 545). The discussion on the affected environment (FEIS, pp. III-220-224 and 542-546) demonstrates how the IPNF fits with the GAO findings. I have determined that professional and scientific integrity are maintained.

Summary: Based on my review of the ROD, FEIS and PF, I find that the analysis for fire and fuels meets all NEPA requirements. The analysis is based on scientific information that was used in a professionally sound manner. The effects of the alternatives are fully disclosed and comments received fully responded to. The Forest Supervisor took a hard look at the effects of the alternatives and made a reasoned decision.

CONTENTION 5: ***The ROD and FEIS violate Forest Plan standards for protection of soil resources.***

5a. It is a violation of standards to be proposing to damage more soils before the Forest Service can demonstrate genuine reductions in detrimental soil conditions." *(p. 33)* ***"For those units presently in violation, the FEIS first proposes more damage, with mitigation later and only where feasible."***

The Forest Service Soil Management Handbook, 2509-18-91-1, states at 2.2 that, "Soil quality standards should be established in the Forest Plan, supplement to the Forest Service Manual, project plan or in supplements to this handbook." The Idaho Panhandle Forest Plan set standards regarding Soils, (FP, p.

II-32). It states, "Soil disturbing management practices will strive to maintain at least 80 percent of the activity area in a condition of acceptable productivity potential for trees and other managed vegetation."

The FEIS, p. III-178, describes the existing condition for soils on the Coeur d'Alene District. It states, "13 units (254 acres), which were harvested prior to the development of the 1987 Forest Plan, presently may not meet Forest Plan soil quality standards and 24 units (1,231 acres) are marginal." The FEIS, p. III-508, describes the existing condition for soils on the Priest Lake District. It states, "twenty-two units (438 acres) which were harvested prior to the development of the 1987 Forest Plan presently may not meet Forest Plan soil quality standards and seventeen units (268 acres) are marginal." It goes on to state for Alternative D, pp. III-182 and III-514, that all of the proposed units that may not meet Forest Plan soil quality standards and the marginal units would follow the soil mitigation measures common to all action alternatives listed in Chapter 2. Upon implementation of the soil mitigation measures, these units would either maintain or reduce existing detrimental soil disturbance levels.

The FEIS identifies specific mitigation, (FEIS, p. II-36) to minimize the effects of the proposed harvest and maintain existing soil conditions (not worsen them). It states that in units with more than 15 percent detrimentally disturbed soils, only existing skid trails would be used, and on units with 10 to 15 percent detrimentally disturbed soils, where terrain is conducive, space trails 140 feet apart, except where converging. It estimates the effectiveness of this mitigation to be high, because less ground is impacted by heavy equipment. In addition, it includes further mitigation to try and reduce the effects of past management. On p. II-37, it states, "On proposed sites that presently exceed Forest Plan standards, where feasible, deep subsoiling with a winged subsoiler will be used on all non-dedicated landings and skid trails to decrease soil compaction, promote revegetation and move these compacted sites back within Forest Plan standards."

As noted above, the Forest Plan standard is to **strive** (emphasis added) to maintain 80 percent of the activity area in a condition of acceptable productivity. Because of practices completed prior to the Forest Plan, this condition is not met on all units. The proposed activities would maintain or reduce the area of detrimental impact; therefore, I find that the project is consistent with the Forest Plan and Handbook guidance. I find the Forest took a hard look at the effects of the proposed activities on soils and has applied the appropriate level of mitigation to maintain or improve site productivity.

5b. The failure to disclose all the areas of detrimental soil conditions in the project areas and their cumulative effects is a violation of NEPA.

The Region 1 Supplement to Forest Service Soil Management Handbook, 2509.18-94, section 2.05, defines the area to be analyzed as an "activity area." The activity area is defined as, "A land area impacted by a management activity to which soil quality standards are applied." The FEIS evaluated the direct, indirect and cumulative effects to the activity areas (areas for which timber harvest is proposed) and determined that cumulatively the soil standards would be maintained or reduced based on design criteria and mitigation applied (FEIS, pp. III-185 and III-516).

CONTENTION 6: ***Failure to consider alternatives rendered the DEIS so inadequate as to preclude meaningful analysis.***

The Appellants contend that the Forest Service was required to develop a range of alternatives consistent with the range of alternatives under the basin-wide EISs for Interior Columbia Basin Ecosystem Management Project (ICBEMP). Since the EISs have not been approved, it is premature to develop an alternative that would meet whatever the requirements would be in the those EISs.

NEPA requires a reasonable range of alternatives be considered that meet the purpose and need, including No Action. The purpose of the project is to "respond to the Douglas-fir beetle outbreak by

restoring vegetation and aquatic ecosystems utilizing timber harvest and the recovered value to accomplish the restoration objectives" (FEIS, p. I-9).

The DEIS evaluated six alternatives in detail, and considered but eliminated detailed consideration of an additional six alternatives. These alternatives were developed based on public comment and the key issues that were identified. The key issues that were used to develop the focus and specific activities of the proposed action include: vegetation restoration and level of timber harvest, water resources and aquatic habitat, road management, activities in old growth and fuel loadings.

Based on public comment on the DEIS, the FEIS added Alternative G and considered but eliminated detailed consideration of three additional alternatives. Alternative G includes road work for aquatic and wildlife improvements, and the use of prescribed fire and non-commercial vegetation treatments to achieve the vegetation restoration goals. I find that the FEIS considered a reasonable range of alternatives that meet the purpose and need to varying degrees.

Appellants also contend that the decisionmaker refused to develop any restoration-only alternative and issued a DEIS with all action alternatives premised on high levels of commercial logging. The purpose and need is premised on utilizing timber harvest to meet resource objectives; therefore, it is reasonable that an alternative not be considered that does not meet this purpose. In addition, the restoration alternative is adequately addressed in the DEIS under the No Action alternative.

Alternative G was developed based on Response to Comments on the DEIS. Alternative G would complete restoration activities without the use of commercial timber harvest. It would complete watershed restoration work through appropriated dollars and also complete vegetation restoration goals through the use of prescribed fire and non-commercial vegetation treatments. The NEPA Implementing Regulations, at 40 CFR 1503.4, state that we should consider comments and respond in a possible number of ways, including developing and evaluating alternatives not previously given serious consideration. This is exactly what the Forest did. The regulations discuss when a supplemental Draft or Final EIS is required at 40 CFR 1502.9. It states that supplements shall be prepared if there are (a) substantial changes to the proposed action; (b) there are significant new information; (c) if it feels the purposes of the Act would be furthered.

In my review of the record, I find that the addition of Alternative G was reasonable based on public comment, and that it was within the range of alternatives previously evaluated in the DEIS. I find that the Forest met the NEPA requirements, and that providing further comment on the additional alternative would not further the purposes of the Act.

CONTENTION 7: ***The selection of alternatives was prejudiced by committing resources before issuing the Record of Decision (ROD).***

Marking and field designations of proposed activities during the planning phase of a project is not in violation of NEPA (40 CFR 1506.1 - Limitation on actions during the NEPA process). Identification in the field allows for accurate field measurements and also allows the interdisciplinary team members, interest groups, and the general public to better visualize and understand the proposed project before any action actually occurs. The pre-decisional marking and cruising on the project did not have any adverse environmental impact, did not limit the choice of reasonable alternatives, is not a major federal action which may significantly affect the quality of the human environment, and did not prejudice the ultimate decision on the project. These activities do not constitute an irreversible or irretrievable resource commitment, nor can they be considered irreparable harm.

CONTENTION 8: ***Both the Final and Draft EISs erred in not designing and fully analyzing an alternative featuring watershed restoration only.***

Appellants contend that a restoration only alternative should have been selected and that increased risk of wildfire is just a myth. I have thoroughly reviewed the Draft and Final EIS, the Incident Outbreak Report, public comments, the ROD and Interested Party comments. I find there is significant supporting evidence that the fire risk is real and the need for action is justified. As noted in the Interested Party comments submitted by Robert A. Maynard on behalf of adjacent landowners, "The Project EIS and supporting record document the extreme and extensive risk of catastrophic wildfire and deteriorating forest conditions in the project area---e.g. large acreages of dead and dying timber and dense stands of species vulnerable to fire, insect, and disease attack...These conditions threaten adjacent state and private forests, lands, homes, properties, and lives of firefighters and citizens of North Idaho." The ROD, p. 15, states, "Units that were within one-quarter mile of private ownership were prioritized for intensive fuels treatment in Alternative D. It reduces fire intensities in the event of wildfires by removing the dead trees that would otherwise add fuels to the already high fuel amounts left by the icestorm of 1996/1997 and decades of fuel accumulations."

