Appendix D - Response To Comments Received on the Draft Supplement to the North Sheep FEIS

Introduction

The Notice of Availability (NOA) of the *Draft Supplement to the 2004 North Sheep Grazing Allotments Final Environmental Impact Statement* (Draft Supplement) was published in the Federal Register on November 9, 2007. The NOA initiated a 45-day comment period that ended on December 26, 2007[1] during which comments on the Draft Supplement were accepted from the public and interested agencies and organizations. This appendix presents a summary of the comments received during the public comment period on the Draft Supplement and provides the Forest Service response to these comments.

During the 45-day comment period, eight mailed or e-mailed submissions were received from three agencies, one environmental organization, and one individual. It should be noted that Katie Fite submitted two comment letters. Of the two letters received from her, one was specific to the North Sheep Draft Supplement and the comments included in that letter are addressed in the Response to Comments section below. The other letter was not specific to the Draft North Sheep Supplement, but was a comment letter on a different project, the MIS Capability Supplement to the Forest Plan Final Environmental Impact Statement. The second letter was thoroughly reviewed for the MIS Capability Supplement project and responses to its content were developed during that project. The response to that letter is not present below but was made part of the Draft North Sheep Supplement project record.

Table 1 lists the number assigned to each submission, the name and organization, if appropriate of each commentor, and each commentor's city and state.

Appendix B - Table 1.
Respondents to the Draft Supplement to the 2004 North Sheep Allotments FEIS.

Letter #	Name	Organization	City, State
1	Wayne F. Butts, Chairman	Custer County Commissioners	Challis, ID
2	Jon Marvel	Western Watersheds Project	Hailey, ID
3	Debra K. Ellers	Western Watersheds Project	McCall, ID
4	Leon Jones		Smiley Cr, ID
5	Larry Zuckerman	Western Watersheds Project	Salmon, ID
6	Katie Fite	Western Watersheds Project	Salmon, ID
7	Christine Reichgott	Environmental Protection Agency	Seattle, WA
8	Ron Kay	Idaho State Department of Agriculture	Boise, ID

[1] The comment period would have ended on Dec. 24, 2007, but during the 45-day comment period, President Bush declared Dec. 24, 2007 a holiday for all federal employees. Thus, that moved the last day of the comment period to the next day that was not a holiday or weekend which was December 26, 2007.

Following the comment period, individual comments were extracted from each submission. The comments were then categorized by issue, summarized and carried forward into this Response to Comments document. All submissions, with or without substantive comments, were reviewed by the decision makers. The individual submissions are included in the project record. Copies of the agency letters can also be found in the project record. The comments were divided into the following Issue Categories:

Issue 1: Climate Change
Issue 2: Forest Plan Guidance
Issue 3: Interior Columbia Basin Ecosystem Management Project (ICBEMP)
Issue 4: Local Culture & Economics
Issue 5: Management Indicator Species / 36 CFR 219
Issue 6: Monitoring and Data Collection
Issue 7: NEPA Process
Issue 8: New Information between 2004 and 2008
Issue 9: Rangeland Management
- Range - Sub Issue 1 – Adaptive Management
- Range - Sub Issue 2 – Range Capability
- Range - Sub Issue 3 – Livestock Grazing Impacts (general)
- Range - Sub Issue 4 – Grazing Permits
- Range - Sub Issue 5 – Roads
- Range - Sub Issue 6 – Suitability

Issue 10: Recreation
Issue 11: Restoration
Issue 12: Soils
Issue 13: Substantial Impairment (Public Law 92-400)
Issue 14: Vegetation
Issue 15: Water & Fisheries
Issue 16: Noxious Weeds / Non-Native Plants
Issue 17: Wildfire
Issue 18: Wildlife
- Wildlife Sub Issue 1 Wildlife General
- Wildlife Sub Issue 2 Bighorn Sheep & Lynx
- Wildlife Sub Issue 3 Greater Sage-grouse

RESPONSE TO COMMENTS

NORTH SHEEP DRAFT SUPPLEMENT

Issue 1: Climate Change

COMMENT 1: Global Warming is certainly occurring and is reasonably certain to occur in the near and long-term future. The SEIS needs to fully analyze the anticipated reductions in MIS, ESA, and livestock capabilities of the watersheds based on climate changes that are likely, including the worse case scenarios, so that MIS, ESA, and Regionally Sensitive Species (Westslope Cutthroat trout) are not eliminated from the North Sheep region of the SNF. For example, if global warming reduces the quality and quantity of suitable and capable spawning habitat for ESA/MSA-listed salmonids, then to maintain and recover these species on the SNF, the Forest Service should reduce grazing effects that increase fine sediment transport, bank and shade cover destruction, and water temperatures. We are also very concerned that climate change processes that are resulting in significant die-off of both higher elevation conifers (whitebark pine) and insect infestations killing large areas of lodgepole pine in these watersheds, as well as recent forest fires, will shorten and compress snowmelt runoff and may significantly accelerate erosion rates in degraded areas. Grazing will affect this at all levels – including the annual disturbance and dislodging of sols by trampling activity.

> **RESPONSE:** The Resources Planning Act April, 2007 update (Interim Update of the 2000 Renewable Resources Planning Act Assessment, Publication #FS-874) acknowledges and addresses climate change. It also indicates that climate variability makes predictions about drought, rainfall, and temperature extremes highly uncertain. Based on the best available science, it would be too remote and speculative to factor any specific ecological trends or substantial changes in climate into the analysis of environmental impacts of the project. Research about long range shifts in species range, etc. is ongoing and a number of groups are discussing the implications of climate change on forest and range management. Although there is a solid consensus that global warming is occurring, there is still much uncertainty about subsequent ecological interactions and trends at the local or site-specific scale. Given the stochastic nature of climate-related events such as droughts, wildfire and floods, it would be highly remote and speculative to make management decisions based on such predictions. The best available science concerning climate change is not yet adequate to support reliable predictions about ecological interactions and trends at the local (site-specific) scale.
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> Project-scale effects will not make individual contributions to greenhouse gas emissions that are significant enough to measure.

Issue 2: Forest Plan Guidance

COMMENT 2a. The SNSEIS conclusion on Sage Grouse is inconsistent with other Forest standards, such as the following:
--Smiley Cr and Fisher Cr have Forest Plan management prescription category 3.2, "active restoration and maintenance of aquatic, terrestrial and hydrological resources." Also, specific management area objectives include restoring upland mesic and sagebrush to improve sagebrush-obligate species habitat. (See p 8 of Allotment Management Plan ["AMP"]).

> **RESPONSE 2a.** As described in the Forest Plan, Management Prescription Categories (MPCs) are broad categories of management prescriptions that indicate the general management emphasis prescribed for a given area. MPC management emphasis is further defined by Forest-wide and Management Area direction. While the emphasis for MPC 3.2 is to actively restore or maintain conditions for TEPCS fish, wildlife, and botanical species, or 303(d) impaired water bodies through a combination of management activities and natural processes, no where does the prescription preclude livestock grazing as an activity that may occur under this prescription category.
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> As previously described in the North Sheep FEIS, many of the impacts to sage grouse habitat are the result of historic rather than current livestock grazing practices and will require specific restoration projects, which is beyond the scope of this analysis. The Forest Plan recognized these historic impacts and includes Management Area objectives addressing the need to restore sage brush communities to improve habitat for sage brush obligate species. These Management Area objectives form the basis for development of project-level actions or proposals to help achieve Forest goals. However, not all projects are proposed and designed to respond to all objectives in the Forest Plan, nor do they have to be. For example, you would not expect a project designed to restore a streambank to implement Forest Plan Objective REOB04 which states: "Maintain the necessary data to determine the individual and/or cumulative changes in ROS classes relative to the management area ROS strategy."
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> Following that same logic, a proposal to authorize livestock grazing is not expected to be a restoration proposal for Sage-grouse habitat. As described in the North Sheep FEIS, many of the impacts to sage grouse habitat are the result of historic rather than current livestock grazing practices and will require specific restoration projects, which is beyond the scope of this analysis. As described in section 4.7.2.3.1 of the North Sheep FEIS, while manipulation of timing and intensity of livestock grazing through the adaptive management process will result in a trend towards desired conditions, some vegetative communities such as the sagebrush steppe may not return to the original community without vegetation manipulation projects or wildfire. This is consistent with the findings in the 2006 Sage-grouse Conservation Plan which states that "while subsequent changes in livestock management may be appropriate to nurture and maintain the restored

area, such changes alone in the absence of restoration activities would likely provide little if any progress." (2006 Sage-grouse Conservation Plan, p. 4-55)

COMMENT 2b. The SNSEIS conclusion on Sage Grouse is inconsistent with other Forest standards, such as the following:
--N Fk Boulder Cr AMP management area objectives include "restore Mountain Big Sagebrush and "maintain and restore habitat for …sage grouse." (pp. 6-7 of AMP).

RESPONSE 2b. Please see Response 2a, above.

COMMENT 2c. The SNSEIS conclusion on Sage Grouse is inconsistent with other Forest standards, such as the following:
--Baker Cr AMP management area objectives include "restore Mountain Big Sagebrush and "maintain and restore habitat for …sage grouse." (p 6 of AMP).

RESPONSE 2c. Please see Response 2a, above.

COMMENT 2d. Page 5, II.A.1. – Does the North Fork-Boulder S&G Allotment AMP meet the forest-wide goals? RAGO01, NO – for wildlife management, particularly bighorn sheep and mountain goat management that are reasonably certain heightened disease risks and forage competition with grazing domestic sheep and goats.

RESPONSE 2d. As described in the North Sheep Supplement, the scope of analysis for the Supplement has been narrowed to those issues listed on page 2 (Section 1.1.1). Analysis of bighorn sheep or mountain goats is beyond the scope of the supplemental analysis. However, in response to this comment, Forest Plan goal RAGO01 specifically states: "Provide for livestock forage within existing open allotments, in a manner that is consistent with other resource management direction and uses." (Forest Plan p. II-44) The effects of livestock grazing on big horn sheep and mountain goats with the allotments are discussed in the North Sheep FEIS in the following locations:

> Mountain goats: on pp. 1-10, 2-25, 2-26, 3-55, 3-56, 3-77, 3-78, 3-84, 3-91, 3-92, 4-67, 4-69, 4-70, 4-80 to 4-83, 4-89, 4-90, and 4-92.
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> Big horn sheep: Chapter 1 on pp. 11,14, and 15; Chapter Two on p. 27; Chapter Three on pp. 78, 84, 95-96; and in Chapter Four on pp. 68-69, 86-87, 90.

These discussions included analysis of whether or not Forest Plan direction relative to livestock grazing and wildlife habitat would be met. In addition to the analysis in the North Sheep FEIS, a Forest Plan consistency checklist was completed and is part of the project record. The checklist concluded that Forest Plan RAGO01 would be met under the proposed action.

Additionally, in his Memorandum Decision and Order (Case # CV-05-189-E-

BLW), Judge Winmill writes: "The Forest Service satisfied NFMA and NEPA in its discussion of Bighorn Sheep…" (p. 25, Docket #47)

COMMENT 2e. Does the North Fork-Boulder S&G Allotment AMP meet the forest-wide goals? RAGO06. What about bighorn sheep and mountain goat management and the reasonably certain increase in competition and disease risks?

RESPONSE 2e. Please see Response 2d, above. A Forest Plan consistency checklist is part of the project record. The checklist concluded that Forest Plan RAGO06 would be met under the proposed action.

COMMENT 2f. Does the North Fork-Boulder S&G Allotment AMP meet the forest-wide goals? VEOB03. Where is the EIS for adopting adaptive management? And for, abandoning the other forms of monitoring, which were publicly reviewed and consulted under ESA and MSA? What about Judge Winmill's earlier decision on the North Fork Sheep FEIS that mentioned adaptive management? What about sacrificing trend analysis capabilities and the ability to compare changes in the environmental baseline conditions from the old monitoring protocols to the new adaptive management monitoring?

RESPONSE 2f. Forest Plan Objective VEOB03 states: "Utilize emerging technologies and science, and implement an adaptive management process to provide for increasing the effectiveness of vegetation monitoring." Please see Response 2a for more on Forest Plan Objectives.

The Allotment Management Plans found in the North Sheep FEIS and Supplement provide a detailed description of the types and amount of monitoring to occur on the allotment. This monitoring includes a number of monitoring techniques including implementation monitoring, trend monitoring, and management effectiveness monitoring. Given the lack of specificity of the comment, the Forest is unsure what the commentor is referring to relative to the assertion that the Forest is "abandoning the other forms of monitoring" and "sacrificing trend analysis capabilities" etc.

The Forest Plan FEIS was the environmental analysis (under NEPA) for this adaptive management objective VEOB03. Regarding adaptive management practices for livestock grazing, Chapter Two of the North Sheep Supplement gives a full explanation of the adaptive management strategy and its protocols.

COMMENT 2g. Does the North Fork-Boulder S&G Allotment AMP meet forest-wide objectives? RAOB03. Again, changes in the monitoring systems resulting in the loss of continuity of the monitoring of the environmental baseline, its changes, and how it responds to poor and good grazing management practices as well as to mitigation and restoration actions. It is akin to starting over; making all the historical and recent data no longer useful. Also, if adaptive management is used, it may prove good for range management, but managers and the interested public will no longer be able to detect trends if the future indicators keep changing. This makes adaptive management into a

cleaver shell game, where the public and the public trust resources can never "win".

RESPONSE 2g. Forest Plan Objective RAOB03 states: During fine-scale analyses where rangeland facilities are identified as a potential concern or problem contributing to degrading resource conditions within the analysis area, identify rangeland facilities that are degrading resource conditions and prioritize opportunities to mitigate their effects or to initiate restoration of resource conditions."

While the comment relative to objective RAOB03 is beyond the scope of the supplemental analysis, the Forest did identify rangeland facilities that were a potential concern in the North Sheep FEIS (p. 2-13) and Records of Decision (North Fork & Boulder Creek Record of Decision, p. 4; Fisher Creek and Smiley Creek Record of Decision, p. 4).

Relative to the concern expressed about monitoring, please refer to response 2f. above.

COMMENT 2h. North Fork-Boulder AMP - Page 6, II.A.4. – Management Area Objectives - Objective 0411 – Are domestic sheep spreading noxious weeds seeds throughout Forest-managed lands? It is reasonably certain that they are.

RESPONSE 2h. Forest Plan Objective 04111 states: "Prevent the spread of noxious weed seeds due to domestic sheep by adjusting or changing management practices, such as trailing route locations and driveway/grazing area seasons of use." Please see Response 2a for more on Forest Plan Objectives.

Please see the responses to Issue 16: Noxious Weeds / Non-Native Plants. The issue of the proposed action affecting the spread of noxious weeds was addressed in the North Sheep FEIS on pages 1-10, 2-24, 3-61, 3-75 to 3-77, & 4-64 to 4-67. The Forest Service recognizes the increasing threat of invasive species. The Weed Management Program inventories, monitors, and treats the North Sheep allotments annually. Additionally, adaptive management strategies discussed in Chapter 2 of the North Sheep Supplement would include modifications to allotment terms and conditions, management practices, and grazing routes when noxious weed infestations occur.

COMMENT 2i. North Fork-Boulder AMP - Page 6, II.A.4. – Management Area Objectives - Objective 0452 – Reduce and control noxious weeds within the Big Wood River watershed? There is spotted knapweed, diffuse knapweed, and dalmation toadflax. There is a need for public education and the prevention of noxious weed spreading through Forest users' actions. There are also non-chemical alternatives to herbicides for controlling noxious weeds. Does the SNF have a noxious weeds programmatic consultation with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service? Are the herbicides proposed in the action covered for these uses?

RESPONSE 2i. Forest Plan Objective 0452 states: "Confine, contain, or reduce the density of noxious weed infestations, particularly spotted knapweed, diffuse knapweed, and Dalmatian toadflax, within the Big Wood River drainage." Please see the responses to Issue 16: Noxious Weeds / Non-Native Plants as well as Response 2h, above. Response 16b and Response 16f address herbicides.

COMMENT 2j. North Fork-Boulder AMP - Page 6, II.A.4. – Management Area Objectives - Objective 0454 – Provide high quality mountain goat forage by minimizing OR reducing summer and fall forage competition between domestic sheep in tributaries of the NF Big Wood River. We don't feel the AMP and SEIS satisfies this objective.

RESPONSE 2j. Discussion of mountain goats were disclosed in the North Sheep FEIS pp. 1-10, 2-25, 2-26, 3-55, 3-56, 3-77, 3-78, 3-84, 3-91, 3-92, 4-67, 4-69, 4-70, 4-80 to 4-83, 4-89, 4-90, and 4-92.

On p. 2-26 of the FEIS it states: "The No-Action Alternative would not be consistent with the following objective related to wildlife and wildlife habitats: Big Wood River Management Area Objective 0454. The Proposed Action would be consistent with this objective since mountain goat habitat in portions of the allotments would be closed to grazing. In localized areas of the allotments, during the 2-year phase-out period, Alternative C would be inconsistent with the same objective as the No-Action Alternative. However, after the 2-year phase-out period, Alternative C would be consistent with this objective."

Based on the generality of the comment submitted, it is unclear why the commentor feels the AMP and North Sheep FEIS and Supplement do not satisfy this objective.

COMMENT 2k. North Fork-Boulder AMP - Page 6, II.A.4. – Management Area Objectives Objective 0456 – Maintain AND restore habitat for deer, elk, migratory birds, and sage-grouse in lower elevation communities. How does sheep grazing restore sage-grouse habitat?

RESPONSE 2k. Objectives form the basis for development of project-level actions or proposals to help achieve Forest goals. However not all projects are proposed , designed, or expected to respond to all objectives in the Forest Plan. Nor do they have to be. For example, you would not expect a project designed to restore a streambank to implement Forest Plan Objective REOB04 which states: "Maintain the necessary data to determine the individual and/or cumulative changes in ROS classes relative to the management area ROS strategy." Following that same logic, a proposal to authorize livestock grazing is not expected to be a restoration proposal for Sage-grouse habitat. As described in the North Sheep FEIS effects analysis, implementation of this project is not inconsistent with Forest Plan objective 0456. Also, as described in the North Sheep FEIS, many of the impacts to sage grouse habitat are the result of historic

rather than current livestock grazing practices and will require specific restoration projects, which is beyond the scope of this analysis.

COMMENT 2l. North Fork-Boulder AMP - Page 6, II.A.4. – Management Area Objectives - Objective 0488 – Scenic values of the SNRA. How can SNF preserve scenic values on private and public lands on the SNRA with intensive sheep grazing and damaged aquatic and terrestrial resources?

RESPONSE 2l. Please see the responses under Issue 13 – PL 92-400/Substantial Impairment. Protecting the scenic value of the SNRA is key to Public Law 92-400. Describing an acceptable level or amount of change to the visual character is defined through the inventoried Visual Quality Objectives (VQOs). On National Forest System lands, development or uses should meet inventoried VQOs wherever feasible. Where the inventoried VQO of Preservation, Retention or Partial Retention cannot be met, a reduction of one VQO constitutes "impairment". A reduction of two VQOs constitutes "substantial impairment". As part of the project record for North Sheep FEIS, a Forest Service Landscape Architect evaluated the Proposed Action and to determine what, if any effects to the VQOs would occur. That scenic evaluation (September 15, 2004), Project Record) concludes that objectives for VQOs will be met. The visual analysis report states: "Scenic objectives for all Management Areas would be consistent with the Forest Plan. For those allotment areas within the SNRA, there should be no threat of "substantial impairment" of the scenic value occurring." The Supplement to the North Sheep FEIS does not change this conclusion. Thus the scenic value is maintained.

COMMENT 2m. North Fork-Boulder AMP - Page 6, II.A.4. – Management Area Objectives - Objective 4109 – Adjust grazing to minimize livestock grazing-recreation conflicts along NF Big Wood River within high density recreational areas. How does continued sheep grazing achieve this objective? With herder camps, livestock fecal matter, overgrazed vegetation, trailing sheep and herding dogs and their garbage not interfere with recreation and scenic values?

RESPONSE 2m. The North Sheep FEIS disclosed the effects to Objective 04109. Within the Summary of the North Sheep FEIS, on p. S-6 it states: Under current grazing management practices, the following objectives, standards, and guides are not being met.... Objective 04109..." On p. S-11: Continued grazing under the No-Action Alternative would not be consistent with the Objective 04110, and progress towards Objective 04109 would be slow. On p. S-11: The Proposed Action would result in a trend toward desired conditions for recreation, though conflicts with recreational values would likely persist in some localized areas. Alternative C (grazing phase-out) would not be consistent with the same points of guidance as the No-Action Alternative. Alternative C would be consistent with Objectives 04109, 04110, and 04112 after the 2-year phase out period.

COMMENT 2n. Pg 88: VEGU06 states that the "areas should be rested for a minimum of two growing seasons". Rangeland sites at this elevation generally do not need two growing season to recover from a fire. It is recommended that there is no minimum time for rest, but to base the need for rest on your factors listed and on site examination at the end of the fire to determine impact to the vegetation and during the first growing season to determine the response to the present vegetation. Factor d., should also have the words "after 2 years of rest" removed from the statement.

> **RESPONSE 2n.** The Forest Plan guideline of resting an area for a minimum of two years was analyzed under NEPA during the Forest Plan revision. This direction has proven to be effective and is a recommended course of action. We appreciate your comment that factors such as vegetation standards should be the trigger for restocking a site, rather than an arbitrary time. The areas affected by wildfire were evaluated following the fire by Burned Area Emergency Response (BAER) specialists as required by Forest Service Policy. Criteria were set for when grazing would resume on burned rangelands. This includes resting the burned area for a minimum of two growing seasons or longer until specific resource conditions are achieved. Once achieved, land managers will evaluate returning livestock grazing to those areas, and specify the conditions (timing, band size, grazing routes etc.) through the adaptive management process consistent with Forest Plan direction, the North Sheep FEIS and the Supplement. If we determined that grazing could occur earlier than two years, based on vegetative conditions, we would need to document our rationale as to why we deviated from the Forest Plan Guideline.

COMMENT 2o. We are puzzled by the inconsistency and conflicts with the Forest Plan and AMPs. Smiley and Fisher Creek AMP identifies these allotments as having Forest Plan management prescription category 3.2, "active restoration and maintenance of aquatic, terrestrial and hydrological resources." See p 7 and 50. Also, specific management area objectives include restoring upland mesic and sagebrush to improve sagebrush-obligate species habitat. (p 8 of AMP). This contradicts Forest efforts in the North Sheep EIS to abdicate its management responsibilities for Sage Grouse, Brewer's Sparrow, and all other sagebrush-dependent species. The bottom line is that in order to continue grazing sheep in this highly fragmented landscape, the Forest's only hope for eking out AUMs is to kill and disturb more sagebrush to try to grow sheep food. This violates the Forest Plan and NFMA.

RESPONSE 2o. Please see Response 2a regarding MPCs and Objectives. Also please note the MPC 3.2 does not preclude livestock grazing.

COMMENT 2p. The North Fork Boulder AMP management area objectives include "restore Mountain Big Sagebrush and "maintain and restore habitat for …sage grouse." (page 6&7 of AMP). The Baker Cr AMP management area objectives include "restore Mountain Big Sagebrush and "maintain and restore habitat for … sage grouse." (page 6 of AMP). There is a disconnect between the promised Objectives on paper in the AMPs, and the actions described in the EIS that will only serve to further fragment and degrade

sagebrush communities.

> **RESPONSE 2p.** Please see Response 2h. The objectives described in the comment are not AMP objectives but rather Forest Plan objectives that are applicable to the areas encompassed by the AMPs. As described in Response 2a above, Management Area objectives form the basis for development of project-level actions or proposals to help achieve Forest goals. However, not all projects are proposed and designed to respond to all objectives in the Forest Plan, nor do they have to be.
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> As previously described in the North Sheep FEIS, many of the impacts to sage grouse habitat are the result of historic rather than current livestock grazing practices and will require specific restoration projects, which is beyond the scope of this analysis.

