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Subject: Transmittal Letter - Beaverhead Forest Plan Riparian Amendment EIS
#98-01-00-0016
Appellant, American Wildlands

To: Appeals Reviewing Officer, Region One

In accordance with 36 CFR 217.15(a), I am hereby submitting the decision documentation for the Alliance for the Wild Rockies, American Wildlands, Montana Ecosystems Defense Council, and Native Ecosystem Council appeal of my decision on the Beaverhead Forest Plan Riparian Amendment FEIS.

I. BACKGROUND

Alliance for the Wild Rockies and Montana Ecosystems Defense Council submitted comments jointly on February 25, 1997 and June 25, 1997. Their letters can be found in the Planning Record in Volume 2, pages 71-72 and Volume 3, pages 83-84. Our response to their comments can be found in Chapter V of the FEIS, pages 4, 16, 19, 35, 78, 83, 92, 94, 105, and 106.

American Wildlands submitted comments on February 28, 1997, and June 3, 1997. Their letters can be found in the Planning Record in Volume 2, pages 168-171 and Volume 3, pages 30-31. Our response to their comments can be found in Chapter V of the FEIS, pages 24, 29, 33, 39, 42, 43, 76, 77, 88, and 96.

Native Ecosystem Council submitted comments jointly with American Wildlands on November 14, 1995. Their letter can be found in the Planning Record in Volume 1, pages 36-79. Our response to their comments can be found in a document mailed to all scoping commenters, in the Planning Record, Volume 4, pages 40106-40151.

II. INFORMATION IN THE DECISION DOCUMENTATION WHERE APPELLANT'S ARGUMENTS ARE ADDRESSED

STATEMENT OF REASONS FOR THIS APPEAL

I. THE BEAVERHEAD FOREST PLAN RIPARIAN AMENDMENT FAILS TO REVERSE PROGRAMMATIC MANAGEMENT DIRECTION THAT HAS PROVEN TO CAUSE HABITAT DEGRADATION AND EXTINCTION OF WESTSLOPE CUTTHROAT TROUT AND OTHER AQUATIC SPECIES (NOA, page 4).

Contention A. Alternative 7 fails to adequately protect declining native fish populations in a timely fashion, and fails to re-establish fish populations where past and ongoing management activities have caused local extinction.

Documentation: The ROD at pages 12 and 13 states, "The Biological Assessment for westslope cutthroat trout concludes, "The intent of the Upper Missouri Westslope Cutthroat Trout Short Term Strategy, for ongoing management practices (such as livestock grazing) is to make sure they will not contribute to the loss of westslope cutthroat trout populations. Alternative 7 goes a little farther to define what is required to meet the intent of the strategy. This is done by: 1) defining interim utilization standards for streams containing 90% or purer westslope (or other genetic purity requirement as defined by any future Montana State Conservation Strategy or Federal Recovery Plan), that will initiate an upward trend in riparian condition where function is impaired or at risk; 2) providing a specific objective for livestock management with regard to westslope cutthroat trout streams. Based on this objective, management changes would occur immediately within Annual Operating Plans so that impacts from livestock management on all WCT streams would not contribute to reduced viability of populations; and 3) requiring an assessment be completed which documents why adjustments are considered adequate to prevent contributing to reduced viability of the population."

The following features of Alternative 7 are excerpts from the Forest Plan Amendment, Attachment A to the Record of Decision. These parts of Alternative 7 pertain to fisheries.

A. Goals

Add: 16. Riparian-wetland areas across the Beaverhead National Forest Planning Area are, at a minimum, in proper functioning condition.

B. Objectives

b. Fisheries

The second paragraph shall read, "Best Management Practices" and Forest-wide standards will be implemented in all management activities; and will be of particular significance whenever a management activity has the potential to produce adverse impacts to the fishery resource.

Add: Immediately adjust land management practices, where needed, so they contribute to the restoration or enhancement of Upper Missouri westslope cutthroat trout populations.

E. Standards

FISHERIES

Fisheries standard #4 shall read, " Livestock management practices will be designed to prevent unacceptable loss of streambank vegetation and structural damage to streambanks."

RANGE

Maximum Allowable Utilization of Palatable Forage Produced in a Riparian Vegetation Type¹

<u>Dominant Vegetation Type</u>	<u>Within Grazing Allotments</u>		<u>Recreation Stock Use Areas Outside Grazing Allotments⁷</u>
	<u>Grazing Tactic</u>		
	<u>Season Long/ Continuous</u>	<u>Deferred or Rest-Rotation</u>	
Grass/Grasslike/Forb ²	30%	50%*	50%
Forest/Shrub/Grass/Grasslike ³ Herbaceous Utilization ⁴	30%	50%*	50%
Key Area Bluegrass ⁵	30%	50%	50%
Riparian Sites Associated With Streams Containing Westslope Cutthroat Trout ⁶	20%	35% to 45%*	35% to 45%

Forest Plan, Chapter VI, pg. VI-4

C. Project Planning

The following would be added to Project Planning

7. In streams containing 90% or greater genetically pure westslope cutthroat trout (or other genetic purity requirement as defined by any future Montana State Conservation Strategy or Federal Recovery Plan), if grazing exceeds the allowable resource threshold discussed in implementation point #5, the threshold may become an annual compliance standard subject to compliance direction in the Beaverhead supplement to FSH 2209.13. This differs from compliance direction for streams without these "pure" westslope cutthroat trout by allowing thresholds to become standards before trend data is gathered.

Public comments and interdisciplinary team responses also deal with adequate protection of native fish populations.

FEIS page V-83, Comment 26: f. Please provide all data, information or methodology to support the proposal to have separate, more stringent, utilization levels on streams containing Westslope Cutthroat trout. The issue surrounding Westslope Cutthroat trout would appear to be more properly focused upon management by DFWP and hybridization / species

competition issues. Please disclose all information indicating that Westslope Cutthroat habitat has declined due to livestock grazing within the Beaverhead National Forest.

Response: The ID team proposed more stringent interim utilization standards on streams containing westslope cutthroat trout to initiate an upward trend in habitat conditions, where needed. The interim standards on non-westslope streams were designed by range specialists to maintain current conditions. In response to public and agency comment, however, we modified the interim standards table to allow more use, where we can show that existing higher use levels are currently improving habitat, or riparian function.

Streams containing competing brook trout and westslope may require removal of the brook trout to maintain viable populations of westslope. Managing populations is the responsibility of Montana Fish, Wildlife & Parks. We will coordinate priorities with them to ensure removal and habitat enhancement projects have the greatest opportunity to succeed.

FEIS page V-92, Comment 10: Will improving riparian areas help the cut throat trout? If the riparian areas are improved, will other non-native, more aggressive fish (brown & brook trout) come into these areas and out compete the cut throat trout. To help the cut throat, might it also be a requirement to drastically reduce the number of brook and brown trout as well as improve the riparian habitat?

Response: Improving riparian areas will increase the diversity and quality of habitat for fisheries. Where WCT and brook trout are both present, it is the opinion of most biologists in this area that improving habitat conditions will help WCT compete against non-native brook trout. There is some concern, however, where both species coexist, that if beaver were reintroduced into an area, creation of a lot of beaver ponds may increase the competitive advantage of brook trout.

On the Beaverhead portion of the forest, we have only one or two streams with both brown and westslope cutthroat trout. Here, it appears they are not occupying the same segment of stream.

In many of our streams where brook trout and WCT are competing, there may have to be some type of control or removal effort directed at brook trout, to maintain viable populations of WCT. Managing populations is the responsibility of Montana Fish, Wildlife & Parks. We will coordinate priorities with MFWP so that removal and habitat enhancement projects have the greatest opportunity for success.

FEIS page V-93, Comment 26: The permittees strongly object to paragraph 7 at page 10 of the alternative. Please identify the study, information or data used to justify the guidelines becoming standards prior to trend information being considered. This paragraph suggests guidelines equate to standards. Please provide all information to substantiate the need for different management of Westslope Cutthroat streams versus other streams in the forest.

Response: It is not our intent to penalize permittees that have WCT on their allotments. The purpose and need of this document: (To restore degraded riparian areas across the land area covered by the Beaverhead Forest Plan. To maintain functioning riparian areas

across the land area covered by the Beaverhead Forest Plan), is the goal for all riparian areas, and is very much the same thing we think is needed to meet legal requirements under NFMA for westslope cutthroat trout. Because so many populations are considered to be at some risk of extinction, we don't believe we have the latitude to wait for a number of years (time before some allotments will have AMP revisions based on the Lawsuit settlement agreement schedule - or other allotments not on that schedule) to initiate management changes.

We have to recognize limiting factors for individual populations and understand that they will vary from stream to stream. We know of many instances where brook trout have been the primary cause of losing WCT in certain stream reaches. We also see situations where we believe degraded riparian conditions have decreased the quality of habitat and increased the competitive advantage for brook trout. If poor habitat conditions (due to livestock grazing) are accelerating the displacement of WCT, we need to look for ways to allow the habitat to improve.

Changing thresholds to standards was included in Alternative 7 to give us more immediate enforceability of allowable thresholds in westslope streams. We recognize circumstance may occasionally prevent meeting allowable resource thresholds, or where it may take a year or two to understand timing or management adjustments to gain consistent compliance with the thresholds at different sites. Where there is an even and honest attempt to do this and failure to meet the thresholds is not considered important, or that compliance will occur quickly, they should not become standards.

The objective within Alternative 7 is that within 5 years negative impacts to the populations via habitat impacts will be removed. To meet this short time frame, however, it requires that we do our best to design management that will accomplish this; then be diligent in applying it on the ground.

Where there is unjustifiable failure to meet the thresholds, impacts in riparian areas are considered excessive, and a commitment by the permittees to work with the Forest Service to do what is necessary to meet the guidelines is lacking, applying the thresholds as standards would give us the ability to enforce compliance.

Because we do not want the thresholds to automatically become standards, we changed the wording in Alternative 7 to read, "the threshold may become an annual compliance standard."

Contention B. The Amendment fails to maintain habitat for sensitive native fish species and fails to maintain minimum viable populations.

Documentation: The FEIS links population viability with habitat conditions at page IV-14, "Habitat is the most basic requirement for attaining or maintaining healthy fish populations. Viable, stable fisheries require abundant, high quality, and diverse habitats which satisfy requirements for all life stages within populations. The relationship between fisheries and stream and riparian function is critical and provides the basis for this analysis. Habitat features are directly dependant on hydrologic and vegetative processes within a watershed (defined by landform, geology, soils and climate). Thus, so is the health of a fishery. If

natural or man-caused disturbances are causing significant shifts in the physical and biotic attributes of a stream and its riparian area, fish habitat will not be created or maintained near potential for that stream system."