In addition, approval of this project will allow the Forest to continue their regular appropriated watershed restoration efforts in higher priority watersheds and accomplish the proposed restoration work in the beetle infested watersheds as well. The ROD, p. 24, states, "Alternative G would require a tenfold increase in appropriated watershed restoration funds. This is highly improbable and in the unlikely event that the funding became available, these project areas are not the highest priority on the Forest for aquatic restoration."

I find that the alternatives considered were appropriate and met the requirements of NEPA. I find the decision is supported by the record and it would be irresponsible for the agency to select a restoration only alternative.

CONTENTION 9: ***DFB FEIS analysis of alternative G is biased and fails to comply with NEPA.***

9a. Watershed restoration design for alternative G is not logical.

Appellants contend that watershed restoration in Alternative G should have focused in different areas than what was considered. Alternative G was developed by selecting watershed restoration efforts from Alternative D and F. Appellants contend that entirely different areas should have been considered.

In my review, I find that it was reasonable and logical to limit the scope of Alternative G to those areas identified in Alternatives D and F. This allowed a meaningful comparison of alternatives. Watershed restoration work can and will still occur in other high priority watersheds, as is noted in the ROD, p. 24.

9b. Prescribed fire aspects of alternative G are not based upon good science.

The Forest evaluated a prescribed fire alternative, but did not evaluate it in detail (FEIS, p. II-58). This alternative would have treated approximately 20,000 acres by prescribed burning. The ID team considered this alternative but dismissed it for a variety of reasons including the potential to increase the bark beetle infestation; the potential of the prescribed burns to burn too hot and volatilize nutrients; the potential to not meet visual concerns of adjacent communities; high risk of escaped fires, etc. (PF, doc. NP_59).

The prescribed fire aspects of Alternative G were developed by utilizing Alternatives D and F as a basis. Vegetative treatments were included where prescribed fire and other non-commercial treatments could feasibly be used to treat excess fuel loadings and trend those stands toward desired conditions. Only those acres were included where treatments could meet these objectives. This alternative focused on those stands that had a shade-intolerant species component (those trees that can withstand fire); stands

without excessive snags (for firefighter safety); and stands with acceptable fuel loadings so that the fire could be controlled.

Although there may be other people who believe we can successfully prescribe burn in different conditions, based on my review of the record, I disagree. Safety for our employees is a critical factor. We have an excellent understanding of fire behavior based on fuel conditions. This is evidenced in the record and supporting references. I find that Alternative G is a reasonable alternative and one that could be accomplished successfully to meet our resource objectives in a safe manner.

9c. Failure to include planting of early seral species as part of alternative G biases the comparison of alternatives and the decision.

Appellants contend more prescribed burning should have been included, with follow-up reforestation, in Alternative G. Based on my review above, I have determined that the level of prescribed burning that is included in Alternative G is appropriate given existing conditions. I find that reforestation was not necessary to include in this alternative.

The Forest developed Alternative G based on public comments, existing conditions, and their scientific knowledge of fire responses. I find that the Forest appropriately developed Alternative G based on their extensive expertise. NEPA does not require the agency to develop "false" alternatives, or ones that cannot be implemented. As stated before, Alternative G can be implemented without risk to our agency's employees.

CONTENTION 10: ***A revised or supplemental EIS is required to permit public review and comment on the full range of alternatives.***

See response to Contention 6.

CONTENTION 11: ***The proposed action manipulates vegetative cover primarily for greatest dollar return and timber output in violation of NFMA.***

Economic and financial factors were considered in the decision. Capturing economic value of dead and deteriorating Douglas-fir trees was one aspect of the purpose and need for action. On the Coeur d'Alene River Ranger District, the selected alternative had a slightly higher net return ($2,770,000) as compared to the next highest value ($2,358,000 in Alternative B). On the Priest Lake Ranger District the selected alternative also had a higher net return ($8,936,000) as compared to the next highest value ($6,418,000 in Alternative B).

Although the selected alternative does have the highest net return, it was chosen not because it produced the greatest amount of timber harvest or financial return, but rather it best responded to the purpose and need for action, best achieved the desired condition described in the Forest Plan and the Forest Service's Natural Resource agenda, and best addressed the key issues for the project. The need for vegetative management is clearly documented in the ROD and the FEIS. The need is not just related to financial return, but also relates to restoration of seral plant communities, reduction of fuel loads and watershed restoration. The selected alternative offers the greatest opportunity to capture the value of dead and dying trees, restore vegetative communities, reduce fuel loads and obtain a funding source for needed watershed restoration work. I have determined the project is in compliance with NFMA.

CONTENTION 12: ***The EIS contrived an unreasonably narrow purpose and need in order to circumvent the requirement to consider other restoration alternatives.***

The Agency Deciding Officer has the discretion to determine the Purpose and Need for a project proposal. The NEPA implementing regulations state the NEPA document shall "briefly specify the

underlying purpose and need to which the agency is responding." The FEIS, Chapter I, and supporting information found in the Incident Outbreak Report clearly support the stated Purpose and Need. In addition, the Purpose and Need relate to the Forest-wide management direction contained in the Forest Plan.

CONTENTION 13: ***The FEIS's vegetation analyses are inadequate and biased toward logging.***

13a. The Forest Service failed to disclose that the project will disrupt successional processes by logging moist site stands.

The FEIS discloses proposed management in moist sites. Moist forest types were defined as stands consisting primarily of western redcedar, western hemlock, western larch, grand fir, western white pine, and lodgepole pine. They account for 86 percent of the beetle-affected and high-hazard areas on the Priest Lake Ranger District. On the Coeur d'Alene River Ranger District, moist habitat type groups account for 79 percent of the mortality-impacted area.

The Appellants suggest that successional processes will be impacted. I do find that successional process will be impacted, but that this change is desired and needed. Harvesting in areas in which ponderosa pine or western larch are an important component will improve stand conditions as competition between Douglas-fir and these seral species will be reduced. To do nothing would be to perpetuate a successional process that favors shade-tolerant species, whose cover distribution is above levels needed to maintain forest health and vegetative diversity. Over the cumulative project area, which includes all three project areas, there would be over a 1-percent change toward desired species composition in the selected alternative. I find that this change is an important first step in restoring the resiliency and health of our forests. This vegetative restoration process is fully supported by the objectives of the Natural Resource Agenda which is to restore healthy, thriving forest ecosystems.

13b. The Forest Service mislead the public about historic conditions.

The Appellants contend that the Forest Service has misused historical information to present a false picture of what stand conditions existed across the landscape. Specifically, that the Forest Service has inaccurately characterized the Lieberg historical reports.

The Lieberg reports were only one source of information that the beetle project used to determine historic and desired vegetative conditions. In addition to the historical sources, a "geographical assessment" was used to determine measurable levels of change in vegetation over the last century. In addition to the geographical assessments, the project area was placed within a larger context and compared to findings in the Interior Columbia Basin Ecosystem Management Project (ICBEMP) and the Northern Region Assessment (USDA, 1999). The findings for forest composition are consistent with these reports. Although the specific inferences from information presented in the Lieberg historical reports could be debated, we find that the historical trends are quite clear and well documented. These findings include:

? There has been a substantial reduction in the percent of the landscape composed of early seral tree species such as western white pine, ponderosa pine, larch and whitebark pine.

? There has been a major shift in forest structure from old growth to medium/immature and large mature size class stands.

? Landscape patterns have been modified by timber harvest and the exclusion of fire. Current landscape patterns are more uniform.

An alternative was selected which addresses these findings. Specifically, it moves the landscape toward a desired future condition of stands with more seral species. The selected alternative addresses the shift

in species composition documented in the FEIS, the Geographical Assessments for the project areas, the ICBEMP and the Northern Region Overview.

13c. FEIS's historic range of variability failed to consider new information.

The new information provided by the Appellants was not submitted prior to the ROD. As such it was not addressed in the Response to Comments on the DEIS.

In addition, I find that the references submitted do not necessarily refute the findings presented in the ROD or the FEIS and do not create a controversy or a dispute over scientific observations. For example, the Appellants' references include suggestions that "reintroducing fire on a large scale is the most effective way to restore forest health" [Much, et. al]. The ROD includes prescribed fire as a tool to help restore vegetative conditions including 1,746 acres on the Coeur d'Alene River Ranger District and 3,705 acres on the Priest River Ranger District. The Appellants' references also "question how well presettlement conditions are understood" and raise doubt "about the validity of the narrow window of time . . . to assess the natural range of variability." I agree that assessing historical conditions is a difficult, scientific process. The process used in the FEIS did not rely on a "snapshot" approach, but rather a well-documented assessment of historical conditions and trends. The findings in the geographical assessments are further supported by findings in the ICBEMP and the Northern Region Overview. The historic range of variability was used to help define desired future conditions and select actions to achieve those conditions.

13d. The Forest Service failed to disclose stand conversion is taking place.