COMMENT 2q. We are very concerned that the Forest basis in both this and the MIS process for defining Sage Grouse habitats as "watersheds". Watersheds may have little meaning to a wide-ranging species like Sage Grouse – what matters is the condition and connectivity between sagebrush uplands that may often span watersheds. It is critical to understand the degree of natural and human-caused fragmentation and disturbance, and connectivity of sagebrush habitats across these uplands spanning watersheds. The Forest uses a fish-filtered and biologically invalid watershed criteria as the basis for its decision-making for Sage Grouse habitat actions and any "restoration" of them.

> **RESPONSE 2q.** The Forest does not define sage grouse habitats as "watersheds". As described in the MIS Capability Supplement, using models, source habitat for sage grouse was depicted by mapping forested Potential Vegetation Groups (PVGs) and non-forested cover types identified as being capable of developing the structural conditions necessary to meet the source habitat definition. To allow for consistency across analysis scales, assessments were conducted and information displayed by watershed, specifically the 5th Hydrological Unit Code HUC) across the three National Forests. As described in the MIS Capability Supplement, this scale was used as watersheds are the distribution unit used to identify species habitat networks and linkages and address distribution requirements. This approach is consistent with analysis classes used in Interior Columbia Basin assessments (Wisdom et al. 2000). The Forest recognizes that sage-grouse source habitats span multiple watersheds and conducted a multi-scale analysis to determine habitat ranges at the watershed scale (5th HUC).

COMMENT 2r. As part of this EIS process and the MIS EIS processes underway, the Forest must re-examine and revise its manipulation policies and obsession over killing sagebrush in pursuit of some supposed past "HRV" fire regime. Even the Forest's recent Interim Report and Summary (Attached) found that managing to mimic past disturbance regimes and "HRV" in the face of climate change, could have unpredictable consequences.

http://www.fs.fed.us/research/rpa/pubs-supporting-interim-update-of-2000-rpa-assessment.shtml

RESPONSE 2r. While the issue of Vegetative Management practices is outside the scope of the original North Sheep FEIS and Supplement, it should be noted that it is Forest Service policy that prior to implementation of any vegetation treatments, site-specific environmental analysis must be completed. As part of the NEPA process, an analysis of direct, indirect and cumulative effects, including examination of sagebrush loss or reduction on surrounding lands, would be conducted. For treatment areas within livestock allotments, the analysis would include a determination of if and when livestock grazing would be allowed within the treatment area.

COMMENT 2s. "Management to mimic the range of historic variation in resource conditions may no longer be plausible if climate change overwhelms the intent of the actions: Management must adjust to dynamic conditions". USFS 2007, Assessment of the Status and Trends of Natural Resources from U. S. Forest and Rangelands: 15 Key Findings".

RESPONSE 2s. Thank-you for that citation. Please see responses to Issue #1 - Climate Change. In addition, adaptive management is designed to be responsive to dynamic conditions and is part of the proposed action.

COMMENT 2t. North Fork-Boulder AMP - Page 6, II.A.4. – Management Area Objectives (Big Wood MA) - Objectives 0447 and 0448 - These are noble objectives, but does the data support that it being met?

RESPONSE 2t. Please see Response 2a. As described in the North Sheep Supplement, the Proposed Action is designed to help move towards this objective.

Regarding MA0447, the proposed action addresses the grazing component of this objective through grazing standards and use requirements. Adaptive management actions in general and specifically #6a (SEIS, p. 18) will be used as needed.

Regarding MA0448, grazing practices, desired condition and monitoring are set in the AMPs (SEIS App. C). Note that achieving this objective for sagebrush stands which are outside of the desired conditions will generally require mechanical or prescribed fire treatments which are outside of the scope of this action.

Issue 3: Interior Columbia Basin Ecosystem Management Project (ICBEMP)

COMMENT 3a. The Forest has committed to using ICBEMP science. ICBEMP science was based on a broad-scale inventory of historical and current conditions (in the Interior Columbia Basin in the 1990s), ecological processes, and threats faced by lands in the

Interior Columbia. Since then, threats have increased significantly – especially the continued expansion of invasive species and their adaptations to grow at higher and higher elevations and across a broader range of soil types. Federal agencies have known since ICBEMP in the 1990s that the principles of Ecological Science are showing that the Interior Columbia Basin is falling apart. In "rangelands", invasive species proliferate in zones of grazing, roading, fire or other disturbance, with loss and/or fragmentation of essential habitat components that provide food, cover and living space for native species. Wisdom et al. (2002) ICBEMP recommendations for sagebrush habitats were:

1) Conserve native grasslands and shrublands that have not undergone large-scale reduction in composition of native plants;
2) Control or eradicate exotic plants on native grasslands or shrublands where invasion potential or spread of exotics is highest;
3) Restore native plant communities where potential for restoration is highest.

Wisdom et al. 2002:

*Defined habitat requirements (source habitats) and assessed trends in these habitats for 91 species of terrestrial vertebrates.

*Identified species of on-going concern about population or habitat status; evaluated changes in source habitats since settlement; ‘

* Looked at effects of roads and road densities;

* Mapped source habitats for terrestrial carnivores, and used the composite of results to identify areas having high potential to support persistent populations.

RESPONSE 3a. We agree that ICBEMP was an important reference (of many) for the analysis of the 2003 Revised Sawtooth Forest Plan as well as the recently completed MIS Capability Supplement. Wisdom, et.al. (2000) was used extensively in the Forest Plan FEIS - MIS Capability Supplement (2008) - a key reference for the North Sheep Supplement. In the MIS Capability Supplement, source habitat models used the characterization of source habitat as described in Wisdom et al (2000) as well as primary literature to identify macrovegetation characteristics necessary to contribute to stationary or positive population growth. We cross-walked information to potential vegetation groups or cover types as well as structural stages which allowed us to model predicted source habitat using Ecogroup landsat data. A spatial assessment of source habitats was conducted for each MIS, including an assessment of change in species’ source habitats using 30-meter resolution LandSat data.

We used methodology comparable to the broad-scale assessment completed by Wisdom et al (2000) at the scale of the Basin and based the spatial assessment on the historic composition and structural conditions of potential vegetation groups in forested habitats and on desired cover type conditions for non-forest vegetation as compared to current conditions. We then related estimates of current source habitat to estimates of historic source habitat and assessed changes in those habitats from historical to current.

Issue 4: Local Culture & Economics

COMMENT 4a. We also encourage your continued consideration for the customs and culture of the areas involved.

> **RESPONSE 4a.** While certain elements in the North Sheep FEIS were supplemented, other important aspects of the project and the analysis in the North Sheep FEIS were sufficient and therefore remain unchanged. The issue of Culture was addressed in the North Sheep FEIS on pages 1-9, 3-48 through 3-52, and 4-43 through 4-45. It will not be re-addressed in the North Sheep Supplement.

COMMENT 4b. There should be a cost-benefit analysis to evaluate the forage demand for livestock as balanced against the values of wildlife species, healthy watersheds and other values foregone to support livestock grazing.

> **RESPONSE 4b.** Completing a cost-benefit analysis is outside the scope of the Supplement. The issue of Economics was addressed in the North Sheep FEIS on pages 1-12 through 1-13 and App F, p. F-6. It will not be re-addressed in the North Sheep Supplement.

Issue 5: Management Indicator Species / 36 CFR 219

COMMENT 5a. The analysis for MIS appears to have simplified CFR requirements, confusing the MIS issue with providing food and habitat for other wildlife species. The cited CFR paragraphs state: "In Forest planning, the suitability and potential capability of National Forest System lands for producing forage for grazing animals and for providing habitat for management indicator species shall be determined …" "Lands suitable for grazing and browsing shall be identified and their condition and trend shall be determined. The present and potential supply of forage for livestock, wild and free-roaming horses and burrows, and the capability of these lands to produce suitable food and cover for selected wildlife species shall be estimated. The use of forage by grazing and browsing animals will be estimated. Lands in less than satisfactory condition shall be identified and appropriate action planed for their restoration."

> **RESPONSE 5a.** The MIS Capability Supplement specifically lists the requirements of 36 CFR 219.20 and how the requirements are addressed. Although concerns over how the MIS Capability Supplement analysis was conducted are beyond the scope of the North Sheep decision, it is unclear, based on the comment submitted, how the MIS Capability Supplement "simplified CFR requirements".

COMMENT 5b. The SEIS has interpreted the requirement to determine suitability and potential capability for producing forage for grazing animals to mean only livestock. There has been no determination as to the capability of the land to produce forage for

deer, elk, bighorn sheep, sage grouse or other "grazing animals", nor has their forage needs and the current supply of their desirable forage been determined.

RESPONSE 5b. It is assumed that the requirement referenced is 36 CFR 219.20 which requires that:

> "In Forest planning, the suitability and potential capability of National Forest System lands for producing forage for grazing animals and for providing habitat for management indicator species shall be determined …".

Paragraph (a) further defines the analysis for grazing animals and management indicator species (MIS) as:

> "The present and potential supply of forage for livestock, wild and free-roaming horses and burros, and the capability of these lands to produce suitable food and cover for selected wildlife species shall be estimated."

The MIS Capability Supplement clearly identifies that it uses source habitat to determine capable MIS habitat, and defines source habitat as:

> "Those characteristics of vegetation that support long-term wildlife species persistence, or characteristics of vegetation that contribute to stable or positive population growth for a species in a specified area and time."

Based on this definition, the ability to provide adequate forage would be a consideration in determination of source habitat. The required analysis for livestock is found in the North Sheep Supplement at pp. 30 – 48 and 91 - 96. The required analysis for MIS (the selected wildlife species) is found in the North Sheep Supplement at pp. 81-89 and 106-108.

It should be noted that the allotment specific suitability and capability analyses include production data for forage species for livestock and wildlife. This data is available on both capable and non-capable grazing lands. Also note that the process of validating or setting appropriate levels of grazing use on the allotments described in the North Sheep Supplement on pgs. 46-48 includes consideration for wildlife habitat needs. The adaptive management practice #8 (Supplement pp. 18 & 20) also provides for modifying grazing to resolve conflicts with other resource uses. This would include wildlife forage use and other habitat considerations.

COMMENT 5c. Pages 41-42 – Allotment Specific Capability Analysis – where's the accompanying analysis for MIS, ESA/MSA-listed species, and Regionally Sensitive Species, so that the Forest Service and the public can determine how much of the watersheds' capabilities is available for livestock grazing?

RESPONSE 5c. The requirements of 36 CFR 219.20 require that through Forest Planning the Forest determine the suitability and potential capability of National Forest System lands for producing forage for grazing animals and for providing habitat for management indicator species. This forest planning requirement was completed through the MIS Capability Supplement. The North Sheep

Supplement used information from the final MIS Capability Supplement to address capable MIS habitat at the allotment level. (Supplement, pp. 83-91, 113-115).

COMMENT 5d. In regard to the capability of these lands to support Management Indicator Species (MIS), the Forest Service needs to provide how it will restore livestock-damaged habitat for sage grouse and bull trout, and the agency needs to provide clear and detailed maps of site-specific conditions of habitat for sage grouse in the final SEIS. This is especially important for habitat that has been determined to be in unsatisfactory condition.

RESPONSE 5d. The Court ruled that the analysis in the North Sheep FEIS for bull trout was adequate, therefore additional analysis for bull trout was not carried forward into the North Sheep Supplement. As described in the North Sheep Supplement(p. 85), many of the impacts to sage-grouse habitat are the result of historic rather than current livestock grazing practices. Desired sagebrush stand conditions for sage-grouse habitat are defined at the landscape or watershed scale (Sawtooth National Forest Land and Resource Management Plan, Vol 2, p. A-15). Restoration of habitat that does not meet desired sagebrush stand conditions will require either natural disturbance events (e.g. fire and disease) or will require specific vegetation manipulation treatment (prescribed fire or mechanical treatment) which are beyond the scope of this analysis (Supplement p.115). Grazing direction, standards, etc. described in the Forest Plan, North Sheep FEIS and Supplement are designed to manage grazing in a manner that will be consistent with the maintenance of desired sagebrush stand conditions and to not preclude their achievement through vegetation manipulation projects.

COMMENT 5e. Wildlife – MIS Resources (Executive Summary) – "MIS capable habitat in less than satisfactory condition within the allotments was also identified." How will SNF improve their range management to improve MIS capable habitat identified as unsatisfactory? Where is the MIS capability analysis?

RESPONSE 5e. The Forest will use area closures, use of temporary corrals, temporary closure of the Smiley Creek corral, increased monitoring and adaptive management strategies described in the North Sheep Supplement to reduce impacts that livestock may have on MIS source habitats in less than satisfactory condition. The MIS Capability analysis is documented in the Final Supplement to the Final Environmental Impact Statement for the Southwest Idaho Ecogroup Plans (MIS Capability Supplement). The analysis documented in the MIS Capability Supplement is addressed in the North Sheep Supplement, Section 3.8.2.3.0 –MIS Capability Analysis.

COMMENT 5f. MIS Resources include ESA-listed threatened bull trout and their stream and riparian habitats. Why is not the MIS capability of bull trout fully assessed and analyzed in the North Sheep SEIS?

RESPONSE 5f. Habitat for Bull Trout within the project area was assessed and analyzed in the North Sheep FEIS and BE/BA. (FEIS pp. 3-35 to 3-41, 3-48, 4-36, 4-39. *Biological Assessment of Effects of Ongoing and Proposed Federal Actions on the Sawtooth Valley Subpopulation of listed Snake River Sockeye, Snake River Spring/Summer Chinook Salmon, Snake River Steelhead, and Columbia River Bull Trout, and sensitive Westslope Cutthroat Trout*. Sawtooth National Recreation Area, Sawtooth National Forest, Idaho. Last update May 1, 2003.)

> "The FEIS exhibits an extensive study of bull trout habitat. For example, Table SW-8 details the conditions on numerous sections of rivers, rating factors such as water quality, watershed conditions, and flow/hydrology, among others. The findings summarized in the Table are then explained at length. The FEIS also contains a viability analysis, evaluating how bull trout "may respond to restoration, conservation, and other management actions" for each of the Forest Plan alternatives. Id. at 3-172. Over the next 58 pages, the FEIS identifies deficiencies in bull trout habitat and discusses improvement strategies. Id" In this extensive discussion, the FEIS uses terms such as "functioning appropriately" or "functioning at risk" to describe the bull trout's habitat conditions. While the FEIS does not use the terms capable or suitable, the terms that it does use essentially describe the same thing. The FEIS also contains an extensive discussion of necessary habitat improvements. "An agency's actions [under NFMA] need not be perfect; we may only set aside decisions that have no basis in fact, and not those with which we disagree." *Forest Guardians v. United States*, 329 F.3d 1089, 1099 (9th Cir. 2003). While the FEIS does not use the terms capable and suitable, it does contain a detailed analysis of bull trout habitat and improvement strategies. That is precisely the result intended by the capability regulation, 36 C.F.R. § 219.20. The Court therefore finds that the Forest Service has complied with NFMA with regard to bull trout habitat." (Document #47. Memorandum Decision and Order. Case 4:05-cv-00189-BLW)

It was determined that Bull Trout had been adequately assessed in the North Sheep FEIS and was therefore not included in the North Sheep Supplement.

COMMENT 5g. The EIS discussion and the Capability and Suitability for MIS continue to be wholly Inadequate for Sage Grouse habitat (SEIS at 18);and Inadequate for pileated woodpecker (SEIS at 18).

RESPONSE 5g. Due to the lack of specificity of this comment, the Forest cannot make a determination as to how or why the commentor feels the analysis is inadequate.

COMMENT 5h. The Forest states that grazing has not measurably contributed to less than satisfactory condition of Pileated Woodpecker habitat because this species relies on mostly coniferous habitat that livestock do not impact. Impacts are stated to be:

"incidental and limited to localized areas" (p 83), including to aspen stands used by woodpeckers. The Forest has no valid basis for saying just how limited conflicts may be –as it has not systematically identified degraded or declining aspen communities across the allotments that are being impacted by sheep browsing, loafing, or bedding along margins. Plus the Forest has such a limited range of MIS species that it has no MIS species for aspen communities, a species that across the Sawtooth is often quite limited and restricted, but that is of great importance to a variety of migratory birds and the recreational public including in the SNRA due to its great beauty in the fall.

RESPONSE 5h. In the North Sheep FEIS, the Forest acknowledges that livestock activities can have negative impacts on aspen stands, and that Pileated Woodpeckers use aspen stands for foraging. The Pileated Woodpecker is highly dependent on mature and extensive coniferous forest stands for most of its life history needs. Livestock impacts to mature coniferous forests are expected to be "incidental and limited to localized areas." As the Forest identifies any negative impacts from livestock grazing to Pileated Woodpecker source habitats, the Forest will use the adaptive management strategies to reduce those impacts. Identifying additional MIS is outside the scope of the North Sheep Supplement.

Migratory birds were addressed in the both Records of Decision for the North Sheep analysis and concluded that "[t]his decision is compliance with the [Migratory Bird Treaty] act, subsequent executive order, and memorandum of understanding between the USDI Fish and Wildlife Service and USDA Forest Service, which provides for the protection of migratory birds. If new requirements or direction result from subsequent interagency memorandums of understanding pursuant to Executive Order 13186, the decision will be evaluated to ensure that it is consistent."

COMMENT 5i. The MIS Capability Supplement also ranks invasive species as the greatest threat with fire and grazing 3rd and 5th. What these documents do not do is relate invasives and fire to livestock grazing. The SEIS should have reviewed the science on these topics and revealed the role livestock play in removing the fine fuels from habitats leading to altered fire frequencies and increased severity. The SEIS should have revealed the role of livestock in reducing ground cover by removing the desirable grasses, forbs and biological crusts that impede establishment of invasives. This was not done and these various factors were considered independent of livestock, which is not true.

RESPONSE 5i. The Forest Service recognizes the increasing threat of invasive species. The Weed Management Program inventories, monitors, and treats the North Sheep allotments annually. Additionally, adaptive management strategies would include modifications to allotment terms and conditions, management practices, and grazing routes when noxious weed infestations occur. The issue of the proposed action affecting the spread of noxious weeds was addressed in the North Sheep FEIS on pages 1-10, 2-24, 3-61, 3-75 to 3-77, and 4-64 to 4-67. This issue was also addressed in the MIS Capability Supplement on pages 16-20, 23-24, and 26. This issue is not within the scope of the North Sheep Supplement

analysis. Please note that recent information on location of Toadflax infestations provided by WWP have been added to the project record and are being used in weed management actions and will be considered during the adaptive management process described in Chapter 2 of the North Sheep Supplement.

Please see Response 17a for fire and grazing.

COMMENT 5j. The Forest unlawfully bases its failure to fully consider restoration actions for Sage Grouse in the MIS Supplement. The MIS supplement is not final, and contains highly controversial and unlawful provisions.

RESPONSE 5j. A final MIS Capability Supplement has been completed (January, 2008). The MIS Capability Supplement describes conservation strategies and associated restoration activities for sage grouse. It is unclear what the commentor is referring to in the broad statement that the MIS Capability Supplement contains highly controversial and unlawful provisions.

COMMENT 5k. For example, at FEIS at 87 states, for the Forest to consider a watershed "high priority for restoration" – it must be identified as such in the Idaho Sage Grouse Plan, finalized under Butch Otter. That State Plan has not undergone any NEPA review. Agency participation in the process may have promoted writing off areas such as the Sawtooth country for recovery of Sage Grouse populations because recovery may require a substantial effort and may conflict with agency efforts to promote continued grazing disturbance/use by a hand full of large or hobby ranchers.

RESPONSE 5k. The identification of priority is based on the analysis in the MIS Capability Supplement which identifies the highest priority watersheds for restoration in the short-term. Relative to the assignment of priorities for treatment, without the establishment of some type of priority, restoration, which is needed throughout the Forest, could be diluted across such a large area that it minimizes any real progress toward restoring degraded habitat conditions in those places where the most benefit to the species could be achieved. The priority of areas requiring restoration is appropriate because it allows the FS to focus resources on the areas that need restorations the most and will provide the best restoration benefit to the sage grouse habitat. That being said, the MIS Capability Supplement does specifically recognize that not all areas where sage grouse occur on the Forests lies within a Greater sage-grouse planning area (MIS Supplement, p. 38). As described in the MIS Capability Supplement, watersheds within the range of the Greater sage-grouse where source habitat has declined by greater than 60%, and that are not encompassed by a Greater sage-grouse planning area, were also identified as a high priority for restoration in the short-term planning period.

COMMENT 5l. In addition, under the Forest's non-Final MIS Supplement scheme, greater than 50% of Watershed acres had to be identified as capable MIS habitat, and "watersheds had to have a high susceptibility for noxious weeds and/or > 50% suitable

rangeland coincident with MIS habitat". This is particularly outrageous for the Forest to impose such a high bar. There are very few Forest allotments – anywhere in the West– that meet this high bar standard for amount of sagebrush. By imposing such a high bar, including in its various MIS update processes underway, the Forest is largely washing its hands –across the Sawtooth, Payette and Boise Forests – of addressing Sage Grouse habitat needs. Sagebrush is clearly the Forest's sacrifice community to the livestock industry. Habitats on higher elevation lands where sagebrush occurs are typically more limited than on BLM lands, and may comprise what appears to be only a small portion of habitats - but they may still be critical in meeting the habitat needs of Sage Grouse over the course of a year.

> **RESPONSE 5l.** We are assuming that this comment is in reference to the establishment of priorities in the MIS Capability Supplement. The MIS Capability Supplement has been finalized (January, 2008) and the establishment of priorities through that Supplement are outside the scope of this analysis. However, as previously stated, without the establishment of some type of priority, restoration, which is needed throughout the Forest, could be diluted across such a large area that it minimizes any real progress toward restoring degraded habitat conditions in those places where the most benefit to the species could be achieved. The priority of areas requiring restoration is appropriate because it allows the FS to focus resources on the areas that need restorations the most and will provide the best restoration benefit to the sage grouse habitat. Also, as described in Response 5k, watersheds within the range of the Greater sage-grouse where source habitat has declined by greater than 60%, and that are not encompassed by a Greater sage-grouse planning area, were also identified as a high priority for restoration in the short-term planning period.

COMMENT 5m. FEIS at 85 describes the MIS supplement as having found that the four allotments fall within watersheds that are in less than satisfactory condition, and that have experienced "a 60% or greater decreases in MIS capable habitat". Then, instead of acting to take a much more detailed site-specific look at the current ecological conditions for sagebrush-dependent species (which is NOT merely the old REA "forage" info and which cannot be derived from that), and try to understand the level and degree of fragmentation and loss of sagebrush communities (see Connelly et al. 2004, Knick et al. 2003) and other important info to understand necessary steps to restore habitats, increase connectivity between sagebrush communities for sagebrush-dependent species, expand the size of contiguous blocks of sagebrush habitat – the EIS proceeds to just write sage grouse off.

> **RESPONSE 5m.** As described in the MIS Capability Supplement, the capable MIS habitat analysis was completed at a broad, programmatic scale and the determination of specific changes in Capable MIS habitat needs to be assessed on a case-by case basis at the project or site level. This is what was done for the North Sheep Supplement. As described in the North Sheep Supplement, the findings of the MIS Capability Supplement were compared against local occurrence data and the findings in sections 3.8.2.3.2 and 3.7.1.4.3 of the North

Sheep FEIS. Information specific to the allotments can be found on pages 84-91 of the North Sheep Supplement. This information includes a description of the amount of capable MIS habitat within each allotment, how that information relates to the findings of the MIS Capability Supplement, and a description of the restoration direction in the Forest Plan applicable to the four allotments. The North Sheep Supplement did not "just write sage grouse off" as asserted by the commentor; rather it assessed the findings in the MIS Capability Supplement against what was already in the original North Sheep FEIS and determined that the findings of the MIS Capability Supplement were consistent with the findings of site-specific data already documented in the North Sheep FEIS.

COMMENT 5n. The Draft MIS supplement (and this lame SEIS derived from it) states that invasive species are listed as the greatest threat to Sage Grouse. Well – WWP has spent two years trying to get the Forest to pay attention to the exploding Toadflax infestation in sagebrush communities here, and now the looming cheatgrass problem! These species as well as Knapweed are known to be linked to livestock and other disturbance, and transported by livestock. Yet this is not adequately examined in either the MIS Supplement, or SEIS.