FEIS Page V-38, Comment 2: Also, at least for westslope cutthroat trout, the Upper Missouri Westslope Cutthroat Trout Technical Committee (UMWCTTC) has developed a Short Term Strategy Report which rates various populations of westslope cutthroat trout for risk of extinction. This is critical environmental information regarding a sensitive riparian dependent native species that should be included in the final EIS. Clearly this fish will be directly affected by the final decision to amend the Forest Plan. A thorough review of the existing information regarding this fish and its habitat is warranted. Application of the no grazing alternative to its habitat is clearly in the public interest, as noted by the Draft EIS, and must go forward if this effort is to be a success.

The UMWCTTC, a scientific inter-agency technical committee, recommends movement or mitigation of a proposed or ongoing activity, such as livestock grazing, if it can not be shown to protect a specific westslope cutthroat trout population/habitat. The UMWCTTC and the Draft EIS are in agreement. To my knowledge, federally subsidized domestic livestock grazing has never been shown to benefit westslope cutthroat trout habitat anywhere. Therefore, it is pertinent to identify specific westslope cutthroat trout habitat, both historical and current, within the affected environment so a rational and informed decision can be made regarding movement/elimination of any ongoing activities that are not determined beneficial to westslope cutthroat trout survival.

These data, along with other pertinent site specific inter-agency information regarding grayling and bull trout habitat within the affected environment, should be identified, analyzed and reviewed for public inspection in the final EIS before a rational and informed decision can be made. The Draft EIS clearly shows it is not in the public interest to continue livestock use of these sensitive, degraded and limited fisheries habitats. What is at stake here? The Draft EIS is significantly deficient in identifying what is at stake here.

Response: The short term strategy (Appendix F), which is common to all alternatives except Alternative 2, was developed in response to the results of the study. Its purpose is to protect populations between now and the time when a long-term conservation plan for WCT is finalized.

Your suggestion that the no grazing alternative be applied on WCT streams will be considered by the decision makers prior to choosing which alternative to implement.

The short term strategy states that for "ongoing activities" that are determined to be high or moderate impact on WCT populations, an action plan must be developed to show how these activities need to be modified to show an improvement in WCT habitat.

Your interpretation that the "activity" has to be beneficial to WCT, is in error. The short term strategy indicates that action plans must define management changes that will reduce impacts to a level that will not contribute to the loss of the population.

It is our opinion that the issue of WCT is adequately discussed and this subspecies' viability is noted as a concern. Riparian function and how that relates to riparian dependant species are other issues this document examines. We do not agree that the EIS is deficient in identifying what is at stake.

FEIS page V-93, Comment 23: Farm Bureau finds that the plans to implement restrictions on grazing in areas where there are 90% pure cutthroat are again missing the causal link. So far, we have not seen any scientific evidence that livestock grazing harms cutthroat trout. Yet, the Forest Service is poised to start restricting livestock grazing based on this criterion.

Under Alternative 7, the goal is a proper functioning condition for riparian areas. If there are Cutthroat Trout in a stream, there is a strong likelihood that the stream is functioning at the high end of the spectrum. There is also a good chance that area has been used for livestock grazing. Which means there is strong likelihood that in the past livestock grazing has not damaged the Cutthroat. Why, all of a sudden do we suppose that livestock grazing is, has and will continue to damage the Cutthroat?

Response: Your assumption that because WCT are present, then the stream is functioning properly is incorrect. This also makes your next assumption (strong likelihood that past livestock grazing has not damaged the stream) incorrect also.

If the stream is not functioning properly, it is likely the habitat's potential to meet requirements for certain life stages within the population may also be affected. The fish may very well occur there in a more vulnerable state. The extent to which a population is affected by poor riparian or stream condition will vary from stream to stream and will have to be assessed. The next step is to determine the role that livestock is having on the potential of that system to recover and whether there is a concern with the population's viability. If livestock are not inhibiting recovery, a change in livestock management may not be necessary. If there are no concerns regarding the population's viability, then it is probably appropriate for management to "maintain the current condition" and wait for AMP revision to make management changes.

Also see Documentation for Contentions I.A. and I.D.

Contention C. The Beaverhead NF fails to provide the protective and restorative measures needed to assure species viability and distribution. The failure to collect population data, to analyze population trends, to survey important habitat components related to riparian function, and to assess whether the maintenance of habitat will be sufficient enough to ensure viability for these sensitive species violates NFMA and the Forest Service Manual.

Documentation: Chapter III of the FEIS, Fisheries, presents a summary of information about sensitive fish species. Such information is also found in Appendix C of the FEIS, the Biological Assessment and Evaluation, pages 31-34. Monitoring for salmonids (trout) was added to the Forest Plan through the riparian amendment. The following Forest Plan monitoring item is taken from Attachment A to the ROD, the Forest Plan amendment, page 11.

Table VI-1

2-2.5 Fisheries

Monitoring Item 2-2.5 is added.

Monitoring Item: 2-2.5 Fisheries

Activity, Practice or Effect to be Measured: What are trout (salmonids) habitat and population responses to improving riparian conditions?

Unit of Measure: Changes in the number and quality of habitat features critical to the population (this could include, but is not limited to pools, spawning gravel and cover).

Changes in trout population density, distribution, or community structure.

Data Source: Fish population and habitat inventories will be conducted on streams having baseline stream morphology, vegetative community status and riparian function status (functioning, functioning-at-risk, and non-functioning) data and are scheduled for continued monitoring.

Population sampling will use a systematic, subsampling approach using 1-pass and depletion type electrofishing surveys. Streams will be sampled every 1/2 or 1/4 mile throughout the length of stream occupied by the fishery. A depletion type survey will be completed at least once for every 2 miles of occupied stream to establish capture efficiencies. Electrofishing sections will be at least 30 times the average width of the stream to allow an adequate number of habitat types to be sampled.

Baseline habitat data will be collected throughout the occupied stream reach using the R1/R4 habitat inventory methodology, at a time proximal to the initial population sampling - definitely within the same year. Subsequent habitat inventories may be scaled back to look at specific habitat characteristics thought to be most greatly affecting the populations.

A more general baseline inventory will be conducted upstream or downstream of the occupied reach to document factors (natural and management related) influencing habitat conditions within the occupied reach.

Changes in riparian condition will be analyzed to see how well they correlate to changes in fish habitat and populations.

Precision and Reliability: High. Monitoring sections will be resurveyed using accepted, repeatable techniques.

Sample Size: 25 streams, stratified across functionality and sensitivity to grazing disturbance, with consideration given to distribution of sample areas across the forest.

Each year 1 stream will be properly functioning and largely unaffected by grazing (control stream); 2 streams will be initially categorized as functioning-at-risk; and 2 streams will be initially categorized as non-functioning.

Sample Schedule: 5 streams per year, monitored at 5 year intervals.

Reporting Period: Annual fisheries report for 5 streams. A five year report for all 25 monitoring streams.

Evaluation: Data will be analyzed annually to describe habitat conditions, population attributes, distribution, and their relationships to riparian condition and trends. Information regarding WCT population stability and sustainability may be ultimately gained.

FEIS page V-91, Comment 4: I was extremely disappointed to learn in the Tuesday evening meeting that Montana Fish & Game feels that the Westslope Cutthroat Trout is nearing extinction, and yet there has, apparently, not been one single population count of Westslope Cutthroat Trout on targeted streams.

Response: We have collected population estimates for specific stream reaches on many of our WCT streams. The estimates were typically collected on reaches that were considered to be "representative", so if we wished, we could extrapolate them over greater lengths of stream.

Based on your comment, we hope it is not your belief that there is practically no data on WCT populations. We on this forest have probably more information on WCT populations than any other forest in the Upper Missouri River Basin.

Also see Documentation for Contention I.D.

Contention D. The Beaverhead Forest Plan Riparian Amendment fails to disclose information or analysis about sensitive species viability and does not address how the short-term WCT strategy ensures the viability of westslope cutthroat trout and arctic grayling populations.

Documentation: The Record of Decision at pages 12 and 13 addresses sensitive species. "**Sensitive Species** - Based on the Biological Assessment and Evaluation prepared for this proposal, it "*May Impact Individuals or Habitat, but will not likely result in reduced viability for the population or species*" for almost all sensitive animal, bird, and fish species known to be located in the analysis area. For trumpeter swan, common loon, North American lynx and wolverine, the proposal will have "*No Impact.*"

"The Biological Assessment for westslope cutthroat trout concludes, "The intent of the Upper Missouri Westslope Cutthroat Trout Short Term Strategy, for ongoing management practices (such as livestock grazing) is to make sure they will not contribute to the loss of westslope cutthroat trout populations. Alternative 7 goes a little farther to define what is required to meet the intent of the strategy. This is done by: 1) defining interim utilization standards for streams containing 90% or purer westslope (or other genetic purity requirement as defined by

any future Montana State Conservation Strategy or Federal Recovery Plan), that will initiate an upward trend in riparian condition where function is impaired or at risk; 2) providing a specific objective for livestock management with regard to westslope cutthroat trout streams. Based on this objective, management changes would occur immediately within Annual Operating Plans so that impacts from livestock management on all WCT streams would not contribute to reduced viability of populations; and 3) requiring an assessment be completed which documents why adjustments are considered adequate to prevent contributing to reduced viability of the population."

"The short-term strategy will provide management direction until objectives of a comprehensive Conservation Strategy for Westslope Cutthroat Trout in the Upper Missouri River Drainage is adopted and incorporated into the Forest Plan."

The Record of Decision at page 19 added the Short Term Strategy to the Beaverhead Forest Plan. "I am amending the Forest Plan to include the Short Term Strategy, Upper Missouri Westslope Cutthroat Trout, as Appendix OO. As presented in Appendix F of the Final EIS, the amendment consists of pages F-3 through F-5."

FEIS at page III-13, "Substantial time and effort are going toward maintaining viable populations of westslope cutthroat trout and arctic grayling."

FEIS at page III-14, "In 1993, 118 streams within the Pioneer Landscape area were evaluated based on fish habitat attributes (a product of stream function) and population viability. Fifty-nine percent of these streams rated non-functioning or functioning-at-risk."

Known fluvial arctic grayling and westslope cutthroat trout populations, population history, and factors affecting them are discussed in the FEIS at page III-14.

FEIS at page III-15, "A risk of extinction assessment (viability assessment) has been conducted for westslope cutthroat populations ranging from 95 to 100% in genetic purity. Four factors were analyzed when looking at the relative risk of extinction for local populations of westslope with a variety of population characteristics (Rieman et al. 1993). They were: 1) Temporal variability in recruitment or survival; 2) Population size; 3) Growth and survival, and; 4) Isolation. The results of the analysis suggested that over 70% of the populations exhibit characteristics which place them in a high or extreme risk category for extinction."

"Another more in depth analysis was recently conducted for westslope cutthroat trout 90% to 100% genetically pure (n=74). This analysis suggested viability may be a concern for as many as 80% of these populations. The Forest Service recognizes the future of these species depends on stable stream systems with a diversity of high quality habitats which meet the seasonal and long-term needs for all life stages of the populations."