Stand conversion related both to species composition and structural/size class is well documented throughout the FEIS. With respect to structural/size class there will be no changes beyond that which will occur as a result of the Douglas-fir beetle infestation. With respect to species composition changes, cumulatively there will be a 1-percent increase in seral species composition. As noted before, I find that this change is an important first step in restoring the resiliency and health of our forests.

The vegetative restoration will be accomplished through both regeneration and selective harvest. On the Coeur d'Alene River Ranger District approximately 12,019 acres will be harvested, including 9,765 of selective harvest, 1,161 of improvement harvest and thinning and 1,093 or regeneration harvest. (Note this is different acreage than that displayed on p. 3, because p. 3 includes harvest in Steamboat and Bumblebee Watersheds, which was dropped in the Decision). On the Priest Lake Ranger District, approximately 7,483 acres would be harvested including 3,429 acres of selective harvest and 4,054 of regeneration harvest. Units, acres, location and harvest prescriptions are clearly displayed in tables and appendices to the ROD and FEIS.

Where stands lack an existing seral component and where the majority of overstory trees have been killed by the Douglas-fir beetle, regeneration is necessary to improve forest composition and forest health. To not regenerate would be to perpetuate a condition of shade-tolerant regeneration. Where stands contained an adequate amount of overstory seral species, selective harvest was designated as the preferred harvest treatment.

CONTENTION 14: ***Salvage alternatives include excessive logging of live green trees.***

14a. (Paraphrased) ***The Appellants contend that there is a "hidden agenda" to sell as many healthy or surviving trees as the Forest Service can get away with.***

The FEIS, Chapter II, pp. 3-4, describes the beetle outbreak and explains the fact that there is a large number of "infested" trees that are still green but will certainly die. The FEIS and ROD is clear regarding the desire to treat these infested areas and also explains that if areas expected to become

infested, do not actually become infested, then those areas will not be treated (ROD, p. 6, Summary pp. 16-17). Throughout the FEIS and ROD it is clear that the target stands for treatment are those that have dead or dying trees and/or trees infested with beetles.

14b. The Appellants contend that the FEIS did not analyze the effects of green tree removal, particularly in the analysis of water quality and therefore fisheries.

The FEIS, Chapter III, pp. 49-79, describes the watershed environmental effects. This description includes the treatment of all acres identified in Alternative D. This includes those acres that may become infested as identified in the analysis.

14c. The Appellants contend that the marking guidelines would require scientific training to apply and that any tree could be harvested using the guideline.

The marking guidelines referred to are quite specific. The guides give clear direction regarding different treatments. Salvage, improvement harvest, thinning and regeneration harvests are all clearly defined and described (see letter and attachments sent to The Ecology Center dated July 23, 1999). The guides also clearly describe the types of trees to be marked according to the treatment prescribed for that individual unit. Given these specific criteria and guidelines, the implementation of these guidelines are well within the capabilities of the field crews involved. Certified silviculturists will monitor the layout and marking of units to ensure they meet the intent of their prescriptions. They will do "spot-checks" throughout the marking process to ensure the prescriptions are being met.

CONTENTION 15: ***Attempting to reduce risk of wildfire burning private property by focusing on "fuel treatments" on National Forest land is inefficient, misguided, and ignores the best scientific information.***

Appellants contend that there exists absolutely nothing in the PFs which shows the Forest Service has spent any resources educating homeowners in the wildland/urban interface on how to best protect their homes from wildfire.

The Agency has worked with the Bureau of Land Management and the State Foresters to develop an education campaign for how home owners can better protect their homes. This cooperative effort is a separate effort from the Douglas-fir Beetle Project which has a separate purpose and need. This project is not an end-all. It is a piece of a multi-faceted approach to sustain our ecosystems and restore the aquatic environment. I find that this project has included the appropriate scope of analysis and alternatives and is consistent with the requirements of NEPA.

CONTENTION 16: ***The IPNF's failure to comply with forest plan monitoring requirements is an ongoing violation of NFMA and has led to an uninformed decision with the DFB Project ROD.***

16a. Forest Plan Monitoring Item D-1 ORV use.

The FEIS evaluated the effects of ORV use in a variety of areas. As noted in Contentions 3, 7, 17-22 and 29, cumulative effects have been appropriately addressed.

Several of the Appellants' comments are in regard to the Access Management Environmental Assessment (AMEA) that is currently in progress on the Forest. This assessment is outside the scope of this FEIS. It has been considered as reasonably foreseeable to the degree that it needs to. A decision for the AMEA has not yet been made. The AMEA will have to comply with existing laws and regulations once it is approved.

16b. Forest Plan Monitoring Item F-3 (Woodland Caribou recovery).

The FEIS, p. III-570, and Priest River Biological Assessment, p. 23 (PF, doc. NP_61), state, "There would be no direct effects to caribou or its habitat because the proposed actions are located outside the designated recovery area. The possible displacement of winter recreation activities may increase use within the recovery area. However, this use would be minor and temporary, and would not increase the displacement effect beyond that which is already occurring. Consequently, habitat effectiveness would not change from existing condition. No other cumulative effects are expected. For these reasons, the Douglas-fir beetle project may effect - not likely to adversely affect woodland caribou or its habitat." The U.S. Fish and Wildlife Service concurred with this finding and analysis May 21, 1999 (PF, doc. NP_64).

I find that the FEIS and Biological Assessment have adequately evaluated the effects of the Douglas-fir Beetle project on the woodland caribou.

CONTENTION 17: ***The failure to adequately analyze cumulative impacts on wildlife results in a violation of NFMA and NEPA.***

17a. Failure to design conservation strategies for all species of concern.

The issue of conservation strategies was not raised during scoping process. However, upon review of the EIS and PF, I have determined that direction from Forest Service Manual (FSM) 2621.2 has been met. Forest Service Manual 2621.2 goes on to state the following, "to devise conservation strategies, first conduct biological assessments of identified sensitive species" and then "display findings under the various management alternatives considered in the plan or project (including the No-Action alternative)." A biological assessment was done for all species of concern and the findings displayed under each alternative considered. These assessments along with the various mitigation measures constitute a strategy to assure the conservation of the species of concern. Regional-level Conservation Assessments and Strategies for several sensitive species (i.e., harlequin duck, Coeur D'Alene salamander) are completed and, where deemed relevant, were used in the wildlife analysis for this project (FEIS, pp. III-265 and 587). Recovery plans for species listed under the Endangered Species Act were also used.

17b. IPNF has failed to undertake genuine population viability analyses.

The effects of the project on sensitive species were addressed and determinations made that the selected alternative would have no impact, or may impact individuals or habitat, but would not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species. The analysis for wildlife species is based on the species habitat needs. Analysis results disclose that appropriate levels of habitat will be maintained. The issue of population viability analysis was an argument presented in litigation regarding the Upper Sunday Timber Sales on the Kootenai National Forest, Montana. On July 6, 1995, Judges Charles C. Lovell of the U.S. District Court of Montana ruled "that the Forest Service did conduct a reasonably thorough analysis of the cumulative impacts of the project and an adequate analysis of population viability issues as required by regulation." The finding continues with, "Neither is it plainly erroneous or inconsistent with regulation for the Forest Service to strive to maintain viable populations of species by focusing on the critical habitat requirements of sensitive, threatened, and endangered species within and without the Decision Area." On July 3, 1996, the 9th Circuit Court of Appeals affirmed the District Court Summary Judgement. The viability analysis is adequately disclosed through the habitat analysis. Based on review of the FEIS and PF documentation, I have determined that the EIS adequately discloses the viability analysis.

17c. Failure to adequately consider the cumulative impacts of roads.

The issue of impacts to wildlife by activities occurring on roads, during project activity, was not raised in the scoping process or in response to the DEIS. However, the FEIS discloses these impacts in several ways including: disturbances; displacement; and changes in habitat effectiveness, capability, or potential (FEIS, pp. III-246, 310-322, 590-591, 834-835, and 837). Based on review of the ROD, FEIS and PF documentation, I have determined that the EIS adequately considered the cumulative impacts of roads.

17d. Failure to adequately consider the cumulative impacts of Off Road Vehicles (ORVs).

The issue of impact from off-road vehicles (ORVs) was not raised during the scoping process. However, ORV use was considered in the project design (FEIS p. II-30), through mitigation measures (FEIS p. II-40), and through analysis (such as security) summarized in the FEIS (pp. III-311, III-581-582) and supported by PF documents (CDA-WL-27 and P-WL-44-48). The cumulative effects of the "Coeur d'Alene River Ranger District 1998 Access Management" were considered as reasonably foreseeable to the appropriate degree. A decision for the AMEA has not yet been made. The AMEA will have to comply with existing laws and regulations once it is approved. The analysis for cumulative effects of the Douglas-fir Beetle project and the Access Management proposal will be included in the NEPA documents for the latter.

17e. Lack of monitoring wildlife species populations' response to management.

