

APPENDIX D - RESPONSE TO COMMENTS RECEIVED ON FEIS

The FEIS was made available to the public on October 9, 2001 and the Notice of Availability for the FEIS was posted in the Federal Register on October 19. Since issuing the FEIS, a number of letters and other comments have been received on the analysis and Alternative F, which was identified as the Preferred Alternative when the FEIS was issued. Substantive comments from those letters (available in the Project File) are summarized below along with a Forest Service response.

One comment letter on the Draft EIS was inadvertently missed in the Response to Comments in the FEIS. That letter was among the first received and it was read and considered, even if not formally responded to in the FEIS. Comments in that letter are also addressed below.

1. We continue to believe either alternative B or D to be a more responsible approach to the catastrophe which occurred.

Alternatives B and D were developed as part of the Draft EIS to display the upper range of reasonable alternatives. Between the Draft and Final EIS, Alternatives F and G were developed in response to public comments and the analysis of environmental effects displayed in the DEIS. Alternatives B and D were included in the Final EIS and given serious consideration for selection. The rationale for selecting Alternative F Modified is explained in the Record of Decision (ROD) as well as the rationale for not selecting Alternatives B or D.

2. The 14 months it has taken so far, for the Federal Government to respond to last years catastrophic events is negligent in the management of our National Forests.

Response to the fires of 2000 began before the fires were extinguished. Burned Area Emergency Rehabilitation teams evaluated the burned areas and recommended emergency rehabilitation work designed to reduce the most severe effects of the fires on water quality and soils. Implementation of the rehabilitation measures began immediately following the fires as soon as it was safe to begin working in these areas. Fire lines were rehabilitated, erosion control work was started on the most sensitive slopes, culverts were replaced and enlarged, drainage was improved, and erosion control seeding was done. This emergency work continued through the spring and summer of 2001.

Work on a longer-term restoration plan also began immediately following the fires. The laws governing how National Forests are managed were not suspended or changed due to the fires. Laws such as the National Environmental Policy Act (NEPA), National Forest Management Act (NFMA), Clean Water Act (CWA), Clean Air Act (CAA), and other laws had to be followed. NEPA mandates a site-specific analysis and public involvement in the planning process. Given the large land area affected by the fires and the amount of public interest in forest management, the planning process necessarily takes time to adequately complete. The project was given the highest priority on the Bitterroot National Forest and received the full commitment of the Forest Leadership.

The time used to complete this analysis has been necessary to comply with the requirements of existing laws and regulations. The Forest is very aware of the product deterioration, which has been a motivating factor in completing a large and complex analysis as diligently and rapidly as possible.

3. The requirement for frozen ground and 2' of compacted snow eliminates 90% of the Bitterroot. Use "frozen ground or 1' of snow" to adequately protect soil resources.

Table 2-9 of the FEIS identifies the management requirements and mitigation measures to protect resource values. A key parameter of the soils and watershed analysis was that ground based skidding would not exceed a 10% reduction in ground cover (FEIS page 3-203 and Project File Doc-Watershed 41). Skidding on ground frozen to a depth of 4" (inches) or covered by 24" of settled snow in areas that burned at high or moderate severity will be applied as a guideline to fulfill the intention that ground cover reduction does not exceed 10% and that R-1 Soil Quality standards will be met. This activity and the level of soil protection will be carefully monitored (FEIS Appendix C). Monitoring of past winter logging has shown this to be effective in limiting soil damage.

4. Helicopter logging on accessible tractor or line machine ground is not necessary.

The decision to use helicopter logging systems to accomplish fuel reduction was based on fire intensity and soil sensitivity. The most severely burned areas on sensitive soils were designated for helicopter logging to protect soil, water, and fish resources. It is recognized that there is an economic cost to this level of resource protection, but soil and watershed specialists and fish biologists determined helicopter logging systems are necessary in some areas to meet the

legal mandates to protect soil and water resources. This cautious approach will be applied where cumulative effects need to be minimized in sensitive drainages.

5. Increasing the Streamside Management Zone and Riparian Area buffers does not have any scientific basis in burned over landscapes. There needs to be flexibility for on the ground logical boundaries – not a mandated width regardless of topography.

The INFISH recommendations for Riparian Habitat Conservation Areas were based on a natural, unburned forest and streamside condition. The fires of 2000 damaged or increased the risk to riparian habitat. While these streamside habitats and their filtering function will recover over the next few years, in the short-term, when burned area restoration work is proposed, it is considered prudent to increase some of the widths to provide an extra measure of buffering capacity and protection for riparian habitats, especially considering the scale of the 2000 fires.

6. Unfortunately, the professional recommendations have been bartered away and the decisions continue to be controlled by the misinformed, well funded and vocal minority.

The environmental analysis process outlined by the National Environmental Policy Act (NEPA) has been followed. The intent of this law is to provide the decision maker with all of the information needed to make better decisions. The environmental effects analysis presented in the EIS is prepared and written by professional resource specialists without interference. The decision documented in the Record of Decision is based on a careful weighing of environmental and social effects, costs, and benefits. The public participation process has been conducted in an open, fair, and honest manner that provides everyone the opportunity to have their opinion considered without regard to social status.