FEIS at page III-15, "Management efforts to protect and/or expand the range of westslope cutthroat trout and fluvial arctic grayling have been ongoing for several years. A multi-agency workgroup has developed a restoration plan for Montana's fluvial arctic grayling. A similar group has been established to provide recommendations and direction for future westslope cutthroat trout restoration efforts. The Beaverhead Forest has been/is involved with

both of these efforts. Recovery and re-establishment efforts for both species will depend heavily on favorable habitat conditions and stable streams."

The FEIS links population viability with habitat conditions at page IV-14, "Habitat is the most basic requirement for attaining or maintaining healthy fish populations. Viable, stable fisheries require abundant, high quality, and diverse habitats which satisfy requirements for all life stages within populations. The relationship between fisheries and stream and riparian function is critical and provides the basis for this analysis. Habitat features are directly dependant on hydrologic and vegetative processes within a watershed (defined by landform, geology, soils and climate). Thus, so is the health of a fishery. If natural or man-caused disturbances are causing significant shifts in the physical and biotic attributes of a stream and its riparian area, fish habitat will not be created or maintained near potential for that stream system."

The Short Term Strategy and viability of westslope cutthroat trout are discussed in the FEIS at pages IV-15 and IV-16.

" i) Short Term WCT Strategy"

"The Beaverhead has adopted a short-term management strategy for Upper Missouri westslope cutthroat trout (WCT), considered a "Feature Common to All Alternatives" (except Alternative 2, the current Forest Plan). Its objective is to secure and improve existing WCT populations and their habitat until a long-term recovery strategy can be developed and implemented. Implementation of this strategy requires that any new activities will result in a "Beneficial" or "No Impact" call in the Biological Evaluation. If a new activity does not meet these criteria, it will be modified to do so or will be deferred."

"All ongoing activities in high priority streams (including grazing) determined to have high or moderate impact on WCT, were required to have an action plan developed to show how these activities need to be modified to allow for a Biological Evaluation determination of "Beneficial", "No Impact", or "may impact individuals, but will not likely result in reduced viability for the population or species". Action plans for most cutthroat streams have been written and their implementation has begun. Action plans for the few remaining streams should be completed by the end of September 1997."

"Because of the Short Term Strategy for WCT, it is assumed any unscheduled allotment with WCT would address cutthroat problems within the next year if a Biological Evaluation determination was made that is not "favorable". This would be common to all alternatives, except Alternative 2, No Action."

"The Short Term Strategy and its implications for grazing management are considered common to all alternatives except No Action, for the purposes of this analysis."

Under the heading "Species Viability", FEIS page IV-16, the FEIS states, "Even though this analysis indicates different alternatives would provide different rates of attaining fisheries goals and objectives, no alternative can increase the risk of extinction of WCT. Thus, where viability of the population is an issue, project level decisions would become similar and

would have similar effects (i.e. regardless which alternative is chosen, project level decisions would have comparable recovery rates to allow a "favorable" Biological Evaluation call)."

"The alternatives differ where WCT populations exist, but viability is not an issue. Benefits would correlate with the speed by which individual alternatives attained riparian goals and objectives. The slower goals and objectives were met, the less beneficial the alternative would be."

Viability is brought up in many of the public comments on the Draft EIS and Draft Alternative 7, found in the FEIS, Chapter V. Public comments from people other than the appellants and interdisciplinary team responses dealing with viability of westslope cutthroat trout and/or fluvial arctic grayling are found on page V-18 (Comment 23), V-19 (Comment 55), V-32 (Comment 39), V-38 & 39 (Comment 2), V-40 (Comment 62), V-83 (Comment 26), V-90 (Comment 4), V-92 (Comment 10), V-93 (Comment 23), and V-94 (Comment 32).

Comments from the appellants dealing with viability, with interdisciplinary team responses, found in Chapter V, follow.

FEIS page V-34, Comment 31 (Montana Ecosystems Defense Council, Alliance for the Wild Rockies, Friends of the Wild Swan): (N)one of the alternatives presented satisfies the minimum legal requirements of cumulative effects under the provisions of the federal Clean Water Act, state water quality standards (including, but not limited to, WQLS/TMDL requirements), NEPA and Management Indicator Species (MIS) "viability" as it affects "species diversity" under planning the provisions of the NFMA.

Response: We believe the alternatives do meet these minimum legal requirements. Except for the No Action alternative, we would not consider alternatives which did not meet these requirements.

FEIS page V-39, Comment 57 (Greater Yellowstone Coalition, American Wildlands, Pacific Rivers Council): [T]he draft fails to adequately consider the needs of westslope cutthroat trout. It is recognized by the Forest Service, the State of Montana, and the Bureau of Land Management that the westslope cutthroat trout is facing a high threat of extinction within the Missouri River basin. The failure of the draft EIS to address the needs of Montana's state fish supports the need for emergency protection under the Endangered Species Act.

While the Forest Service may not be legally required to take steps prior to formal protection under the ESA, the agency does have duties under the National Forest Management Act. This duty to protect sensitive species has not been adequately addressed in the draft EIS.

By rejecting the "fisheries strategy" alternative and not incorporating additional measures in the proposed alternative, the EIS is likely to become another justification for the need to protect Montana's westslope cutthroat trout under the Endangered Species Act. The current reliance on holding onto the last few remaining strongholds adopted by the Forest is a good first step. There is almost universal agreement among biologists that this approach will not halt further declines or reduce the risk of extinction facing westslope cutthroat trout on the Beaverhead National Forest. The EIS needs to address this issue with both interim and long-

term measures to recovery the westslope cutthroat trout. Failure to address this issue will only create additional uncertainty for the ranching community and heighten concerns of conservationists.

Response: By making the "Short Term Strategy" common to all action alternatives in the DEIS, we recognize the problems associated with westslope cutthroat trout. The short term strategy requires that all new activities be deferred or altered to have no negative impact on WCT populations. For ongoing activities (such as grazing) that are negatively affecting populations, it requires that action plans be developed along with an implementation schedule, which will modify ongoing activities so that they no longer contribute as impacts to the population and or habitat.

FEIS page IV-94, Comment 31 (Montana Ecosystems Defense Council): Alternative 7 fails to adequately protect declining native fish populations in a timely fashion. It fails to re-establish fish where past management has caused local extinctions. Neither does Amendment 7 require that waterbodies fully support aquatic lifeforms, not does it protect and restore the aquatic ecosystems on which they depend. It is unlawful to continue to not meet state water quality standards.

Response: We spent considerable time trying to ensure Alternative 7 would meet the needs of native fish species. The Forest Supervisor, however, will consider your comment on that regard, prior to making a final decision on this EIS. It is the responsibility of the Montana Fish, Wildlife & Parks to manage fish populations (i.e. re-founding populations in streams that may once have supported them).

FEIS page V-106, Comment 31 (Montana Ecosystems Defense Council): The adequacy of the analysis regarding water quality and the viability of native cutthroat trout and other desirable fish species is seriously lacking. The minimum legal requirements of the following was not met: 1) cumulative effects under the provisions of the federal Clean Water Act, 2) state water quality standards (including, but not limited to , WQLS/TMDL requirements), 3) and Management Indicator Species (MIS) "viability" as it affects "species diversity" under the planning provisions of the NFMA.

Response: As we responded to your identical comment on the Draft EIS, we believe the alternatives do meet these minimum legal requirements. Except for the No Action alternative, we would not consider alternatives which did not meet these requirements.

Appendix C contains the Biological Assessment and Evaluation for Fisheries, pages C 31-34.

Page C-31, "It is Forest Service policy to ensure that Forest Service actions do not contribute to the loss of viability of any native animal species or contribute to a trend toward federal listing of any species (FSM 2672.41). All Forest Service projects, programs, and activities are to be reviewed for possible effects on threatened, endangered, and sensitive (TE&S) species. The Biological Evaluation is the means of conducting this review and of documenting the findings.

Sensitive species are determined by the Regional Forester (FSM 2670) and are those species for which population viability is a concern."

The Short Term Strategy is explained on pages C-32 & 33. The link between the strategy and viability of westslope cutthroat trout populations can be found within this explanation. For example, from page C-33, "The intent for ongoing management practices (such as livestock grazing) is to make sure they will not contribute to the loss of westslope cutthroat trout populations. All alternatives except the No Action (Alternative 2) incorporate this strategy."

Arctic grayling is discussed on pages C-33 & 34. The conclusion on page C-34 states, "The greatest potential for land management to impact arctic grayling is primarily by affecting stream and riparian function in tributary streams to the extent that sediment is transported to the Big Hole River in excessive quantities. The points of impact may be limited in number, but still have some potential to negatively influence individuals. All action alternatives are designed to improve riparian and stream function and would then reduce impacts to the Big Hole river. The "No Grazing Alternative" would result in a Beneficial Effect determination, since it would allow a virtually uninhibited recovery of most riparians. All other alternatives would result in a determination of May Impact Individuals or Habitat, but will not likely result in reduced viability for the population or species. "

The Short Term Strategy for Upper Missouri Westslope Cutthroat Trout, along with some supporting documents, can be found in Appendix F of the FEIS.

Contention E. The Short-term Strategy for Upper Missouri Westslope Cutthroat Trout and the Standard Analysis Process have no scientific credibility and fail to discuss methods for maintaining minimum viable populations of westslope cutthroat trout, arctic grayling, and other aquatic species.

Documentation: None of the appellants specifically addressed the Short Term Strategy in any of their comment letters. The "Strategy" is discussed under Documentation for Contention I.D.

Contention F. There is no excuse for the failure to at minimum adopt interim standards for fisheries and aquatic conservation similar to those adopted in the Columbia River Basin by the USFS and BLM.

Documentation: This point is raised in public comments, FEIS page V-35, Comment 31 (Montana Ecosystems Defense Council, Alliance for the Wild Rockies, Friends of the Wild Swan): The timely return to acceptable water quality standards should apply to the entire aquatic ecosystem, not just priority blue ribbon trout streams. It is imperative that the Forest act quickly to protect the best spawning areas first, but that is no excuse for ignoring the rest of the ecosystem (terrestrial and aquatic). We implore you to immediately adopt, at minimum, the native fisheries Riparian Habitat Conservation Areas (RHCA) standards of the Inland Native Fish Strategy currently being implemented on the Forests west of the Continental Divide. Buffer zones of 300 feet for fish-bearing streams, 150 feet for non-fish bearing perennial streams, and 100 feet for intermittent streams on "Priority Watersheds" is a good place to start with new and improved forestwide management standards.

Response: This approach was presented for the decision makers' consideration in Alternative 5, Fisheries Strategy.

The Record of Decision on page 10 discusses Alternative 5, including the reasons the decision makers did not select it.

"INFISH direction targeted the bull trout. We modified the direction to apply to westslope cutthroat trout populations on the Beaverhead Forest with genetic purity greater than or equal to 90%. Direction is provided in the form of riparian goals, Riparian Management Objectives, and standards and guidelines for grazing. The overall objective of this alternative is to provide quality fish habitat for all trout, with emphasis on westslope cutthroat trout, by closely controlling and monitoring activities within riparian areas. Riparian direction would apply to every riparian area on the forest, not just within livestock grazing allotments."