The issue was not raised during the scoping process. However, monitoring of management indicator species (MIS) populations (i.e. elk) has been done in compliance with CFR 36 219.19(a)(6) which states, "This monitoring will be done in cooperation with State fish and wildlife agencies, to the extent practicable." The Idaho State Fish and Game Department provides the IPNF with big-game survey data. Non-game species populations are inextricably tied to vegetative conditions that continually shift in form and substance in response to ecosystem processes and disturbances. One form of monitoring is assessing the capability of the vegetation (habitat) to support MIS and taking into account past actions and influences. Habitat monitoring, in the form of cumulative effects analysis, is documented in the FEIS and PF. Based on review of the FEIS and PF documentation, I have determined that the EIS adequately considers monitoring data in determining wildlife populations' response to management.

17f. DFB FEIS presents inadequate cumulative effects analysis for proposed, indicator, and sensitive wildlife species.

Effects analyses were provided for each species by analysis area (Coeur d'Alene and Priest Lake Ranger Districts) using appropriate bounds of analysis (FEIS, pp. III-263-585). The U.S. Fish and Wildlife Service provided concurrence on the analysis done (PF, doc. NP_60-61) for proposed species (lynx), and listed species (bald eagle, peregrine falcon, gray wolf, grizzly bear, woodland caribou, and bull trout) (PF, docs. NP_64-65). The requirements of NEPA have been met. Based on review of the ROD, FEIS, and PF, I have determined that the EIS adequately discloses and quantifies the direct, indirect, and cumulative (past, present and reasonably foreseeable activities) impacts to proposed, management indicator, and sensitive wildlife species (FEIS, pp. III-243-326; 564-630; 834-835; 837; and 839).

CONTENTION 18: ***Old growth.***

18a. There was no documentation using forms which evaluate each of these stands for criteria the Forest Plan adopted as determining old growth. 1) Field surveys are resulting in old growth being dropped from the Forest Inventory without the benefit of an examination which compares stands criteria with those the Forest plan adopted for old growth determination; the ROD authorizes logging in old growth--declaring it doesn't qualify without completing genuine surveys.

The PFs clearly document the old growth review methodology (P-VE-105), show that appropriate examination and comparisons were made (P-VE-104 and 110) and the individual stand reviews are included (P-VE-1 through 110).

18b. Watson Unit 17 field notes (Document P-VE-92) <u>There isn't even a name written on the field review notes</u>--who did this unit's review and what are their qualifications for evaluating old growth? 2) The qualifications of the field reviewers of all this old growth evaluated by the Priest Lake District are doubtful.

Project File review shows that all reviewers are identified (P-VE-99 and 101) and their qualifications are summarized in the List of Preparers (FEIS, p. LP-4).

18c. Watson Unit 17 field notes (Document P-VE-92) ... reviewers can read for themselves to be able to judge if characteristics in the unit were actually compared to Forest Plan Standard old growth criteria. In short, that didn't happen.

In reading document P-VE-92, I have judged that characteristics were compared to old growth criteria (see response to 18a).

18d. 1) old growth is being dropped from the Forest inventory without the benefit of field verification that compares stands' criteria with those the Forest Plan adopted for old growth determination.

The PF reveals that the majority of stands received field review (P-PV-101). The "office review" consisted of looking at field data collected previously (P-VE-97). The data also shows that the vast majority of stands remained in old growth designation.

18e. 2) If such areas are in fact not old growth, then this casts doubt on other stands not being evaluated for old growth on the District since they are not in beetle hit areas. The FS's being able to currently meet the 10% and 5% requirements is genuinely in doubt. This DFB analysis situation casts a very significant doubt as to whether the IPNF has demonstrated, or can demonstrate, that 10% old growth even exists forestwide.

The PF (P-VE-101 and 103) provides documentation that units dropped were indeed old growth and that stands deleted as old growth were replaced with other stands. The amount of old growth provided is clearly present (PF, doc. P_VE_103).

18f. The Appeal Attachment 25 document, "Old Growth within Proposed Treatment Areas-Douglas-fir Beetle FEIS" shows that some Old Growth Management Units do not even have the required 5%, if "recruitment" is not included, as it shouldn't for the purposes of meeting the Forest Plan Standards.

Recruitment is not included in meeting Forest Plan Standards (PF, doc. P_VE_103). Appeal Attachment 25 is correct in showing that some old growth management units do not currently have 5 percent old growth in them. The Forest Plan recognizes that old growth does not occur evenly across the landscape and has allocated stands for old growth recruitment to provide for future old growth in areas where it does not exist at present (i.e., old growth units 15, 16, 19, 20, and 21). The same attachment show units with more abundant existing old growth (i.e., units 28, 22, 12).

18g. Appellants wonder why the Coeur d'Alene River RD did not do any reviews for old growth habitat as part of the DFB Project Analysis.

The FEIS (p. III-45) discloses that no allocated or recruitment old growth stands are proposed to be entered on the Coeur d'Alene River RD. Therefore, reviews are not needed.

CONTENTION 19: ***Inadequate snag and cavity nesting habitat protection.***

The rationale for not including a detailed snag analysis is disclosed in the FEIS. In summary, 1) mitigation measures are in place to insure retention of snags and green replacements at adequate levels; 2) beetle epidemic will continue to kill live trees which creates snag densities greater than pre-project conditions; and 3) not all areas impacted by beetles would be treated. Data from the PF (P-W-42, 43 and CDA-WL-14) provides the "hard look" required under NEPA.

CONTENTION 20: ***Forest songbirds was inadequately addressed in the DFB project.***

Songbirds are not identified as management indicator species, nor are they listed as sensitive. However, they were screened for their relevancy to the project. The EIS adequately discloses and quantifies the direct, indirect, and cumulative (past, present and reasonably foreseeable activities) impacts to songbirds through analysis done for management indicator species, snag dependant species, and old growth habitat.

CONTENTION 21: ***Unacceptable cumulative impacts to big game species.***

The details of the cumulative impacts analysis on big game are found in the PF (CDA-WL-24-34 and P-WL- 44-51, and 56-58). These documents include effects from roads, ATVs, and snowmobiles, as well as logging, slash treatment and other project activities. Summary statements of impacts during project activities (i.e., displacement, security) are recorded (FEIS, pp. III-310-322 and III-581-582). The FEIS discloses and quantifies the cumulative (past, present and reasonably foreseeable activities) impacts to big game species. In addition, the FEIS includes mitigation to lessen the effects on big game (FEIS, p. II-40-45).

Summary: I find that the Forest Supervisor took a hard look at the direct, indirect, and cumulative effects on all wildlife species potentially affected by the project. He included mitigation to lessen the effects on a variety of species including eagles, goshawk, flammulated owl, Townsend's Big-eared bat, grizzly bears, lynx, big game, Coeur d'Alene salamander, fisher, and forest land birds (FEIS, pp. II40-46).

CONTENTION 22: ***Failure to analyze cumulative impacts on watersheds, water quality, and fisheries using sound scientific methodology.***

Science has found that roads have contributed to increased peak flows and sediment routing to streams (Jones and Grant, 1996; Troendle and King, 1983; Megahan, 1983; Patten, 1989). One of the key issues identified in the Purpose and Need was that existing roads were affecting fish habitat and channel stability and one of the desired conditions was to reduce road densities. The FEIS analyzed the cumulative effects of roads on watersheds, water quality, and fisheries by considering the total miles of roads and number of crossings in a watershed. If, as science contends, roads are contributing to the cumulative impacts in a watershed, then eliminating roads and crossings should address the problem. The FEIS adequately analyzed how the proposed actions would reduce some of the cumulative impacts from roads (FEIS, pp. III-151, 153-154, 156, 158-159, 161, 162, 164, 165, 167-171, 173, and 174; and III-476, 478-481, 483, 485, 488-492, 494-495, 497-500, and 502-504; tables displaying net stream improvement in each drainage analyzed).

Science has also found that harvesting can cause increased peak flows, particularly when overharvesting has occurred in a drainage. The FEIS analyzed the cumulative impacts from past, current and reasonably foreseeable actions on peak flows using WATSED. WATSED uses science-based methodologies to estimate peak flow increases from activities. The FEIS adequately analyzed how the proposed actions, in combination with past harvesting and road construction, would affect peak flows.

22a. ***The FEIS does not adequately disclose the relationship between increased water yield and instream erosion and reference methods and science.***

The FEIS indicates that there were several references to published literature relating increased water yield and instream erosion. The literature also described the methods used (PF, docs. Jones and Grant, 1996; Christner and Harr, 1992; Kappesser, 1991; and Megahan, 1983).

22b. ***The FEIS does not adequately disclose that the WATSED model does not estimate sediment production resulting from instream erosion.***

WATSED is an analysis tool that spatially and temporally organizes some typical watershed response relationships as a result of forest practices. The FEIS utilizes WATSED to compare the probable effects of alternatives. It does not give absolutes, but must be used in conjunction with knowledge of the model and its limitations, other models, data, analyses, experience and judgement (FEIS, p. III-120).