RESPONSE 5n. Please see the Response to 5i.

COMMENT 5o. SEIS at 1.8 (at 82) Wildlife Resources, states that the Forest's MIS capability analysis requires two findings [36 CFR 219 regulations]. The Forest states that these criteria are met for Sage Grouse (acknowledging Habitat Present and Threats posed by grazing), but not for the Pileated Woodpecker. The Forest found the SEIS allotments have 0-25% of capable sage grouse habitat in SNF (p 83). WWP stresses that this "capable" grouse habitat comprises around 40% of the claimed "Capable" grazing land of the allotments. The North Fork Sheep allotments have experienced at least a 60% decrease in Sage Grouse capable habitat (p 85). See also vivid illustration SEIS at 86, where the areas of greatest decrease include all four SEIS allotments.

RESPONSE 5o. We agree that the North Sheep Supplement does in fact state that the four North Sheep allotments contain "greater than 0% but less than 25% capable sage grouse habitat" and that the allotments have experienced a 60% or greater decrease in capable habitat from historic conditions. However, we unaware of how WWP came up with its claim that "capable" grouse habitat comprises around 40% of the claimed "Capable" grazing land of the allotments. Table: Wildlife 3-1 displays the acres and percent of sage-grouse habitat by allotment for the four allotments. The percentage of total allotment acres providing sage grouse habitat ranges from a low of 4% on the Smiley Creek Allotment to a high of 14% of on the North Fork Boulder allotment.

COMMENT 5p. The SEIS also relies on the MIS supplement – but the MIS supplement is not yet Final. It is deeply flawed and carries forward old and outdated 1950s "range" mindsets. It includes a naïve and untenable understanding of the effects of grazing disturbance to arid land systems. See WWP MIS comments.

RESPONSE 5p. The MIS Capability Supplement has been finalized (January, 2008) and the analysis of capable sage grouse habitat for the four North Sheep Allotments has been reviewed and updated to include any applicable changes in the analysis based on the Final MIS Capability Supplement. Given the generality of the comment, we are uncertain as to why the commentor feels the MIS Capability Supplement is flawed and carries forward outdated mindsets.

COMMENT 5q. The non-Final MIS Capability Supplement contains critical flaws – such as the failure to provide current and accurate information on the location and rate of spread of noxious weeds (and invasive species (such as cheatgrass) and their risks of increase across Forest lands; and especially analysis of the risks of weed expansion under the disturbance regimes/sagebrush killing and other actions it embraces as supposed "restoration" actions. The MIS Supplement is also fatally flawed in failing to examine the current biologically relevant habitat conditions, the extent of current and foreseeable habitat loss and fragmentation, and related cumulative impacts to important and sensitive species across the public land areas.

RESPONSE 5q. The MIS Capability Supplement has been finalized (January, 2008). Contrary to the assertions of the commentor, the MIS Supplement, while beyond the scope of this analysis, is based on current science and data as described on pages 2-4 and 24-25 of the MIS Capability Supplement and as supported by the project record.

Issue 6: Monitoring and Data Collection

COMMENT 6a. The monitoring laid out in the Smiley Creek AMP provides for 40 – 50% utilization on uplands and 4 or 6" stubble height on riparian areas. These are, however, only "indicators" not permit terms and conditions that are enforceable. In addition, sheep diets include a preponderance of forbs, yet there is no analysis to show that the proposed "indicators" will be protective of forbs or sensitive grasses and shrubs. Furthermore, the Forest Service has never presented any analysis of the levels of use in riparian areas and adjacent uplands corresponding to these stubble height standards. In practice, these may not be applicable to sheep at all.

RESPONSE 6a. The indicators cited (eg. SEIS App. C, Smiley Cr - Fisher Cr AMP, pp. 15 -- 20) are also standards identified in the Forest Plan and as such are enforceable consistent with the December, 2005 Forest Plan Annual Grazing Use Implementation Guide. Documentation for establishment of these use levels are included in the record for the Forest Plan FEIS and Record of Decision. Additional Forest Plan grazing use standards also apply including "Only open or loose sheep herding will be practiced . . . " (SEIS App C, Smiley Cr. - Fisher Cr. AMP p.17) and "Only annual once-over sheep grazing will be allowed . . ." (SEIS App C, Smiley Cr. - Fisher Cr. AMP p.17). These use standards generally

result in lower grazing utilization levels than the 6 inch and 40 percent use standards.

COMMENT 6b. The Multiple Indicators Monitoring method specified in the Adaptive Management description does not measure in-stream habitat such as undercut banks. It should also be recognized that the mere use of riparian stubble heights on hydric species such as Nebraska sedge means that there will be no overhanging grasses to shade and protect the stream banks or provide hiding cover for fish.

RESPONSE 6b. Adaptive management (SEIS, action 6A, p. 19) allows for the modification of annual use indicators and for changes in monitoring protocols (eg. SEIS, App C. North Fork Boulder AMP p. 22). As previously described, other use standards and indicators in addition to stubble height standards are also applied. The statement that ". . . there will be no overhanging grasses . . ." is incorrect because once over grazing, one time use of watering sites generally limits use to much less than 4" stubble ht. minimum. Where we have sheep grazing use issues on streambanks is usually on dry bars or banks which are high enough and dry enough that they don't support riparian grasses. Stream shading by grasses generally does not occur on these ecosites. Also there may be an issue at sites where sheep cross streams following a grazing route, but this is generally very localized.

COMMENT 6c. There was no scheduled monitoring of water quality in the SEIS or AMPs. Idaho Water Quality Regulations require the use of BMPs to control sedimentation and fecal pollution from livestock grazing. The Idaho Agricultural Pollution Abatement Plan describes these and recognizes the need for livestock exclusion or forest buffers to protect streams from E.coli pollution. Meadows and plant communities bordering streams lose their ability to filter sediment and fecal pollution when heavily grazed as the Adaptive Management criteria provided in the AMP allow.

RESPONSE 6c. The proposed AMP does not allow the allotments to be "heavily grazed," and the Forest Service believes that conditions of the proposed grazing permits are consistent with Forest Service responsibilities under the Idaho Agricultural Pollution Abatement Plan. The permit conditions would minimize non-point source pollution by restricting permittees to annual once-over grazing of sheep to an approximate 20% vegetation utilization standard. The AMP would also restrict sheep grazing and herder camping from riparian areas except as necessary to water stock and cross stream channels. These and other conditions are Best Management Practices (BMPs) that minimize the potential for and the magnitude of nutrient and sediment input to streams within allotments. Given the large areas used and transient nature of sheep band movements, Forest Service water quality monitoring targeted to the proposed action would be impractical and of questionable utility; long-term TMDL water quality monitoring by the IDEQ should reveal any substantial impacts. Water quality was discussed in the North Sheep FEIS on pp. 1-9, 1-12, 1-13, 2-20, 3-4, 3-8, 3-17, 3-27 to 3-33, 3-44 to 3-

47, 3-89, 4-13, 4-28, 4-30, 4-33 to 4-34, 4-36, and 4-38 to 4-43. It will not be reanalyzed in the North Sheep Supplement.

COMMENT 6d. The descriptions in the SEIS of stream habitat conditions in Smiley Creek and Fisher Creek Allotments reveal a landscape with highly degraded conditions. Since the North Sheep EIS, the Forest Service has attempted to "dumb down" potential conditions for the streams in these allotments by relying on the "Natural Conditions Database" as representing undisturbed conditions. Inspection of Table 7 from that document reveals that activities in these watersheds include recreation, roads, trails, grazing, fires, diversions, and mining. Therefore, conditions in these watersheds used for reference do not represent undisturbed conditions. To use this as a basis to explain away high sediment levels or large amounts of disturbed stream banks is a reach.

RESPONSE 6d. The North Sheep Supplement acknowledges that other management activities have influenced baseline conditions. However, baseline conditions do not have be in an undisturbed or natural condition to use the Natural Condition Database (NCD) criteria. The NCD criteria represent conditions in unmanaged streams in similar geology, Rosgen channel types, precipitation, and temperature to those that occur in the Smiley and Fisher Creek allotments. This criteria sets the benchmark which one measures existing conditions against. For example, the NCD criteria says surface fine sediment for a functioning appropriate condition should be defined as 33-40% average (25-50 range) in C channel types with wetted widths of 1.5 to 6 meters. This benchmark was used to compare existing surface fine sediment conditions in similar channel types and wetted widths in streams in the Smiley and Fisher allotments. Sometimes baseline conditions met the criteria and were determined to be functioning appropriately. Sometimes it did not and conditions were determined to be functioning at risk or unacceptable risk depending on how much values varied from the criteria. The criteria were also not used blindly. At times even though most sample sites fell within the range of NCD values, baseline conditions were rated in poor functioning conditions if it was believed streams still show signs of past impacts from management activities or natural disturbances.

COMMENT 6e. The SEIS and NSEIS were full of descriptions of degraded riparian and upland areas. The previous paragraphs of these comments have pointed out specific examples of cites from the SEIS of degraded sagebrush habitats, riparian areas, and streams. The Forest Service has relied on the Natural Conditions Database to relieve it of responsibility for the extreme degradation found in the streams of the project area. The SEIS does not reveal that the NCD data was collected from watersheds that also have roads, trails, livestock grazing, historic impacts from mining and grazing. The SEIS did not address whether these areas were still recovering from those impacts and were not at potential or whether they are at potential. Regardless, the stream and riparian areas within the project area are mostly functioning at risk (FAR). While the SEIS used the NCD to show the streams are in better condition (FAR) rather than (FUR) than previously thought (before the current decision was challenged), they are still degraded and none of the AMP provisions or Forest Plan DFCs will allow their restoration.

RESPONSE 6e. The adaptive management strategy is designed to limit sheep impacts in those areas that show current or historic grazing effects or effects from other management activities/natural disturbances. This should in time help trend reaches that are not functioning appropriately toward their desired conditions.

COMMENT 6f. Page 49, Para 4 – Overton's Natural Conditions Database is based on empirical data throughout Idaho and it is rather simplistic and ecologically incorrect in its assumption that just because a stream segment is in a wilderness or is considered relatively unimpaired by grazing, that it is pristine and meets the potential natural capability that represents streams in the SNF without grazing, wildfire, logging, mining, roading, and recreational impacts. Even in the relatively pristine Frank Church River-of-No-Return Wilderness (FC-RONRW) and the Sawtooth Wilderness, there are introduced, invasive species such as noxious weeds, there was some historic grazing, logging and mining. Permitted and dispersed recreation, including river-based rafting and guided fishing on the Middle Fork Salmon River within the FC-RONRW makes the wilderness sometimes some of the busiest lands managed by the National Forest Service and some of the wilderness airstrips busier than Boise International Airport.

RESPONSE 6f. The Natural Condition Database (NCD) does not take into account introduced species such as brook trout and noxious weeds. Only physical attributes such as bank stability, surface fine sediment, etc. Certainly wilderness and roadless areas are not entirely pristine. But they represent the stream conditions that have fewer management impacts then streams outside these areas. The stream data in the NCD was collected in nearby subbasins in the Upper Salmon basin and are a more appropriate comparison to conditions in the Smiley and Fisher Creek allotments than values in App. B of the forest plan that represent functioning appropriate conditions across the Columbia basin. When a Watershed Condition Indicator (WCI) value identified in the matrix is not physically or biologically appropriate, given the inherent characteristics (geoclimatic setting) of the subwatershed, the WCI should be modified (App. B, p. 13). WCIs should be refined to better reflect conditions that are functionally attainable in a specific watershed or stream reach based on local geology, land and channel form, climate, historic and potentially recoverable fish species habitat, and potential vegetation (App. B, p. 13).

COMMENT 6g. Page 49 - Although the SNF is not under the PACFISH/ INFISH Biological Opinion, it is notable that the Overton database has many relatively unimpaired stream segments that do not meet the standards and guidelines, for example for width:depth ratio. Although Overton's database is a useful tool, WWP does not believe the SNF should lower the bar to what exists in 21st Century Idaho since legacy and modern grazing, logging, and mining leave their marks in much of the Rocky Mountain state.

RESPONSE 6g. While the SNF is technically no longer under the PACFISH/INFISH biological opinion, as stated in Appendix B of the Forest Plan

(p. B-1), the Forest Plan incorporates components of Pacfish/Infish, the 1995 and 1998 Opinions, the Endangered Species Act (ESA), and the Clean Water Act (CWA) important to the Forest's long-term Aquatic Conservation Strategy (ACS). As described in Appendix B of the Forest Plan, the WCIs represent default values that should be modified if local data are available to help define a more site- or watershed-specific WCI value. This is the case for many of the streams within the North Sheep allotments.

The stream data in the NCD was collected in nearby subbasins in the Upper Salmon basin and are a more appropriate comparison to conditions in the Smiley and Fisher Creek allotments than values in App. B of the forest plan that represent functioning appropriate conditions across the Columbia basin. When a WCI value identified in the matrix is not physically or biologically appropriate, given the inherent characteristics (geoclimatic setting) of the subwatershed, the WCI should be modified (Forest Plan, App. B, p. 13). WCIs should be refined to better reflect conditions that are functionally attainable in a specific watershed or stream reach based on local geology, land and channel form, climate, historic and potentially recoverable fish species habitat, and potential vegetation (App. B, p. 13).

COMMENT 6h. Page 58, Para 4: PacFish, Infish Biological Opinion (PIBO) Monitoring. Monitoring data should not be used to assess an allotment's management and capability, but rather are designed for evaluating the effectiveness of management under PACFISH/INFISH for the entire Columbia River Basin. Statistically, it is at the wrong scale to be very applicable.

RESPONSE 6h. The PIBO information collected within the Smiley and Fisher Creek allotments was used only to assess the baseline. This is no different than IDEQ or Sawtooth National Forest data collected within these allotments. Therefore it is at the appropriate scale for this analysis.

COMMENT 6i. Therefore, further analysis on Sage Grouse and MIS capability, with required actions to address the drastic decline of Sage Grouse in the allotments, should be undertaken before a Final SNSEIS issues. As a frequent visitor to the Smiley Creek and Beaver Creek drainages over the last few years, it is evident that the vegetation and riparian health of the Smiley Creek drainage has improved without the sheep for the last two years. Not only the overall health but that compared to Beaver Creek. These differences need to be studied and used as a base line for any SEIS and I fear any study has been rudimentary and incomplete. It would be a shame to let the sheep back in and eliminate the possibility of this study. Also, I hope that eventually the Forest Service will be required to perform this type of study in a controlled area. The two year start of such a study in the headwaters of the Salmon River is a valuable resource of the Forest Service and should not be hastily lost.

RESPONSE 6i. We agree there has been improvement to riparian and upland vegetation in the portion of Smiley creek that has not been grazed. The Forest will take these improvements into account when making decisions on whether or when

to reopen Smiley Creek for grazing. Relative to Greater Sage-grouse and habitat capability, the Idaho Sage-grouse Conservation Plan (July 2006, p. 4-99) states: "A small population existed historically in the Sawtooth Valley south of Stanley, but its current status is unknown." SNF Biologists have made several observations of Greater Sage-grouse in this area and will continue to record occurrence observations of this species. Population information will help Forest biologists identify key source habitats that are being used by Sage-grouse. The MIS Capability Supplement identifies source habitat for Sage-grouse within the project area as "Lands in Less Than Satisfactory Condition." Both the annual monitoring of livestock grazing and the use of the "adaptive management strategy" will reduce impacts that livestock grazing may be having on Sage-grouse source habitat within the project area. This is also expected to improve the MIS habitat capability in the area.

COMMENT 6j. SEIS (at 85) uses the catch-all of historic grazing as the cause of degradation identified in the North Sheep EIS: the "terraced slopes, pedestaling of shrubs, reduced forb cover, and bare patches throughout the allotment". Yet it never provides site-specific trend and other info across the range of sites including slopes and other areas. This is necessary to determine if these effects are "historic". WHY are desirable forbs not present? Why aren't bare soils now covered? How long will it take to gain adequate protective cover – with and without – sheep use/disturbance? What is the time frame with and without sheep disturbance? The Forest must examine the chronic ONGOING grazing and trampling effects across areas disturbed by sheep use, if it is to conduct a valid analysis. This has not been done. What is meant by "historic"--- – last year? The Forest has never defined this. We also stress that data used in the North Sheep EIS does not include the current degradation and loss of habitat components represented by Toadflax and other weed invasions.

RESPONSE 6j. Historic grazing is described numerous times in the North Sheep FEIS and draft North Sheep Supplement and it is also noted no trend data is available for that era (SEIS page 25). Professional judgment that utilizes cause-and-effect interpretations of anecdotal data was used, in part, to estimate impacts from historic grazing activities. Relationships of resilience and recovery from changes in disturbance developed through various monitoring efforts were extrapolated to estimate resource conditions and trend for historic grazing. Data from range analysis conducted during the 1960s through today provides the information for evaluating livestock related impacts and trend of modern day grazing activities. The baseline ground cover for the representative soil-vegetation types are derived from the landtype data and the range site descriptions. The analysis acknowledges a decline in sagebrush habitats, however, it is also characteristic for these habitats in the North Sheep landscapes to have up to 40% bare ground in localized areas. In localized areas that are highly degraded, the overall timeframe for recovery is unpredictable due to the complexity of conditions and disturbance mechanisms. Maintaining or improving desirable ground cover ranges will be tracked through Adaptive Management monitoring in key areas that also address other resource concerns (i.e. sagebrush habitats). It did

not address current degradation and loss of habitat components represented by Toadflax and other weed invasions. The North Sheep Supplement (page 85) discusses historic grazing along with other activities and factors to describe changes in sage-grouse habitat including the presence of desirable forbs, etc. It also discusses the role of exotic weed invasion in this process. Direction for recovery of sage-grouse habitat on the allotments is described in the North Sheep Supplement on pages 87 - 89.

COMMENT 6k. The Forest range monitoring sites are on flatter sites. The Forest has not conducted repeated trend or other studies on veg use monitoring in sagebrush communities that reflect conditions on steep slopes where sheep are grazed and trailed. The Forest can not support a claim that conditions of soils are improving just because the number of sheep are less now than in the late 1800s. Effects of degradation by continued grazing disturbance are often cumulative. We also stress that the numbers of sheep proposed for near-status quo management significantly exceed the average actual use that has occurred here in recent years.

RESPONSE 6k. In conducting the allotment specific capability analyses, the Forest included reviews of conditions on slopes where sheep are grazed and trailed (SEIS pp. 41, 42, & 47). Additionally, annual implementation monitoring includes field reviews of these types of areas (e.g. SEIS App. C, North Fork Boulder AMP, pp. 22 & 23). The project record includes documentation of similar field reviews. The number of sheep head months shown in the SEIS (p. 48) are the upper bounds or limits of grazing use that will be authorized under this analysis and decision. Allowable annual grazing amounts will be set based on the results of field reviews, monitoring and permit compliance within the adaptive management process (SEIS p. 48). Actual numbers of head months of grazing experienced in recent years are the result of this process.

Issue 7: NEPA Process

COMMENT 7a. We recommend that the final DS-FEIS provide a more complete cumulative impacts assessment of both the capable and incapable lands, of areas that are both localized and dispersed. We also recommend that the adaptive management approach respond to impacts from the cumulative uses, not just those contributed by sheep grazing, when management changes, closures, or other prescriptions are made.

RESPONSE 7a: The affected environment and effects of livestock grazing discussed in Chapters 3 and 4 of the North Sheep FEIS and Supplement are related to all lands within the four allotments which are grazed by domestic sheep. The analysis was not limited specifically to capable lands inside the allotments. For example, the characterization of sheep grazing habits found in the FEIS at 3.2.1 (pp. 3-1 to 3-3) sets the stage for this analysis describing sheep grazing habits and movements across lands of mixed capability.

The effects analysis (direct, indirect, and cumulative) was completed in accordance with 40 CFR 1508.7 – 8. The effects analysis is found in Chapters 3 and 4 in both the North Sheep FEIS and the Supplement. Please note that the Final North Sheep Supplement expanded upon the effects for adaptive management in Section 4.2.3.

COMMENT 7b. Based on the resource conditions described thus far, which result both from natural and human activities, we continue to believe that an additional alternative should be added that would be a "hybrid" of Alternatives B and C. This alternative would, after two years, close the Fisher Creek and Smiley Creek allotments within the SNRA. The North Fork-Boulder and Baker Creek allotments within the SNF would continue sheep grazing under the adaptive management approach. We recommend that this hybrid alternative be included. We would support its selection as the preferred alternative because it would contribute to recovery for sensitive riparian areas, aquatic habitats, and water quality. However, other uses that are contributing to aquatic, soils, vegetation, and wildlife impacts, such as motorized dispersed recreation, would also need to be addressed.

RESPONSE 7b. NEPA requires analysis of alternatives in order to display a range of environmental consequences sufficient to support an informed decision. There is no requirement to analyze an infinite range of slightly different alternatives. (FSH 1909.15, Sec 65.12). Alternatives must be measurably different to be meaningful. The Forest identified issues through scoping and then developed a range of alternatives that address the significant issues. This process, as well as alternatives considered in detail and those considered but not given detailed study, are described in the North Sheep FEIS. (pp. 1-7 to 1-14 and 2-1 to 2-17). Each alternative was composed of different components regarding the resource. Your proposed alternative, a combination of Alts. B & C is an example of a "combined alternative". The different components of the alternatives comprising your new alternative are not dependant on each other and therefore components from various alternatives could be combined to form a whole alternative. There is no need to analyze this hybrid alternative as the analysis of the individual components is sufficient in the North Sheep FEIS. Thus, the decision-maker was free to choose this hybrid alternative suggested by you based on the North Sheep FEIS. The issue of Alternatives was addressed in the North Sheep FEIS on pp. 1-7 to 1-14 and 2-1 to 2-17). Expanding the range of alternatives is not within the scope of the North Sheep Supplement analysis.

COMMENT 7c. On reviewing your DNSS, you have thoroughly identified the impacts of livestock grazing in the allotments. ISDA has a concern that the cause/effect of the authorized action (livestock grazing) to the resources is very specific and when addressing the proposed action results, your statement is phrased that you are only anticipating on meeting all applicable objectives, standards and guidelines. ISDA feels that the science for the information and management action you used in identifying the impacts is the same foundation of information and management actions for your proposed action. You should state that the proposed action will allow the authorized action to

meet, rather than anticipate, all applicable objectives, standards and guidelines until otherwise determined through monitoring.

> **RESPONSE 7c.** We appreciate your concern on the use of "would" versus "will". Throughout the document, we used "will" where we were 100% sure of the effects occurring. Recognizing that management of natural resources is not always an exact science, it is rare to be 100% sure of anything. In many places we used the word "would" to indicate it is was by far the most likely outcome based on all factors, current science, best management practices, and professional judgment, but allowing for the variability associated with natural resource management.

COMMENT 7d. The SEIS offers only three alternatives, ignoring consideration of a broader range of alternatives to address and incorporate passive restoration including ICBEMP science, current ecological science, mounting evidence of Sage Grouse and other sagebrush species declines, Global Warming processes that make these sagebrush communities, higher elevation habitats, ESA streams and desiccating watersheds less resilient and more sensitive to disturbance, new info assembled in the agency's own Interim Report, greatly heightened public concern about wolves and other wildlife conflicts with sheep use in Idaho.

> **RESPONSE 7d.** As described in Response 7b above, the issue of Alternatives was addressed in the North Sheep FEIS on pp. 1-7 to 1-14 and 2-1 to 2-17). Expanding the range of alternatives is not within the scope of the North Sheep Supplement analysis. NEPA requires analysis of alternatives in order to display a range of environmental consequences sufficient to support an informed decision. There is no requirement to analyze an infinite range of slightly different alternatives. (FSH 1909.15, Sec 65.12).