"Elements of this alternative important to westslope cutthroat trout are visible in the short term strategy. In both strategies, grazing practices must not reduce the viability of westslope cutthroat trout. First, practices are modified to prevent habitat degradation or show improvement of existing habitat condition. If the modification does not work, grazing is suspended."

"I did not feel I needed to select this alternative to protect westslope cutthroat trout habitat when the short term strategy is achieving that goal. Alternative 5's goal is similar to the desired future condition description in Alternative 7. Its riparian habitat conservation areas are similar to the riparian management areas delineated in the Forest Plan. Its objectives were useful for achieving desired aspects of fish habitat, but may have led to unnecessary restrictions in riparian uses if applied forest-wide."

Contention G. For most of the WCT streams on the Forest, Alternative 7 ensures that they "would be maintained in their existing condition until management was changed through AMP revision" (IV-20) thereby continuing the decline of current populations and the need the list these species as threatened or endangered under the ESA.

Documentation: The full quote from FEIS page IV-20 is, "Using Alternative 7's interim standards, riparian areas on streams supporting WCT, as well as a few others, would improve. Most, however, would be maintained in their existing condition until management was changed through AMP revision".

From FEIS page IV-21, "Alternative 7 does a better job of directing management to meet the Short Term Strategy for Westslope Cutthroat Trout in the Upper Missouri River Basin, in part, with the following unique features: 1) A new fisheries objective calling for immediate adjustments of management practices so they contribute to the restoration or enhancement of Upper Missouri westslope cutthroat trout populations; 2) more restrictive interim standards in streams containing 90%+ pure westslope cutthroat trout, designed to initiate an upward trend in fish habitat; 3) an option to use stricter compliance direction in streams containing 90%+ pure westslope cutthroat trout. "

II. THE FEIS FAILS TO PROVIDE ADEQUATE INFORMATION (NOA, PAGE 6).

Contention A. To assure that a "fair discussion" occurs, agencies are required to obtain "high quality" information, including "(a)ccurate scientific analysis."...(T)he EIS for the Riparian Amendment failed to provide data and analysis about species viability.

Documentation: The Documentation for Contentions I, B, C, and D refer to portions of the ROD and FEIS which discuss data and analysis about species viability.

Contention B. The EIS also failed to adequately describe the "affected environment" of terrestrial and aquatic habitat conditions ecosystem-wide.

Documentation: Forest-wide affected environment descriptions of terrestrial and aquatic habitat conditions are found in FEIS Chapter 3. Page 13, Link Between Riparian Function and Fish Habitat, 14, Fish Habitat Survey Data, 17-26, Terrestrial Wildlife, and 7-10, riparian function.

None of the appellants raised this concern in their comment letters. A commenter other than the appellants, however, raised a similar concern, FEIS page V-38: Comment 2: The public and the decision-maker have not been adequately informed of the specific environmental conditions or the specific risks to beneficial uses for the riparian resources in question.

For example, the Draft EIS fails to identify internationally significant and unique riparian habitats within the project area. The westslope cutthroat, grayling and bull trout are native riparian dependent sensitive species which have drawn international acclaim and may or may not inhabit some of the streams within the affected federal lands. Their historic and current habitats have not been identified in the Draft EIS. Nor has the condition of their limited and unique habitats been identified.

These native trout are riparian dependent species and are extremely sensitive to habitat modification. Livestock grazing use has been identified as an activity that can severely and adversely affect these species' habitat. As well, population levels for these native fish continue to decline throughout their limited range in the West. All of these sensitive native fish species are trending toward extinction. Their habitats must be identified, restored and protected if this effort is to be a success.

Response: Regarding our need to identify internationally significant and unique riparian habitats within the project area (i.e. westslope cutthroat, grayling and bull trout habitats): We have described the occurrence of grayling and westslope cutthroat within the analysis area (DEIS, Chapter III pages 13-14). Specific locations of these populations are considered outside the scope of this document, since this analysis is programmatic rather than project specific. If you would like more specific information regarding these species, you may request it from the Beaverhead-Deerlodge Supervisor's Office. Bull trout do not occur within the analysis area.

The discussion regarding the purpose and need for this EIS (Summary page 1) says monitoring of the Beaverhead Forest Plan has shown it is inadequate in protecting riparian dependant values. It also says due to degraded riparian function, streams are not often meeting goals for fisheries. The discussion of characteristics exhibited by degraded

streams which seriously affect fish habitat are described in the DEIS, Chapter IV page 13. These combine to describe the general characteristics of fish habitats when riparian function is lacking.

The primary issue that arose from the extinction risk analysis conducted by the Upper Missouri Westslope Cutthroat trout Technical Committee was that viability of this subspecies in the Upper Missouri River Basin is a concern. A description of the concerns surrounding WCT is found in the DEIS, Chapter III (page 14); its current status, and information suggesting the number of populations to which risk of extinction is an important concern.

The results of analysis specific to individual populations is outside the scope of this analysis, since this EIS is programmatic. Also, results from individual populations are not definitive. The purpose of the analysis was primarily to understand how secure WCT were in the Upper Missouri River Basin. In essence it was a starting point, highlighting the need to develop a framework for WCT conservation.

FEIS page V-94, Comment 32: You need to disclose exactly what percentages of the forest's streams actually have a >90% pure WCT population existing - we believe the information would be quite informative to the publics - and would likely demonstrate how few streams would be "protected" under the WCT guidelines.

Response: While most of the streams containing WCT have been identified, we are still finding a couple of previously unidentified populations per year. At this time we estimate that there are probably stream segments on 90 to 100 streams supporting pure WCT populations. It is not important to this analysis to display a map of these streams. This information is available upon request.

Contention C. The issue of roadless areas and their critical role in maintaining species viability is never discussed.

Documentation: Roadless areas were never mentioned in any comment letter from any person at any comment opportunity. The roadless resource never came up as an issue or concern related to the riparian amendment analysis in any interdisciplinary team or oversight committee meeting.

Contention D. Intermittent streams are not addressed.

Documentation: Information on intermittent streams can be found throughout the FEIS and ROD.

The FEIS and ROD were written using the definition of riparian areas presented in the FEIS on page II-3, "Riparian areas are the banks and adjacent areas of water bodies, watercourses, seeps, and springs whose waters provide a more moist habitat than that of adjacent uplands. Riparian areas integrate the interactions of virtually all the physical, vegetative, and biologic components of a watershed. " This definition includes intermittent streams, without specifically using those terms.

Alternative 7 is presented in the Record of Decision as Attachment A. Following are parts of the alternative which address intermittent streams either in those terms, or by including them in the all-inclusive label "riparian-wetland" areas.

A. Goals

Add: 16. Riparian-wetland areas across the Beaverhead National Forest Planning Area are, at a minimum, in proper functioning condition.

B. Objectives

Add: s. Riparian

1. By 2010, use the desired future conditions developed through landscape analysis, along with additional project level information, to develop site-specific desired future conditions for all riparian-wetland areas on all livestock grazing allotments, through allotment management planning. For riparian-wetland areas outside the boundaries of allotments, use landscape level desired future condition to develop site-specific desired future conditions through ongoing project level planning. Describe desired future conditions at the project level by stream reach or wetland. Riparian areas will first achieve proper functioning condition, and then progress towards desired future condition.
2. a. Where such site-specific desired future condition has been determined and existing condition equals desired future condition, maintain riparian-wetland conditions.
- b. Where such site-specific desired future condition has been determined and existing condition is less than desired future condition, establish upward trends in vegetation functions within 3-5 years, and in physical functions in 5-10 years. Upward trends must be sustained toward either proper functioning condition or desired future condition.
- c. Where such site-specific desired future condition has not yet been determined, allow no reduction of existing water quality or physical or biological functions of riparian-wetland areas from management activities, on any stream or wetland.
3. Recover and maintain the composition and structure of native riparian plant communities achievable within existing site potential, sufficient to achieve and maintain desired future condition.
4. Reduce non-native plants and noxious weeds.
5. Restore and maintain suitable habitat for riparian-wetland associated threatened, endangered and sensitive (TES) species, management indicator species (MIS) and beaver by accomplishing vegetation objectives.

Intermittent/Ephemeral Streams Capable of Producing Riparian Vegetation

Achieving the physical desired condition for intermittent and ephemeral channels will assure that proper functioning condition is maintained. These channel types display great variability in their ability to perform the functions normally associated with perennial channels. The specific functions performed by any given channel will be maintained in proper functioning condition.

Desirable vegetation along intermittent and ephemeral stream channels will display the vigor and distribution needed for maintenance and reproduction, within the limitations of the existing climate and the presence of adequate water. The riparian plant communities will provide residual vegetation to reduce overland flow, enhance infiltration, maintain soil stability and provide and maintain habitat for riparian dependent aquatic and terrestrial species.

Vegetation composition may consist of a mix of native and non-native species. The desirable dominant vegetation will be native species within the site potential. Grass and grass-like species will be the dominant herbaceous vegetation present on most sites that are classified as capable of grazing domestic livestock. Sites will display overall proper functioning condition but the vegetation may fall within any desired successional stage between proper functioning condition and potential natural vegetative community.

From the FEIS page III-12. "h. Stream Channel Morphology", "Streams on the Beaverhead National Forest range from those which flow only in response to rain or melting snow, to medium-sized streams which flow year-round."

FEIS pages IV-25 & 26 contain this statement under 4 headings, "Expected changes and benefits to wildlife habitats would apply to all areas with standing or running water and those with high soil moisture capacities that could potentially produce riparian vegetation. These areas include but are not limited to streams (perennial and intermittent), springs, seeps, wet meadows, ponds, and lakes.

FEIS Chapter III page 17, Terrestrial Wildlife, Introduction.

FEIS page V-35, Comment 31 (Montana Ecosystems Defense Council, Alliance for the Wild Rockies, Friends of the Wild Swan): The timely return to acceptable water quality standards should apply to the entire aquatic ecosystem, not just priority blue ribbon trout streams. It is imperative that the Forest act quickly to protect the best spawning areas first, but that is no excuse for ignoring the rest of the ecosystem (terrestrial and aquatic). We employ you to immediately adopt, at minimum, the native fisheries Riparian Habitat Conservation Areas (RHCA) standards of the Inland Native Fish Strategy currently being implemented on the Forests west of the Continental Divide. Buffer zones of 300 feet for fish-bearing streams, 150 feet for non-fish bearing perennial streams, and 100 feet for intermittent streams on "Priority Watersheds" is a good place to start with new and improved forestwide management standards.

FEIS Appendix A. The descriptions of the alternatives deal with intermittent streams in various ways. Alternative 1 gives objectives for riparian areas associated with streams and riparian areas not associated with streams (A-3). Under Desired Future Condition, "Stream channels will exhibit the dimensions, patterns and profiles produced by natural processes within their watersheds, allowing for some adjustment due to past management practices. Riparian areas not associated with streams will store and release water within their climatic and hydrologic variations. Riparian vegetation will reflect community types that allow the maintenance of appropriate channel dimensions, patterns, and profiles."