The User's Guide for WATSED is located in the PF (RF_WA_11). Region 1 WATSED Water and Sediment Yields, Technical User Guide states that WATSED tracks the eroded material (surface and mass erosion) produced naturally and from activities to estimate the total sediment yield. The model routes on-site eroded material (both natural and from activities) to the live water-system and then routes that material to the critical reach specified by the user. Eroded material from instream is not tracked by WATSED.

The FEIS, p. III-120, states, "The sediment and peak flow estimates are only part of the information necessary to evaluate effects. In addition, the difference between alternatives with respect to these two estimated response values is relative to the magnitude of the different alternative actions. Rarely, in the Region where this model was developed and is used, are differences in estimated sediment less than 10 to 20 percent, and peak flows less than 5 percent even detectable in any given watersheds due to technical limitations in measurement and the natural variability of these parameters.

The analysis discloses that increases in sediment would be no more than 3 percent and increases in water yield would be no more than 2 percent, therefore those changes would not be detectable within the streams.

22c. ***...it is unlikely any changes in peak flows resulting from these management activities will have a direct, indirect, or cumulative effect outside the conditions in which these fish evolved.... lacks site-specificity*****."**

The quote from the FEIS is located in a section titled "General Effects of Land Management Activities" (FEIS, p. III-526). This section was written to give a brief history of the drainage including effects to fish caused from past management and historic fires. The section following the General Effects describes the direct, indirect, and cumulative effects of the proposed actions by drainage and is more specific. In addition, the watershed effects analysis did analyze peak flows for each drainage.

22d. ***The watershed section does not disclose the percentage or volume of live trees that will be logged in each drainage.***

The watershed section did not disclose the percentage or volume of live trees that would be logged. Rather, the analysis was based on the percentage of crown removal in each drainage. The reason for using percentage of crown removal was because that is what WATSED uses in its estimates of peak flow increase. The percentage of crown removal was based on the total amount of trees to be removed.

The WATSED results have incorporated both the live and beetle-killed trees (PF, doc. CD Electronic Files).

22e. ***The FEIS lacks site specific information.***

My review of the FEIS indicates there are many references to site-specific information. The amount of proposed logging and road construction, reconstruction, and removal are specified by drainage (FEIS, pp. II-19, III-151, 153-154, 156, 158-159, 161, 162, 164, 165, 167-171, 173, 174, 476, 478-481, 483, 485, 488-492, 494-495, 497-500, and 502-504). Maps are also available showing the location of the proposed units within a watershed, and roads are individually identified on the maps with their proposed treatment, including where individual culverts are going to be upgraded.

22f. ***The FEIS does not fully consider the cumulative impacts of all the "short term" effects from previous and ongoing activities.***

The WATSED model accounts for all past harvest and road construction and reconstruction, as well as ongoing activities. The WATSED outputs for peak flows and sediment, summarized in the FEIS, are the cumulative results from all past, ongoing, and proposed activities (PF, doc. CD Electronic Files). The duration of past and ongoing activities can also be obtained from the outputs. I find that the cumulative impacts of past and ongoing activities were adequately addressed.

22g. ***No mention of grazing impacts in the cumulative effects analysis.***

Grazing was mentioned in the FEIS as an existing condition. Where grazing has occurred in the past, there is generally bank trampling which destabilizes streambanks. Cattle grazing is incorporated into the cumulative effects by accounting for the existing channel condition (PF, doc. P_WA_2: PF notes for stream surveys of Upper West Branch, Lower West Branch and Lamb Creek; FEIS, p. III-487: Cumulative Effects for the Upper West Branch at the Watershed Scale). Reaches damaged by cattle would be considered "functioning at risk" or "not functioning" and would be more sensitive to increased peak flows. My review of the FEIS indicates that an overall assessment of the watershed condition was given and peak flow increases from the proposed actions were minimized in all the watersheds.

22h. ***Effects related to water yields*** (appeal, p. 85), ***instream erosion***.

The FEIS indicates that there were several references to published literature relating increased water yield and instream erosion (PF, docs. Jones and Grant, 1996; Christner and Harr, 1992; Kappesser, 1991; and Megahan, 1983). In addition, the FEIS discusses the effects related to water yields and instream erosion on pp. III-116, III-438-439, and 453.

22i. ***Value of restoration vs. logging effects.***

The FEIS evaluated the effects of restoration vs. logging through a comparison of alternatives with Alternative G. Alternative G was developed to consider the effects of restoration activities without the use of commercial timber harvest. Alternative G considered road work for aquatic and wildlife improvements, and the use of prescribed fire and non-commercial vegetation treatments to accomplish the vegetation restoration goals. The effects analysis indicated that in most cases there was no difference between the selected Alternative D and Alternative G.

22j. ***There is no quantitative data provided in the FEIS to substantiate a net improvement to the streams. There is also no reference in the FEIS where the sediment reduction figures presented were obtained.***

The FEIS displays tables indicating the number of stream crossings that would be removed, the associated reduction in risk of crossing failure, as well as the miles of encroaching road that would be removed (these are roads that hydraulically modify streamflows at bankfull stages) (FEIS, pp. III-151, 153-154, 156, 158-159, 161, 162, 164, 165, 167-171, 173, 174, 476, 478-481, 483, 485, 488-492, 494-495, 497-500, and 502-504; tables displaying net stream improvement in each drainage analyzed). This would improve the streams by not constricting channels and would allow the channels to maintain their appropriate dimensions. The FEIS states that the sediment reduction figures were calculated based on measurements or estimates of road fill located at stream crossings (FEIS, pp. III-148-149 and 474-475). Crossings that would be eliminated or upgraded would reduce net associated risk.

22k. ***The maps in the FEIS are inadequate.***

My review of the maps in the FEIS indicates that the maps contain sufficient identifying characteristics so that the public could locate the proposed cutting units on the ground. There is a general map that contains the township and range, private land boundaries, major lakes and streams, and major stream names for the Coeur d'Alene and Priest River areas. In addition there are maps showing where each unit is located. These maps have streams and roads marked on them, as well as private land boundaries. The major streams and certain roads are labeled.

22l. ***The FS does not provide sufficient information to ensure maintenance of the existing biota or the physical integrity of the affected streams as mandated by the Forest Plan.***

The FEIS provides sufficient information to ensure maintenance of the existing biota and physical integrity of the affected streams (FEIS, pp. III-151, 153-154, 156, 158-159, 161, 162, 164, 165, 167-171, 173, 174, 476, 478-481, 483, 485, 488-492, 494-495, 497-500, and 502-504; tables displaying net stream improvement in each drainage analyzed). In two watersheds, the analysis showed that the proposed actions could not ensure maintenance of the existing biota and physical integrity of the affected streams; these were the Bumblebee and Steamboat Watersheds (FEIS, pp. III-168-170, 176, and 212-213). Harvest in these watersheds was dropped in the ROD.

The Appellants also contend that the FEIS did not disclose the value of dead trees in moderating water yield. Leaving dead and dying trees would affect the hydrological response between the time a stand of infested trees will die and the abrupt removal by regeneration logging. In Alternative A (no action) the FEIS did analyze for leaving dead trees. This was done with the WATSED modeling in Alternative A. The results presented in the FEIS for Alternative A incorporate dead standing trees without the logging.

The Appellants further contend that the Forest Service has not demonstrated that the removal of roads and culverts in conjunction with logging and road building would result in a net benefit to the stream systems. The FEIS does demonstrate that in all watersheds but one, there would be no change or a net decrease in road miles (FEIS, pp. III-151, 153-154, 156, 158-159, 161, 162, 164, 165, 167-171, 173, 174, 476, 478-481, 483, 485, 488-492, 494-495, 497-500, and 502-504; tables displaying net stream improvement in each drainage analyzed).

22m. ***Purpose and Need.***

Appellants contend that if the Forest Service were serious about aquatic restoration it would not propose 14.8 miles of new road construction or any heavy reconstruction. It further contends that temporary roads could remain open for several years, possibly up to 10 years after logging, and that these effects have not been fully evaluated.

Appendix A, pp. 109-124, explains various facets regarding roads involved in the FEIS. On p. 112, it states, "Permanent roads were considered (on the Coeur d'Alene District) where there were regeneration

units which would need continued access for timber stand improvement work. Temporary roads were considered when units were selectively harvested, when the distances were relatively short, and when they could be placed on hillsides to minimize impacts to streams. If those conditions couldn't be met based on an interdisciplinary review of effects, then helicopter-yarding was chosen." There would not be a net increase in roads with any alternative. The majority of new roads would be temporary and would be obliterated after use. Between the Draft and Final EIS, permanent roads associated with Alternative D were reduced substantially, from 20 miles to 3.9 miles.