7. No measurable additional impact to the soils or watershed beyond that naturally occurring from the fire occurred from summer ground based skidding on the Payette's Blackwall-Corral Post Fire. Ground based skidding on frozen soil or settled snow only is unnecessary.

There are three compelling reasons why ground-based harvesting is limited to winter conditions in high and moderate burn severity areas was decided upon. First, the purpose and need of this project is to reduce fuels. Economic reasons were considered in my decision, but landscape recovery and resource protection are also important considerations. Ground based and skyline logging systems were maximized to the extent that soil, watershed, and fisheries effects will permit.

Second, there is little doubt that the severely burned soils have been sensitized and need an extra measure of protection. Although conservative logging methods, e.g., properly spaced skid trails, less impactful equipment and rehabilitate with a small excavator can greatly limit disturbance (re Payette Monitoring Report, Soil PF 25), logging on frozen soil or over snow has shown to result in almost no disturbance. Given the fact that the watersheds are already impacted from the fires, we want to minimize, to the extent practicable while meeting the fuel reduction objectives, additional cumulative impacts to soil and water.

Third, since ground disturbance will be more limited, the risk of noxious weed spread is also reduced.

8. Skid trail application of “slash mats” is near totally ineffective when the slash is dry, brittle, fire killed limbs and tops.

We agree that dry, brittle slash provides ineffective slash mats. Application of slash mats is only required in low intensity burn areas (FEIS page 2-25 and ROD Appendix A). In this case, the limbs and tops should be green.

9. I am advocating the retention of summer ground based harvests as an option, based on site condition.

Logging systems were based on the best available information about site conditions, including burn intensity, erosion risk, watershed sensitivity, and fish habitat. Since the value of fire killed trees declines over time, most fuel reduction activities need to occur in the near term, before the ground conditions fully recover. Dry season ground based and skyline logging systems are included in Alternative F-Modified to the extent that soil, watershed, and fisheries effects will permit.

10. Soil disturbance should not be confused with soil erosion. Soil disturbance can be beneficial.

We agree in part. Although soil may be disturbed, it is not considered “detrimentally damaged” unless it exceeds criteria established in the Soil Quality Standards (FSM 2500), such as excessive compaction or displacement, which should not exceed 15% of an activity area. It is our opinion that the effects of fire have already provided ample disturbance to enable seeding and planting and that hydrophobicity will have greatly diminished within one year. Lopping and scattering of tops and branches during fuel reduction activities will provide additional effective ground cover, but the lack of a protective duff layer on severely burned soils necessitates the winter logging requirements identified in the FEIS.

11. Actions of the BAER team have resulted in placing wattles on slopes exceeding 70%. These measures far outweigh erosion that may result from ground based skidding on shallow slopes.

The placement of straw wattles is an emergency measure. Studies have shown that wattles, when properly placed, are effective at stopping sediment from gentle rains. Intense rain events can make them ineffective as was shown during intense thunderstorms in limited areas during the summer of 2001.

12. Limiting the slash pile size to 20' in diameter means that more piles will be needed.

By limiting the size of slash piles, burns will not be as hot, reducing the amount of bare soil created. Bare soil is conducive to the establishment of noxious weeds (Losensky, 1987). In addition, smaller, less intense burns will result in less damage to plant roots, mycorrhizae, and organic material important for plant growth. Maintaining an intact native plant community will also assist in competing with invading species. Not all piles will be burned, some will be retained for small mammal habitat.

13. Two mitigation measures to reduce the visual impacts of harvest along trails are excessive and unnecessary. One requires “backcut” or “flushcut” stumps for a two-chain width (132 ft) from both sides of the trail. The other measure expects slash piles be located 1 chain (66 ft) away from the trail.

Cut faces of stumps and excessive amounts of slash in the immediate foreground of trails are visually obtrusive to many people. While it is true that the effects of the burn and fuel reduction activities cannot be hidden, the effects can be reduced in visually sensitive areas. Felling trees with flush cut or back cut stumps does not conflict with approved tree falling techniques. Moving slash piles one chain from the trail will require a fair amount of hand-work. However, with techniques such as directional tree felling, the amount of hand-work can be reduced. Hand piling away from trails will have some additional, although minimal, impact on the economics of the proposals. This is a customary approach on the Bitterroot National Forest for fuel reduction near system trails and is used to reduce impacts to recreation users.

14. I did not see a specific mitigating measure limiting use of temporary roads during fuel reduction measures within the alternatives, within a Bitterroot NF 24 May 2001 “Alternatives and Key Issue Summary” temporary road construction is limited to short spurs less than 100 yards. This restriction is arbitrary and capricious.

The mileage of temporary road for each alternative is disclosed in the FEIS (Table 3-52). The temporary road length restriction referred to applies to Alternative B. This restriction is not included in Alternative F-Modified.

15. Harvest of timber can continue for several years, e.g., the harvest of dead timber from the 1961 Sleeping Child Fire. Continued harvest should require less stringent mitigations measures as the hill-slopes recover. The FEIS should consider these changed conditions.

It is not possible to anticipate or fully evaluate every possible turn of events or changed condition that may or may not happen in the future. Monitoring will be a key feature to ensure that activities, effects, and conditions are within the ranges established in the EIS. The FEIS has evaluated the environmental effects of proposed and alternative activities that are considered most likely during the life of the project. If conditions and proposals for management activities change over time, supplemental environmental review may be needed. NEPA regulations provide for supplemental environmental review for changed conditions.