COMMENT 7e. This extremely limited range of alternatives is: 1) no action (continuing with current grazing regime); 2) proposed action (slight cutbacks in head months, with stubble height and other protocols set forth in AMPs) or 3) no grazing after 2 years phase-out. Based on degraded conditions described in SEIS, and numerous and growing conflicts and processes including Global Warming, greatly reduced and nearly extirpated aquatic and other ESA and sensitive species, numerous sensitive species conflicts including Gray Wolf, increasing recreational uses, growing water scarcity, continued decline and loss of sagebrush habitats Westwide, the Forest rationally should select alternative 3, no grazing, with grazing prohibited for next 2 years due to substantial impairment of values. The Forest should also develop new alternatives that grapple with the effects of Global Climate change, growing concern about clean water supplies, escalating recreational uses, etc.

> **RESPONSE 7e.** Please see the response to 7b and 7d. The No Grazing Alternative seems to best address the commentor's concerns about Global Climate change and growing concern about clean water supplies. An Alternative to address escalating recreational uses was not developed in the original North

Sheep FEIS as the scope of this project is on livestock grazing – not increasing recreational use.

COMMENT 7f. If grazing is to continue in these areas at any level, a full range of alternatives that examine: Significant reductions in stocking, restricting sheep use to much smaller areas with reduced conflicts with sagebrush species, and reduced conflicts with wolves or other carnivores, and undertaking systematic restoration (recovery of understories and microbiotic crusts) through passive restoration - and not more burning and killing of sagebrush or other such disturbance) of sagebrush communities and Sage Grouse habitats.

RESPONSE 7f. Please see the response to 7b and 7d. The No Grazing Alt seems to be best addresses this commentor's concerns.

COMMENT 7g. The SEIS fails to address the Court Order due to:

1. A continued failure to explain the difference between Forest Plan and REA analysis capability figures for Smiley Creek;
2. A continued Failure to address effects of grazing on areas determined to be non-capable;
3. A continued Failure to do adequate capability analysis on Sage Grouse and to include other important species as Indicators for Forest health.

RESPONSE 7g. The North Sheep Supplement does address the Court Ordered requirements.

1. The comparison of the Forest Plan capability analysis and allotment specific capability analysis for Smiley Creek are discussed, evaluated and compared in the Final North Sheep Supplement on pp. 7-10, 31-49, and 97-104. The judge stated on page 15 of the Memorandum Decision and Order (Case 4:05-cv-00189-BLW Doc. 47, 2/7/2006, p.15-19)

   "First, the FS never explained in the SNF Forest Plan or the NSEIS how it used its five capability criteria to calculate the 25% capability figure."

   This process is described beginning on page 32 of the North Sheep Supplement.

   "Second, the FS had GIS data that could be used to show allotment by allotment capability but never shared that information in any NFMA or NEPA document."

   This information is displayed in the North Sheep Supplement on pages 36 – 41.

   "Third, the FS ignored the capability figures in the NSEIS. By not revealing crucial data, and then ignoring it in the NSEIS, the FS violated its duty under

NEPA to prepare an EIS that would foster both informed decision making and informed public participation."

The North Sheep Supplement in Section 3.2.4 displays the process used to identify capable grazing lands evaluating and comparing the Forest Plan level model and the allotment specific process. Additionally it describes how this data were used in establishing acceptable levels of grazing on the four allotments.

On page 16 the Court stated: *"if the figures were computed inaccurately, the EIS must explain why. If actual conditions differ, the EIS must explain how. With those explanations the NSEIS would comply with NFMA's consistency command and NEPA's hard look requirement."*

The Court required the Forest Service in the North Sheep Supplement: to describe how it used the criteria in the capability model, display allotment specific capability maps generated by the capability model, and include the data generated by the capability model in the North Sheep EIS decision. The analysis included in the Supplement, pp. 31- 49 & 98-104 meets these requirements.

2. The North Sheep FEIS and Supplement did evaluate effects of domestic livestock grazing on <u>all</u> lands within the four allotments; the effects analysis was <u>not</u> confined to lands determined to be "capable". The affected environment and effects of livestock grazing discussed in Chapters 3 and 4 of the North Sheep FEIS and Supplement reflect that. For example, the characterization of sheep grazing habits found in the North Sheep FEIS at 3.2.1 (pp. 3-1 -- 3-3) sets the stage for this analysis describing sheep grazing habits and movements across lands of mixed capability.

3. The judge stated on page 19: *"36 C.F.R. requires the Forest Service to conduct a capability and suitability determination for MIS species . . . The SNF Forest Plan and FEIS do not satisfy this duty for the sage grouse and pileated woodpecker but do satisfy it for the bull trout."*

   MIS Sage-grouse is discussed in the Final North Sheep Supplement on pp. 82-90 and 112-115. On January 18, 2008, Regional Forester Harv Forsgren signed a Supplement to the Records of Decision For the Sawtooth, Boise and Payette Land and Resource Management Plans. This Supplement fulfills the Court's requirement (USDA FS 2008, Final Supplement to the Final Environmental Impact Statement for the Southwest Idaho Ecogroup Land and Resource Management Plans). Additionally, this issue is addressed for the North Sheep allotments in the Supplemental North Sheep EIS on pp. 83-91 and 114-116.

COMMENT 7h. The Forest has wrongfully limited the Scope of the SEIS. In the face of

a rapidly changing scientific understanding of Climate change, species endangerment, rapid pace of weed expansion, forest and sagebrush die-off and other new information, It has failed to adequately consider the current setting for species like Sage Grouse, the very low pop. numbers of ESA-listed species, Global Warming, dire threats to the Gray Wolf under the IDFG Plan and proposed imminent ESA de-listing, and other processes that are underway across the region, the SNRA, the allotments and the landscape grazed by these operations and the surrounding area.

> **REPONSE 7h.** The Scope of the Supplement was addressed p.2 (North Sheep Draft Supplement) as well as complying with the Court Order elements that defined the scope.
>
> In response to the Court Order, the Forest specifically agreed to supplement the North Sheep EIS to:
>
> - Display the strategies and monitoring protocols for adaptive management;
> - Describe the specific grazing management prescription, the monitoring plan, and the adaptive management process to be followed;
> - Display the relationship between the adaptive management strategy and compliance with the standards and guidelines in the Forest Plan; and
> - Adequately explain the Forest Plan capability and suitability determinations in the NSEIS and include an analysis of the Forest Plan capability modeled data at the allotment level.
>
> (Third Declaration of Sharon Labrecque-Smith) The North Sheep Supplement satisfies these agreements.

COMMENT 7i. Current site-specific information on habitat components and populations, risks of extinction, effects of habitat fragmentation, etc. must be examined in order for the Forest conduct a valid scientific analysis. The deficiencies in the capability analysis and its interpretation, and the site-specific effects of continued sheep gazing on watersheds and ecosystem processes, must be adequately studied before any valid analyses can occur.

> **REPONSE 7i.** While certain elements in the North Sheep FEIS were supplemented, other important aspects of the project and the analysis in the North Sheep FEIS were sufficient and therefore remain unchanged. The scope of the analysis for this Supplement is not the same as the original analysis. (p. 2) and has been narrowed to focus on the effects as they relate to capability and suitability determinations for livestock grazing; full explanation of the adaptive management strategy and its protocols; and consideration of new information for Management Indicator Species. Habitat components and populations, risks of extinction, etc will not be revisited in the North Sheep Supplement.

COMMENT 7j. Given all the pressing new issues (or newly recognized issues!) facing these nationally significant public lands, the Forest must expand the scope of its analysis, and examine a new range of alternatives that would provide for sustainable waters, wild lands and habitats for native biota, that would minimize impairment. Instead of really

examining new info, the SEIS attempts to build a firewall between its rosy blindered analysis and the realities of 2007 in the Sawtooth country.

> **REPONSE 7j.** Please see the response to 7b and 7d regarding alternative development. The No Grazing Alternative seems to be best addresses this commentor's concerns. Also, please see the responses to Issue 8 – New Information.

COMMENT 7k. While pointing to the Forest Plan discussion of capability (SEIS at 4), it fails to collect information necessary to understand the conditions of the vast drainage network, and understand effects of grazing use and the ability of the and to withstand such uses. See also WWP Gray Wolf and Climate Change comments (Attached). The MIS supplement also ignores ICBEMP findings (Wisdom et al. 2002 also Attached) related to management to sustain sagebrush and other arid land habitats critical to Sage Grouse, Brewer's Sparrow, Migratory Birds, and other native biota.

> **RESPONSE 7k.** We believe we have collected the appropriate information in order to provide a meaningful supplemental analysis. ICBEMP and Wisdom (2002) was addressed extensively in other response to comments under Issue 3 - ICBEMP. The MIS Capability Supplement is a separate project which did use references from Wisdom.

COMMENT 7l. It is NOT reasonable to continue with the same Limited Range of alternatives. WWP has brought significant new resource concerns to the Forest's attention, and are bringing many additional concerns to your attention as part of this process. The Forest at the national level has greatly increased awareness and concerns about invasive species, and is now even creeping toward recognizing some realities of Global Warming (see FS 2007 Interim Report - Attached) and the recognition of growing importance of recreational uses of public lands. The Range of alternatives in the original analysis was never adequate, and never examined the full range of conflicts with livestock use here.

> **RESPONSE 7l.** Please see the response to 7b and 7d. The No Grazing Alternative seems to best address this commentor's concerns. Also, please see the responses to Issue 8 – New Information.

COMMENT 7m. The Forest states (p. 24) that this is a "base assessment that established from the Forest Plan". The Forest plan sets goals, objectives, and management actions for a wealth of values of the public lands and the SNRA. The info necessary to integrate and balance an array of Forest mandates (clean water, functioning watersheds, protection of riparian corridors, rare plants, recreational uses, cultural sites, viable populations of Sage Grouse and other MIS and sensitive carnivore and bird species, etc.) - and the mandates of the SNRA – has not been provided.

> **RESPONSE 7m.** We respectfully disagree that the necessary information to determine compliance with the Forest Plan and the SNRA Public Law 92-400 was

not provided. A Forest Plan Consistency checklist is part of the project record. A "substantial impairment" worksheet was completed and is summarized in the Ranger's Memo on Substantial Impairment. Please see the responses to Issue 13 – Substantial Impairment.

Issue 8: New Information between 2004 and 2008

COMMENT 8a. Since the original North Sheep EIS that still forms the majority of the basis of this action was completed in 2004, several new have risen meriting expanded analysis such as:
-- Forest should have to analyze action's potential effect on climate change;

> **RESPONSE. 8a.** The Resources Planning Act 2007 update (Interim Update of the 2000 Renewable Resources Planning Act Assessment, Publication #FS-874) acknowledges and addresses climate change, and indicates that climate variability makes predictions about drought, rainfall, and temperature extremes highly uncertain. Based on the best available science, it would be too remote and speculative to factor any specific ecological trends or substantial changes in climate into the analysis of environmental impacts of the project. Research about long range shifts in species range, etc. is ongoing and a number of groups are discussing the implications of climate change on forest management. Although there is a solid consensus that global warming is occurring, there is still much uncertainty about subsequent ecological interactions and trends at the local or site-specific scale. Given the stochastic nature of climate-related events such as droughts, wildfire and floods, it would be highly remote and speculative to make mgmt. decisions based on such predictions. The best available science concerning climate change is not yet adequate to support reliable predictions about ecological interactions and trends at the local (site-specific) scale.

COMMENT 8b. Since the original North Sheep EIS that still forms the majority of the basis of this action was completed in 2004, several new have risen meriting expanded analysis such as:
-- Forest should have to analyze Sage Grouse effects as if Sage Grouse were going to be listed under ESA due to recent Federal Court decision;

> **RESPONSE 8b.** Currently, the US Fish & Wildlife Service has made the ESA determination that Greater Sage-grouse are warranted for listing under the Endangered Species Act but precluded due to higher priorities. Until the Fish & Wildlife Service moves beyond the current determination for Sage-grouse, the Forest will analyze impacts to Sage-grouse and its habitats under the direction for MIS and Sensitive Species. These two Forest categories place Sage-grouse at a higher level of analysis and conservation above all other species on the Forest except ESA listed species.

COMMENT 8c. Since the original North Sheep EIS that still forms the majority of the basis of this action was completed in 2004, several new have risen meriting expanded

analysis such as:
-- Forest should have to analyze action's potential effects on Wolves based on proposed state management plan, and its conflicts with the SNRA and NFMA, and adopt actions that will result in no impairment of Gray Wolf and other native carnivore habitats and populations.

> **RESPONSE 8c.** While certain elements in the North Sheep FEIS were supplemented, other important aspects of the project and the analysis in the North Sheep FEIS were sufficient and therefore remain unchanged. The issue of the Gray Wolf was addressed in the North Sheep FEIS on pp. S-14, 3-81 to 3-83, 4-69, 4-71, 4-76, 4-79, 4-84, and F-38.
>
> Wolf populations in the Northern Rockies has exceeded its recovery goal and continues to expand its size and range. There are currently more than 1,500 wolves and at least 100 breeding pairs in Montana, Idaho, and Wyoming. The topic of Gray Wolves is outside the scope of the North Sheep Supplement. At the time this is written, there are no changes in the regulatory requirements for Gray Wolves; however, it is recognized that Fish & Wildlife Service has proposed the Gray Wolf for delisting from the Endangered Species list. If the Final Delisting Rule proceeds, it will take effect in mid-March, 2008 and management of the wolves would be turned over to the States.

COMMENT 8d. Since the original North Sheep EIS that still forms the majority of the basis of this action was completed in 2004, several new have risen meriting expanded analysis such as:
-- Forest should develop integrated protections and a new array of alternatives and actions to protect for the wealth of sensitive plant and animal species that now may be under increased Threats and potential Loss and Extirpation due to Global Warming processes, weed invasions, etc.

> **RESPONSE 8d.** Please see the response to 8a.

COMMENT 8f. Such effects and conflicts [with Lynx] were never adequately in the original EIS, and must be newly considered here as part of the Capability analysis and examination of the effects (and continued Suitability) of grazing sheep in the limited Capable as well Non Capable lands.

> **RESPONSE 8f.** While certain elements in the North Sheep FEIS were supplemented, other important aspects of the project and the analysis in the North Sheep FEIS were sufficient and therefore remain unchanged. The issue of the Lynx was addressed in the North Sheep FEIS on pages 3-81 to 3-78 to 3-81, 3-96 to 3-97, and 4-71 to 4-72. The topic of lynx is outside the scope of the North Sheep Supplement.

COMMENT 8i. The Forest has failed to incorporate current ecological science and New Information on habitats including understanding forces of fragmentation, and that are relevant to understanding population connectivity and viability. This information for

imperiled, MIS, sensitive, and other species must be examined in adequate species Capability and Forest Suitability Determinations. Examples: Microbiotic crusts and effects of grazing disturbance on crusts facilitating weed invasion; the degree of loss and fragmentation of sagebrush habitats both locally and rangewide and the effects of populations. Declines in resiliency of sagebrush communities due desertification and Global warming processes (see Wisdom et al. 2002, Wisdom et al. 2003, Pellant 2007).

> **RESPONSE 8i.** The Forest has reviewed and included current science in analysis and information on habitat fragmentation and other issues brought forward in the SEIS (SEIS p. 87 and App. B). Additionally, the Forest recognizes that ecological systems and their understanding are dynamic and adopted an adaptive management approach to manage this issue (Forest Plan ROD pp. 6-7 and Forest Plan pp. 1-1, 1-3, and 4-5). The proposed action implements this process on the North Sheep Allotments (SEIS p. 11). The adaptive management strategy provides opportunity to use new information in managing grazing on the allotments (SEIS p. Section 2.2.2.1).

COMMENT 8j. The Forest has failed to incorporate... Global Warming effects on sagebrush, forest and aquatic MIS species. ESA petitioning of the Pika (threatened by climate change and sheep removal of critical food sources here). Very low (or even extirpated) populations of bull trout and other native aquatic species. Increased understanding of the grave threat of brook trout to bull trout especially under degraded habitat conditions in SEIS area waters. Greatly increasing invasive species problems in the allotments. Significant new sagebrush and other habitat losses in wildfire.

> **RESPONSE 8j.** Please see the Response to 8a for Climate Change. The North Sheep FEIS and Supplement did address the impacts of brook trout to bull trout within the allotments, did address the low populations of bull trout, and did address the increasing threat of invasive species. (North Sheep FEIS, Sections 3.4 and 4.4. North Sheep Supplement, p. 111.) The North Sheep Supplement also included information about recent wildfires in Section 1.1.2a New Information.

COMMENT 8k. The Forest has failed to incorporate... Microbiotic crusts improve soil stability, productivity, and moisture retention, moderate extreme temperatures at the soil surface, and enhance seedling establishment of vascular plants (Belnap and Gardner 1993, Harper and Pendleton1993, Johansen and others 1993, St. Clair and others1993), thus contributing to high ecological integrity of shrub-steppe habitats. See Wisdom et al. 2002. Since this info was compiled, understanding of the importance of crusts has increased. In addition, with new information on threats to native carnivores, a valid examination of effects of sheep disturbance to Gray Wolf, Wolverine, Canada Lynx and the wealth of native carnivores must be conducted. Radio-tracking and other studies conducted by IDFG, including in these allotments, showed the importance of Pikas (now known to be threatened by climate change) as wolverine food.

> **RESPONSE 8k.** While certain elements in the North Sheep FEIS were supplemented, other important aspects of the project and the analysis in the North

Sheep FEIS were sufficient and therefore remain unchanged. Effects on the wildlife species cited were discussed in section 3.8 and 4.8. This issue is not within the scope of the Supplement analysis. There has been no change in these elements. Where new information or science becomes available relative to these and other issues, the adaptive management process allows for its inclusion in management situations (see response to comment 8i).

Issue 9: Rangeland Management

Range - Sub Issue 1 – Adaptive Management

COMMENT 9a1. WWP believes the Forest Service has failed to comply with the court ordered remand of the North Sheep FEIS by failing to explain and analyze how "Adaptive Management" will be implemented to comply with that Order. The Forest Service needs to address the obvious ambiguity of the proposed adaptive management and explain how monitoring will occur, and how and when monitoring will necessarily lead to changes in management of domestic sheep grazing. One clear failure is that the agency fails to address anywhere how it will monitor the impacts of domestic sheep grazing on seeps, springs, wet meadows and aspen clones.

REPONSE 9a1. How monitoring may lead to changes in management under adaptive management strategy is explained in section 2.2.2.1 of the North Sheep Supplement (pp. 11- 21). When monitoring may lead to changes in management will depend upon the significance and priority of issues identified. Threshold values or trigger points for annual and long-term monitoring are described in the monitoring and desired conditions sections of the Allotment Management Plans in App. C of the Supplement. Under adaptive management, monitoring of sheep grazing impacts on seeps, springs, wet meadows and aspen clones may be accomplished using any agency approved protocols appropriate to site specific issues and conditions. Example: Adaptive Management Action was taken in 2007 on the Baker Creek allotment, in conformance with direction outlined on pages 17-21 of the North Sheep Supplement. In addition, the decision to defer grazing on the North Fork-Boulder allotment to avoid conflict with denning wolves was also in conformance with Adaptive Management concepts.

COMMENT 9b1. The entire Adaptive Management scheme presented in the SEIS is nothing more than a continuation of the shell game the public has encountered when dealing with Forest Service grazing issues, where specifics are limited or lacking and there are no rules. The SEIS has not presented evidence that Adaptive Management has restored degraded conditions in similar areas. If that was the case, then why not use the management that resulted in that restoration rather than continuing an open ended process. The SEIS on p12 makes clear that the Adaptive Management is an open-ended proposition that can redefine any element of condition, management or monitoring the Forest Service might desire, thus making the decisions in the NSEIS and SEIS irrelevant

REPONSE 9b1. The assertion that Adaptive Management is an open-ended proposition that can redefine any element of condition, management or monitoring the Forest Service might desire is inaccurate. Site specific desired conditions disclosed in the AMP must be consistent with findings of the relevant NEPA analysis, which in turn must be consistent with the Forest Plan. Further modification of desired conditions would require additional NEPA compliant analysis. The effects of any action implemented under adaptive management must fall within the scope of the relevant NEPA analysis. Potential effects associated with implementation of monitoring protocol are similarly constrained. The adaptive management process is not an open ended process. Most adjustments will occur due to annual monitoring of range conditions or management compliance. Long term monitoring will help determine if management adjustments are leading to positive change, or weather certain areas need to be re-evaluated as to the ability to respond to grazing influences.

COMMENT 9c1. Range and ecological science are far advanced today and provide clear knowledge about the effects of grazing on plants, wildlife and ecosystems. The Adaptive Management scheme laid out here is such that once the SEIS/ROD are issued, all options are open. There are no strict protocols, no validation of forage capacity, no monitoring of bedding grounds, watering places, trailing routes with strict standards of performance. The Adaptive Management criteria are not part of the SEIS, and do not appear to be terms and conditions placed on permits so they are enforceable. They are just an open-ended excuse to continue the failed management that has lead to the current degraded conditions on these allotments, which are detailed throughout the SEIS.

REPONSE 9c1. Monitoring protocols addressing current issues associated with livestock grazing are disclosed in the Monitoring chapter of the relevant AMP. Validation of forage capacity is addressed in the North Sheep Supplement section 3.2.4.7.2 "Validating Grazing Capacity". The AMP is made a part of the permit by reference. Thus, the AMP provisions are enforceable as conditions of the permit. Standards for use for watering sources bedgrounds, etc, are established in the AMP and Forest Plan. Determination of degree of impact to bed grounds, areas adjacent to water, or trailing routes will continue to be based on field review of rangeland resources with respect to Forest Plan and allotment specific direction, standards, etc. Where specific monitoring studies are not in place to evaluate grazing impacts on these sites, the best judgment of the professional range manager based on observations of effects where studies are in place and based on professional training and experience administering grazing on these and other Forest allotments will be used to evaluate grazing impacts and identify needs for changes in management. For example, if in the opinion of the range manager that a bedground is getting too large or is contributing to soil or vegetation disturbance in the adjacent area, the bedground can be closed or rested as needed.

COMMENT 9d1. For example, the Rangeland Resources discussion (SEIS p21) continues to identify the main issues as ability to comply with once-over grazing, impacts

to high-elevation basins and ensuring one time/one night bedgrounds. Each year, with this one time/one night situation, there would be some 120 different bedgrounds in each allotment. That is 120 places stripped each year to become weed infested and nitrate poisoned from urine and fecal matter. How many places are available for bedding and will these be revisited year after year, or will they spread to cover more and more areas to rest those previously degraded, or will the same locations be visited each year? The SEIS and AMP are silent on the extent of the damage at these places which must expand over time to rest previously used locations so they can recover. The same would be true of watering places. The SEIS and AMP offer no solution to these issues, but bury the reality in the vague and confusing language of Adaptive Management.

> **REPONSE 9d1.** The degree of impacts to these sites in which the once over standard is complied with is decided on by the range manager in consultation with the permittee. Again the range manager determines if a site needs to be closed or rested. In the example given by the commentor, 120 different bed ground sites would collectively amount to approximately 12 acres. Restriction of use of bed grounds to one night per year also significantly reduces the grazing impacts to these sites significantly below that characterized in the comment.

COMMENT 9e1. Then a key statement (p. 25), "progress towards desired conditions would be determined, in part, by the efficacy of the adaptive management strategy and monitoring program in detecting and minimizing detrimental impacts." The SEIS avoids discussing that the Desired Future Conditions are only 50 – 74% of potential, a degraded state in itself, but again, relies on Adaptive Management without any assurance other than BELIEF that any improvement in condition can occur. This makes clear that Adaptive Management is the end goal, not improving the land. If the Forest Service can get the public and courts to buy in to this failed management strategy, which in reality is just a means of avoiding accountability and progress, then it wins and the land, wildlife and the public lose.

> **REPONSE 9e1.** It is recognized that historic use of the allotments has created areas where the soil mantle and vegetation have been altered significantly. It is understood that any improvement in overall condition will be a slow process, and may never achieve the same state that existed previous to settlement. Adaptive management practices provide a tool to help prevent further deterioration and where feasible, move the condition of the resource in a positive direction. Desired conditions are described for specific resources in Chapters 3 of the North Sheep FEIS and Supplement and also in the allotment management plans (SEIS App. C). The commentor's characterization of desired condition being 50 -- 74% of potential is not consistent with these documents.