In Alternative 4, page A-20, "Riparian area not perennially connected to stream systems by surface flow". Page A-27, "Class IV streams would not support a catchable fish population and would not be considered as having the potential to do so. They would comprise all streams not previously classified. These streams are generally characterized as having ephemeral or intermittent stream flows. They may be of importance, however, because of water quality concerns of the receiving waters. With these streams water quality and quantity issues are of importance and specific fishery objectives and management guidelines are not identified. Watershed direction associated with water quality and maintenance of channel integrity would guide management."

Alternative 5, page A-34, "Category 4 - Seasonally flowing or intermittent streams, wetlands less than 1 acre, landslides, and landslide-prone areas: This category includes features with high variability in size and site-specific characteristics."

Alternative 6 deletes statements from MA descriptions which allow domestic livestock grazing. MA 11 is lakes, lakeside lands, streams and the adjoining lands that are dominated by riparian vegetation (FEIS III-3); MA 13 is productive timber stands on moist sites that are suitable for timber management. Seeps, springs, and wet areas may be present (III-4); MA 14 is seeps, springs, and wet areas which are nonforested or unsuitable for timber management (III-5).

Contention E. The ecological effects of other upland activities (besides grazing) that raise water temperature and deliver sediment into fish-bearing streams are not discussed.

Documentation: FEIS Chapter I-"The EIS addresses riparian impacts regardless of their cause. Forest Plan goals, objectives, standards, and guidelines for timber, minerals, recreation, and facilities are sufficient to allow the restoration and maintenance of riparian function, therefore, do not need to be revised. The EIS will focus on areas of the Forest Plan which do need to be revised to meet the purpose and need for this analysis. "

FEIS Chapter III summarizes data collection and analysis on pages III-6 through III-10. Many of the analyses collected information on upland activities other than grazing. Upland activities other than grazing are also discussed on pages III-10, III-15, and III-18, IV-23, IV-33, IV-34, V-44 (Comment 46), V-50 (Comment 7), V-71 (Comment 63) and V-106 (Comment 16).

Contention F. The analysis documents failed to address the diversity and viability of native fish species and the critical natural processes that threaten them. For example, the relationship between grazing and whirling disease was not explored.

Documentation: The diversity and viability of native fish species and the critical natural processes that threaten them are discussed throughout the Documentation for Contentions I. B, C, D, II. B, C, D, E, and III. A and B.

None of the appellants brought up the subject of whirling disease in their comment letters. One commenter, however, did.

FEIS page V-99, Comment 3: Can domestic livestock spread the tubifex worm important in the transmission of whirling disease by carrying mud from riparian to riparian (including from private land prior to entering the Forest)?

Response: It is unlikely that the tubifex worm could be introduced and become established in a stream on the forest via transportation of the mud, by cattle, from a riparian area on private land.

III. ALTERNATIVE 7 FAILS TO EVALUATE CUMULATIVE EFFECTS UPON FISHERIES AND THE WATERSHEDS ON WHICH THEY DEPEND.

Contention A. The Beaverhead National Forest and BLM made almost no effort to adequately assess the current condition of impaired watersheds, including many that may no longer support native fish populations as a direct result of agency mismanagement. These "past" impacts need to be addressed as part of a cumulative effects analysis.

Documentation: The current condition of all watersheds is discussed in the FEIS Chapter 3, pages 7 - 11 Indirect Assessments, Direct Assessments, Project Level Analyses, Past Management , page 3-15 Cumulative Impacts from Current Physical and Biological Conditions.

Contention B. Cumulative effects to native fish through riparian area management include ORV traffic, logging, burning, roadbuilding, mineral extraction, oil and gas exploration and development, and other activities that might impact sensitive fish species and their habitats. The EIS did an unacceptable job of estimating cumulative effects.

Documentation: Cumulative effects to native fish and their habitat are discussed in the FEIS on pages, III-8 "Cumulative Effects Analysis"; III-10 Past Management; III-15 Cumulative Impacts from Current Physical and Biological Conditions; IV-2 Effects Common to All Alternatives (On Physical and Biological Components of Riparian Areas); and IV-23 Cumulative Effects of the Alternatives on Vegetation.

IV. THE BEAVERHEAD RIPARIAN AMENDMENT FAILS TO IDENTIFY, PROTECT AND RESTORE IMPAIRED WATERBODIES CURRENTLY NOT

MEETING STATE WATER QUALITY REGULATIONS OR BENEFICIAL USE STANDARDS REQUIRED UNDER THE CLEAN WATER ACT (NOA, page 7).

Contention A. The EIS fails to address this key legal requirement (development of Total Maximum Daily Loads for Water Quality Limited Streams), despite the fact that numerous streams in the planning area fail to meet water quality standards.

Documentation: The Record of Decision discusses the decision in light of the Montana Clean Water Act on pages 13 and 14.

Montana Clean Water Act

What The Law Says

HB 546 was enacted in May, 1997. It amends Section 75-5-103, MCA. Section 4 (10): Pending completion of a TMDL (Total Maximum Daily Load) on a waterbody listed pursuant to [section 3]: (c) new or expanded nonpoint source activities affecting a listed water body may commence and continue their activities provided that those activities are conducted in accordance with reasonable land, soil, and water conservation practices; (d) for existing nonpoint source activities, the department shall continue to utilize educational nonpoint source control programs and voluntary measures as provided in subsections (5) and (6). Subsection (5) basically says folks can implement voluntary measures to reduce pollutants prior to the development of a TMDL.

When a water quality limited stream (WQLS) segment comes up on the state's TMDL schedule, a source inventory will reveal where the problem, often sediment, is coming from. The state will set an allowable level for the pollutant. This will be defined for each segment, and looked at on a watershed basis. The TMDL will be the set of actions necessary to stay within the allowable level for the pollutant. The forest will work with the state once they develop the formats and processes to be used in developing a formal TMDL. If changes in livestock management are needed to achieve a TMDL, permittees and Forest Service and/or BLM personnel will work together to design solutions. We will continue to work with the state to meet TMDLs, once we've designed them. Monitoring will reveal our progress.

All but two of the waterbodies listed in the 1996 Water Quality Limited Waterbodies have a low TMDL development priority. Two are moderate priority.

Forest Service Policy

Best Management Practices will be applied to impaired waterbodies to bring them into compliance with water quality laws. This requirement is a feature of the existing Beaverhead Forest Plan. The Natural Resources Conservation Service (NRCS) Prescribed Grazing Standard (Standard MT528A-3, January 1996) updates the State of Montana Agriculture Best Management Practices for livestock grazing. In an August 5, 1997, memo to Montana Forest Supervisors, David Spores, Director of Forest and Rangeland in Region 1, says, "I must emphasize that the Forest Service policy and position is that use of the grazing BMPs, on National Forest System lands, is not

voluntary but mandatory for the Forest Service. Use of the BMPs is required by not only the state water quality standards, but also the Montana Nonpoint Source Pollution Program Plan."

"By design, the updated prescribed grazing standard reflects how we currently do business in rangeland management. Additionally, it reinforces the importance of allotment planning efforts and the need for follow-up monitoring for implementation and effectiveness, with the associated emphasis by the Clean Water Act."

How This Decision Follows Forest Service Policy and Complies With the Clean Water Act

Because this Forest Plan amendment is programmatic direction, it is not an appropriate document in which to identify specific solutions for each water quality limited stream segment. These will have to be accomplished on a site-specific basis.

Livestock grazing would be considered an existing nonpoint source activity, covered by point (d) of HB 546. To meet the intent of the water quality law as amended, we need to reduce pollutants prior to the development of a TMDL. Regarding livestock grazing, two conditions exist for streams which are designated water quality limited due to changes caused by livestock grazing.

1. Following AMP revision, or within allotments with riparian direction already in place, livestock caused impairment will be reduced by following direction designed to restore and maintain desired riparian condition (PFC at a minimum). During allotment management plan revision, ID teams, permittees and other participants will follow the Guidelines for Developing and Implementing Allotment Management Plans, found in the Forest Plan Amendment (Alternative 7). The process outlined in these guidelines considers the same elements as those presented in the January, 1996 Natural Resources Conservation Service Prescribed Grazing Standard. Similar to the prescribed grazing standard, the amendment's implementation guidelines call for using a planned grazing system, and monitoring and distribution tools to prevent over-use of riparian or other range resources. Use of the 1996 Prescribed Grazing Standard is Forest Service policy in Montana, and meets the provisions of the Montana Water Quality Act and other state and federal laws as they relate to livestock grazing.

2. Interim Forest Plan standards apply to allotments without site-specific riparian direction until such direction is developed through allotment management plan revision. These interim standards are more restrictive than current Forest Plan riparian grazing standards. They were designed to allow no degradation of water quality or physical or biological function from current conditions. Because they are more restrictive than current Forest Plan standards, they could allow some improvement in areas that were remaining static under the Forest Plan standards. The interim standards represent an improvement over the existing condition. The interim standards for riparian forage utilization and stubble height fall within the recommended levels in the 1996 Prescribed Grazing Standard.

We calculated the percentage of allotments that would be operating with site-specific riparian direction each year. Beginning in 1998, 35% of Beaverhead zone allotments would be using site-specific riparian direction developed through the allotment management planning process. Following the schedule of AMP revision in the lawsuit settlement agreement, this figure jumps to 50% by the year 2001 and 75% by 2005. Between 2005 and 2010, the allotments without site-specific riparian direction which were not on the settlement agreement schedule will have their management plans revised. By 2010, 100% of the allotments in the Beaverhead zone will operate with site-specific riparian direction designed to improve and maintain proper functioning condition, at a minimum.

The Federal Clean Water Act and its relationship with the Montana Clean Water Act are discussed in the FEIS, pages III-5 and 6.

1) Clean Water Act (1972, Amended 1987):

Section 101> The objective of this Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.

Section 208(2)(F)> A process to identify agriculturally and silviculturally related non-point sources of pollution, and set forth procedures and methods to control to the extent feasible such sources.

Section 303> States have responsibility to develop and review water quality standards.

Section 313> Requires all Federal Agencies to control and abate water pollution under all Federal, State, and local requirements. Executive Order 12088 specifies this compliance.

Section 319> Requires Federal consistency with the State Non-Point Source (NPS) program. The State NPS program includes a process for identifying Best Management Practices (BMPs) to control identified sources.

Compliance with State requirements for protection of waters within Montana means "land management activities must not generate pollutants in excess of those that are naturally occurring, regardless of the stream's classification. 'Naturally occurring' is defined by the Administrative Rules of Montana as that water quality condition resulting from runoff or percolation over which man has no control or from developed lands where all 'reasonable' land, soil and water conservation practices have been applied." Forest Service Handbook 2509.22, Soil and Water Conservation Practices Handbook, lists Soil and Water Conservation Practices (SWCPs), some of which may be recognized through a memorandum of understanding as Best Management Practices (BMPs) by the state. Compliance with water quality law for existing sources for nonpoint source pollution in Montana is based upon compliance with water quality standards, which includes the beneficial uses of the appropriate stream classifications established by the state. If water quality standards are not being attained, then the use of BMP's recognized by the State of Montana is an approved remedy.