16. We feel the Forest Service is not properly addressing the following issues in their search for a solution to manage the burned areas of the forest fires of 2000: Safety of forest users, fuel reduction, wildlife habitat, watershed management/fisheries, soil erosion. Our efforts are to ensure that the Bitterroot National Forest be managed properly in order to create a healthy environment for many generations, not just for the short term.

Your comments have identified many of the same environmental concerns that are addressed in the FEIS. Many people identified these issues and expressed a wide variety of opinions about them. The analysis fairly evaluates each issue, which is displayed in the FEIS. The environmental and social effects, costs, and benefits have been carefully weighed in the decision.

17. We are concerned for the safety of forest users while utilizing Bitterroot National Forest roads in the roaded areas effected by the fires of 2000. The safety of private citizens and forest service employees is an issue that must be addressed. Furthermore, the liability that the Bitterroot National Forest employs by not removing hazard trees immediately is exponentially increased every day that passes. We feel that it is time that the Forest Service begins the process of hazard tree removal within a 100 ft minimum of its road systems within the burned areas of 2000.

Safety risks to forest users is addressed in the FEIS (pages 2-29 and Chapter 3’s Recreation and Social reports). Alternative A (no action) as well as those alternatives that did not include fuels reduction identifies an increased risk to forest users. Following the fires, trees posing imminent safety hazards along roads and trails were felled during BAER

work and ongoing maintenance. Fuel reduction activity units adjoining roads in Alternative F-Modified will reduce longer-term hazards on those sites. Elsewhere, ongoing road and trail maintenance activities will minimize risk by keeping open roads clear and monitoring for safety hazard trees.

18. How can Alternative F be favored over Alternative B when it eliminates fuel treatment on 1/5 of the area in need of such treatment? What will happen to the soils and entire watersheds when the fuels that now go untreated, eventually are consumed by wildfire? Can't the same care for watersheds be exercised under an Alternative such as B and D?

As described in the Record of Decision, based on the effects analysis described in Chapter 3 of the FEIS, the environmental effects of Alternative B are considered too great and do not adequately balance the need for fuels reduction with the legal mandate to protect forest resources. Alternative F does a better job of balancing the environmental and social effects, costs, and benefits. The effects of Alternative F on selected watersheds were also not considered acceptable and therefore were modified, as described in the Record of Decision.

19. Why is Alternative G the only alternative that specifies log barrier installation? Certainly all alternatives should include this type of work where this treatment is appropriate. Why isn't any of this work included in the decision?

No additional log erosion barriers are identified because they provide a level protection for the first one to three years following high severity fire when vegetation has not recovered and when the soil is still hydrophobic from fire heating. After that time, frost heaving, vegetation growth, and time has reduced hydrophobicity and vegetation is also present to help hold the soils in place and to provide a small duff layer to protect the soils. The Interdisciplinary Team believed that if additional log erosion barriers needed to be installed to protect down slope resources (i.e., life and human property) that this work should be done during the summer of 2000, using Burned Area Emergency Rehabilitation authority rather than waiting until 2002 or later when the proposals associated with this analysis were implemented and the emergency either no longer existed or was severely reduced. In fact, during 2001, another BAER Team was convened on the Forest to consider additional treatments following the July storms (FEIS p. 2-31). As a result, additional emergency work in the form of log erosion barriers were installed in the Lord Draw area, above Camp Creek near FS Road 106, above the Sula Fire Station, Skalkaho area, Whiskey Gulch, Rye Creek and consisted of about 60 additional acres where soil movement or hydrophobicity tests revealed a need for slope stabilization. Two hundred acres of existing log erosion barriers in Laird Creek were cleaned and improved following the storm events in July (Personal communication with G.Richtmyer 11/2/01).

20. The USFS has hired you and your entire staff to apply your professional knowledge, skills and judgement to manage the Bitterroot National Forest. You were not hired to take a vote or an opinion poll of interested parties to make your decisions. This is not a democratic process. Forest management must be based on science and professionalism.

The environmental analysis process outlined by the National Environmental Policy Act (NEPA) has been followed. The intent of this law is to provide the decision maker with all of the information needed to make better decisions. The environmental effects analysis presented in the EIS is prepared and written by professional resource specialists without interference. The decision documented in the Record of Decision is based on a careful weighing of environmental and social effects, costs, and benefits. Public participation in the decision making process is a legal requirement of NEPA. The public participation process has been conducted in an open, fair, and honest manner that provides everyone the opportunity to have their opinion considered without regard to social status.

21. Alternative F seems reasonable. What ever alternative salvages the most harvestable timber would be good.

Selected portions of Alternative F were modified in the Record of Decision, which reduced the amount of fuels reduction and timber harvest by a small amount. Neither Alternative F nor Alternative F-Modified harvests the most timber; that is Alternative D.

22. I support Alternative F which will allow for the minimum (46 mi.) of road bulldozing (decommissioning). As an avid recreationalist, both motorized and non motorized, dirt bike, hiking, snowmobiling, and Nordic skiing, I am opposed to any road closures unless they are causing legitimate and actual environmental damage and can not be rerouted around the problem area.