COMMENT 9f1. Even if the Adaptive Management scheme could work, the Forest Service has provided no science to document that continuing to graze on these degraded allotments at any level and under any scheme can restore them to their potential, or even improve them marginally. There is no requirement for long-term rest and nothing about the current condition or status of the species that should occur in the native herbaceous

community.

> **REPONSE 9f1.** We know from almost a century of management as well as scientific literature, that this landscape is resilient. The effects of past grazing will be diminished at nature's pace, just as it recovers from large scale fires, floods, drought or any other natural event. Vegetative Community Guides for uplands and riparian areas or relic sites aid us in understanding what species composition and frequency should be strived for. The effects of proposed alternative are described in Chapters 4 of the North Sheep FEIS and Supplement. These analyses indicate that continued improvement of rangeland conditions is possible under appropriate livestock management practices as described in the North Sheep Supplement (Adaptive Management Actions, pp. 17 – 21).

COMMENT 9g1. The SEIS has provided no science to show that its Adaptive Management scheme will provide for recovery of the myriad of degraded locations throughout these allotments, has provided no definitive monitoring of sensitive locations and with its Desired Future Condition of "Fair" has defined the Forest Service out of any obligation to recover these damaged ecosystems.

> **REPONSE 9g1:** Desired conditions and annual use levels are defined in the Allotment Management Plans (Supplement, App. C). Specific monitoring sites have been established to monitor attainment of desired conditions and annual grazing use. Monitoring sites were chosen to represent resource areas that receive heavier than average grazing impacts and that would characterize achievement of desired resource conditions across ecological sites that are sensitive to grazing impacts. Annual allotment inspections are also conducted to review overall grazing use, compliance with the grazing permit and annual operating instructions, and determine if adaptive management actions are needed that may not have been indicated by monitoring at the specified monitoring sites. The adaptive management actions are scientifically based, field tested and are consistent with current rangeland and natural resource management science (Supplement, Section 4.2.3, p. 92)

COMMENT 9h1. The Adaptive Management scheme cannot succeed because the Forest Service has not demonstrated in the past that it can monitor utilization effectively, nor has it monitored water quality, forage production or described the locations and condition of the bedding, watering and trailing locations. These must be identified and located on maps with an analysis of their extent and current condition.

> **REPONSE 9h1:** While monitoring will vary from year to year based on workloads and program planning. The minimum level of monitoring is described in the monitoring section of the allotment management plans (Supplement, App. C). The project record has consistent examples of annual and long-term monitoring. Management direction set in recent AOIs are examples of how this information leads to adaptive management changes in grazing use, trailing routes, etc. Monitoring will be accomplished using Forest Service approved protocols

which are consistent with current science and technology for rangeland management monitoring.

COMMENT 9i1. Similarly for uplands, throughout the SEIS and the NSEIS before, claims are made that Adaptive Management "is anticipated" to "move towards" meeting all goals, standards, etc., there is never any definitive commitment that improvement will be attained. Conditions throughout the uplands are severely degraded resulting in the need to close some portions of high elevation areas, but those are not specified as to mapped locations, acres and whether they will suffer trailing or grazing impacts due to lack of enforcement or incidental grazing on nearby areas. There is no mapping of lands in unsatisfactory condition that should be removed from capable acres, yet the SEIS is full of descriptions of degraded upland and riparian areas.

REPONSE 9i1. Definitive commitment for improvement is described in the North Sheep EIS Records of Decision (Fisher Cr & Smiley Creek ROD -Decision paragraph p. 1 & Adaptive Management paragraph p. 3; and in the North Fork-Boulder and Baker Creek ROD - Decision paragraph p.1 & Adaptive Management paragraph p. 2). High elevation basin closures within the Baker, North Fork, and Smiley Creek allotments have been delineated on the maps within the North Sheep EIS. These areas were selected based on sensitivity of the areas due to elevation, climate, shallow soils, and vegetative qualities. Further use of grazing within these areas was deemed to not be beneficial to either the resource or for forage use. Multi -season rest has been practiced on portions of the all the four allotments in recent years as a result of adaptive management processes.

COMMENT 9j1. Although this SEIS is addressing adaptive management strategies that were not covered in the North Sheep FEIS, as ordered by Judge Winmill, the switch from stubble height monitoring standards to adaptive management strategies for permitted grazing has never undergone the full NEPA and ESA/MSA consultations and analyses required by statute and regulations.

REPONSE 9j1: As identified by the Court, the North Sheep FEIS did not adequately explain the adaptive management strategy. This has been rectified in section 2.2.2.1 of the North Sheep Supplement. Additionally, the adaptive management strategy was discussed in detail during consultation for the FEIS with ESA regulatory agencies. There was no additional ESA consultation done on the North Sheep Supplement because there were no new and/or significant ESA related issues that would trigger re-consultation (e.g. no new species listed, no changed effects analysis, etc.)

COMMENT 9k1. Page 10 (North Fork-Boulder S&G Allotment AMP) – "reasonable expectation that long-term desired conditions objectives will be achieved" when adaptive management for sheep grazing is implemented. This is a huge leap in faith and logic and is totally dependent on range condition, range capability, and that bighorn sheep/mountain goats and domestic sheep/goats will be compatible year-round. The

AMP authors also assume that the proper number of AUMs, particularly on the allotment even though some units such as the high alpine are closed. This is contrast to the reasonable expectation that domestic sheep and goats will damage upland vegetation on the allotment.

> **REPONSE 9k1.** Compliance with once-over grazing will minimize impacts on soil and vegetation. Expectations that conditions will improve are legitimate, based on the analysis. The effects of the proposed action documented in Chapters 4 of the North Sheep FEIS and Supplement are consistent with this position.

COMMENT 9L1. We appreciate the additional information concerning the approach and methodology for practicing adaptive management. The methodology indicates that five generations of adaptive management would be implemented prior to taking administrative action with a permittee. We are concerned that, given what is currently known about the condition of the allotments, and the potential effects of climate change, five generations of adaptive management may be overly long in situations where adverse impacts could be avoided by catching and addressing problems early. We recommend that the final DS-FEIS include discussion of the potential effects of climate change on resources affected by grazing, and that adaptive management methodology include more flexibility to take needed actions where and whenever problems arise.

> **REPONSE 9L1.** The commentor's claim that the adaptive management process would require five generations prior to taking administrative action is inconsistent with the description of the process (Supplement p.11-21). Annual allotment inspections and annual monitoring results are used to implement adaptive management actions as well as the results of long-term monitoring. The process does not require or wait for the 3-5 year schedule of long-term monitoring to implement actions. Note that the process states: "While long-term trend and condition information is preferred, the lack of such information should not delay the evaluation of the current rangeland conditions and needed adaptive management adjustments" (Supplement p. 14). Actions needed to alter management where conditions warrant can be implemented through the Annual Operating Instructions (AOI). If the need for the action is identified from monitoring or allotment reviews early during the grazing season, the adaptive action could occur during the same grazing year if it relates as well to areas not yet grazed in the same grazing season. The current AOI would be modified to do this. Otherwise, the action would be implemented in the AOI for the next grazing season. Note that the adaptive management process does not apply to willful or obvious violations of the grazing permit terms and conditions, but applies to situations where monitoring of short-term or long-term indicators show a need for management action changes. This does not alter the District Ranger's authority to implement adverse actions against permittees who violate terms and conditions of grazing permits. Also, administrative actions that adversely modify grazing permits are subject to formal appeal regulations (36 CFR 251 subpart C). The time frames stipulated in the regulations for implementing appealed decisions would be followed.

COMMENT 9m1. The preferred adaptive management Alternative B would also require adequate dedicated staff and monitoring resources to satisfactorily implement the approach. Based on the amount of monitoring data provided thus far, we are concerned about the likelihood that the SNF and the SNRA will be able to obtain adequate funding to carry out compliance and effectiveness monitoring needed for implementation. We recommend that the Final DS-FEIS explain how Alternative B would be adequately staffed and funded, and fully disclose the likelihood that the prescriptions and restrictions included in the Allotment Management Plans would be implemented (e.g. once-over grazing).

> **REPONSE 9m1.** Funding for allotment administration and monitoring are outside of the scope of this Supplement. These decisions are made on an annual basis as Congress determines the funding provided and priorities are assigned to the Agency. Monitoring for North Sheep will be balanced with the needs of the other allotments on the units.

COMMENT 9n1. ISDA has a concern that adaptive management addressed in the DNSS is directed to make changes that will be more restrictive to the permittee when progress is not being made toward applicable objectives, standards and guidelines. There are very few adaptive management actions that would give the permittee more flexibility when applicable objectives, standards and guidelines are being met or exceeded. ISDA recommends that a section be added to include flexibility that would allow the permittee the use of more trails, use natural watering sites that had been closed, have more time to trail through closed areas and to periodically use closed areas, increase shipping locations, have less restriction on bedding grounds, allow water hauling to more location and during the complete grazing season, if needed, to modify the indicators that would be less restrictive to use, increase numbers livestock and/or allow early or late use of the area to improve distribution and to allow livestock to be used as a tool for vegetative control (weeds control, fuels reduction, etc.).

> **REPONSE 9n1.** The grazing permit which will be issued consistent with the ROD will specify the limits of adaptive management that will be allowed without revisiting the environmental analysis and decision process. Adaptive management actions such as those described in the comment may be implemented if they are consistent with monitoring results and if they have been evaluated in this or other applicable environmental analysis and project decisions. These actions may be taken at the request of the permittee as described in the North Sheep Supplement (pp. 19, 94-95) under adjustments in grazing practices. For example, the decision to defer grazing on the North Fork Boulder allotment in 2007 to avoid conflict with wolves was made by the permittee. Adaptive Management does provide flexibility to the permittee and gives the permittee a chance to implement management changes in a timely fashion.

COMMENT 9o1. The Forest has failed to adequately examine its grazing schemes,

stocking rates, standards of use and uncertain adaptive management schemes in light of the loss of resiliency in sagebrush landscapes – especially those subjected to continued grazing disturbance. This will only become worse as Global Warming processes progress. See Pellant BLM Congressional Testimony on Global Warming (Attached).

> **REPONSE 9o1.** The grazing strategy, standards, guidelines, and direction are there to prevent further degradation of the sagebrush/steppe and associated riparian communities. Stocking rates for sheep, including placing caps on band sizes, and then grazing once- over through portions of the allotment that are open and contain significant capable ground determines the time that sheep remain on an allotment. Effects and certainty of global warming at this time are largely based on supposition and conjecture. However; monitoring conditions on-the-ground and reacting to needed changes through the adaptive management establishes a process for dealing with these changes as they may occur. Also, please see the response to Issue #1 – Climate Change.

COMMENT 9p1. The North Sheep EIS found that the existing grazing system does not comply with Sawtooth Forest Plan, and that continuing the current system would degrade sensitive areas, increase stream sediment and reduce fish habitat. Despite recognizing the need for change, the Forest made no meaningful changes in grazing, and control and understanding of the grazing system became even more cloudy through the Forest's imposition of highly uncertain Adaptive Management. In the SEIS, the Forest remains on the same path – with in fact the primary change made is imposing a new Model and continued uncertainty about livestock grazing management actions.

> **REPONSE 9p1.** Meaningful changes were made in this project. Significant areas of the allotments are being closed to grazing, and areas are being rested until recovery objectives are achieved and management direction for the use of trailing and for shipping corrals is being changed (FEIS p. 2-1 & 2-2, and RODs). Management objectives and desired conditions have been defined, (Supplement, App. C, Allotment Management Plans-Sections 2C); monitoring plans developed (Supplement, App. C, Allotment Management Plans, Monitoring Sections); and an adaptive management strategy was defined (Supplement, Chapter 2). Adaptive management activities and monitoring protocols consistent with current science and technology and with proven results in-the-field have been identified as key to the adaptive management process (Supplement, section 4.2.3, p. 92).

COMMENT 9q1. Adaptive Management (AM) Is A Cover for Forest Not Wanting to Make Needed Changes, and for Not Holding Grazers Accountable. The SEIS discussion of AM (at 11-13) is a smokescreen for the Forest failing to apply specific triggers and sideboards to management actions in decisions, including in AMPs and AOPs. AM is also much-used by the Forest to exclude the public from future decision-making. The closed door meeting with ranchers at the AMP or AM level exclude the public – and are designed to cut deals that benefit the livestock industry. The cloak of secrecy surrounds the outcomes of meetings and Forest processes to apply AM at the AMP or AOP level, greatly necessitates the Forest laying out a specific set of discrete, measurable science-

based management actions that will be applied if annual use standards are not met.

> **REPONSE 9q1.** Adaptive management is recognized by the Forest Service as a legitimate approach to allotment management. The Forest Plan also sets the basis for development and use of an adaptive management strategy (Forest Plan p. I-1). There is no cloak of secrecy associated with the process at the AMP or AOI level. All decisions and documents resulting from this process are available to the public. In addition, anyone expressing interest in how management decisions are made are welcome to convey their concerns to the Forest Officer in charge.

COMMENT 9r1. Requiring mandatory compliance with a consistent Annual Use standard is necessary to provide accountability, and to prevent "mistakes" such as excessive removal of protective streambank vegetation, or trampling that bares soils to erosion – can have serious irreversible consequences. Thus, specific criteria must be established, must be met annually, and must be based on current ecological science.

> **REPONSE 9r1.** Grazing standards have been established in the Forest Plan (Forest Plan pp. II-45. Additional annual use criteria may be set in allotment management plans and annual operating instructions consistent with monitoring results through the adaptive management process. Directions written out in the Annual Operating Plans are aimed at insuring compliance with the Allotment Management Plan as well as keeping the AMP current. Specific criteria cannot be established for each possible effect. The adaptive management process provides for matching the adaptive action to the degree of the problem identified.

COMMENT 9s1. There are no specific, concrete AM actions laid out with scientific analysis that demonstrates that they will solve specific problems. Despite many pages claiming to describe how AM actions will be applied, there is no certainty. It is impossible to understand what exactly will occur in the land. In a landscape increasingly overrun with weeds, with ES populations in streams greatly reduced and facing Global Climate Change, and conifer die-off, etc. Reliance on the Forest's loose and still undefined AM scheme is certain to result in continued undue degradation of pubic lands and waters. The Forest has NEVER examined the Risks and Unsuitability if its AM scheme in a landscape where only 25% and much less of the land are capable of grazing, and there are a welter of conflicting uses. In reality, it appears the Forest is throwing out the smokescreen of Adaptive Management to avoid having to take a "hard look" at management actions and necessary measures to protect values of the public lands.

> **REPONSE 9s1.** In the North Sheep Supplement - Chapter 2, section 2.2.2.1, lists potential adaptive management actions. These include "Adjustments to sheep numbers and seasons of use", "Implement periods of rest for the allotment or areas within the allotment", "Closure of grazing areas within the allotment", and "Implementation of additional grazing restrictions. Includes: annual grazing use indicators (end of season and/or within season), salting practices, herding practices, and other management practices". Though the potential benefits of reduced numbers and season of use, rest, and closure would seem self evident, the

premise that these actions can initiate and sustain a trend toward achievement of desired conditions within the analysis area resides in professional judgment based on past experience and review of relevant references. References are listed in appendix B of the North Sheep Supplement, and in Chapter 6 of the North Sheep FEIS.

COMMENT 9t1. The "toolbox" of AM is the very same things that have caused habitat losses and fragmentation for wildlife species across the West – such practices as corrals, salting, fencing that shifts or intensifies use into other areas, etc. What the Forest claims are "adaptive actions" are what it is supposed to be doing in the first, and that has not been working here! These actions are designed to accommodate continued livestock use – at the maximum possible level – without taking into account the needs of important and sensitive species.

REPONSE 9t1. These actions are accepted grazing management practices that have been shown to be effective in both scientific literature and practical application (Supplement, pp. 93-94). The premise that these actions can initiate and sustain a trend toward achievement of desired conditions within the analysis area resides in professional judgment based on past experience and current science. References are listed on pages 93-94 and Appendix B of the North Sheep Supplement and Chapter 6 of the North Sheep FEIS. Impacts to sensitive species were taken in to account in the Biological Evaluation for the FEIS and in Chapters 4 of the FEIS and Supplement.

COMMENT 9u1. There are to many conflicting, overlapping wildlife and ESA species and recreational uses here for the Forest to point to a laundry list of its usual activities - such as placement of troughs, facilities and salt and say – we'll try some of these if there are problems. The Forest, even if it is to rely on any AM, must place significant prohibitions and sideboards on what actions can and can't occur. This must be done in an integrated NEPA analysis. For example, Frenchman Creek is beat out in 2009 – so then the use of AM in the AOP then shifts and intensifies sheep use in wolf denning, wolverine, Pika habitats in 2010 permits –without ever conducting integrate analysis of analyzing effects under NEPA?

REPONSE 9u1. Capacity estimates and monitoring of past grazing effects were used to establish projected grazing allocation under the Proposed Action Alternative (SEIS Table: Range 3.4.). This establishes the maximum annual forage allocation to livestock that will be authorized without further NEPA analysis. Under the proposed action, this allocation will only be fully utilized in years when forage production is adequate to preclude unacceptable resource impacts. Forage production in permanent closure areas was not included in capacity estimates. Similarly, reduced forage availability resulting from temporary closures or rested pastures is taken in to account when authorized numbers and season is tentatively established in AOIs. This issue is further addressed by existing authorities to conduct current season monitoring and issue directives for early pasture moves, or complete removal of livestock from the

allotment prior to the scheduled "off-date".

COMMENT 9v1. We again stress that the AM practices - which are really just how agencies try to deal with grazing without reducing livestock permitted numbers are pretty much just common agency Standard Operating Procedure (see SEIS 18-21). Many of these measures are already notorious for having caused widespread degradation, loss and fragmentation of Sage Grouse and other important species habitats across the West. See Braun 1998, Connelly et al. 2004, Dobkin and Sauder 2004, Knick et al. 2003, Freilich et al. 2003. Plus the Forest wrongly claims these to be "mitigation". In reality, there is little to any real mitigation applied here – such as closures of entire watersheds to all sheep use.

REPONSE 9v1. Adaptive management provides the flexibility to implement closures and other practices as deemed relevant. The upper basins in Baker Creek, Prairie Creek, and North Fork-Boulder are examples where it was determined that further sheep grazing would be detrimental to the resource with little value to livestock use. Periodic rest of some areas, with associated reduction in days is a valid management tool, as was practiced in Baker Creek in 2006 and 2007. An additional example is in the North Fork-Boulder Allotment in 2007 where grazing did not occur to prevent wolf/sheep predation problems. Application of this process in recent AOIs provide examples of the Forest's intentions and abilities to implement this process.

COMMENT 9w1. The whole AM scheme as it is being applied by the Forest is aimed at removing requirements of ranchers to comply with annual measurable standards of use, comply with specific defined use periods and use areas, etc. AM is being used to provide a framework for managing lands where no livestock industry accountability will be required. It is an ever-shifting management scheme designed to never require accountability. Its uncertain use particularly in areas with so many natural and other constraints to livestock use and movement– ranging from Biological opinions for ESA species to bottlenecked use areas to Wolves to Rare Plants to high recreational use areas, carries great risk.

REPONSE 9w1. This characterization of the Forest's intent is inaccurate and is not consistent with Forest Service direction, actions, or the North Sheep FEIS and Supplement. Our management strategy is based on our firm resolve to protect the resource while permitting a legitimate resource use. Specific requirements for annual use standards are found in the Sawtooth National Forest Land and Resource Management Plan (pp. 44-45) and in the Monitoring Sections of the Allotment Management Plans (Supplement, App. C.). The term grazing permits which authorize grazing under this decision identify the allowable grazing season. The Annual Operating Instructions which are developed to implement the direction from the Forest Plan and the allotment decisions describe timing of use, routing patterns and specific direction related to band size, shipping, etc. The adaptive management strategy also gives the land manager the opportunity to add additional or more restrictive annual use criteria consistent with monitoring

results (Supplement, Adaptive Action 6a, pp. 20 & 96).

COMMENT 9x1. In order for the Forest to valuate "potential AM Actions", it must first collect the necessary baseline data on current conditions, and incorporate current ecological science – including invasive species, rare plant occurrences, climate change effects, knowledge of low populations of aquatic species, severely degraded drainage networks including springs and seeps, Pika conflicts, Wolf conflicts, etc. to be able to apply a valid NEPA analysis and to develop a specific set of management actions under which grazing would occur. It has not done so.

> **REPONSE 9x1.** Acquiring additional data on climate change, sensitive species etc. is an on going process. (Please see responses to Issue #1 – Climate Change; and Issue # 10 – New Information.) Necessary changes to management based on new information will be considered where applicable. Baseline and effects of the proposed action have been evaluated in Chapters 3 and 4 of the North Sheep FEIS and Supplement. Baselines for desired conditions are described in the Monitoring Sections of the allotment management plans (Supplement, App. C.).

COMMENT 9y1. Likewise, Table 2-1, Forest Plan Objective is to "reduce grazing impacts to … Frenchman Creek, Smiley Creek". Instead of examining long-term rest or closure to reduce impacts, the Forest point to the unspecific "application of additional or other annual use indicators …". There is no certainty here. There are no specific concrete actions provided, and no explanation of what must occur to allow improvement (such as establishing a 10" stubble height? Rest for a decade?) or how the Forest will be evaluating their effectiveness, or where sheep will be grazed while any "recovery" is occurring in these watersheds. Further, this entire Table shows that serious Forest Plan concerns exist about currently impaired conditions in the North Sheep allotments and surrounding landscape, but now the Forest in its shallow rubberstamping of near-status quo sheep use in the SEIS.

> **REPONSE 9y1.** "Long-term rest or closure" was analyzed under Alternative C- "Grazing Phased Out" alternative.

COMMENT 9z1. There is hardly any difference between the Proposed Action and No Action –except that the Proposed Action is much less certain with its smokescreen of AM. AM would allow shifts and intensification of sheep use in lands without new NEPA - including on soils and in important habitats –where the Forest has NO information on conditions, or populations of sensitive species. While the Forest claims the No Action Alt would result in minimal changes – it has no basis for claiming that its minor changes and uncertain AM under the Proposed Action would result in changes necessary to provide habitats and viable populations of important and sensitive species here – and that such continued use would not conflict with rare and sensitive species, recreational uses, private landowners not wanting sheep spreading weeds and bacteria on their lands, etc.

> **REPONSE 9z1.** The commentor's characterization of the effects analysis is not consistent with the analysis in Chapters 4 of the North Sheep FEIS or Supplement

or the biological assessment. See discussion in 9p1 above.

COMMENT 9aa1. FEIS at 31 states that Capability is "the potential of the land area to produce resources supply goods and services, and allow resource uses under an assumed set of management practices and at a given level of management intensity". Note that the AM gibberish does not provide ANY understanding of the specific practices to be employed and the specific intensity of use in any land area. Again, in order to understand the potential of the land area, the Forest must first understand such things as the current level and severity of weed infestations, risks of weed expansion under continued use at specific levels, etc. For example, Toadflax has increased dramatically across the sagebrush lands and intermittent drainages and mesic sites at lower elevations across the allotments and bordering the mainstems. It is rapidly invading the only large blocks of "capable" lands in the much of the Smiley Creek allotment.

> **REPONSE 9aa1.** The current conditions of allotment resources are described in Chapters 3 of the North Sheep FEIS and Supplement. Additional information on current weed infestations is also found in the project record and in Natural Resource Inventory System - Terra Invasive Plants database. Maximum use standards are described in the Forest Plan (p. 3-45 to 3-46) and North Sheep Supplement - Appendix C - AMPs. The adaptive management process described in Chapter 2 of the North Sheep Supplement is designed to apply appropriate actions at appropriate intensities to resource management problems and use conflicts.

COMMENT 9bb1. The use of the ever-shifting and uncertain AM scheme elevates risk to rare plants and habitat and population impairment, as snap decisions may be made to haul water, alter trailing routes, shift and intensify use in one watershed to "rest" another – and severe impacts to known (and unknown unsurveyed) populations may occur. AOPs are drawn up when rare plants are under snow, and there realistically will just not be surveys preceding shifted and altered uses under AM. And again, many of the AM actions conflict with maintenance and recovery of rare plant populations as they may further spread weeds, concentrate sheep disturbance, and have other avers effects.