The Clean Water Act Section 303(d) and 40 CFR (Part 130) requires each state to identify water bodies that are water quality limited. After water quality limited water bodies have been identified, they are prioritized and targeted for TMDL (Total Maximum Daily Load) development. When final approval is granted by the EPA, the 303(d) list becomes part of the annual Montana 305(b) Report.

The NFMA requirement for the conservation of soil and water resources is listed in 36 CFR 219.27 (f). "Conservation of soil and water resources involves the analysis, protection, enhancement, treatment, and evaluation of soil and water resources and their responses under management and shall be guided by instructions in official technical handbooks.

Water quality limited stream segments are discussed in the FEIS on page III-7.

The process of designating a stream as a Water Quality Limited Segment (WQLS) by the State of Montana constitutes an indirect assessment of the water quality conditions on the Beaverhead National Forest. The Montana 305(b) report for 1994 lists the WQLSs throughout the state, and the reasons for their impairment. A variety of avenues exist for a stream segment to be on the WQLS list. Some have intensive monitoring by agencies to support their listing, while others have only been visited once by volunteers. Based on our own monitoring efforts, the Beaverhead Forest recommended some stream segments be placed on this list, while others within the boundaries of the Beaverhead were recommended by other parties. The listed stream segments and the reason for their inclusion are found in a project file document, the State of Montana 305(b) report for 1994, entitled Montana Water Quality 1994. It is published every other year by the Water Quality Division of the Montana Department of Health and Environmental Sciences.

The EPA/State of Montana's recommended strategy for dealing with a stream segment that is WQL, is to develop a Total Maximum Daily Load (TMDL) for the specific pollutant identified as causing the problem, implement a strategy to maintain that pollutant at or below its TMDL, and thereby move the stream toward achievement of the Water Quality Standard. This approach works well where the pollutant is easily identifiable and the source of the pollutant is known. It doesn't work as well where the "problem" in the stream results from a change in watershed function as a result of a change in channel morphology. These problems are not easily solved by setting a TMDL for a "pollutant." Sediment is sometimes used as a surrogate pollutant, but the extreme variability of sediment throughout the year, as well as from year to year, makes the TMDL calculation extremely difficult, and of dubious effectiveness.

Consequently, a WQLS classification on the Beaverhead Forest means the stream is not functioning or is functioning-at-risk. As such, we treat it like any other stream in those categories. The cause of impairment is identified through a stream specific evaluation, and a desired future condition (DFC) established that will ensure the stream functions properly in the future. A strategy is developed to move from the existing condition to the DFC. However, implementation of the strategy will more likely involve changing the land uses that have led to the problem, than developing a TMDL for specific pollutants.

Public comments and interdisciplinary team responses dealing with water quality are found in Chapter V of the FEIS.

FEIS pages V-42 and 43, Comment 57 (Greater Yellowstone Coalition, American Wildlands, Pacific Rivers Council): In the case of any water body identified by the State of Montana as being water quality-limited, it fails to address the requirement of the Forest Service Agreement with the State to implement "best management practices" to meet water quality

standards. Since these water quality-limited water bodies have been identified as water bodies that will not meet water quality standards even if all current non-point control measures are implemented, it is incumbent on the Forest Service to develop and implement "BMPs" that will meet standards.

The draft EIS fails to disclose current waterbody segments that do not fully support beneficial uses as set forth in the Montana List of Waterbodies in Need of Total Maximum Daily Load Development, 1996. In the case of any waterbody listed as a water quality-limited, immediate steps must be taken to protect water quality and achieve Montana water quality standards. Interim guidelines and standards and monitoring needs to be directed towards addressing water quality impairment during the interim as well as longer term. These measures need to include site specific measures including reductions in a.u.m. along these stream segments.

Response: The alternatives in the Draft EIS are meant to supplement the current Forest Plan. Requirements of the Forest Plan to implement best management practices are not changed in any way by any of the alternatives.

The list of waterbody segments is included by reference to the State of Montana 305(b) report for 1994, DEIS page III-7. The interdisciplinary team and deciding officers considered your suggestions.

The Record of Decision will discuss how the selected alternative complies with water quality laws.

Comment 57 (Greater Yellowstone Coalition, American Wildlands, Pacific Rivers Council): While in certain cases the riparian function objectives embodied in the alternatives may be sufficient to attain water quality standards, in many, if not the majority of cases, other factors involving the entire watershed need to be considered. Clearly under the Clean Water Act, a 50 year recovery rate is unacceptable. Recent court decisions have begun to focus on a five year time frame to achieve water quality standards for water quality-limited streams. This should be a good interim target for the proposed forest plan amendment. Clearly, the uncertainty of when measures will even be implemented as set forth in the draft EIS is unreasonable and may be arbitrary and capricious.

Response: Chapter III and Appendix B discuss the interrelationship between riparian areas and the watershed in which they are contained. Forest Service Region 1 policy calls for watershed analysis at the landscape scale using the R-1 Protocol for Watershed Characterization (summarized in Appendix B). Using this protocol ensures we will have considered the entire watershed when it comes time to evaluate and treat riparian areas.

Alternatives 1 and 7 include a 50 year time frame when describing the forest-wide desired future condition. It is a description of what the future forest would be like after 50 years of implementing the Forest Plan as amended by Alternative 1 or 7.

We added a flow chart to Chapter II to display the sequence of actions that would take place during implementation of each alternative.

Comment 57 (Greater Yellowstone Coalition, American Wildlands, Pacific Rivers Council): The applicable water quality standards for water bodies impacted by this decision must meet the beneficial use of the stream. Beneficial use specifically includes the biological communities naturally occurring in the reference stream impacted by the decision. Montana Department of Environmental Quality has developed a reference stream manual for Montana as required by the Clean Water Act that should provide the basis for developing in stream management and monitoring objectives.

Response: Please see the Record of Decision for a discussion of how the selected alternative will comply with water quality laws.

We were unable to locate a reference stream manual for Montana developed by the Department of Environmental Quality. It appears that personnel at the Department of Environmental Quality (Bukantis, 1997, personal conversation) have not heard of the document. We would appreciate a specific reference to allow us to get a copy of this manual.

FEIS page V-77, Comment 22: It may be helpful to clarify and/or assure that water quality standards compliance be included within the proposed desired future condition for riparian areas by linking water quality protection to the recommended riparian desired future condition for lotic systems (page 2). For example, adding water quality protection language to specifically state that, "water quality impairment is eliminated," and that, "water quality (i.e., chemical, physical, and biological integrity of surface waters) is protected to allow full support of designated beneficial uses."

Similarly, it may be helpful to add water quality protection language to the objectives. For example, amending the second paragraph under the domestic livestock objectives to: "Domestic livestock grazing will be managed and may be limited in riparian areas to ensure riparian function and water quality are maintained or restored."

Response: We added your suggested language to the desired future condition description for lotic systems because water quality is not mentioned elsewhere in this section of the Forest Plan. We did not add your suggested language to the livestock objective. Within the objectives for watershed the Forest Plan states, "Appropriate planning, analysis, mitigation, and monitoring will be done to ensure that management activities will not adversely affect water quality and quantity."

FEIS page V-96, Comment 12 (American Wildlands): The new amendment and information fails to address how riparian objectives and guidelines will impact state-listed water quality impaired streams.

Response: Where the management prescribed by Alternative 7 occurs in a watershed with WQLS that are affected by grazing, those WQLS will begin to improve. Many of the streams recommended by the Beaverhead Forest for inclusion on the WQLS list were included because of the effects of livestock grazing.

Contention B. The interim policy though a bit of an improvement over current conditions, fails to meet the intent of the Clean Water Act and protect existing, designated, and beneficial uses of impaired waterbodies.

Documentation: See Contention A, language from the Record of Decision, discussion of interim Forest Plan standards, How This Decision Follows Forest Service Policy and Complies With the Clean Water Act, point 2.

Contention C. The management plan fails to direct managers to use maximum (interim) standards for impaired waterbodies, an obvious failure to best protect water quality. Similarly, in the direction for the development and implementation of AMPs, the Forest failed to specifically address implementation and monitoring for allotments in WQLS streams.

Documentation: See the Documentation for Contention III. A for how the interim standards comply with the Clean Water Act.

Attachment A to the ROD, the Forest Plan Amendment, contains several features dealing with water quality. These are reproduced here, with applicable words or phrases underlined.

Page 2, DFC for Lotic Systems, "Water quality will allow full support of beneficial uses as designated by the State of Montana."

Development and Implementation of Allotment Management Plans (AMPs)

3. Desired future conditions (DFC) will be described for all stream reaches or wetlands within the allotment. DFC will be determined by integrating biological, physical, water quality, social, and economic aspects of allotment resources. Desired conditions are considered management objectives.
4. While working together to develop the best management strategy (a planned grazing system) for the allotment as a whole, the permittee and Forest Service and/or BLM representatives may use any combination of the following tools to reach riparian desired future condition, as described by allotment goals and objectives.
5. Part of the "best management strategy" mentioned in implementation point #4 will be allowable resource thresholds that facilitate achievement of allotment goals and objectives.
6. After 3-5 years of implementation of the AMP, trend evaluations will determine progress toward meeting allotment goals and objectives. Three main questions will be answered: 1) Has the desired response begun in those parameters measuring riparian function that we expect to see change? 2) Have allowable resource thresholds been met? 3) What additional management adjustments, if any, are needed? (adjustments could be + or -)
8. Allotment Level Monitoring

a. Introduction

Allotment level monitoring provides data to evaluate resource conditions on an allotment; implementation of allotment management direction; and effectiveness of management direction in meeting allotment goals and objectives.

c. Annual Event Monitoring

Measures of utilization intensity and distribution unique to riparian-wetland areas such as key area forage utilization, stubble height, woody browse utilization and bank trampling can also be recorded. These measures provide information to assess whether or not there are correlations between livestock effects and long-term changes in physical, water quality, and/or biological features of riparian-wetland areas.

d. Trend Monitoring (Effectiveness and Validation Monitoring)

Long-term monitoring traces changes in resource attributes or condition (trend). Periodically (every 3-5 years), at the appropriate specific study sites (e.g. vegetation transects, channel morphology, photo plots, etc.) resource attributes or characteristics identified in the management objectives for the allotment are documented. Management success is evaluated by interpreting trend data in relation to annual events (weather, disturbance levels, etc.). Interpreting trend in relation to all these variables illustrates if current management is effective and if objectives are realistic for the site. Trend is determined using information collected over time. Apparent trend is assessed at one point in time by indicators such as soil erosion.

IV. THE FEIS FAILS TO CONDITION THE FUNDING OF ACTIONS ON MITIGATION AND FAILS TO MONITOR MIS AND WATERSHED CONDITIONS, IN VIOLATION OF NFMA (NOA page 9).