The alternatives considered in the FEIS included a range of road miles considered for decommissioning. Roads were identified for decommissioning based on their location, potential for erosion, condition, and future need for forest management.

23. Marketable burned trees should be removed and sent to the mill.

The alternatives considered included a range of harvest volumes from 0 to an estimated 240 MMBF. Alternative F-Modified includes approximately 176 MMBF of harvest volume.

24. New trees should be planted and riparian areas restored.

Tree planting and riparian restoration are included in the alternatives and Alternative F-Modified.

25. [Alternative F] if you must have one, seems to be less intrusive.

The Record of Decision modified alternative F in selected areas. Alternative F-Modified balances the environmental and social effects, costs, and benefits and best meets the Purpose and Need for Action.

26. We are opposed to your plans to log this devastated landscape. As you well know, though burned forests represent an irresistible temptation to the timber industry, logging in areas of heavy burning is very damaging to the soils and this to the flora and fauna that rely on the soil and water quality for their survival and well-being.

A key purpose of the project is to remove excess fuel that will result in more severe burning conditions in the future. The timber industry can help us do this, and the revenues collected from harvest of the dead trees will fund related activities, such as road reclamation, that will enhance water quality. The majority of logging systems in Alternative F-modified are aerial (>80% helicopter and skyline.). These aerial systems will have minimal impacts to the soil, the water quality, and the associated flora and fauna. The areas burned at high or moderate severity that are designated for tractor logging are restricted to winter conditions, which limits logging to frozen ground or adequate snow cover conditions needed to protect soils.

27. Alternative C is amazing in that you considered it. It is the only alternative that shows a high level of care and concern for the land.

The National Environmental Policy Act (NEPA) requires that we consider a range of reasonable alternatives. Alternative C is within a range of reasonable alternatives and was fully evaluated and considered.

28. Fire is a natural force, which molds our environment. Until man began to manipulate his environment for his own financial purposes, fire was a very positive influence. Overstocked forests were returned to park-like stands by low-level fire, grasses were renewed, wildlife flourished in its presence, and water quality and soils recovered after the burn.

While it is true that fire is a natural force, the fires of 2000 were outside the natural range of variability due to years of fire suppression. The natural low severity fires that historically occurred in much of the Bitterroot Forest on a frequent cycle were replaced by large, severe, stand replacement fires. Fire suppression was conducted and continues to be conducted to protect private property and important resource values. Although the 2000 fires were unusually large and severe, the vegetation, wildlife, water, and soils will recover. The Burned Area Recovery project is designed to speed the natural recovery and reduce the likelihood of another large, severe fire in the future when the fire-killed trees present a heavy fuel load.

29. We, the timber interests reap a huge profit from the sale (usually overseas) of the logs, but then we create a vacuum when those jobs are gone, making middle-income families more and more dependent on timber that isn't there.

Unprocessed logs from National Forest lands are prohibited from export and cannot be substituted for private logs that are being exported. The profitability of timber sales may be overestimated judging from the number of sawmills that have gone out of business in the last decade.

30. While working against the healing forces of nature, we create a situation which is ripe for further landscape injury by increasing fire risk from slash buildup and be exacerbating soils erosion. This spoils the quality of the regional watershed, erosion suffocates anadromous fish eggs, fish die and we as humans suffer.

A key purpose and need of the Burned Area Recovery project is to reduce the likelihood of severe fires in the future by reducing fuel loading. Piling and/or burning to reduce fire risk will dispose of slash from management activities, where needed. Soil erosion is expected to be within acceptable limits through the application of mitigation measures such as winter logging, water bars, seeding, and improved drainage. Effects to soils, water, and fish have been fully evaluated and documented in Chapter 3 of the FEIS. The effects will meet all current standards, laws, regulations, and policy.

31. Foresters in the Bitterroot Forest should concentrate on preventing the severe losses to human habitation that occurred in 2000. Education is key to protecting the urban-wildland interface.

Education is an important part of protecting the wildland urban interface. Education programs are in progress and will continue after the Burned Area Recovery project is implemented.

32. Our whole nation is dependent on our forests for clean water, clean air, wildlife values, as well as responsible, sustainable timber production. What you have proposed is not responsible, is not sustainable, is not scientific, and is simply wrong.

Effects on water, air, wildlife and other resources were evaluated in the FEIS (Chapter 3). In selecting Alternative F Modified, the environmental and social effects, costs, and benefits were carefully weighed. The best available science was used throughout the analysis (FEIS L-1 to 23).

33. I regret that it has taken this long to develop alternatives. No doubt much of the wood that would have been marketable with quick action will now be unmerchantable.

Response to the fires of 2000 began before the fires were extinguished. Burned Area Emergency Rehabilitation teams evaluated the burned areas and recommended emergency rehabilitation work designed to reduce the most severe effects of the fires on water quality and soils. Implementation of the rehabilitation measures began immediately following the fires as soon as it was safe to begin working in these areas. Fire lines were rehabilitated, erosion control work was started on the most sensitive slopes, culverts were replaced and enlarged, drainage was improved, and erosion control seeding was done. This emergency work continued during the spring and summer of 2001.