> **REPONSE 9bb1.** As described in the North Sheep Supplement (p. 2) the scope of analysis was limited. Sensitive plants were analyzed in the North Sheep FEIS (pages 4-50 to 4-63) and will not be revisited in the Supplement.

COMMENT 9cc1. Was the highly uncertain Adaptive Management part of the original ESA consultations – for Bull Trout, Canada Lynx, Gray Wolf?

> **REPONSE 9cc1.** The proposed action, which includes adaptive management, was included in all ESA consultations.

COMMENT 9dd1. The Application of the loose and uncertain Adaptive Management scheme carries a high risk of expanded irreversible loss of soils, microbiotic crusts, sagebrush communities with appropriate composition, function and structure, and

necessary habitat components for Sage Grouse, Pygmy Rabbit, Brewer's Sparrow and other native biota. Systems under stress from Global Warming and long-term degradation are very likely to be less resilient and slower to recover from disturbance – even if recovery is at all possible.

> **REPONSE 9dd1.** Adaptive management is designed to allow corrections to occur in a ready fashion when monitoring shows there is detrimental activity occurring. The ability to make adjustments or significant changes to management in a timely fashion should prevent further deterioration from going unchecked, and minimize adverse impacts on biotic resources.

COMMENT 9ee1. There will be a continued inconsistency between the Forest Plan and the ROD (if the proposed near-status quo plus highly uncertain Adaptive Management alternative is chosen), because no meaningful changes in grazing will occur, and there has been no real explanation provided of how Adaptive Management will improve conditions, and not just make them worse. There are no site specific or substantive actions of any kind identified to improve and reconnect fragmented sagebrush habitats here.

> **REPONSE 9ee1.** Meaningful changes on both North Fork-Boulder and Baker Creek allotments have occurred since this process of revising the AMP began. Considerable areas have been both closed to grazing, other large areas rested, and in the case of North Fork-Boulder rested seasonal long for two consecutive years. Additional changes will occur to meet resource needs, such as post fire rest on Baker Creek to further altering or refining trailing routes, and reducing days use in particular drainages.

COMMENT 9ff1. Page 12 (North Fork-Boulder S&G Allotment AMP) – A controlled "experiment" is not possible to evaluate the effectiveness of different adaptive management strategies such as varying the number of AUMs, the timing, season of use, etc. if the Forest Service is also changing the annual indicators. If there are two or more variables versus just the livestock management plus the stochastic inputs of climate, weather, geology, aspect, etc.

> **REPONSE 9ff1.** This section is not intended to describe a controlled experiment but application of monitoring and associated management practices on-the-ground in response to monitoring results.

Range - Sub Issue 2 – Range Capability

COMMENT 9a2. WWP is also concerned that the agency has failed to adequately analyze and provide complete information about the capability and suitability of these lands to support grazing by domestic sheep. The Forest Service must provide more complete and detailed maps of lands deemed capable of grazing by domestic sheep showing all four Region 4 criteria for capability, and the agency must complete full

analysis in the Final SEIS of the impacts of domestic sheep grazing and trailing on lands deemed non-capable of supporting grazing by domestic sheep. The 40 year old REA data used in the draft SEIS fails to include data on highly erosive soils which is a critical part of determining capability in conformance with Region 4 standards of these lands to support domestic sheep grazing.

> **REPONSE 9a2.** The capability determinations described in the North Sheep Supplement- section 3.2.4.6 utilized past and current range analysis data. This data was collected following protocols including those in the cited Range Analysis Handbook which evaluated erosion potential, ground cover, etc. This data was further modified and updated during the allotment specific capability assessment (SEIS pp. 41-42) consistent with Forest Plan Guideline RAGU01 (Forest Plan p. III-46) which removed additional areas based on landtype classifications, soil cover criteria, etc. The original analysis was modified and updated to make it consistent with current Forest Plan direction and criteria such as that used in the Forest Plan Capability Model. Documentation of the criteria used in the Forest Plan Capability Model and RAGU01 are found in the Rangeland Resources Technical Report No. 1 for the Boise, Payette, and Sawtooth National Forests Plan Revisions, USDA Forest Service, R4, July 2003 (Forest Plan Revision Project Record Document No. 2471). The allotment specific analysis identified differences in capable acres both in terms of location and amount (SEIS pp 39 – 45). Capable acres in the allotment specific analysis show approximately 7400 acres more capable grazing areas on the allotments than the Forest Plan level analysis (SEIS pp. 43). The allotment specific analysis provides a more accurate analysis than the Forest Plan level model (SEIS p. 42).

COMMENT 9b2. The SEIS has reworked its capability analysis to arrive at additional capable acres... where lands that are currently not producing forage are suddenly claimed "capable" for forage production, apparently relying on these claims in the absence of public knowledge about the true conditions prevailing on the ground. Table Range 3-1 in the SEIS presents the capable acres based on the Forest Plan Model and the Allotment REA Model, which remains shrouded in uncertainty and obfuscation. The following Table presents that same analysis as percentage of allotment area compared to total allotment acres with the change between the two models.

Allotment	Capable Acres	% Forest Plan Model Capable Acres	% REA Model Change from FP Model to REA Model
Fisher Creek	25.1	26.4	+1.3%
Smiley Creek	13.2	12.9	-0.3%
Baker Creek	12.3	20.6	+8.3%
North Fork/Boulder	15.2	21.1	+5.9%

> **REPONSE 9b2.** Please see Response 9a2.

COMMENT 9c2. The Table makes clear that no significant change in capable acres was found in the Fisher Creek and Smiley Creek Allotments with only small increases in

Baker and North Fork Boulder Allotments. Both models are fatally flawed for the reasons explained below. There is no listing of areas to be closed, such as upper elevation basins and ridgetops, and subtraction of those acres from the capable acres.

> **REPONSE 9c2.** The issue of computing capable acres was adequately displayed in the North Sheep Supplement on pages 38-42.

COMMENT 9d2. Forage Production >200 lb/acre. The SEIS capability analysis leaves much to be desired and claims to be a "conservative" model in arriving at capable rangelands. The model uses data from the 1960's to claim that the Potential Vegetation Groups (PVGs) producing over 200 lbs. of forage per acre were included as capable. The SEIS does not discuss whether this "forage" is desirable for sheep or includes species of low desirability for sheep, does not recognize the preference of sheep for forbs over grasses. Nor does the model provide any data validating that current conditions allow forage production to meet the capability criteria or the forage needs of livestock or habitat and forage needs of wildlife.

> **REPONSE 9d2.** See Response 9a2. Evaluation procedures described in Chapter 40 of the Range Analysis Handbook (USDA FS, 1964) are based on the ratings of desirability of plant species for grazing use. The 1964 analysis process used a threshold of 50 lbs. forage production per acre for identifying capable lands and calculating tentative grazing capacity. Both the Forest Plan Capability model and the allotment specific capability analysis conservatively used a much higher threshold value of 200 lbs. of forage per acre to identify capable lands and for calculations of tentative grazing capacities.

COMMENT 9e2. The Figures on SEIS pages 39 and 40 show the dispersion of capable and non capable lands with capable lands located spottily among much larger areas of non-capable lands. These figures illustrate the impracticality of attempting to graze these allotments because of the great likelihood of large areas of non-capable lands being placed at risk and degraded by livestock trailing, grazing, bedding and watering. While the SEIS indicated that Forest Range Staff had ridden the allotments and viewed conditions where the bedding, watering and trailing locations occur, there was no mapping or documentation of the location and extent of these areas of heavy use or where they occur relative to the capable and non capable lands. The SEIS did not present any definitive mechanism to protect the non-capable areas while grazing the capable areas, if those are truly capable, which the SEIS analysis has failed to demonstrate.

> **REPONSE 9e2.** The depiction of capable grazing lands does not attempt to define land that is capable of being grazed under all possible management intensities, prescriptions, management scenarios, etc. It does not attempt to define areas that should never be exposed to the presence of livestock. It provides a reasonable, conservative assurance that the areas of land depicted are capable of being grazed. It does not define nor depict decisions that lands not displayed as capable are incapable of being grazed or should not be managed for livestock grazing. The model was used to estimate the amount of Forest rangelands lands

that would provide a forage base for supporting livestock grazing under typical management scenarios and conservative grazing management practices (SEIS p. 32). Not identifying an area as capable does not mean it cannot be crossed by livestock or some forage removed by livestock. For example, in areas with enough tree canopy to reduce forage production to less than 200 lbs/acre does not mean livestock could not or should not pass by or remove some forage while passing by. It just means that the area was not deemed to have enough forage production to be used as a base for determining grazing capacity.

The analysis of effects of livestock grazing in Chapters 4 of the North Sheep EIS and the North Sheep Supplement describes effects of grazing on all grazed lands on the allotments, not just lands identified as "capable" by the Forest Plan Model or the allotment specific capability analysis. Management direction developed to manage grazing impacts to rangelands which include Forest Plan standards and guidelines, desired conditions, etc. also apply to all lands within the allotments.

COMMENT 9f2. Grazing Capacity - The SEIS analysis used a value of 7 lb/day of forage for a ewe and lamb. It did not clarify whether this was air dry or oven dry weight. The analysis also admitted that some ewes had twin lambs, but did not reveal whether most have twins, or only a few have twins. The weights provided in the SEIS are suspect in view of current USDA statistics on sheep weights. Based on current USDA published weights for ewes and lambs, adult domestic sheep weigh from 165 to 440 pounds, and lambs about 129 pounds.

REPONSE 9f2. During the early part of the grazing season, most bands on the allotments are mixed bands, with both twins and single lambs. Lamb weights at shipping average around 130 lbs. Ewes average around 165 lbs. In late July or early August, lambs are removed from the allotments and the bands are made up of dry ewes (known as "drys"). These factors are described in the North Sheep Supplement on page 45. For some lamb bands, the 7 lb rate may be low. For dry bands, the 7 lb rate would be high. The 7 lb. rate was used to approximate forage use for the entire season (SEIS p. 46). While not cited in the Supplement, the 7 pound figure is air dry weight. This data were used to calculate tentative capacity information. Appropriate levels of grazing use are determined as described in the entirety of section 3.2.4.7 of the North Sheep Supplement.

COMMENT 9g2. The forage consumption rate for sheep given in the 1964 R4 Range Analysis Handbook was 3.3% of body weight per day consumed as air dry forage weight. If these figures were used to calculate forage consumption rates as air dry values, the range for a ewe and one lamb would be 9.7lb/day to 18.8 lb/day. The Forest Service must include a permit provision that provides rancher certification as to the number and weights of ewes, rams and lambs grazed on the allotments so that the public can be assured that the full forage consumption is billed and the taxpayers are not further subsidizing the sheep industry due to undercharging for the actual forage consumed. Lamb weights should be recorded as the average from the time they enter the allotment until they leave the allotment.

REPONSE 9g2: Please see Response 9f2. Calculations for actual Billing for grazing use is not based on pounds of forage consumed. It is based on the number of days that the sheep use National Forest System lands. The direction for calculation of grazing fees is described in section 2238 of the Forest Service Manual. The scope of the analysis for this Supplement is not the same as the original analysis. The issue of certifying weights raised in this comment is not within the scope of the Supplement analysis.

COMMENT 9h2. In addition, the capability analysis which you prepared in the SNSEIS at pgs 31-44 shows only small percentages of the subject allotments are capable for sheep grazing, with these capable areas scattered piecemeal throughout the allotments. The SNSEIS failed to analyze the continued effects of domestic sheep grazing on the non-capable areas, most of which remain open for grazing under the SNSEIS's preferred alternative, 2.

REPONSE 9h2: Please see Response 9e2.

COMMENT 9i2. Since the time the REA mapping and procedures were developed (the 1960s), there is a greatly heightened awareness of the importance of riparian areas. During the 1960s, riparian areas were considered sacrifice zones. Since that time, a wide array of riparian literature (Belsky et al. 1999 and scientific documents described in other WWP comments) demonstrated the adverse effects of domestic livestock grazing. So - to provide an ecologically credible 2007 understanding of the "Capability" of lands to withstand livestock grazing and trampling disturbance, the sustainability of use, and to prevent undue degradation of lands and waters and habitats, the Forest must incorporate new info on riparian areas. If the Forest argues that "We can't do that –Capability procedures are set in stone"- then riparian information (as with information the grave risks of proliferation of invasive species) must be integrated systematically into a Suitability Determination, and an examination of the overall health and Capability for the land to supply goods and services while protecting natural values.

REPONSE 9i2. Riparian areas do fall within the capability evaluations considered at both the Forest Plan and allotment-specific level. Specific criteria for selecting out riparian areas were not used except as related to land types and soil erosivity information displayed in these models. Suitability decisions in the North Sheep FEIS which closed specific areas were made in part based on observed effects of grazing in riparian areas. Specific riparian areas of concern were identified for rest until the achievement of specified improvements in conditions occurs. Desired conditions for riparian areas have been established in the North Sheep FEIS and the North Sheep Supplement -Appendix C. Grazing use standards for these areas were established in the 2003 Forest Plan. In total, these processes and direction incorporate current science into riparian area management. Monitoring and adaptive management direction in the North Sheep Supplement and in its Appendix C - AMPs provide the tools to ensure that where needed, additional short-term and long-term suitability decisions can be

made.

COMMENT 9j2. We appreciate the additional information included in the DS-FEIS regarding the methodology for assessing capable and suitable lands for grazing. The capable and suitable lands are dispersed and discontinuous within the allotments. Consequently, it is likely necessary that bands of sheep must traverse substantial areas of incapable and unsuitable lands to access the various suitable lands. We are concerned about potential impacts to the environment that could be caused by disturbing these unsuitable lands. There is no information included about the amount, type, condition, and vulnerabilities of the incapable and unsuitable lands that would be traveled and potentially grazed and/or damaged by the sheep bands. We recommend that the final DS-FEIS include this information.

> **REPONSE 9j2:** Please see Response 9e2. Some areas that contain large percentages of non-capable lands have been removed from grazing (Fisher Cr. & Smiley Cr. ROD, p. 4; and in the North Fork-Boulder & Baker Cr. ROD p.2). An example of this is on the Baker Creek allotment, where the drainages on the southern portion of the allotment from Baker Peak to the South Fork of Baker have been removed from livestock grazing, as well as the upper Norton Creek to the head of Newman Creek. Closures based on large stretches of non-capable in relation to capable ground is common to all four allotments. Effects of grazing areas not classified as capable were considered in the context of possible sheep use routes and patterns within the analysis area under the action alternative being considered. Consideration was not limited to those specific areas delimited on capability maps. Identification of potential grazing impacts based on routes that cross non-capable range constitutes such site specific analysis.

COMMENT 9k2. The Sawtooth NF plan found 25% of the lands as capable. The Forest GIS data showed the capability as: Baker Cr 12%, Smiley Cr 13%, North Fork Boulder 15%. Yet the Proposed action sought to graze 30% of the North Fork, and 29% Smiley Creek. The Forest violated NFMA by: 1. Not explaining in the Forest Plan or EIS how it used the 5 capability criteria to calculate the 25% capability figure; 2.Not disclosing GIS information on specific allotments in any NFMA or NEPA document; 3. Ignoring capability in the original North Sheep EIS. If figures were computed inaccurately, EIS must explain why, and if actual conditions differ, the SEIS must now explain how.

> **REPONSE 9k2.** Please see Response 9e2. The analysis required by the Court (Case 4:05-cv-00189-BLW Doc. 47, 2/7/2006, p.15) is included in the North Sheep Supplement, pp. 31- 46 and pp. 91-96.

COMMENT 9L2. The Mapping of Capability in the SEIS is not even done at a scale & presentation level that allows understanding of the location of many of the known and acknowledged problem areas, including in relation to Capable habitats. Larger-scale mapping with identifiers such as drainage location, topography, areas of concern and degradation, MIS & sensitive species habitats overlaid would provide some basis for understanding of the values & conflicts associated with grazing use in these very

important SNRA & other lands.

> **REPONSE 9L2.** Maps were printed at a scale capable of being displayed on a single page in the printed document to reduce production costs and for ease of display. These maps were developed from GIS data files that were developed at a much finer scale sufficient to address allotment specific capability. This data is available in the project record. Larger scale maps are also available in the project record.

COMMENT 9m2. Sheep movement across the landscape above the valleys is confined to narrow and often discontinuous fingers of Forest-mapped Capable lands, meaning that sheep use here is annually disturbing soils and vegetation communities across large areas of lands that are Not Capable and the same areas of damaged Capable lands. Due to topographic, rock/talus, dense timber and other confines – year after year sheep are funneled into the same already-degraded areas and healing or stability can not occur especially under the short growing seasons for vegetation recovery, and now the added stress of climate change.

> **REPONSE 9m2.** Please see Response 9e2.

COMMENT 9n2. Current baseline information of the condition of the drainage arteries, their vulnerability to erosion under continued grazing use, and the downstream effects on aquatic species habitats, must be provided as part of a valid 2007 North Sheep Capability and Suitability Determination for these Bull Trout and anadromous fish watersheds. The effects of chronic grazing disturbance – on both Mapped Capable as well as Incapable Lands –on these arteries (sediment conduits in their current degraded state) must be fully considered in making any Determination of the Suitability of these lands for continued grazing use/disturbance.

> **REPONSE 9n2.** Existing conditions of resources in the analysis area are disclosed in chapter 3 (affected environment) of both the North Sheep FEIS and the Supplement. These were taken into consideration during development of the action alternatives. The scope of the North Sheep FEIS and Supplement necessitated description of existing resource conditions with specific regard to past grazing effects. Significant livestock grazing related impacts and issues were identified based upon their occurrence within the analysis area, not upon whether they occurred in suitable, unsuitable, capable, or non-capable lands. Design of the action alternatives addressed suitability in the form of permanent area closures and required rest for specific areas.

COMMENT 9o2. This latest North Sheep SEIS is a cover-up for the fact that the severe constraints of very limited Capable land, and the absolute necessity for sheep to move across (hooves disturb unprotected soils in trailing and grazing) of Forest-mapped Non Capable lands, as well as those lands mapped Capable that are suffering chronic long-term degradation from livestock use, are not able to stabilize and heal.

REPONSE 9o2. Please see Response 9e2.

COMMENT 9p2. The Forest must carefully examine the location of drainage areas in relation to what either sets of mapping (REA or Forest Plan) mapping shows as "Capable" lands. Look at the maps of the SEIS that show so little Capable land! This should show any rational person that these lands can not support livestock use–even under the Forest's own models. Many of the narrow areas COLORED (shown as Capable under the Forest's REA) are part of this extensive drainage network for which the Forest provides no data of any kind on ecological health, bank stability, perennial vs. increasingly intermittent or reduced flows, alterations in flows over time, desertification, etc. Nearly all of the fingering and branched land areas shown as Colored on all of the Capability Mapping contain drainages at their heart. These drainages are often in very poor and unstable condition. Yet the Forest does not show these drainages–not even the mainstems–in its SEIS Capability maps! See Baker Creek & North Fork Boulder SEIS 39, Smiley & Fisher (SEIS 40), Baker & North Fork Capability Map (SEIS 43), Smiley Creek & Fisher Creek Capability Map (SEIS 44).

REPONSE 9p2. Limitations of the Forest Plan Capability model (model) were considered and are discussed in the North Sheep Supplement - chapter 3, section 3.2.4.1. Preliminary issues (those used to develop the proposed action and alternatives) are identified based on analysis of site specific existing conditions within the analysis area that are relevant to the type of analysis being performed. The absence of data (apparent or real) for a given area does not mean that the area was not scrutinized for issues relevant to the purpose and need of the analysis. The assertion "These drainages are often in very poor and unstable condition" is not site-specific. In the absence of further detail, issue identification in the existing analysis constitutes the best information available.

COMMENT 9q2. The SEIS actions include such provisions as Water Hauling (which itself has serious adverse long-term impacts to soils and vegetation and habitats of sagebrush communities and Sage Grouse and other sensitive species habitats where it would occur) to shift use off streams. So it is essential also to understand just how tiny any grazable strip of land near mainstems really is if sheep use is also somehow to avoid the stream areas. The Forest has also never examined the supposed new protections in light of the many past violations of use areas and other compliance issues here.

REPONSE 9q2. Water hauling is primarily used where there is no live stream or developed water source. The portable troughs are placed on upland sites with capacity for one watering at each site. Potential effects of the proposed action are disclosed in Chapter 4 of both the North Sheep FEIS and Supplement. Water hauling was not identified as an issue associated with implementation of the proposed action.

COMMENT 9r2. Please explain how Forest Plan mapping may differ from the supposedly more site-specific mapping found in the EIS – especially in considering and weighing the factors plugged into the Models, and the condition and effects of grazing

use on drainages? The Forest Plan placed considerable emphasis on riparian conditions, and the Forest must fully explain if that modeling more fully took into account the effects of grazing narrow riparian stringers by mapping them as less or Non Capable. How does any version of the Forest's Capability mapping take into account the degree of degradation that exists in these extensive tributary networks? Forage production in an upland site is not a surrogate for understanding the condition of the drainage network and its Capability to withstand grazing and trampling effects in steep terrain with highly erodible soils.

> **REPONSE 9r2.** Pages 38-43 of the North Sheep Supplement discuss the variation between the Forest Plan Capability Model and the Allotment Specific model. Riparian areas do fall within the capability evaluations considered at both the Forest Plan and allotment-specific level. Specific criteria for selecting out riparian areas were not used except as related to land types and soil erosivity information displayed in these models. Suitability decisions in FEIS which closed specific areas were made in part based on observed effects of grazing in riparian areas. Specific riparian areas of concern were identified for rest until specified improvements in conditions were achieved. Desired conditions for riparian areas have been established in the North Sheep FEIS, Supplement, and Appendix C of the Supplement. Grazing use standards for these areas were established in the Forest Plan. In total, these processes and direction incorporate current science into riparian area management. Monitoring and adaptive management direction in the North Sheep Supplement and Appendix C - AMPs provide the tools to ensure that where needed, additional short-term and long-term suitability decisions can be made. Grazing impacts on tributary streams are generally confined to those areas that are readily accessible, and usually are not a majority of the drainage. Those portions of a tributary that pass through heavy timber, talus areas, overly steep slopes, or are bordered by heavy willow or boggy areas receive little or no use. Those segments that are subjected to grazing are only used once per season, to avoid un-acceptable bank damage or use on riparian vegetation.

COMMENT 9s2. Better, more detailed mapping must be provided for both the public and Forest to understand -the lay of the land, the extensive drainage network and the location of degraded areas in relation to bottlenecked sheep use and movement patterns. Mapping, information on the current condition and flows of riparian and tributary areas including springs and seeps, must be fully examined. Information must be provided that overlays the current road network and mining disturbance with drainage arteries & their ecological condition–to better understand the cumulative effects of roading, grazing, mining, tree cutting and other disturbance on sediment production & its effects on important habitats for native biota. This is important on the lower drainage areas and flats–as motorized trails and roading have expanded – partially as a result of recreational uses, but also as a result of the logging and cutting of red trees/dead lodge pole pines. Unmapped routes crisscross bare-sided tributary drainages on flatter valley floor areas that carry flows during runoff. Sheep here have de-stabilized banks. e.g. Little Beaver.

> **REPONSE 9s2.** The GIS data and maps used for the analysis were generated at

scales sufficient to address capability. This data is available in the project record. REA maps were made part of the North Sheep FEIS project record. These maps are on 7.5 inch USGS maps that show many of the springs and tributaries. Routing maps submitted to the North Sheep FEIS record show only general routes and not site specific crossings or bottlenecks. In regard to the effect of roads, on both the Baker Creek and North Fork-Boulder Allotments numerous roads have been closed in both drainage bottoms and in upland sites, as well as having dispersed recreation sites designated, with many sites that were detrimental to stream courses or meadows closed. No special access is granted for grazing purposes. The Rangeland Resources Technical Report #1 for the Boise, Payette & Sawtooth National Forests Plan Revision and North Sheep Supplement (Section 3.2.4) describes information used to make capability determinations. Issue identification is based on the best information and mapping available at the time. Existing conditions (to which livestock may have contributed) are disclosed in chapter 3 of both the North Sheep FEIS and Supplement. Effects of the alternatives considered in detail on streambank stability are disclosed in chapter 2, section 2.4.2 of the North Sheep FEIS and updated chapter 2, section 2.4.2 of the Supplement.