Contention A. There is no specific forestwide plan to monitor westslope cutthroat trout populations or the condition of spawning and rearing habitat. Amendment 7 provides no water temperature standards and no temperature monitoring.

Documentation: The following sentences appear in the Record of Decision, page 17, under the heading, "Monitoring And Evaluation".

Monitoring is a key component of the Forest Plan amendment. We replaced Forest Plan Monitoring Item 2-3 Riparian with one that better reflects the kind of information we are now gathering and the questions we need to be answering. We added Forest Plan Monitoring Item 2-2.5 Fisheries to gather important information about trout habitat and populations.

The following Forest Plan monitoring item is a part of the riparian amendment. It appears in the Record of Decision within "Beaverhead Forest Plan Amendment #7", Attachment A, page Amendment #7-11.

Forest Plan, Chapter VI, pg. VI-11

Table VI-1

2-2.5 Fisheries

Monitoring Item 2-2.5 is added.

Monitoring Item: 2-2.5 Fisheries

Activity, Practice or Effect to be Measured: What are trout (salmonids) habitat and population responses to improving riparian conditions?

Unit of Measure: Changes in the number and quality of habitat features critical to the population (this could include, but is not limited to pools, spawning gravel and cover).

Changes in trout population density, distribution, or community structure.

Data Source: Fish population and habitat inventories will be conducted on streams having baseline stream morphology, vegetative community status and riparian function status (functioning, functioning-at-risk, and non-functioning) data and are scheduled for continued monitoring.

Population sampling will use a systematic, subsampling approach using 1-pass and depletion type electrofishing surveys. Streams will be sampled every 1/2 or 1/4 mile throughout the length of stream occupied by the fishery. A depletion type survey will be completed at least once for every 2 miles of occupied stream to establish capture efficiencies. Electrofishing sections will be at least 30 times the average width of the stream to allow an adequate number of habitat types to be sampled.

Baseline habitat data will be collected throughout the occupied stream reach using the R1/R4 habitat inventory methodology, at a time proximal to the initial population sampling - definitely within the same year. Subsequent habitat inventories may be scaled back to look at specific habitat characteristics thought to be most greatly affecting the populations.

A more general baseline inventory will be conducted upstream or downstream of the occupied reach to document factors (natural and management related) influencing habitat conditions within the occupied reach.

Changes in riparian condition will be analyzed to see how well they correlate to changes in fish habitat and populations.

Precision and Reliability: High. Monitoring sections will be resurveyed using accepted, repeatable techniques.

Sample Size: 25 streams, stratified across functionality and sensitivity to grazing disturbance, with consideration given to distribution of sample areas across the forest. Each year 1 stream will be properly functioning and largely unaffected by grazing

(control stream); 2 streams will be initially categorized as functioning-at-risk; and 2 streams will be initially categorized as non-functioning.

Sample Schedule: 5 streams per year, monitored at 5 year intervals.

Reporting Period: Annual fisheries report for 5 streams. A five year report for all 25 monitoring streams.

Evaluation: Data will be analyzed annually to describe habitat conditions, population attributes, distribution, and their relationships to riparian condition and trends. Information regarding WCT population stability and sustainability may be ultimately gained.

FEIS page V-78, Comment 31 (Montana Ecosystems Defense Council, Friends of the Wild Swan, Alliance for the Wild Rockies): We recommend mandatory watershed-wide standards which are scientifically defensible and enforceable. Please adopt numerical measurements for population numbers (of fish and other MIS aquatic lifeforms), water temperature, sediment bedload, redd counts, cover, pool-riffle ratio etc.) to be reported annually. The Forest must establish accepted scientific assessment methods and fully-funded monitoring programs to guide terrestrial and aquatic management programs. The Forest has avoided the simple fact that native trout can only survive in cold, clean water and the condition of watersheds is the primary cause of the current trend toward extinction.

Response: There is no data, that we are aware of, that suggests degraded water quality is causing the extinction of our ailing native species within the analysis area.

It is very difficult, if not impossible to create scientifically defensible and enforceable watershed-wide standards for all of the parameters you suggest. For the purposes of this environmental analysis, we do not have the ability to do what you ask. As such, we have provided several alternative approaches to meet a broad range of resource objectives, and evaluated them based on a common set of criteria.

Our assessment methods are based on scientific principles and accepted monitoring protocol. In certain areas, we have adapted monitoring to answer questions that need to be addressed.

While we may not have provided the wording you would like to see in the document (namely that trout can only survive in cold and clean water) the effects that land management can have on trout habitats have been disclosed for the analysis area. The implication of this disclosure is that if habitats are degraded, fisheries will be negatively impacted.

FEIS page V-80, Comment 5: On page 6 it is stated that interim standards on westslope cutthroat trout streams will be used to initiate upward trends in fish habitat. We feel that the alternative should describe what parameters will be measured to determine trend in fish habitat.

Response: Fish habitat conditions are related to hydrologic and riparian processes occurring in and around the stream. Because habitat inventory is very labor intensive and it is not possible to evaluate changes on all of our cutthroat streams in an appropriate timeframe, fish habitat will be assumed to be improving if riparian function is improving. Thus, we will use parameters which show improvements in riparian function to indicate upward trends in fish habitat. The Forest Plan monitoring protocol developed for fisheries (Appendix A description of Alternative 7) will be used to validate habitat changes in selected streams as riparian conditions improve.

FEIS page V-85, Comment 26:R-1 Protocol: Please identify the need and the basis for determining or classifying watersheds at the landscape level as functioning, functioning-at-risk or non-functioning. If a watershed is classified in a certain manner, please explain the ramifications. In addition, the R-1 Protocol is identified but not explained in the alternative or analysis. Please provide an explanation of information and/or previous NEPA documents regarding the R-1 Protocol.

Response: Although the R-1 Protocol for Watershed Characterization was introduced in Alternative 7, it is really not a part of this Forest Plan amendment decision. In a memo dated May 22, 1997, Regional Forester Hal Salwasser stated, "The expectation is that these will be applied, as appropriate, in current and future assessment efforts throughout the Region." The protocol for Watershed Characterization is one of 21 protocols included in the memo. The memo also says the 21 products, "have passed both a technical review and a management approval process."

We added a brief description of watershed characterization at the landscape scale to summarize what kinds of information the protocol gathers, and what kind of product is produced. It is found in Appendix B.

The need to identify the functionality of watersheds at the landscape level has to do with prioritizing all land management activities within that landscape. Only by knowing the functionality of a landscape's watersheds can we schedule and locate vegetation projects, restoration, AMP's, and monitoring to best address problem areas. If a watershed has a number of non-functional reaches, a more thorough investigation of that watershed will be done to determine causes, possible restoration measures, and changes in the activities that are taking place in that watershed. The results of that investigation will lead to recommendations to address the problems.

The "more thorough investigation" will be conducted along the lines of "A Federal Agency Guide for Pilot Watershed Analysis" (USDA et.al., 1994). This Guide recommends that field investigations of stream channels be undertaken to determine channel condition within the watershed. The R-1 Protocol details how those investigations will be accomplished.

FEIS page V-96, Comment 12 (American Wildlands): We were disappointed that the additional information sent did not include a process to implement watershed level assessments, establish and achieve watershed specific interim and long-term water quality objectives focused on the biological health of the stream, monitoring, and a mechanism to assure real interim milestones are achieved.

Response: Draft Alternative 7 discussed how riparian function would be determined at the landscape and project levels. In the Final EIS we expanded the discussion of the landscape level analysis (see Appendix B).

Watershed level assessments are completed at the landscape level. The procedure follows that outlined in USDA et. al., 1994, and includes the R-1 Protocol for field sampling of stream channels. The assessments seek to determine the status of a watershed based on its natural and management history. The watershed portion of the Landscape Analysis reports includes the analysis we have done to date along these lines.

Contention B. Nowhere in the EIS is funding for specified validation monitoring discussed. Implementation and effectiveness monitoring: nothing for fish and aquatic species. Historically, fish and wildlife have been poorly funded, a trend which unlawfully continues under the Amendment, in violation of NFMA and NEPA.

Documentation: Funding for monitoring of the Forest Plan amendment is discussed in the Record of Decision, page 17. "Many people asked what would happen to implementation of this amendment if monitoring budgets were not adequate to fund the entire program. Since the 1995 lawsuit settlement agreement requires at least one visit to each allotment annually, this practice will continue for the foreseeable future. We anticipate sharing the burden of annual monitoring between Forest Service/BLM personnel and grazing permittees and their representatives will free the agency folks to concentrate on Forest Plan and trend monitoring. One assumption we made was plots established to measure trend of riparian components on individual allotments could also be used as Forest Plan monitoring sites. "

Allotment level monitoring is directed in the Forest Plan Amendment, Attachment A to the ROD, page 9. Monitoring is tied into allotment goals and objectives. If fish and aquatic species are tied in with an allotment objective, they will be monitored under these provisions.

VI. THE FEIS FAILS TO PREVENT TAKING, FAILS TO AID IN RECOVERY, AND FAILS TO CONSERVE THE HABITAT OF THE THREATENED GRIZZLY BEAR, IN VIOLATION OF THE ENDANGERED SPECIES ACT (NOA, page 9).

Contention A. The EIS failed to include a letter of concurrence documenting formal consultation with U. S. Fish and Wildlife Service relating to threatened and endangered species.

Documentation: The letter of concurrence is referenced in the Record of Decision, page 12, and found in the planning record, Volume 7, pages 70124 and 70125.

Contention B. The FEIS failed to identify, analyze or take reasonable and prudent measures to maintain linkage zones in the planning area. Habitat quality, food availability, habitat security, and roads were not addressed. There is no plan to provide grizzly "security core" habitat within the FEIS.

Documentation: None of the appellants brought up the subject of grizzly bears in their letters of comment on scoping, the Draft EIS, or Draft Alternative 7.

Information on grizzly bears can be found in the FEIS on page III-19, and in Appendix C, the biological assessment and evaluation. Grizzly bear, along with the effects of the alternatives on it, are discussed in detail on pages Appendix C-8 through 11. Mitigation measures to be applied during allotment management plan revisions are found on page Appendix C-24.

Page C-11 concludes, "It is concluded that Alternatives 1, 2, 3, 4, 5 and 7 are "not likely to adversely affect" grizzly bears or their habitats on the Forest." The ROD, page 12 states, "The U.S. Fish and Wildlife Service concurred with these findings on September 19, 1997."

Contention C. The Tobacco Roots are an area that provides grizzly habitat and an essential grizzly bear corridor. The proposed logging/burning project is incompatible and could result in "takings" of grizzlies.

Documentation: No logging/burning project is proposed through this decision to amend the Forest Plan to include further riparian direction. See the ROD for a description of the decision.

Contention D. Cumulative impacts analysis generally determines how agency actions may affect the continued existence of grizzly bears is inadequate.

Documentation: Cumulative effects on grizzly bears are presented in the Biological Evaluation and Assessment, pages C-10 and 11.