Work on a longer-term restoration plan also began immediately following the fires. The laws governing how National Forests are managed were not suspended or changed due to the fires. Laws such as the National Environmental Policy Act (NEPA), National Forest Management Act (NFMA), Clean Water Act (CWA), Clean Air Act (CAA), and numerous other laws are required to be followed. NEPA mandates a site-specific analysis and public involvement in the planning process. Given the large land area affected by the fires and the amount of public interest in forest management, the planning process necessarily takes time to adequately complete. The project was given the highest priority on the Bitterroot National Forest and received the full commitment of the Forest Leadership.

The time used to complete this analysis has been necessary to comply with the requirements of existing laws and regulations. The Forest is very aware of the product deterioration, which has been a motivating factor in completing a very large and complex analysis as diligently and rapidly as possible.

34. I do not believe in “pulling culverts and decommissioning road,” but that seems to be present in every alternative except A. The small erosion caused by roads and culverts cannot begin to compare from the wholesale erosion that results from forest fires, and I believe that fires burn more intensely in unmanaged areas.

Studies and monitoring reports consistently identify roads as the largest source of erosion and sediment. Road decommissioning and storage is a proven method of reducing sediment in these watersheds that were affected by the 2000 fires.

35. I am concerned that the fuel reduction in the Burned Area Recovery FEIS would be used as an excuse for extensive logging of the forest.

Commercial harvest of timber is a tool planned for accomplishing some of the fuel reduction activities because it is more cost effective than investing in fuels reduction work with no financial return. Harvest will allow more acres of fuel reduction work to be accomplished with a limited budget.

36. I urge the Forest Service not build new roads into roadless areas. Fuel reduction must not be used as an excuse for logging or road building in roadless areas of the Bitterroot.

No roads or fuel reduction work are planned for inventoried roadless areas. Management activities and temporary road construction are planned in unroaded areas. This is consistent with current national policy, the Bitterroot Forest Plan, and the Purpose and Need of the Burned Area Recovery project. Temporary roads will be rehabilitated and revegetated following their use. Unroaded areas will remain unroaded.

37. The Roadless Area Conservation Rule as published 1/12/01 must be allowed to take effect in all National Forests.

The Burned Area Recovery project is consistent with the Roadless Area Conservation Rule.

38. This report [provided by the commenter] analyzes the impacts of one new alternative, Alternative F, on unroaded lands and core bull trout and west slope cutthroat habitat and water quality limited segments.

The interdisciplinary team reviewed the analysis submitted by the commenter.

39. Unit locations did not appear to be altered from the prior analysis in most cases. The FEIS states some of the acreages within units were adjusted to exclude acreage in RHCAs.

Alternatives did not change substantially between Draft and Final EIS documents. Some adjustments in units and acreages were made to improve the accuracy of the FEIS. Alternative F was developed from modifications to other alternatives, so there are many similarities.

40. Of the total acreage for harvest in Alternative F, the following were the acreages units completely within unroaded areas: 13,263. This compares with 14,351 acres in the total estimate of the FEIS (Table 2-28). Visual estimation of the acreage in partial units estimates 3634 acres of units partially in unroaded areas compared to the 1088 acres estimated in the FEIS. The difference could be due to the allocation of acreage in partial units to areas outside of the unroaded areas disproportionate to the area within the boundaries, error in visually estimating the extent of the units within the unroaded areas or the mistaken inclusion or exclusion of units from the analysis.

Acreage estimates in the FEIS were made using a geographic information system (GIS). They were derived using the best available information and technology.

41. Thus, 34% of the acreage for harvest under Alternative F is in unroaded areas according to the BNF's own estimates.

The FEIS acknowledges and displays management activities occurring in unroaded areas, but no activities are planned in the inventoried roadless areas. No permanent roads will be constructed in unroaded areas. The temporary roads will be rehabilitated and revegetated. Unroaded will remain unroaded following the implementation of this project.

42. Of the total acreage for harvest in Alternative F, the acreage in core bull trout habitat outside of unroaded areas was 3928 acres. Therefore, an additional 9% of harvest is in bull trout core habitat areas outside unroaded areas.

FEIS Chapter 3 describes the effects on bull trout habitat. Mitigation measures have been identified for implementation that will protect bull trout habitat. The US Fish and Wildlife Service has concurred with the effects analysis.

43. Of the total acreage for harvest or cutting treatment in Alternative F, the acreage in core west slope cutthroat habitat outside of core bull trout habitat and unroaded areas was 4830 acres. This represents an additional 11% of harvest acreage in prime west slope cutthroat streams.

The FEIS displays the effects on west slope cutthroat trout habitat. The same mitigation measures for bull trout will be applied for west slope cutthroat trout. West slope cutthroat trout is not a threatened or endangered species, it is classified as a sensitive species by the Regional Forester.

44. Of the total acreage for harvest or cutting treatment in Alternative F, the acreage in designated Montana Department of Environmental Quality water quality limited segments outside of core west slope cutthroat habitat, core bull trout habitat and unroaded areas was 829 acres. An additional 2% of the acreage harvested is in areas with compromised water quality.