On p. A-119, it explains how roads were considered in the analysis. It states, "The analyses do not assume that temporary roads are less damaging in the short term. It assumes that they are less damaging only in the long term since they should be removed after they have served the purchaser's purpose...The sediment and peak flow analyses treated temporary roads as if they had remained in place for up to five years."

I find the Forest Supervisor took a hard look at roads to determine when, where, how and why to construct new roads, permanent and temporary. I find the decision to construct 14.8 miles of new road is consistent with the purpose and need. Existing roads with sediment problems will be restored and new roads are only proposed where they could be placed on hillsides with minimal impact to streams.

22n. ***Analyses fail to examine fine scale - specific tributaries.***

(This appears to be specific to Priest Lake portion of project. However, the elements of the contention can also be found above, as well as similar references to the Coeur d'Alene portion).

Given the size of the analysis area, it was not practical to include all site-specific information on every affected tributary. Site-specific information is available in the PF in the form of stream surveys and field notes. However, there is a summary of the existing condition of each drainage in the FEIS and site-specific maps are provided indicating where the units and roads are located with respect to the streams.

22o. ***Basis for peak flow magnitude and timing.***

The WATSED outputs list the estimated percent increase in peak flows by year (PF, doc. CD-Electronic Files). It is from this output that it is possible to determine whether peak flow recovery is occurring, as well as the magnitude of the increases.

22p. ***Does not address whether Alternative D would maintain the existing biota, the physical integrity of the stream.***

Alternative D does address whether it would maintain the existing biota and physical integrity of the stream. Alternative D would result in an increased risk to individuals at the stream segment scale in the Bumblebee watershed. Alternative D would not be consistent or would be marginally consistent with the Clean Water Act and Water Quality Limited Listings in the Bumblebee and Streamboat watersheds. In all other watersheds Alternative D would maintain the existing biota and physical integrity of the streams (FEIS, pp. III-168-170, 176, and 212-213). Harvest in these watersheds was dropped in the ROD.

22q. ***Thresholds.***

My review of the FEIS indicates that the watershed analysis did disclose the significance of the WATSED water yield and sediment numbers (FEIS, p. III-120 and 442). The magnitude of the percent change in peak flow and sediment that WATSED estimates reflects a level of stress on the watershed

and stream system that has been induced over time. Some watersheds are more resilient to these stresses than others, and that was considered in the synthesis of effects. The sediment and peak flow estimates are only a part of the information necessary to evaluate effects. However, the FEIS does state that rarely are differences in estimated sediment less than 10 to 20 percent, and peak flows less than 5 percent even detectable in any given watershed due to technical limitations in measurement and the natural variability for these parameters.

The use of the WATSED model was to provide one set of information to the technical user, who, along with a knowledge of the model and its limitations, other models, data, analyses, experience, and judgement, must integrate all those sources to make the appropriate findings and conclusions.

22r. ***Analysis of Mitigation.***

The ROD displays pictures of road obliteration projects. The photos show how effective road decommissioning can be (ROD, pp. 3-4). The effectiveness of mitigation measures is summarized in the Forest Plan Monitoring and Evaluation Report 1997. The findings of the report indicate that BMPs and road obliteration do work to reduce sediment transport to streams (Forest Plan Monitoring and Evaluation Report 1997, pp. 82-89).

22s. ***There are no cumulative effects analyses provided for Consalus, Blonc or Lower Goose Creeks.***

Consalus and Blonc Creeks are tributaries to Goose Creek and Goose Creek is a tributary to the Upper West Branch. Goose Creek was treated in its entirety and not split into Upper and Lower Goose. My review of the FEIS indicates that cumulative effects for these drainages are addressed. Consalus and Blonc Creeks were combined with Goose Creek for the cumulative effects analysis. The cumulative effects for the Upper West Branch included Consalus, Blonc and Goose Creeks (FEIS, pp. III 486-492).

Isaacson I. ***This analysis puts all the emphasis on roads and introduced sediment; this is a major flaw.***

The analysis puts a lot of emphasis on roads and introduced sediment because it was a key issue stated in Chapter I and Chapter II of the FEIS (pp. I-9-12 and II-5-6). Existing roads were identified as affecting fish habitat and channel stability. The units of measure used in the analysis reflect this issue. However, peak flow increases were also an issue and peak flow was incorporated into the analysis. The amount of proposed harvest was minimized so that peak flows would not increase above what the stream could handle.

Issacson 2. ***This analysis completely ignores the position of water yield being part of the problem.***

The FEIS took a hard look at the effects of water yield. The FEIS identifies the watersheds with altered water yield from past management (FEIS, pp. III-122, 126, 135, 137, 139, 141, 143, 453, 458, 462, 464, and 466 refer to altered water yields from past management). The analysis of the proposed actions appropriately addresses water yield. The analysis indicates that the proposed actions would not increase peak flows substantially (FEIS, pp. III-151, 153-154, 156, 158-159, 161, 162, 164, 165, 167-171, 173, 174, 476, 478-481, 483, 485, 488-492, 494-495, 497-500, and 502-504; tables displaying peak flow increases in each drainage analyzed).

Isaacson 3. There should be an analysis of harvest in each drainage and the vegetation that is there by age class.

The harvest history of each drainage was included in the analysis with the WATSED runs and in the PF (PF, docs. P_WA_1 through P_WA_187 and WA_1 through WA_8).

Isaacson 4. ***The fish protection is based solely on having a riparian buffer in place.***

My review of the FEIS indicates that fish protection was based on several variables. The units of measure were amount of riparian harvest, sediment delivery risk, increased fish passage, and reduced length of encroaching roads. In addition, the fisheries analysis refers to the watershed analysis for the stream channel condition and incorporates channel condition into the assessment of the fisheries resource (FEIS, pp. III-198-202, and 526-530).

22t. ***Road Maintenance Analysis is inadequate.***

With respect to roads, the Purpose and Need states funds would be used to improve drainage structures on roads, to close unneeded road segments, reconstruct roads and relocate roads. The maps in the FEIS adequately display which roads would be obliterated, reconstructed, relocated, or receive routine maintenance. This road work is strictly associated with the proposed actions and does not preclude other regular road maintenance funded by Congress from occurring (FEIS, Appendix, p. A-123). The proposed road maintenance is required in the timber sale contract and is administered either by the timber sale administrator or engineering representative. The watershed analysis adequately addressed cumulative effects from the road work (FEIS, pp. I-151, 153-154, 156, 158-159, 161, 162, 164, 165, 167-171, 173, 174, 476, 478-481, 483, 485, 488-492, 494-495, 497-500, and 502-504; tables displaying net road miles in each drainage analyzed). The analysis included the net effect of this road work on the miles of road remaining in the drainages analyzed.

22u. ***We contend that the FS has not shown that armoring culverts rather than removing them renders the stream crossings "inert" for the long duration. Front end obliteration would close roads and prevent periodical inspection and maintenance.***

Closed roads do not prevent periodical inspection, they prevent inspections of roads in a vehicle. While armoring culverts does help reduce the risk of a culvert washout in practice, it is not used with front end obliteration. If a road is going to be closed with obliteration, then culverts would be removed beyond the obliteration point. This is done because maintenance equipment usually cannot be used on obliterated roads.

22v. ***Inadequate analysis of cumulative impacts on Fisheries.***

The analysis for fisheries is based on the species' habitat needs (FEIS, pp. III-188-189, 519-520, 191, and 521 and Biological Assessments for the Coeur d'Alene and Priest Lake Districts). The selected action aims to improve the degraded habitat and increase fish passage. The FEIS discloses which habitat components are important to fish and the effects to those components. The cumulative effects to fish habitat would be a decrease in sediment routed to streams, reduced road encroachment into the Riparian Habitat Conservation Areas (RHCAs) and increased fish access. The Biological Assessment for Priest Lake District determined that in the short term, the project may affect but is not likely to adversely affect bull trout populations or habitat. The long-term effect to bull trout habitat is expected to be beneficial because of reduction in the risk of sediment delivery to stream channels and the removal of fish migration barriers. The Biological Assessment for the Coeur d'Alene District determined that the project was not likely to adversely affect bull trout. U.S. Fish and Wildlife Service concurred with these findings (PF, docs. NP_63 and 64, FI_1, FI_4, and P_WA_2).

CONTENTION 23: ***The ROD and FEIS violate the Clean Water Act.***

Cumulative effects analysis included all the existing and reasonably foreseeable projects. The State BMPs and Forest Service's Soil and Water Conservation Practices have been identified (FEIS, Appendix

F, BMPs and SWCP) and will be applied to the project. The State of Idaho Department of Environmental Quality (DEQ) concurred with the findings that beneficial uses would not be impaired, thereby indicating that the proposed project was consistent with the Clean Water Act (ROD, pp. 17, 20, and 28-29; FEIS, pp. III-176, and 506; FEIS, Appendix A, pp. A-5-9; PF, docs. WA_51 and WA_52; letters to and from DEQ). I find the ROD and FEIS meet the requirements of the Clean Water Act.