VII. THE BEAVERHEAD RIPARIAN AMENDMENT FAILS TO ADEQUATELY PROTECT SENSITIVE SPECIES ON THE FOREST

Contention A. The Beaverhead NF failed to analyze the viability for sensitive species. The Forest Service neglected the following factors in their failure to examine population dynamics: population growth rate, population size, linkages to other populations.

Documentation: ROD page 12, "**Sensitive Species** - Based on the Biological Assessment and Evaluation prepared for this proposal, it "*May Impact Individuals or Habitat, but will not likely result in reduced viability for the population or species*" for almost all sensitive animal, bird, and fish species known to be located in the analysis area. For trumpeter swan, common loon, North American lynx and wolverine, the proposal will have "*No Impact.*"

The Biological Evaluation/Biological Assessment presented in Appendix C of the FEIS covers sensitive species in detail.

Contention B. In addition, the FEIS does not provide any analysis of the viability of wildlife or birds, especially neotropical migrants susceptible to parasitism by cowbirds. There is no discussion or analysis of what wildlife or birds occupy the project areas, how they are affected by grazing, and how they will be impacted by the FEIS vague riparian revisions. Nor is there any cumulative effects analysis regarding impacts to wildlife and birds.

FEIS Chapter 3, page 18, Terrestrial Wildlife, "Scale-Related Biological Diversity and Population Viability". "Species Evaluated", beginning on page III-19 discusses threatened, endangered, proposed or species at risk; USFS Region 1 Sensitive Species; Forest Management Indicator Species; and species or species groups of ecological concern. Under species or species groups of ecological concern are, amphibians, birds (including a section on brown-headed cowbirds and nest parasitism), fur-bearers, and ungulates. Tables on pages III-22 and 23 list bird species using riparian areas, their population trends and susceptibility to parasitism.

FEIS Chapter 4, discloses the effects of the alternatives on the species discussed in Chapter 3. Effects of grazing in general are found on page IV-24. Cumulative effects are found on pages IV-33 and 34. Further analysis of the effects of the alternatives on terrestrial wildlife are presented in Appendix C, the Biological Assessment and Evaluation. Appendix D lists bird species that are directly dependent or that use riparian areas more than any other habitat. Characteristics listed in the table include, species occurrence; population trends; habitat characteristics; habitat use and requirements; frequency of brown-headed cowbird parasitism; and responses of songbirds to livestock grazing. Appendix G addresses the comments received about wildlife; large ungulate use of public land riparian areas. Further information on wildlife can be found in 15 Planning Record documents, Volume 8, Document numbers 23, 30, 41-53.

VIII. THE BEAVERHEAD RIPARIAN AMENDMENT FAILED TO PROVIDE MONITORING FOR THREATENED, ENDANGERED, AND SENSITIVE SPECIES ON THE FOREST.

Contention. The Beaverhead NF must establish accepted scientific assessment methods and fully-funded monitoring programs to guide terrestrial and aquatic management programs.

Documentation: Monitoring funding is discussed in the ROD on page 17. Monitoring within the Forest Plan amendment is discussed in Attachment A to the ROD, pages 9-11. Monitoring within the remainder of the Forest Plan is found in Forest Plan Chapter VI, pages 5-17.

IX. THE BEAVERHEAD RIPARIAN AMENDMENT FAILED TO ANALYZE THE IMPACTS OF NOXIOUS WEEDS ON RIPARIAN VEGETATION.

Contention A. The Riparian Amendment fails to analyze how the presence of exotics affects riparian vegetation and ecosystems.

Documentation: Exotics were discussed in responses to public comment.

Page 45 of the scoping comments and responses document (Planning Record, Volume 5, pages 40106-40151): Comment 176 My main concern is knapweed. This is the biggest threat the forest has to diminishing plant diversity.

ID Team Response: We agree. This isn't just a Forest Service or BLM problem, but rather a State-wide (West-wide) problem that all land owners and all people need to come to

grips with. Noxious weeds, however, will not play an important role in this EIS for recovery and maintenance of riparian function.

Page 12, scoping comments and responses: Comment 111 (Montana Ecosystems Defense Council, Alliance for the Wild Rockies, Friends of the Wild Swan): The proposed action states as an objective that the riparian vegetation should exhibit species composition and coverage similar to the appropriate community type. This proposed standard is inadequate since it fails to look at climax conditions and could result in a riparian areas managed to remain in disclimax. A number of community types identified in Hansen, et. al. (1995) are dominated by exotic species.

Managing to maintain seral or disclimax vegetation types may directly conflict with the direction in the NFMA to manage to maintain biological diversity. Past management practices have been deleterious to healthy riparian communities, aquatic species and water quality. Maintaining a vegetation community indicative of this type of mis-management violates the spirit and intent of the law. It will only accelerate the decline of riparian and aquatic species on these forests.

The riparian standards and guidelines should clearly state the goal for riparian areas is to manage for climax vegetation of the appropriate habitat type or plant association. The use of community types should be limited to cases within appropriate habitat types and plant associations where communities exist that are seral due to natural disturbance events such as fire or flood. An objective should be to eliminate community types that are disclimax due to poor management or the result of invasions of exotic species types.

ID Team Response: The ID team considered your vegetation suggestions when developing alternatives to the proposed action, to be found in Chapter 2 of the EIS.

The Hansen, et. al. work is encyclopedic and is meant to describe the variety existing on the land. We expect the riparian vegetation to change within certain limits as described by Hansen, et. al.

The philosophy of the proposed action is that it is not necessary to have climax species on site to achieve riparian function. When seral stages are present, however, it is most desirable for plant communities to be made up of native species that will eventually progress to climax if given enough time - in other words, the "correct" seral species. Species like Kentucky bluegrass and dandelion are not ideal components of seral communities because they would not naturally exist under any succession scenario. Many willow species are seral in spruce habitat types, and these are acceptable because it is still possible for the riparian area to progress toward climax. Natural disturbance factors would not produce a landscape in which all riparian areas were in climax.

Our major concern in establishing riparian function is that vegetation provide the necessary streambank stability to maintain channel morphology. This can be provided by seral species, as long as they are the correct species for that habitat type. We agree management should move to correct past abuses, but to eliminate invasions of exotic species may prove to be impossible.

FEIS page V-61, Comment 63 response: *Permanent plots and photo plots mentioned above substantiate the statements that the flatter gradient streams have been impacted to the greatest degree by livestock grazing. These flatter areas are sites where cattle tend to congregate and remain unless actively managed and herded out of these areas. This is evidenced by native vegetation replaced by exotic species such as dandelion, clover, bluegrass, thistles, and an increase in Baltic rush and in some instances noxious weeds. Shrubs may be severely hedged giving them a mushroom shape, and shrubs are not reproducing. This impact is dramatically demonstrated in exclosures where cattle have been excluded and the native vegetation allowed to recover. Different management or different allotments on the same stream may also demonstrate that difference as well.*

FEIS page V- 100, Comment 3: Can domestic livestock be an important source of weed seed transport from riparian to riparian (including from private land prior to entering the Forest)?

Response: Some noxious weeds can survive the rumen and secal digestive process. In addition, some weed seeds can be mechanically transported in the coat or in the hooves of grazing animals. However, the probability of grazing animals serving as major vectors for weed infestations on public lands is considered small unless they are transported from an area of heavy infestation directly onto public lands or they recently have been fed weed infested hay. Southwestern Montana has instituted a weed free hay, straw and feed requirement on all public lands.

A primary route for the introduction of noxious weeds is on machinery such as trucks, cars, all-terrain-vehicles, railroad trains, and ground disturbing equipment.

FEIS page V-103, Comment 20. Does livestock grazing, trampling and compaction of riparian streambanks and soils encourage the establishment and maintenance of any non-native "invader" species, such as Kentucky bluegrass? How does the presence of this introduced species affect the integrity of the riparian ecosystem? Is a grass like Kentucky bluegrass very competitive for limited riparian resources? Is Kentucky bluegrass a valuable riparian area component? Are there any other non-native or noxious weed species that have increased in riparian areas as a result of the federal grazing management program?

Response: Chapter III, Riparian Vegetation discusses the effects of livestock grazing on riparian vegetation, at a scale appropriate to this forest-wide analysis. Site-specific questions such as these are best answered on individual allotments and are outside the general nature of a Forest Plan Amendment.

*Owing to the relative scarcity of *Catabrosa aquatica* this species is of little importance as native forage. Given the species' rhizomatous roots it should compete quite well and respond well to livestock grazing. How quickly a site recovers is dependant upon many factors such as how badly disturbed the site is and the proximity of seed sources.*

Contention B. The analysis documents fail to account for how noxious weeds will be controlled...assess the current condition of noxious weed infestations in riparian areas.

The Forest Plan Amendment discusses noxious weeds in two ways, as presented in Attachment A to the ROD. On page 2 of Amendment #7 two riparian objectives deal with noxious weeds.

3. Recover and maintain the composition and structure of native riparian plant communities achievable within existing site potential, sufficient to achieve and maintain desired future condition.
4. Reduce non-native plants and noxious weeds.

On pages 2 and 3 of Amendment #7, Desired Future Condition statements for streams contain the following sentences.

Vegetation composition may consist of a mix of native and non-native species. However, the desirable dominant vegetation will be native species within the existing site potential.

Forest Plan, page II-9, "Noxious weed control; conducted in cooperation with other agencies, private landowners, and public land managers; has high priority in the forest program. Funds and deposits associated with the timber harvest program will be used to prevent infestations of noxious weeds that could result from the timber harvest traffic. Education efforts will be continued. Some range management funding, through the appropriated channels and the Range Betterment Fund (dollars generated by the grazing fees), will be utilized to address the noxious weed problems."

FEIS page V-103, Comment 20: Does livestock grazing, trampling and compaction of riparian streambanks and soils encourage the establishment and maintenance of any non-native "invader" species, such as Kentucky bluegrass? How does the presence of this introduced species affect the integrity of the riparian ecosystem? Is a grass like Kentucky bluegrass very competitive for limited riparian resources? Is Kentucky bluegrass a valuable riparian area component? Are there any other non-native or noxious weed species that have increased in riparian areas as a result of the federal grazing management program?

Response: Chapter III, Riparian Vegetation discusses the effects of livestock grazing on riparian vegetation, at a scale appropriate to this forest-wide analysis. Site-specific questions such as these are best answered on individual allotments and are outside the general nature of a Forest Plan Amendment.

Chapter 3 page 16, "On some badly impacted sites noxious weeds have become well established, the two most common being spotted knapweed (*Centaurea maculosa*) and leafy spurge (*Euphorbia esula*)".

Chapter 3 page 30, "The riparian problems facing permittees and land managers today are rooted to a great extent in the legacy of overgrazing from the late 1880s and early 1900s coupled with other prominent historical forces of alteration such as climatic changes, beaver trapping, water diversions, mining, road-building, logging, and the introduction of exotic plant species (Elmore 1994)".

/s/ Rex Blackwell (For)

DEBORAH L. R. AUSTIN
Responsible Official