The FEIS displays the effects on water quality. Mitigation measures to protect water quality have been identified for implementation (FEIS 2-25 to 2-31). Best Management Practices will be applied. Alternative F Modified will protect the beneficial uses (cold water fisheries) of the streams on the Bitterroot National Forest. The Montana DEQ has concluded that the project complies with the Montana Water Quality Act.

45. Thus, 56% of the acreage harvested is in unroaded, core bull trout or west slope cutthroat trout or water quality limited stream segment watersheds.

The FEIS displays the effects to all these resources in Chapter 3. As noted above in #44, mitigation measures and best management practices will be applied to limit the adverse effects.

46. There were two major temporary roads through unroaded areas in Alternative F.

Alternative F included six temporary roads in unroaded areas totaling 3.5 miles, the longest being 1.57 miles. Alternative F Modified includes 5 temporary roads in unroaded areas totaling 2.7 miles, the longest being 1.57 miles. These temporary roads will be rehabilitated and revegetated following their use. The unroaded areas will remain unroaded.

47. Another helicopter landing shown on the maps in an unroaded area is found between units 257 and 265. This landing is not associated with any temporary or other roads and is not closely associated with any unit. The purpose of this landing is not clear.

Consistent with the conservative approach to analysis, a few more landings were analyzed than will actually be needed when implementation is complete. The landing referred to will not be needed for implementing Alternative F-Modified.

48. Why this decision was not issued at the same time the FEIS was released?

There was a 30 day wait after issuing the FEIS to follow regulations regarding a request for an exemption from the normal automatic stay of implementation. Another delay occurred to allow for public notification that the Under Secretary of Agriculture was considering making the decision on this project.

(No comment was assigned to number 49)

50. Regarding FEIS, 1-20,21: Does not address entire burned area and only a very small portion of the Timber areas. Inadequate as it doesn't responsibly manage the burned fuels in the Timber management area – 57% of the 307,000 acres. Responsible management would treat all timber plus all interface plus some other.

All burned areas designated as suitable timberlands outside of Inventoried Roadless Areas and streamside buffers (RHCAs) were considered for fuel reduction needs. The remaining suitable timberlands that were not considered for fuel reduction treatment in the action alternatives has no need for fuel reduction (grasslands and forested areas that are sparsely stocked or dominated by smaller trees).

51. Regarding FEIS, 1-12,13 and INFISH standards: Totally avoids activity in the riparian areas. States that fuel are a problem of reburn at 20 tons/acre (Brown) – then proposes no action in the heaviest timbered riparian areas.... Completely ignores the location of the streams in management areas that allows manipulation. Wilderness solutions are not appropriate here. ...Totally ignores the significant economic value of the riparian timber to off set the costs of restoring the areas particularly the stream channel placement and long term woody debris.

More treatment in riparian areas was considered, but not studied in detail (FEIS page 2-33). Decisions to leave burned trees and other fuels in riparian areas are based on guidance from INFISH standards. These requirements are intended to minimize sediment contribution to streams, maximize woody debris contribution (which helps rather than hurts fisheries), and maximize stream shading. Reforestation efforts are proposed to be carried out adjacent to and within many RHCAs to increase the speed for forest recovery.

52. Regarding FEIS, 1-12,13 and INFISH standards: Totally ignores the abilities of rebuilding the stream channels with placement of long and large woody debris to improve watershed and aquatic conditions in the heavily burned drainages (as accomplished in Rye Creek drainage during BAER).

We believe that it is more sound to maintain fish habitat in as natural a state as possible than it is to reduce naturally recruited pieces of woody debris (i.e. by harvesting inside of stream buffers), and then compensating for this reduction in recruitment by artificially putting woody debris back into the channel. Simply put, in the vast majority of instances, man cannot construct better fish habitat than nature. We also believe that it is unnecessary to add woody debris to streams that already contain adequate amounts of woody debris, and where potential future recruitment is at or near its full potential. We know, and are already seeing, that the fires are going to increase woody debris recruitment to streams over the next two decades. For those reasons, the only streams where woody debris placement is being proposed in the FEIS are those streams that clearly lacked woody debris prior to the fire, and recruitment potential was reduced due to road encroachment and/or past riparian harvest. Rye and North Rye Creeks are examples of this, and are proposed for some woody debris placement. In the other streams, we believe that the best course of action is to allow natural recruitment to continue, and protect the full potential for recruitment. Widening the narrowest stream buffers out to a distance of 200 feet will encompass at least two site potential trees, and will ensure that woody debris recruitment and shade are not affected by the salvage harvest.

53. Regarding FEIS, 1-12,13 and INFISH standards: The effects of the mass wasting and accelerated surface erosion resulting in massive sediment delivered to the streams is not addressed in relationship to the mitigation measures required for logging. Ten tons of sediment per mile of stream requires many limitations on logging activities and 1800 tons per mile for a natural fire is OK and justifies no action. ... This fire and its sediment loads and the resulting fish survival is the example we need to demonstrate that the logging impacts of sediment are of no significant impact and should not be used as a control measure for logging. Certainly logging impact on sedimentation is so small as to be unmeasurable.