COMMENT 9t2. Where are drainage areas in Non Capable lands that will be traversed by, disturbed by sheep in grazing use here? How much worse are the effects of annual and chronic sheep grazing disturbance on drainages areas in non-capable lands?

REPONSE 9t2. Please see Response 9e2. General grazing routes are described in the Grazing Prescription section of the Allotment Management Plans (SEIS Appendix C). For example, portions of the East Fork of Baker Cr. and Newman Cr. drainages on the Baker Cr. Allotment and portions of the lower Easly and Goat Cr. drainages on the North Fork-Boulder Allotment include areas where some trailing may occur on lands not identified as "capable". Examples of actual grazing routes compatible with the proposed action for allotments within the analysis area are provided in 2007 AOIs in the project record for the relevant Allotment. Effects of the alternatives were considered in the context of possible sheep use routes and patterns within the analysis area considered. Potential effects of the alternatives considered in detail for all areas grazed on the allotments are disclosed in Chapter 4 of both the North Sheep FEIS and the North Sheep Supplement.

COMMENT 9u2. Springs and eroding steep slope tributaries are not even identified. Yet the Forest predicates its AMPs, AOPs and EIS analysis on the fantastical belief that somehow sheep will be moved through both Capable and Non Capable lands and not degrade or be bedded by riparian areas. Well, in order to make that claim and understand the feasibility of even placing such supposed restraints on the permit/AOP, or the ability of even the most well-intentioned permittee to follow such Terms – then the Forest needs to have current information on the location of all perennial, intermittent drainages and riparian areas in the path of the sheep use/movement so it can determine if grazing without new or accelerated damage is at all feasible. Effects of sheep disturbance near

mainstems may be amplified by roading disturbance in bottlenecked portions of watersheds. Example: Beaver Creek eroding bare-banked gullying trib. crossed by main access road.

REPONSE 9u2. See Response 9t2. Chapter 2, section 2.4.2 of the North Sheep Supplement summarizes potential effects of the alternatives considered in detail on soil and watershed resources.

COMMENT 9v2. Several practices identified – such as open or loose sheep herding – are impossible to conduct in moving sheep through the narrow bottlenecks in eking out AUMs in the scattered and stringer Capable areas here. Sheep movement is confined, year after year, into the same narrow areas of Capable and Non Capable lands.

REPONSE 9v2. Those areas that are bottlenecks do create a problem for trailing sheep. Generally these areas are small in when considering the overall landscape and size of the allotments – especially as the larger areas of non-capable lands have been closed. Disturbance cannot be totally eliminated, only minimized, as with building trails through these same areas. This comment fails to identify specific areas where such concerns might exist. In the absence of further detail, issue identification in the existing analysis constitutes the best information available. The assertion that "Several practices identified – such as open or loose sheep herding – are impossible to conduct in moving sheep through the narrow bottlenecks" is speculative and therefore falls outside the scope of this analysis.

COMMENT 9w2. But somehow the Forest concludes that this dramatic decrease and extirpation of the Sage Grouse population here apparently doesn't matter. It claims no further Capability analysis is needed because watersheds within these allotments were not identified as "high priority watersheds in the 2006 Sage Grouse Conservation Plan." (p. 87).

REPONSE 9w2. The North Sheep Supplement, Section 3.8.2.3.1.0 describes the capability analysis for sage-grouse on the allotments. Section 3.8.2.3.1.2, sub-heading "Sawtooth Forest Plan Direction Addressing Restoration of Lands in Less Than Satisfactory Condition" discloses existing authorities "To address concerns over declining habitat conditions", with allotment specific management area direction. Pages 107 and 108 describe effects of the alternatives with respect to restoration of sage-grouse habitat as it relates to this action.

COMMENT 9x2. The Capability Maps show that sheep make significant use of conifer sites. Some of the large Gaps between "capable" areas are forested vegetation where sheep use and trailing may compact soils, alter understories leading to denser tree seedlings, more fire prone and unhealthy stands, and otherwise affect forest conditions that may result in altered fore regimes that may affect Pileated habitats.

REPONSE 9x2. Sheep make only light use of conifer stands as they pass through, except for bedding along the fringes where these stands adjoin water

sources. Open timber types that have bunch grass understory, reflect insignificant impacts from grazing. Those stands with understory of pine grass or elk sedge receive negligent amounts of use and are impacted primarily from trailing. Sheep impacts to timber have generally only been associated with new seedling establishment following timber harvest, where they may graze some terminal buds or trample new seedlings.

Results of the final Supplement to the July 2003 Final Environmental Impact Statement for the Southwest Idaho Ecogroup Revised Forest Plans (MIS Capability Supplement) are disclosed in chapter 3, section 3.8.2.3.1.1 of the North Sheep Supplement. The Capability Supplement did not identify capable MIS habitat for pileated woodpecker, nor did it identify lands in less than satisfactory condition as a result of livestock grazing for pileated woodpecker. Given this, there will be no further consideration of pileated woodpecker relative to the requirements of 36 CFR 219.20 in this Supplement.

COMMENT 9y2. When the Forest determines "Capable rangelands" - is it ONLY looking at Upland conditions? And not integrating the Ecological Condition (such as bare eroding gullies) of a drainage or watershed into this consideration? If not, this must be done in order for the forest to comply with the many Goals, Objectives and promises made in the Forest Plan concerning riparian areas.

REPONSE 9y2. Both riparian and upland sites are analyzed. If a stream bottom is capable, but the slopes leading to it are over-steepened, or barren, the stream area would be removed from use as not accessible. (Example: Parts of the South Fork of Baker Creek) The Forest Plan Capability mode was clarified in chapter 3, section 3.2.4.1 of the North Sheep Supplement. The model was not used to identify issues associated with livestock use. Such issues were identified based on site specific analysis. Attainment of Forest Plan Goals and Objectives was addressed in the design of the action alternatives.

COMMENT 9z2. The Forest claims projects have been implemented – yet only minor things have occurred. Those we are aware of have shifted and intensified sheep disturbance into sagebrush or highly vulnerable higher elevation habitats – such as the "alternative" trailing to avoid private lands. How has the Forest removed forage and use on private lands from its modeling and mapping?

RESPONSE 9z2. Capacity estimates were used to establish projected grazing allocation under the Proposed Action Alternative (Table: Range 3.4. / North Sheep Supplement). Forage from private lands was not included in capacity estimates.

COMMENT 9aa2. In order to graze stringers of capable lands livestock must be moved across and graze in large areas of eroding, steep, or otherwise Uncapable lands. The Forest has also not conducted an integrated examination of the effects of grazing currently, and grazing under the loose and uncertain AM scheme on recreational uses of

these lands. Like the sheep, most recreational uses are compressed into flatter valley floors, along mainstems near watercourses, and scenic higher elevation areas. These are the very sites where any AM shifts of sheep use will only result in increased effects to other high use recreational areas. Please provide scientific documentation that shows that AM (SEIS at 17-21) "has been effective in improving resource conditions" (SEIS at 21). Where? How? For how long?

> **RESPONSE 9aa2.** Please see Response 9e2 and Response 9t2. To get to these scenic higher elevations, trailing over non-capable ground is necessary to graze capable lands. Areas where there is little capable ground, does not warrant crossing sizable expanses of non-capable areas and these for the most part have been closed.
>
> Effects analysis of potential grazing impacts based on routes that cross non-capable range constitute such site specific analysis. Cumulative effects of recreation and grazing were considered in the North Sheep Supplement (Chapter 4, section 4.4.4.2), but were not identified as issues requiring additional consideration and/or clarification in the Supplement. The North Sheep Supplement does, however, provide clarification as to how potential adaptive management actions such as "shortening the period of use to reduce or eliminate grazing impacts" may be implemented to address "periods where plants or other resources are most susceptible to damage, or avoid conflicts with other uses such as during periods of high recreation use" (chapter 2, section 2.2.2.1, sub-heading "Adaptive Management Actions", item # 3a.)

COMMENT 9bb2. How can the Forest, under such circumstances, proposes essentially status quo stocking on these very same lands under the Proposed Action, and call such use sustainable – or Suitable? The weed problem alone necessitates examination of a much broader range of reduced grazing, and grazing closure alternatives. The Forest capability Model is JUST ONE PART of understanding the overall Capability of lands and sustainability of uses. What is the Capability of these lands for withstanding sheep use in the face of aggressive weed infestations? The Forest can not practice both Integrated weed management, and graze sheep in this bottlenecked area all at the same time.

> **RESPONSE 9bb2.** Weeds are important factor in judging suitability not capability. Some confined areas that may have substantial populations of weeds can be avoided and treated. Other areas can be grazed early prior to seed development, and still other with wide spread infestations may be closed to use. Under once over grazing, days lost due to avoidance or closure or not made up elsewhere where grazing is currently occurring. Limitations of the Forest Plan Capability model (model) were considered and are discussed in chapter 3, section 3.2.4.1 of the North Sheep Supplement. The potential for spread of noxious weeds was addressed in the Supplement, and was not carried forward as an issue needing additional consideration / clarification in the North Sheep Supplement.

The Supplement does, however, provide clarification as to how noxious weeds might be addressed under adaptive management. For example, chapter 2, section 2.2.2.1, sub-heading "Adaptive Management Actions", item # 8 (on p. 21) includes the potential to "Adjust grazing to address conflicts with other resource uses" including "use of sheep grazing as a tool for noxious weed management and site preparation for reforestation, management of sheep camps, fire and noxious weed prevention, etc".

Under the same sub-heading, item # 13 (on p. 22) "Vegetative Treatments – Nonstructural range improvements" provides "Actions include implementing vegetation treatments to achieve desired rangeland conditions including prescribed fire, noxious weed treatment, seedings, aspen stand treatments, sagebrush manipulation, etc. These actions may be proposed as adaptive management actions".

Forest Plan direction, as cited in the North Sheep FEIS further discloses existing authority as follows: Management Area Direction Specific to Baker and North Fork Boulder Allotments MA-04 – Big Wood River (Sawtooth Forest Plan, Volume 1 pages III-144-163).

- Rangeland Resources Objective 04111 - Prevent the spread of noxious weed seeds due to domestic sheep by adjusting or changing management practices, such as trailing route locations and driveway/grazing area seasons of use. Under adaptive management, such direction could be implemented elsewhere in the analysis area as necessary.

COMMENT 9cc2. The Forest makes passing mention of use of a 50% slope model – Why not choose to use a more conservative model in a landscape with steep, eroding batholith soils slopes where the Forest itself admits a great deal of grazing damage has occurred?

RESPONSE 9cc2. That portion of the Baker allotment that falls within the Batholith is primarily in the upper basins that were closed. There are also granitic instrusions in other parts of the allotment but are mixed with other soil types such as the Challis volcanics. Slope itself is not the only factor to consider, but the degree and dispersement of ground cover, and erodibility of soils needs to be factored in. The assumptions used in criteria development for rangeland capability determination, along with explanation of how capability criteria were developed, are disclosed in "Rangeland Resources Technical Report #1 for the Boise, Payette & Sawtooth National Forests Plan Revision.

COMMENT 9dd2. Under the Modeling process described in EIS at 33, it appears that an area had to be covered with water and show up as covered with water in the Ecogroup Model that was used. This means that the hundreds or thousands of spring, seep, intermittent trib, and other areas may have been INCLUDED as Capable, Yet there is no PFC or other info anywhere to provide an understanding of the condition of such areas.

Thus, the Forest did not conduct a site-specific assessment of these critical areas tat serve as conduits for delivery of sediment to streams. A review of the SEIS Mapping of capable lands shows this. Plus it even appears that the areas Mapped as Capable in the REA modeling include the "double-lined streams".

> **RESPONSE 9dd2.** Limitations of the Forest Plan Capability model (model) were considered and are discussed in chapter 3, section 3.2.4.1 of the North Sheep Supplement. Livestock grazing impacts to streams, riparian areas, and dependant TES species were considered and are disclosed in Chapter 4 of both the North Sheep FEIS and Supplement. The comment fails to identify specific sites where condition or sediment delivery might be an issue. In the absence of further detail, issue identification in the existing analysis constitutes the best information available. Project design and mitigation measures for the action alternatives address issues affecting streams and riparian areas within the analysis area.

COMMENT 9ee2. Modeling info at 35 shows that soil stability must be determined. Yet, there is no data on the stability of soils across the steep grazed Capable and grazed Noncapable areas. There is no information that allows the Forest to understand the stability of soils in and surrounding the vast drainage networks that act as sediment conduits to the mainstems.

> **RESPONSE 9ee2**. The Forest wide Capability Analysis and land capability groups developed for each Forest Plan at the Eco Group level were based on the reconnaissance level information that grouped a number of landtype associations having similar inherent performance characteristics. The Capability Model and resulting land capability groups are "averages" for landtype associations for each of the individual Forests. The Capability Model developed for the North Sheep Supplement was derived using the inherent soil properties for the specific landtypes that are representative of the analysis area and range analysis data that included evaluations of soil conditions and erosivity. See Appendix B of the Revised Forest Plan (Volume 2) for functioning appropriately values

COMMENT 9ff2. For the Forest and the public to understand just hw all modeling is applied, the EIS effort must include additional mapping that depicts all lands that are in each of the categories described as land types excluded from consideration as grazing lands. The SEIS appears (again, at the scale and poor mapping it is impossible to tell) that the Forest mapping of Capable lands includes scoured cirque basin lands, steep rocky lands, wet alluvial lands, and other areas that are to be considered Non-capable. See FEIS at 37.

> **RESPONSE 9ff2**. Limitations of the Forest Plan Capability model (model) were considered and are discussed in chapter 3, section 3.2.4.1 of the Supplement to the NSEIS. Lands considered during identification of issues associated with livestock use were not limited to those identified as "capable" in the model. The REA maps show that Capable lands do occur in the allotments in high basin /cirque areas. For suitability reasons, many of these areas were closed to further grazing.

COMMENT 9gg2. Larger maps and much more detailed mapping of Capable lands – under both Modeling schemes – must be provided so that an understanding, by watershed, can be obtained of what areas are located where. A detailed mapping must also show degraded areas, and locations of other concern, in relation to sheep grazing and trailing use at a scale and with identifiers that can be understood. The scale of this mapping simply does not allow understanding of Location of Modeled Capable lands in relation to landscape or other features, or of areas of known resource concerns. Overlaid on that should be systematically studied "problem" areas in both Capable and Non Capable lands. The Forest clearly does not want the public to understand how it is applying its Models. The Mapping is done at such a gross scale that it is nearly meaningless for comparison's sake between models, and in understanding ecological effects of grazing that must be understood to conduct a valid Capability and Suitability process.

> **RESPONSE 9gg2.** Maps printed in the North Sheep Supplement have to be at a scale sufficient to be displayed on one page in the printed document.. The GIS data and maps used for the analysis were generated at scales sufficient to address capability. This data is available in the project record. Limitations of the Forest Plan Capability model (model) were considered and are discussed in chapter 3, section 3.2.4.1 of the Supplement. REA mapping done at the scale of 1:24000 provides ample clarity in identifying capable lands. These maps are part of the Project Record. Lands considered during identification of issues associated with livestock use were not limited to those identified as "capable" in the model. The assertion that "The Forest clearly does not want the public to understand how it is applying its Models" is conjecture, and falls outside the scope of this analysis.

COMMENT 9hh2. Forest discussions of "forage" in Capability mapping suffer from serious flaws. Many of the middle elevation sideslopes grazed by sheep are comprised largely of elk sedge – a coarse graminoid largely unpalatable to sheep. This grows in clumps, surrounded by bare, loose trampled granitic soils. In places, even the elk sedge is dying and losing vigor due to the erosion and "pedestaling" of the clumps from trampling-caused erosion in interspaces between clumps. The Forest has no monitoring sites in sagebrush or sideslopes off the valley floor flats, despite these areas comprising a significant amount of the land area being grazed. How has the Forest factored weeds and unpalatable "forage" into its REA analysis? Is the REA based on the production of Yellow Toadflax, a noxious weed?

> **RESPONSE 9hh2.** This comment fails to identify specific areas where such concerns might exist. In the absence of further detail, issue identification in the existing analysis constitutes the best information available. Designated Monitoring Areas for "Sagebrush/Grass uplands" have been established and data recorded on all of the allotments within the analysis area, and are listed in the relevant AMP. Forage production estimates are based on production of "forage" (palatable species). Permanent plots were installed in the upper basins in Baker Creek, Smiley Creek –Frenchman's pasture, and North Fork-Boulder allotments.

In addition nested frequency plots were placed in East Fork Baker, Boulder Creek, and Easily Creek. In addition rapid upland assessment plots were conducted in numerous locations in the Baker Creek allotment.

COMMENT 9ii2. The Forest has provided no analysis of how it took its Tentative Grazing Capacity and integrated effects of grazing and trampling disturbance to Non-capable lands into an understanding of effects of grazing use, appropriate stocking, etc. Nor has it explained how shifted or altered use or AM changes will adjust stocking to Capable lands and AUMs on the land.

RESPONSE 9ii2. Capacity estimates were used to establish projected grazing allocation under the Proposed Action Alternative (Table: Range 3.4. / Draft Supplement). This establishes the maximum annual forage allocation to livestock that will be authorized without further NEPA analysis. Under the proposed action, this allocation will only be fully utilized in years when forage production is adequate to preclude unacceptable resource impacts. Annual Operating Instructions "tailor" herd movements to facilitate the use of available forage in a given year. Forage from Non Capable lands was not included in capacity estimates. Use of non-capable lands is incidental to the trailing of livestock through these areas. The nature of such trailing (with the specific intent of addressing livestock impacts) has been defined in the 2007 AOI for the Smiley Creek allotment as follows:

> "trailing will be defined as movement of a herd through a given area within a stipulated timeframe so as to minimize herd impacts (e.g. hoof impact, incidental grazing, etc.). Open herding (allowing the herd to disperse just enough to preclude concentrated hoof impact) will be employed on trailing routes".

Under adaptive management, such direction may be implemented wherever necessary within the project area.

COMMENT 9jj2. Even the gross scale mapping that the Forest has done shows that there are only tiny small pockets or stringers of Capable lands over large areas, and erodible soils, degraded waters, narrow tributary drainages, etc all must be traversed/trampled by sheep in order to graze the scattered, isolated, narrow pockets and stringers.

RESPONSE 9jj2. Use of non-capable lands is incidental to the trailing of livestock through these areas. The nature of such trailing (with the specific intent of addressing livestock impacts) has been defined in the 2007 AOI for the Smiley Creek allotment as follows: "trailing will be defined as movement of a herd through a given area within a stipulated timeframe so as to minimize herd impacts (e.g. hoof impact, incidental grazing, etc.). Open herding (allowing the herd to disperse just enough to preclude concentrated hoof impact) will be employed on trailing routes". Under adaptive management, such direction may be

implemented wherever necessary within the project area. Areas that have little capable ground, have been closed out as they offer little grazing value. Example of this include: the West Fork of Prairie Creek, Upper Lost Shirt, South Fork of Baker, and Alden Gulch. In North Fork-Boulder the West Fork, most of the East Fork, Murdock, Cunnard, Goat Creek, and upper North Fork are closed or avoided due to lack of capable ground. Routing through these allotments is limited, thus crossing non-capable ground is required and acceptable.

COMMENT 9kk2. Superimposed on top of this widely scattered and disconnected Capable landscape is a Proposed Stocking Rate that is grossly excessive – and rivals that for irrigated private land pastures! Total allotment acreage is 147,213 acres. The Forest REA Model finds 27,842 acres scattered and dis-connected Capable acres with 14,855 AUMs. Somehow, magically, the REA Model exactly corresponds with the current Permitted Use (Table 3-30, SEIS at 47). Then, the Forest after a whole series of largely unexplained "adjustments" only proposes to drop permitted stocking to 13,235 AUMs. Then on top of this, the Forest appears to be leaving the door open to stocking at even higher levels (see FEIS at 48, describing AM possibilities). This ignores the severity of the weed invasions, the fact that fish populations are "functioning at unacceptable risk" (SEIS at 76 – Frenchman Creek for example) or potentially extirpated, sensitive species habitat needs, etc.

RESPONSE 9kk2. Capacity estimates (SEIS section 3.2.4.7) were used to establish projected grazing allocations under the Proposed Action Alternative (Table: Range 3.4 SEIS). This establishes the maximum annual forage allocation to livestock that will be authorized without further NEPA analysis. Under the proposed action, this allocation will only be fully utilized in years when forage production is adequate to preclude unacceptable resource impacts.

COMMENT 9ll2. In its extremely limited discussion of riparian vegetation (SEIS at 79), the Forest claims that heavy stands of willows protect banks. There large segments of the mainstems and the other trib networks that are ignored here and that do NOT contain dense willow stands. In fact, sheep browse use of willows outside of the big marshy areas and beaver ponds is very high in lands accessible to sheep, and such use is only measures in isolated cherrypicked sites on mainstems – while sheep browse use on willows across the landscape is not monitored or systematically examined in this SEIS analysis.

RESPONSE 9ll2. This comment fails to identify specific areas where such concerns might exist. In the absence of further detail, issue identification in the existing analysis constitutes the best information available. Where once over grazing is practiced, use of willows is not considered heavy. Locations where sheep are allowed to congregate in one spot (e.g. at salt cakes), heavy use may occur. These are areas where monitoring if focused to avoid further problems.

COMMENT 9mm2. Table 3-3. SEIS at 47 shows that for the period from 2003 to the present, even in years when areas were not rested, stocking was significantly below the

numbers on the permit, or the numbers being proposed for continued use. So any "recovery" of any areas occurred under much-reduced stocking. Note: The Forest's "average" does not factor in areas "rested" due to fire, or injunction. So the "average use" is actually much lower. Please provide Actual Use over the past 20 years so that the full extent of DECLINES in resources under stocking at well below the permitted level can be understood.

> **RESPONSE 9mm2.** Actual use records are maintained in the relevant allotment folder and are available for review under authority of the FOIA. The apparent concern here is addressed by "once over" grazing management - which reduces the potential for overuse, and adaptive management / existing permit authorities - which provide for variable numbers and season (within a maximum permitted livestock allocation) to address issues associated with seasonal variations in forage production.

COMMENT 9oo2. Please provide full mapping of the use referred to in SEIS at 47 – what were the routes discussed with permittees? How did they conflict with Wolves, Lynx, Pikas, wolverines, Sage Grouse habitats, etc.? How much more use was and will be shifted into NON-Capable lands through avoidance of streams or other Conflict areas?

> **RESPONSE 9oo2**. Grazing routes discussed with permittees are reflected in Annual Operating Instructions, copies of which are maintained in the relevant allotment folder. Potential conflicts between livestock and the species listed were considered and are disclosed in North Sheep FEIS - Chapter 4, and the associated BA/BEs for, and during consultation with ESA regulatory agencies. Use of non-capable lands is incidental to the trailing of livestock through these areas. The nature of such trailing (with the specific intent of addressing livestock impacts) has been defined in the 2007 AOI for the Smiley Creek allotment as follows: "trailing will be defined as movement of a herd through a given area within a stipulated timeframe so as to minimize herd impacts (e.g. hoof impact, incidental grazing, etc.). Open herding (allowing the herd to disperse just enough to preclude concentrated hoof impact) will be employed on trailing routes". Under adaptive management, such direction may be implemented wherever necessary within the project area.

COMMENT 9pp2. The Forest cannot conduct a valid Capability and Suitability assessment until it analyzes and maps surveyed occurrences of rare plants across this area, and identifies sites and populations where sheep use may conflict with these species. No valid Biological Evaluation is possible until that is done. Many rare native plats are highly adapted to specific soil types, and many native plants may be adversely affected by sheep waste that contains excessive nutrients that exotic weeds thrive on.