CONTENTION 24: ***Failure to adequately analyze cumulative impacts on watersheds and fisheries results in a violation of NEPA and NFMA: Westslope cutthroat trout viability is threatened.***

The FEIS evaluated the cumulative impacts on watersheds and fisheries and westslope cutthroat trout (WCT) and determined that viability is not further threatened by the proposed actions. The FEIS gives a summary of the current distribution of WCT, as well as where they were documented historically (FEIS, pp. III-188-189 and 519-520). The FEIS also states that WCT populations have declined over their historic distribution with viable populations existing in only 36 percent of the original Idaho range (FEIS, pp. III-191 and 521). The primary cause of the decline was found to be habitat degradation (FEIS, pp. III-191 and 521) with a reference to Rieman and Apperson, 1989).

The analysis for fisheries, including WCT, is based on the species habitat needs. The proposed actions aim to improve the degraded habitat. The FEIS discloses which habitat components are important to fish and the effects to those components. The cumulative effects to fish habitat would be a decrease in sediment routed to streams, reduced road encroachment into the RHCAs and increased fish access.

CONTENTION 25: ***Failure to adequately consult with the U.S. Fish and Wildlife Service results in a violation of ESA and NFMA: Bull Trout.***

Appellants contend that the analysis for Fedar Creek is contradictory and the determination of effects is flawed. The analysis for Fedar Creek is based on a variety of parameters, peak flows just being one element. The analysis states that overall habitat is in good condition in Fedar Creek. The Biological Assessment indicates that fish passage and refugia will be restored or improved through the upgrading of two culverts to allow fish passage. In addition, 3.0 miles of road will be obliterated. It also states, as Appellants contend, that there would be no measurable change over openings caused by the beetle epidemic. However they are in error in their interpretation. What the analysis is stating is that peak flows would be about the same with or without harvest; therefore, there isn't any real affect from harvesting dead trees. Based on the evaluation of all the elements, the biological assessment determined that connectivity would be improved in Fedar with fish-passable stream crossings.

I find that the analysis and conclusions for Fedar Creek is appropriate and does not violate the ESA or NFMA. The USFWS concurred with the finding of Not Likely to Adversely Affect bull trout determination on May 21.

CONTENTION 26: ***Increased risk of flooding. The FEIS also fails to consider the cumulative effects of the logging in those watersheds in terms of increased risk of flooding and toxic contamination.*** (This issue is specific to North Fork Coeur d'Alene and main Coeur d'Alene Rivers).

The FEIS took a hard look at the cumulative effects of logging in terms of increased risk of flooding. The tables presented in the FEIS show the results of the analysis indicating no substantial or measurable increase in peak flows as a result of the proposed actions (FEIS, pp. III-153-174, tables on pp. III-153, 154, 156, 158-159, 161, 162-165, 167-171, 173, and 174. Also p. III-494). The FEIS discussed the lack of substantive instream flow response; therefore, no instream erosion would occur as a result of increased peak flows. Any toxic contamination in the soils would not be eroded.

Summary: Based on my review of the record, I find that the Forest Supervisor took a hard look at the direct, indirect, and cumulative effects of the alternatives on water quality and the aquatic resource. He applied the appropriate mitigation to reduce effects (FEIS, pp. II-35-37 and Appendix F). This decision will reduce fuels and fire intensity, restore vegetative conditions, and improve watershed conditions through restoration and improvement of roads.

CONTENTION 27: ***Visual Quality.***

27a. The Forest Plan prohibits logging in MA9.

The Idaho Panhandle Forest Plan, p. III-40, states, "Salvage and firewood, and miscellaneous products removal may occur from existing access." As noted in the Forest Plan, salvage is allowed, although it is not scheduled.

27b. There are no visual simulation displays that attempt to show comparisons between* existing *and projected conditions under the various alternatives.

The FEIS discloses the effects on visual resource through a descriptive process (FEIS, pp. III-342-347 and 645-649). The ROD includes a simulation of a landscape before and after harvest. I find that the Forest Supervisor took a hard look at visuals and disclosed the effects in accordance with NEPA. In addition, mitigation is applied to lessen the effects to the visual resource.

27c. The FEIS failed to provide a genuine visual quality analysis of project impacts, and dodged the question of whether the activities meet VQO's.

The Idaho Panhandle Forest Plan, p. II-25, states, "Meet adopted visual quality objectives. Exceptions may occur in unusual situations; these will be identified through the project planning process involving the ID Team. Examples of some exceptions are....large areas where the mortality rate for timber is very high. Mitigation measures should be developed for areas when VQO's are not met."

The FEIS, p. III-345, states that seven regeneration units would not meet visual quality objectives because of the need for regeneration harvest greater than 2 acres in size, in areas of high mortality in the Coeur d'Alene District. The FEIS describes ways to lessen the visual impact, although not completely. The FEIS, p. II-38, identifies mitigation that would be applied to these units. This mitigation includes (1) helicopter-logging on five units to provide irregular boundaries, thus avoiding straight lines and geometric unit shape; (2) utilize jackpot burning rather than underburning or broadcast burning; (3) no fireline construction; and (4) retain green trees where possible. The estimated effectiveness of this mitigation is moderate.

The FEIS, pp. III-348 and 649 determined that Alternative D meets Forest Plan standards because of the allowance the Forest Plan makes in situations such as these.

CONTENTION 28: ***DFB Project is inconsistent with forest plan's implementation schedule violating NFMA.***

The Appellants contend that proceeding with the project is inconsistent with the Forest Plan because of the monitoring element B-4, Insect and Disease. Monitoring element B-4 states that if the insect and disease conditions across the forest are predicted to reach epidemic or serious levels on 5 percent of the Forest, then further action should be taken. The purpose of this monitoring is to determine if there is a need for change in the Forest Plan. As Appellants note the level of beetle-killed trees does not amount to more than 5 percent of the forest; therefore, the Forest does not need to evaluate whether further action regarding the Forest Plan needs to take place.

The FEIS evaluates Forest Plan consistency for all resource areas. The FEIS pp. III-78 and 402 states, "Forest Plan direction provides that timber management activities will be the primary process used to minimize the hazards of insects and diseases and will be accomplished by maintaining stand vigor and diversity of plant communities and tree species." (FP, p. II-2). These sections provide further discussion regarding Forest Plan consistency. The ROD, p. 29, also determined that the project is consistent with the Idaho Panhandle Forest Plan.

In review of the record, I have determined that the Appellants misconstrue the application of the Forest Plan monitoring requirements in this argument. I find that the project is consistent with the Forest Plan.

CONTENTION 29: ***The FEIS fails to adequately analyze cumulative effects of ongoing and reasonably foreseeable activities.***

Appellants contend that the FEIS only includes a mere listing of ongoing and reasonably foreseeable actions in Appendix E. However, in my review of the FEIS, I find that the analysis documents where and when those items were used in the various analyses, and that the analysis fully complies with the requirement of NEPA.

Chapter III discusses ongoing or reasonably foreseeable projects in approximately 100 different places. Under Vegetation pages 68 and 385, it discusses existing conditions which includes past, as well as ongoing or reasonably foreseeable activities. Pages 75 and 399 discuss specific timber sales that were included in the analysis.

Chapter III, pages 117, 148, 149, and 439 discuss methodology for watershed analysis that specifically includes ongoing and reasonably foreseeable projects. Ongoing or future timber sales and watershed restoration activities that were considered in the cumulative effects analysis for each watershed (such as Lower West Branch or Hayden Lake) are often listed under each area that was analyzed; see pages 157, 161, 166, 476, 477, 482, and 484.

Chapter III, pages 199, 204 and 532 discuss methodology used in the fisheries analysis, including ongoing and reasonably foreseeable activities, as well as how they were used in the determination of effects to MIS.

Chapter III, pages 262 and 585 discuss environmental consequences to wildlife species and includes the ongoing and reasonably foreseeable activities in the determination of effects calls for each species. Specific activities that may be affecting habitat for a particular species are listed for that analysis area; see examples on pages 291, 299, 363, 597, 614, and 615.

Appendix E, p. 8, specifically lists Butch Creek as one of the many ongoing projects that were included in the analysis for this project.

CONTENTION 30: ***Economics analysis inadequate.***

Appellants contend that non-market benefits and costs should have been included in the economic analysis. They further contend that the project should have completed a much more detailed approach to economic analysis and that the simple cost/benefit analysis is inadequate.