The sediment inputs that are predicted to occur from salvage logging generally range between 1-3% of the amounts produced by the fires. On the surface, this is a small number. However, when you consider that some of our streams have largely been filled with sand as a result of the combination of past activities, the fires, and last summers mudslides, we believe that the cumulative effect on the fishery is a legitimate concern. This is particularly relevant in the five drainages where Alternative F has been modified (Medicine Tree; Laird; Little Sleeping Child; North Rye; and lower Rye Creeks). In those streams, westslope cutthroat trout populations have suffered losses in excess of 75% of the pre-fire population; a couple populations have lost in excess of 90% of their pre-fire populations (Medicine Tree; Little Sleeping Child). Furthermore, the Medicine Tree and Little Sleeping Child populations are also isolated to short (< 4 miles) sections of habitat, with little hope of new fish moving into these streams from other unaffected areas. In those situations, the addition of 100-300 tons of sediment from harvest activities could have a significant effect on the fishery, even if it is only 1-3% of the fire/mudslide sediment load. Those quantities of sediment are also high enough that they could be visible and measurable in many areas. The bottom line is that we cannot control the sediment that the fires will add to streams. However, we can control the amount that our management activities will add, and we believe that it is prudent to back off where significant cumulative effects to the fishery could occur.

54. The sediment model overstates the logging sedimentation produced and even then it is of no significant impact as evidenced by the survival of the fish from these massive sediment loads.... The water model the USFS uses is incorrect... What are the specific reasons and studies that caused the USFS to come to their conclusions on the water model? What are the specific reasons and studies that caused the USFS to come to their conclusions on the soils model?

It is incorrect to state that the massive sediment loads from the fires and mudslides have had no significant impact on the fishery. The FEIS documents major fish kills in Sleeping Child, North Rye, Laird, Medicine Tree, and Little Sleeping Child Creeks as a result of sediment from mudslides (FEIS pgs 3-245, 3-246, 3-277, 3-296). We agree that in the long-term, the majority of these populations are likely to recover. However, in the case of isolated westslope cutthroat trout populations like Medicine Tree and Little Sleeping Child, recovery is not a sure thing, and if and when it does occur, it is likely to be slower than in other streams where fish populations are connected to each other and new colonists can move into the burned areas and repopulate streams.

Computer models are not intended to provide highly accurate estimates of sediment or water increases caused by land management activities. They are intended to provide estimates that can be used for comparing alternatives and for application of professional judgment by resource specialists.

The WEPP model (Disturbed Water Erosion Prediction Project) was used to estimate existing and potential volumes of sediment that would be produced by the various proposed activities in the FEIS. A cadre of watershed specialists used professional judgment to select appropriate model parameters (PF Watershed 41).

The Equivalent Clearcut Acre Model was used to describe existing forest crown conditions and estimate potential water yield resulting from forest crown removal. Again, watershed specialists used professional judgment to determine appropriate model parameters (PF Watershed 41).

The model outputs were used to compare alternatives and to evaluate how the outputs might affect the existing conditions on the landscapes. The increases predicted by the model are quite small when compared to current levels (FEIS Table 3-38, 3-34, 3-30, 3-26). Cumulative effects (conditions in stream channels and on the land that result from past activities as well as natural sensitivities) were the limiting factor in selection of what activities to implement (refer to existing condition and cumulative effect discussions for each hydrologic unit (HUC) (FEIS 3-98 to 106, 3-119 to 130, 3-131 to 138, 3-149 to 162, 3-163 to 168 and 3-175 to 186).

55. As stated in the report large burn areas have a damaging effect on the soil and then more mitigation measures are placed on management activities to limit their damage when the damage has already been done. If it is already wrecked what can be affected? The effect of logging cannot be located within the massive changes of the fires effects. Specifications for operation avoid the benefits of working the soil to improve the conditions as stated in the report.

We agree in part. Some studies as summarized by McGiven & Starr (2000) have indicated that the effects of sedimentation from salvage logging are not detectable due to the large amounts of sediment resulting from the fire itself. However, since so much soil is lost as the result of severe fire effects, it makes the remaining soil all the more precious to retain. With regard to the benefits of working the soil, we have not noted the presence of a “soil cap” and the hydrophobic property of the soil to repel water following a fire has been found to be variable across the landscape. Most of this effect disappears in a year’s time. We believe it is more important to disturb the soil surface as little as possible until plant growth is re-established that will impede rain splash and allow infiltration of water.

56. The public desires the management of the areas as evidenced by survey of the USFS. This survey of the local population is quite representative of the national population, as our folks have recently come from many parts of the country. The public is using more wood products, which is a social demand for, and approval of intensive management of the BNF.

Much more information than just the public survey was used to make the final decision. Results of the environmental effects analysis, scientific information, requirements of laws, regulations, and policies, and public comments were all factors in the decision.

57. The BNF has reduced the harvest with no additional ground information in Alternative F. Bowing to pressure ... Easy way out.

The environmental analysis process outlined by the National Environmental Policy Act (NEPA) has been followed. The intent of this law is to provide the decision maker with all of the information needed to make better decisions. The environmental effects analysis presented in the EIS is prepared and written by professional resource specialists without interference. The decision documented in the Record of Decision is based on a careful weighing of environmental and social effects, costs, and benefits. The public participation process has been conducted in an open, fair, and honest manner that provides everyone the opportunity to have their opinion considered without regard to social status.

Development of Alternative F and the decision to select Alternative F-Modified was based on analysis of resource conditions and environmental effects.

58. The BNF has not reached the 10 MMBF target of the allowable cut for the last several years. This fire demonstrates how far in error the allowable cut is due to the large size of and the production of the BNF (230+bdft/ac/yr). The vegetation is not being addressed properly.

Dead timber is not regulated for sustainability under the Bitterroot Forest Plan. The National Forest Management Act allows dead timber to be sold as a substitute for the regulated live timber component or sold in addition to the regulated component. The allowable sale quantity for the Bitterroot National Forest (33.4 MMBF) is available for the annual timber sale program. This equates to approximately 334 MMBF over the traditional ten-year period for the Forest Plan. The current Forest Plan was signed 14 years ago. This equates to 467.6 MMBF of allowable sale quantity to date. Since 1988, the Bitterroot Forest has harvested approximately 109.18 MMBF. The amount of harvest proposed in Alternative F Modified is approximately 176 MMBF. The total (accomplished + planned) is approximately 285.18 MMBF. This project would not exceed the allowable sale quantity (Forest Plan Monitoring and Evaluation Report 1988-1999 and Timber Volume Offered and Sold Year 2000).

The allowable sale quantity is a maximum harvest level, not a minimum or required level. Actual annual harvest levels are based on a variety of factors including budgets and environmental effects.

59. “Some” – very poor specification. 1% or 100%? Unscientific and generally poor management. What is some?

I agree that “some” is a poor specification. Review of the FEIS shows that “some” is often used in a generic sense to indicate “a portion” and to improve readability of the document. “Some” is usually defined in more site-specific detail with a complete reading of the FEIS and inspection of the tables and charts.

60. Re: FEIS 1-20,21 and 2-24 to 31. Specifications do not properly address economics or on the ground conditions. Inefficiently addresses the harvest of products. Inappropriate techniques and ignores current knowledge, attitudes, and abilities.

The Forest Plan direction you cite (FEIS 1-20, 21) was developed in 1987. It will be appropriate to review and possibly change this direction during the upcoming Forest Plan revision. It would not be appropriate to make wholesale changes in Forest Plan direction as part of a project analysis. Site-specific amendments to the Bitterroot Forest Plan are included as part of this decision. The management requirements and mitigation measures you cite (FEIS 2-24 to 31) are based on standard practices, current contract specifications, and the best available knowledge of current ground conditions.

61. No fertilization or herbicides used. This is a serious deficiency of the FEIS.

Fertilization is planned in Alternative F Modified where erosion control seeding is applied. Fertilization to promote tree growth is not a standard practice in this area because the costs are high and benefits are questionable. The limiting factor for tree growth in this area is usually related to soil moisture, not lack of nutrients. In steep terrain, such as the Bitterroot National Forest, the adverse watershed effects of widespread fertilizer applications could be substantial.

Herbicides to control noxious weed invasions will be used in limited areas along roadsides where such use was approved in previous environmental assessments. A Forest-wide EIS for integrated noxious weed treatment is being prepared that will include herbicide treatments in the high-risk weed areas affected by the 2000 fires (FEIS 3-424). Also refer to the FEIS at 4-114 for responses to previous comments concerning herbicides.

62. Terrible timing and choice of actions... No action on the ground after 14 months. Totally ignores the perishable nature of the products... This spoilage was known by the BNF, who cited books on study of tree decay. Completely ignored the obligation to current contracts which has caused the spoiling of the contracted products and products to be included in the catastrophic modification.

The time used to complete this analysis has been necessary to comply with the requirements of existing laws and regulations. The Forest is very aware of the product deterioration, which has been a motivating factor in completing a very large and complex analysis as diligently and rapidly as possible.

63. Why does the alternative F have further reductions in the treatment areas?

Alternative F was developed between the Draft and Final EIS in response to public and other agency comments and additional interdisciplinary review of the DEIS alternatives (FEIS 2-18). Alternative F was designed to reduce the adverse effects of Alternatives B or D and provide a better balance of effects, costs, and benefits.

64. Why were others not allowed to present alternatives?

Many people presented comments concerning alternatives, which were reviewed and considered by the Interdisciplinary Team (FEIS 4-24 to 40). The Conservation and Local Economy Alternative was a comprehensive comment submitted by a local organization, which received 683 letters of support with 752 signatures (FEIS 4-3). Alternative G was studied based on the high level of public interest. The National Environmental Policy Act (NEPA) does not require that every alternative be studied in detail, only that a reasonable range of alternatives be evaluated.

65. What is the reasoning for this excessive snag retention? There are more snags than ever, in the wilderness there is a solid sea of them all the way to McCall Idaho... and all the species affected are very mobile. They fly or move rapidly to the next snag.

Not all wildlife species prefer the same density of snags. Common flickers and Lewis woodpeckers, for example, prefer a lower density of snag habitat. Retaining snags in the treatment areas will provide snag habitat diversity. While it is true that there is an abundance of snag habitat on the Bitterroot Forest, snag dependent species occupy home ranges of a smaller scale. The home range of individual populations does not extend across the entire landscape. Another important reason for retaining snags in treatment areas is that those snags will eventually fall to the ground and serve as woody debris for organisms that are not particularly mobile.