The FEIS, pp. III-353-359 and 654-660, disclose the financial analysis, including regulatory framework and methodology for all alternatives, including the No Action alternative. This issue is also discussed in detail in Appendix A, Response to Comments, pp. A-66 through A-72. P. A-72 best responds to this contention. It states, "The primary focus at the project level is to identify economic implications that are

unique for decisions made at this management level....every effort was made to include relevant information for all resources, both commodity and non-commodity, that would be affected by the proposed management activities." 40 CFR 1502.23 states, "For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations." The FEIS describes the monetary costs and benefits in the financial analysis. The non-monetary analysis is completed by reviewing the environmental effects associated with each resource area. The Summary Comparison Table in Chapter II of the FEIS (pp. II-59 through II-72) displays the merits and drawbacks, or trade-offs, of the various alternatives.

I find that the appropriate level of economic analysis has been completed and meets the Agency and NEPA requirements for this type of project.

CONTENTION 31: ***The FEIS failed to disclose roadless area impacts.***

NEPA Implementing regulations state that, "NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail." The Idaho Panhandle National Forest Plan, Appendix C, identifies inventoried roadless areas on the Forest. As part of the design criteria for the project no inventoried roadless areas would be entered. As the Forest first identified opportunities, they went through a review to determine if those stands met the design criteria (PF, doc. NP_72-77). If units were found to be in roadless areas, they were dropped. As noted in the Appellant's attachment #32, this criteria was reconfirmed. The ROD, p. 5, states that no roadless areas would be entered. Based on my review of the record it is clear that no units enter roadless areas; therefore, it was not an issue that needed to be addressed in the FEIS.

CONTENTION 32: The Forest Service failed to provide adequate responses to public and agency comments.

Responses to public comment are found in Appendix A of the FEIS. Within this 199 page document are found clear responses to each of the comments the Appellants contended were missing. Responses are also supported by documentation found in the FEIS.

Appellants contend that the EPA had submitted comments, yet the Appellants couldn't find a response to these concerns as required by the appeal regulations. Appendix A of the FEIS clearly responds to EPA's comments. The following list provides locations of each of these comments: Aquatics: A-6; Economics: A-34 and A-41; Water quality: A-5; Monitoring: A-104 and FEIS, II-51; Road Management Criteria: A-117 and FEIS, pp. III-148-149, 474-475, and 720; Vegetation: A-144 and FEIS, pp. III-75, 399, and 676; and Effects: A-6.

The Appellants further contend a letter from University of Idaho, College of Forestry, Karl J. Stoszek was not adequately responded to. Appellants see no answers to six questions. Responses to Dr. Stoszek's comments are found on p. A-137.

Appellants contend the FEIS's Response to Comments in Appendix A did not respond to the following comment by the Lands Council and the comment was not printed in the Appendix: The DEIS at III-240 states the "Average Diameter of Harvested Trees" in the Coeur d'Alene River District would be 18 inches dbh..." The responses to this reference are found on p. A-57.

I find responses to comment to be thorough and appropriate for this project. Each comment contended to be missed was included in Response to Comments - Appendix A, of the FEIS.

CONTENTION 33: ***FEIS does not provide adequate protection of sensitive plants.***

***Comments pointed out that delegating surveys to after the decision is rendered, violates NEPA* [no citation].**

The FEIS, pp. III-80-102 and 404-425, disclose the effects of the project to sensitive plants. The analysis includes a thorough description of the existing condition, including where such plants are expected to occur. The effects analysis is based on the results of past surveys, current distribution, and condition of sensitive plant species in habitats similar to those found in the proposed treatment sites, types of proposed treatments and the likely effects to existing populations and habitat from the proposed activity based on current knowledge and professional judgement. It includes a broad-scale assessment of the distribution and suitability of sensitive plant habitat in relation to proposed activities and a detailed analysis of each proposed activity and the need for mitigation, including field surveys.

The FEIS identified several thousand acres in Alternative D that need to be surveyed prior to implementation (FEIS, pp. III-102 and 425). Chapter II-48 describes mitigation to be applied. It states, "All previously unsurveyed areas identified as highly suitable habitat that, as a result of proposed activity, would have a high risk of adverse effects to sensitive plant populations or habitat must be surveyed prior to project implementation. Some areas previously surveyed may be resurveyed, based on the date and intensity of the most recent survey and the risk to habitat from proposed activities. All newly identified sensitive plant occurrences would be evaluated. Specific protection measures would be implemented to minimize impacts to that population occurrence and its habitat." These protection measures could include the following (1) dropping proposed units from activity; (2) modifying the proposed activity; (3) implementing a minimum 100 feet slope distance buffers around sensitive plant occurrences as necessary to minimize effects and maintain population viability; (4) implementing, if necessary, Timber Sale Contract Special Provisions C(T)6.251#, Protection of Endangered Species, and C(T)9.52, Settlement for Environmental Cancellation; and (5) implementing buffers on peatland habitats.

It is estimated that the effectiveness of this mitigation is high because the requirement to survey, identify and protect populations from adverse effects and to buffer habitat for threatened species from all activities will be implemented prior to award of the contract.

The ROD, p. 26, states, "Botanists' analysis assumed the presence of sensitive plant species in the unsurveyed, highly suitable habitat...While a high number of acres have been found to contain highly suitable habitat, based on Forest experience from past surveys, only a very small presence of habitat is ever actually occupied...No impacts to sensitive species or suitable habitat are expected in most habitat guilds. Impacts to sensitive moist, wet, cold, and dry forest guild species or habitats are minor, and will not cause a loss of population or species viability or lead to a trend towards federal listings." The ROD noted that field surveys would be completed by the end of June for the exemption area and anticipated to be completed by the end of August for the remaining area.

I find that the Forest Supervisor had an adequate level of information before him to make a reasoned decision in compliance with NEPA. He knew what areas had high probability of occurrence for sensitive plants. He determined that to ensure that the project would not trend any species toward threatened status, surveys would be completed prior to implementation and appropriate action (mitigation) would be applied if plant species were found.

<u>RECOMMENDATION</u>

I recommend the Forest Supervisor's decision be affirmed and the Appellants' requested relief be denied. The Forest Supervisor should ensure that no harvest will occur in Bumblebee and Steamboat Watersheds.

/s/ Martin L. Prather

MARTIN L. PRATHER
Reviewing Officer

United States Department of Agriculture

Forest Service

Pacific Northwest Region

P. O. Box 3623
Portland, OR 97208-3623
333 S.W. First Avenue
Portland, OR 97204

File Code: 1570-1 **Date:** September 29, 1999
Route To:

Subject: Colville National Forest Douglas-fir Beetle Project FEIS

To: Regional Forester

On June 11, 1999, Robert L. Vaught signed a Record of Decision (ROD) for the Colville National Forest Douglas-fir Beetle Project Final Environmental Impact Statement (FEIS). The decision was appealed by Steven Davis on behalf of the Idaho Sporting Congress and Elizabeth Allen on behalf of Kettle Range Conservation Group, The Lands Council, Native Forest Network, Inland, Leavenworth Audubon, The Ecology Center, Alliance for the Wild Rockies, and Western Fire Ecology Center.

I conducted my review in accordance with 36 CFR 215. My review was to ensure that the analysis and decision are in compliance with applicable laws, regulations, policy, and orders. The appeal record, including the appellants' objections and requested relief, have been thoroughly reviewed.

The appeals focus on evaluation of impacts from timber harvest and connected activities, and assert the Forest Supervisor's decision is not in accordance with the legal requirements of the Colville National Forest Land and Resource Management Plan.

The appellants provided comments during the planning process. The appellants were offered an informal disposition meeting by telephone. The telephone conference call did not result in resolution of the issues.

My recommendation is based upon the following evaluation.

Clarity of the Decision and Rationale

I have examined the stated purpose and need for the project and find it is consistent with national policy, agency objectives, and the Forest Plan. The selected alternative will accomplish the stated purpose and need.

I find the Responsible Official's logic is adequately described by the Record of Decision. The selected alternative responds to both public and agency comments. The project description and implementation requirements described in the ROD and FEIS and supporting documentation are clear. The identification of mitigation measures and monitoring requirements are well defined.

I believe the Forest Supervisor made a reasoned and informed decision, and I agree with his decision as described by the ROD. The decision documentation clearly demonstrates and supports the purpose and need for and the benefits and environmental consequences of the alternatives, including the selected alternative.

The decision documentation is consistent with the Colville National Forest Land and Resource Management Plan. The project proposal is consistent with Agency policy and direction. The

decision documentation indicates that the Forest Supervisor carried out an extensive process for providing public participation opportunities and responding to comments.

Requested Changes and Objections of the Appellant

The appellants' requested relief in general is that the decision be reversed. After reviewing the appellants' assertions and supporting rationale, granting the requested relief is not warranted.

Based on my review, I recommend you affirm the Forest Supervisor's decision.

/s/ Ron Escano

RON ESCANO
Appeal Reviewing Officer
Acting Director, Natural Resources