> **RESPONSE 9pp2.** Potential effects of "sheep use" to sensitive species were considered and are disclosed in the Biological Evaluation for the North Sheep FEIS. Also, within the North Sheep FEIS, Paragraph 4.8.2.3.1 on page 4-76-4-77 addressed effects of Proposed action on Canada Lynx, Gray Wolf and

Wolverine.

COMMENT 9qq2. There is no valid basis provided for continuing to graze and trail in isolate remote pockets of supposedly Capable lands, and fragile middle and high elevation watersheds with numerous ESA and sensitive species conflicts including Conflicts with the Gray Wolf, American Pika, Canada Lynx, Wolverine and other important and sensitive species– when only small isolated patches and stringers of habitat are Capable of such use even under the Forest's own models. In order to graze the isolated patches of "forage", the sheep must traverse vast areas of public lands that are Not Capable of supporting livestock use, and traverse remote areas essential for native carnivores. See SEIS Capability Maps. Where within this landscape are wolverine denning-type habitats? Gray Wolf denning habitats? Canada Lynx denning habitats? Where are areas that are "hot spots" for prey species essential for foraging to feed these young carnivores? The Forest must analyze the regional and antional significance of the important native carnivore community that may inhabit this landscape, and examine the level and degree of its impairment by continued sheep use.

RESPONSE 9qq2. Please see Response 9e2. Effects of the action alternatives on TES and sensitive species are disclosed in the Biological Assessment and Biological Evaluation (respectively) for the North Sheep EIS. These effects were considered in the context of possible sheep use routes and patterns within the analysis area under the action alternative being considered. Consideration was not limited to those specific areas delimited on capability maps. This is appropriate in light of Judge Winmill's February 7, 2006 Memorandum, Decision, and Order which states: "If land is found incapable at the forest plan level, it may still be grazed if site-specific studies show actual conditions support grazing. Biological Assessments and Evaluations analyzing potential grazing impacts to TES species based on routes that cross non-capable range constitute such site specific analysis.

COMMENT 9rr2. If "rest" of 5 to 10 years is needed for aspen recovery here - under the continued very high stocking and bottlenecked repetitive sheep use, if one area is "rested" for recovery, will all the rest of the AUMs be heaped on remaining Capable and Non-Capable lands?

RESPONSE 9rr2. Capacity estimates were used to establish projected grazing allocation under the Proposed Action Alternative (Table: Range 3.4. / Draft Supplement). This establishes the maximum annual forage allocation to livestock that will be authorized without further NEPA analysis. Under the proposed action, this allocation will only be fully utilized in years when forage production is adequate to preclude unacceptable resource impacts. Forage production in permanent closure areas was not included in capacity estimates. Similarly, reduced forage availability resulting from temporary closures or rested pastures is taken in to account when authorized numbers and season is tentatively established in AOIs. This issue is further addressed by existing authorities to conduct current season monitoring and issue directives for early pasture moves, or complete

removal of livestock from the allotment prior to the scheduled "off-date". The effects of stocking on key resource elements was addressed in the North Sheep FEIS on pages 4-50-92 and thus is not within the scope of the Supplement analysis

COMMENT 9ss2. SEIS at 9 states: “Proposed action and alternatives may not adequately consider the Forest Plan assessments of capability and suitability for grazing given the site-specific characteristics of the North Sheep allotments. This may lead to overstocking of the allotments”. The concerns run even deeper than overstocking. There are critical elements that the Forest has simply ignored – invasive species facilitated by continued sheep use, use of Non capable areas, soil erosion in bottlenecked use areas, sensitivity of limited Capable and bottlenecked NonCapable areas to any additional grazing disturbance, conflicts with wildlife for food, cover and space (Lynx, Pika, Wolverine, Gray Wolf, Sage Grouse) , the likely impossibility of recovering Sage Grouse and maintaining even the much-reduced existing sagebrush with the Forest’s really ONLY basis for stocking the allotments being the lower elevation sagebrush communities.

RESPONSE 9ss2. Effects of the alternatives on noxious weeds (the invasive species currently identified as an issue within the analysis area) were considered, and are disclosed in chapter 4, section 4.7.4. of the Draft Supplement to the NSEIS. Trailing through unsuitable areas (closure areas) is addressed in the Smiley Creek S&G AOI (pg.2 footnote) - "trailing will be defined as movement of a herd through a given area within a stipulated timeframe so as to minimize herd impacts (e.g. hoof impact, incidental grazing, etc.). Open herding (allowing the herd to disperse just enough to preclude concentrated hoof impact) will be employed on trailing routes". Under adaptive management, this and other management direction may be applied to any unsuitable or non-capable area where issues associated with livestock impacts are identified. Grazing related impacts to soil resources were considered and are disclosed in Chapter 4, section 4.3 of the Draft Supplement to the North Sheep FEIS. Grazing related issues (such as unacceptable levels of disturbance) were identified within the analysis area whether they occurred on suitable, unsuitable, capable, or non-capable range. Grazing related impacts to wildlife were considered, and are disclosed in chapter 4 of the North Sheep FEIS and the North Sheep Draft Supplement.

COMMENT 9tt2. The Chart of Projected Grazing on Page 24 shows how absurd this process is. The Forest claims that stocking very close to the current permitted level in ALL situations would somehow balance ALL the ESA, sensitive and MIS species, recreational, climate change, weeds, and other issues here – AND at the same time, somehow, allow “restoration”. It also ignores the fact that recent grazing use has been significantly less than permitted levels! So the permit “reductions” are paper reductions only. It appears the Forest may be artificially propping up/inflating the values of the public lands grazing permits by refusing to reduce permitted levels to even the levels that ranchers have been ale to graze here in recent years.

RESPONSE 9tt2. Capacity estimates were used to establish Projected grazing allocation under the Proposed Action Alternative (Table: Range 3.4. / Draft Supplement). This establishes the maximum annual forage allocation to livestock that will be authorized without further NEPA analysis. Under the proposed action, this allocation will only be fully utilized in years when forage production is adequate to preclude unacceptable resource impacts. Further adjustment in grazing levels may be implemented in the modification of the Grazing Permit to bring stocking levels down to actual use as per direction in Region 4 Forest Service Handbook 2209.13.

COMMENT 9uu2. The EIS closed headwater areas to grazing, but still permitted trailing disturbance into and through these very sensitive areas. The Forest has not systematically evaluated the effects and locations of continued trailing disturbance in and through the fragile cirques and other high elevation areas. The Forest has also not provided sufficient data to enable understanding of how many AUMs were supposedly reduced, and where, and how those AUMs were calculated. Plus, in allotments/areas where NO AUMs are reduced, if use of high elevations has now been somewhat limited (perhaps), this means that INCREASED sheep use will occur in, and be shifted onto, other areas – such as the fragile sagebrush habitats, and steep eroding sideslopes cut by eroding drainages. The effects of such intensified use have not been examined, including effects on MIS and sensitive plant and animal species.

RESPONSE 9uu2. There Capacity estimates were used to establish Projected grazing allocation under the Proposed Action Alternative (Table: Range 3.4. / Draft Supplement). This establishes the maximum annual forage allocation to livestock that will be authorized without further NEPA analysis. Under the proposed action, this allocation will only be fully utilized in years when forage production is adequate to preclude unacceptable resource impacts. Forage from Non Capable lands was not included in capacity estimates. Trailing through unsuitable areas (closure areas) is addressed in the Smiley Creek S&G AOI (pg.2 footnote) - "trailing will be defined as movement of a herd through a given area within a stipulated timeframe so as to minimize herd impacts (e.g. hoof impact, incidental grazing, etc.). Open herding (allowing the herd to disperse just enough to preclude concentrated hoof impact) will be employed on trailing routes". Under adaptive management, this or other restrictive management direction may be applied to any area where issues associated with livestock impacts are identified. Calculations for determining reduction in Head months associated with the basin closures are part of the project record for the North Sheep FEIS. In addition, the Forest has established monitoring plots to monitor the ongoing impact of trailing and the recovery were cirque basins are closed to grazing to better assess grazing impacts.

COMMENT 9vv2. The Forest has also not demonstrated that it is not still setting stocking rates based on sheep use of private lands. Much more detail on just how any AUMs are being calculated must be provided, along with much more detailed mapping. We again stress, that since stocking is allowed to levels well above those in the past,

reductions in AUM s is on paper only – and this also means there is even more increased shifted use on fragile sagebrush lands or other areas.

RESPONSE 9vv2. Under adaptive management, grazing season and livestock numbers may be reduced at any time to address resource concerns such as seasonal variations in forage production. Projected grazing allocation under the Proposed Action Alternative (Table: Range 3.4. / Draft Supplement) establishes the maximum annual forage allocation to livestock that will be authorized without further NEPA analysis. Under the proposed action, this allocation will only be fully utilized in years when forage production is adequate to preclude unacceptable resource impacts. AUM's are calculated based on number of capable acres available, average production, percent utilization (once over grazing =roughly 25%)., daily forage consumption x band size. These numbers are all variable and provide just an estimate when calculating numbers of days grazing. Other factors weigh in on an annual basis as to actual days used. Grazing capacity has not been allocated from private lands.

COMMENT 9ww2. This whole situation is made even more uncertain by the use of AM. How many AUMs will be grazed, and where, under all foreseeable AM schemes? How will any of the AM schemes be tailored to use of, and movement through, available forage? Tailored to use of Capable and Non Capable lands? How many AUMs are in reality coming from Non Capable lands?

RESPONSE 9ww2. Capacity estimates were used to establish projected grazing allocation under the Proposed Action Alternative (Table: Range 3.4. / Draft Supplement). This establishes the maximum annual forage allocation to livestock that will be authorized without further NEPA analysis. Annual Operating Instructions "tailor" herd movements to facilitate the use of available forage in a given year. Forage from Non Capable lands was not included in capacity estimates. Trailing through unsuitable areas (closure areas) is addressed in the Smiley Creek S&G AOI (pg.2 footnote) - "trailing will be defined as movement of a herd through a given area within a stipulated timeframe so as to minimize herd impacts (e.g. hoof impact, incidental grazing, etc.). Open herding (allowing the herd to disperse just enough to preclude concentrated hoof impact) will be employed on trailing routes". Under adaptive management, this management direction may be applied to any unsuitable or non-capable area where issues associated with livestock impacts are identified. No AUM's come off non-capable lands. Grazing intensity varies from year to year depending on the band sizes, actual turn out dates, shipping dates, and other factors such as drought, fire, or economic reasons.

Range Sub Issue 3 – Livestock Grazing Impacts (general)

COMMENT 9a3. For example, Hormay and Talbot (1961) wrote the original guidance for rest-rotation grazing based on intensive field studies. They stated, “While the idea of

incorporating rest in grazing management is not new, the concept of longer rest periods than have heretofore been recommended, at least for mountain bunchgrass ranges, and of closer correlation of resting and grazing with plant growth requirements, is new." Some points of interest from the study were that, even with the rest-rotation system, some areas were more heavily used than others, re-growth was minimal on clipped plants after the seed-in-milk phase and clipping during active growth reduced total herbage yield during that year. A single season of clipping reduced basal area of forbs and grasses the next year. Four consecutive seasons of clipping at the seed-in-milk phase reduced basal area of Idaho fescue 80%, bottlebrush squirreltail 62%, longspur lupine 91% and wooly wyethia 16%.

> **REPONSE 9a3.** Studies on rest rotation grazing are primarily centered around cattle allotments, where a variable number of pastures are created and utilization standards are applied. On the sheep allotments, we are attempting to regulate the amount of time sheep graze a particular area by the time it takes them to move through. Rest is beneficial where an area is showing heavy use in and around streams in order to provide some relief for riparian vegetation including willows. Where feasible routes may be altered in order to provide growing season deferment. Strategies involving "longer rest periods than have heretofore been recommended" are possible under adaptive management (the proposed action).

COMMENT 9b3. Hormay and Talbot also found that cool-season grasses such as Idaho fescue varied in production by a factor of three due to changes in annual precipitation, while the beginning of growth varied by up to a month with similar variations on time to flowering and seed ripening. In clipping studies, they found that a single clipping of Idaho fescue reduced the basal area of the plant by 49%, while four years of consecutive clipping at the seed in milk phase reduced basal area of Idaho fescue 80% and killed 20% of the plants. Four years' rest after four years' clipping resulted in little or no recovery of Idaho fescue, wooly wyethia and longspur lupine. The basic principle enunciated by Hormay and Talbot, based on their quantitative research, was to require adequate years' of rest to allow the native plants to recover their vigor before again being grazed. This requires multiple years of rest between grazing periods. They also recommended that it is important to include adequate monitoring of each grazed unit or pasture to determine if these rest periods are sufficient to maintain or restore production.

> **REPONSE 9b3.** Strategies involving "multiple years of rest between grazing periods" are possible under adaptive management (the proposed action). Monitoring is addressed in the relevant AMP. Once over grazing by lamb bands equates to light use on grasses such as Idaho Fescue, as ewes and lambs key in more on annual and perennial forbs. The dry bands tend to make more use of grasses as the forbs have dried out. Use is still in the light to moderate level. The areas the drys (ewes without lambs) graze usually receive growing season deferment due to the nature of the allotments especially lack of routing flexibility, elevation changes, and shipping locations.

COMMENT 9c3. Kauffman et al studied upland and wet meadow communities that had

livestock excluded for 9–18 years. They found major differences between these ungrazed communities and those continuing to be grazed. In each case, the area without grazing had greater belowground plant biomass, lower soil bulk density and higher soil pore space. In dry meadows the infiltration rate was 13 times greater than those continuing to be grazed and in wet meadows, infiltration of rested areas was 2.33 times greater. Bohn and Buckhouse found that grazing systems including season-long, rest-rotation and deferred grazing did little to enhance and sometimes hindered infiltration and beneficial soil properties. Grazing during wet periods such as spring and fall had negative impacts on these attributes.

> **REPONSE 9c3.** Potential effects of the action alternatives were considered and are disclosed in chapter 4 of the North Sheep FEIS. The studies cited are primarily associated with cattle grazing. Cattle tend to loaf in riparian areas unless continuously pushed out, especially during hot /dry periods. The impacts stated do occur. Dry bands especially will also camp in riparian areas creating some of the same effects, if they were not moved out after watering and nooning, and not allowed to return. Good herding and once over use is a key element in protecting these areas from severe grazing impacts.

COMMENT 9d3. WWP is not aware of any studies in which stubble height management has restored damaged streams or riparian habitats. In fact, degraded riparian areas such as these may require complete rest to initiate the recovery process. (31) "Overgrazing riparian vegetation makes streambanks more vulnerable to the destablizing effects of livestock trampling and the erosive force of water, exposes soils to drying out by the wind and sunlight, reduces water storage capacity of the riparian area, reduces shade and thereby increases stream water temperature, encourages invasion of undesirable plants, speeds up runoff, and reduces filtration of sediment necessary for building streambanks, wet meadows and floodplains." (32) 31- Clary, Warren P. and Bert F. Webster. 1989. Managing Grazing of Riparian Areas in the Intermountain Region. USDA Forest Service Intermountain Research Station GTR INT-263. 32 - Chaney, Ed, Wayne Elmore, and William S. Platts. 1993. Managing Change – Livestock Grazing in Western Riparian Areas. U.S. EPA.

> **REPONSE 9d3.** Under adaptive management (the proposed action) monitoring methods may be changed as necessary to address site specific resource concerns. "Complete rest" was considered under the "no grazing alternative". Strategies involving "complete rest" (closure) of concern areas are possible under adaptive management (the proposed action). In the North Sheep FEIS, Paragraph 3.3.2 on page 3-17 addresses streambank stability, Morphology, and sedimentation and effects of grazing use. Note that the publications cited also identify levels of grazing use that are consistent with maintenance and recovery of riparian ecosystems.

COMMENT 9e3. These authors noted that utilization standards or stubble heights "… may be inappropriate for some degraded riparian plant communities." In the Columbia Basin, an increasingly common approach to the restoration of habitats of endangered

salmon is exclusion of livestock from streamside communities. [Kauffman, J. Boone, Andrea S. Thorpe, and E.N. Jack Brookshire. 2004] Meehan and Platts (1978) found that no grazing system was compatible with a healthy aquatic ecosystem (1978) .

> **REPONSE 9e3.** Under adaptive management (the proposed action) monitoring methods may be changed as necessary to address site specific resource concerns. Exclusion of livestock was considered under the "no grazing alternative". The studies cited relate primarily to cattle grazing systems. Stubble height standards are best used with cattle grazing where livestock has access to entire reaches of streams and are not under direct management. On sheep allotments, areas where sheep water may only be in isolated reaches, other portions of the stream being in timber or inaccessible areas. Heavy use may occur when an entire band goes to water and noons in an area that is confined. But that reach of stream will be subjected to that use only one time during that season.

COMMENT 9f3. Page 54: The Smiley Creek Allotment includes Alturas Lake Creek, which is designated critical habitat for endangered Snake River sockeye salmon and because of its historic importance to the species, the stream is crucial for the conservation and recovery of this endangered fish species. Page 54: The SEIS clearly states that the streambank stability and sediments of the Smiley Creek Allotment are functioning at risk or not properly functioning due in part legacy and modern grazing of sheep. Page 55: The SEIS clearly describes stream channel damage along Smiley Creek from historic grazing as well as descriptions of sheep trampled banks, compacted vegetation, and trampled riparian areas in most reaches. Page 56: The SEIS clearly describes that current sheep use in some upland and riparian areas in the Smiley Creek Allotment has resulted in the overuse of vegetation, soil compaction, and exposed soil surfaces, which leads to increased sediment loading in streams.

> **REPONSE 9f3.** Issues associated with livestock grazing are addressed by the proposed action and action alternatives. The concerns listed were considered by the resource specialists both during project design and in determining the effects of the alternatives considered in detail. These issues were also addressed during the Endangered Species Act required consultation process. Concurrence letters that the implementation of the Proposed Action is "not likely to adversely affect" listed species or critical habitat was received from NOAA Fisheries and US Fish and Wildlife Service. (NOAA Fisheries – June 15, 2004; USFWS – June 7, 2004).

COMMENT 9g3. The Draft Supplemental North Sheep Environmental Impact Statement ("SNSEIS") supports my observations of degraded conditions on these allotments, including the following:
--3.3 Soil and Watershed Resources : a number of watershed assessments are described as functioning at risk or not properly functioning, including the following, with sheep grazing noted as a factor:

A. Fisher Cr—excessive surface fine sediment (p 54)
B. Smiley Cr—streambank stability and sediment levels (p 54)

C. Alturas Lake Cr—streambank stability in some reaches (p 58) and surface fine sediment (p 59)
D. Frenchman Cr—surface fine sediment (p 61)
E. Beaver Cr—streambank stability (p 62) and surface fine sediment (p 63).

REPONSE 9g3: Thank-you for your observations. Issues associated with livestock grazing are addressed by the proposed action and action alternatives. The concerns listed were considered by the resource specialists both during project design and in determining the effects of the alternatives considered in detail.

COMMENT 9h3. The Draft Supplemental North Sheep Environmental Impact Statement ("SNSEIS") supports my observations of degraded conditions on these allotments, including the following:
--3.4 Fisheries Resources: Special status fish are denoted as having a number of concerns:

A. Smiley Cr noted as having a variety of problems for special species fish due to recent sheep impacts, including high water temperatures, bank slumping (p 72).
B. Alturas Lake Cr, high temperatures, erosion, trampling (p 75)
C. Frenchman Cr, high temperatures (p 76)
D. Beaver Cr, high temperatures (p 77)
E. Fisher Cr, high temperatures (p 78).

REPONSE 9h3: Thank-you for your observations. Issues associated with livestock grazing are addressed by the proposed action and action alternatives. The concerns listed were considered by the resource specialists both during project design and in determining the effects of the alternatives considered in detail.

COMMENT 9i3. Cumulative effects. The assessment of the affected environment and the environmental consequences state that resources functioning at risk or that are not functioning properly due to sheep grazing are fairly localized. However, the DS-FEIS also indicates that there are resource damages, particularly to water quality, riparian areas, streambank stability, soils, and vegetation due to roads, particularly roads in Riparian Conservation Areas, numerous trail and roads stream crossings, dispersed recreation (including motorized ATVs), historic grazing, mining, and logging. EPA believes that these cumulative damages should be assessed and evaluated to determine what is needed to protect, maintain, and restore the natural resources. We are concerned that allowing these continued cumulative uses may result in substantial chronic impacts and resource degradation.

REPONSE 9i3. Cumulative actions are addressed in chapter 4, section 4.1.1 of the NSEIS. Cumulative effects of the proposed action are addressed for each resource in chapter 4 of the NSEIS.

COMMENT 9j3. Claimed "Improvement" here - as in lower Smiley Creek meadows–

has only come with multiple years of rest or the Forest coming up with new models or moving monitoring sites or changing protocols. Once grazing resumes, there is no guarantee that any bank stability will be maintained or that conditions will not quickly worsen. In order to graze sheep in the confined Smiley Creek watershed, use will have to be made of the very same bank areas and meadows that are the points of concern. The sheep will not use the soggy and marshy areas that present an illusion of green. Sheep grazed here will always seek the drier riparian and mesic zones. They will continue to tear open the same "problem" areas – and these are where the eroding, bare, collapsing banks, are. Sheep movement, again, is confined by topographic, water or other features, including even the steepness of erosion gullies the sheep are creating!

> **REPONSE 9j3:** The assertion that "they (the sheep) will continue to tear open the same problem areas" is speculative and therefore falls outside the scope of this analysis.

COMMENT 9k3. The very significant losses of ESA species in these watersheds – with Bull Trout now so reduced that it seems they may disappear altogether from some drainages, show how severe the ongoing and chronic grazing effects are.

> **REPONSE 9k3.** Effects to ESA listed species that occur within the analysis area are disclosed in the Biological Assessment for the North Sheep EIS. Effects to fisheries resources are disclosed in Ch. 4, section 4.4 of the NSEIS, with additional information on cumulative effects in chapter 4, section 4.4.4.3 of the Supplement to the NSEIS.

COMMENT 9l3. Our site visits to the allotment have also shown us that the damage sheep are doing to the banks and sides of drainages, gullies and slopes dislodges and loosens large amounts of soil (sometimes clods with grass or sedge roots too) because these soils are poorly stabilized granitic soils - that are then moved downstream with heavy rainfall or snowmelt runoff.

> **REPONSE 9l3.** Livestock related damage to the banks and sides of drainages, gullies and slopes are addressed by the proposed action and action alternatives of the NSEIS. Effects of the proposed action on soil resources are disclosed in chapter 4, section 4.3.2.3 of the North Sheep FEIS. Most of the areas of granitic soils are in the upper elevations and have been closed or routed around. Areas such as the Big Peak trailing route will continue to be impacted, but effects should be constrained by moving through the area in a timely fashion, with no bedding to occur within the upper reaches.

COMMENT 9m3. FEIS claims at "a trend towards desired conditions would occur" under Alt. B, but the Forest has no rational or scientific basis, and nebulously refers to "more careful management of grazing". Under Alt. B, the Forest would stock these lands significantly above the level of Actual Use that has caused current ongoing degradation and species conflicts and extirpations. The many AM actions listed by the Forest are largely based on actions shown in Connelly et al 2004, Braun 1998, Freilich et al. 2003,

Dobkin and Sauder 2004 to degrade, fragment and destroy habitats for Sage Grouse and other sagebrush-dependent biota, and also to often conflict with big game and sensitive species habitat needs.

> **REPONSE 9m3.** The assertion that Under Alt. B, the Forest would stock these lands significantly above the level of Actual Use that has caused current ongoing degradation and species conflicts and extirpations is speculative and seems to rely on the premise that stocking levels are the only means of addressing resource concerns. The proposed action and action alternatives address resource issues in a variety of ways. Further, the 2007 AOIs addressed specific resource concerns by strategies that included reduced livestock numbers and season. Under the proposed action, these strategies may be implemented in any year. The permitted levels stated in the AMP's set a ceiling for use. The agency does not stock the allotment, the permittee does. Actual use levels may continue to be lower than permitted use due to decisions to turn out later, turn out smaller bands, or come off earlier due to once over grazing constraints.

COMMENT 9n3. Trailing, bedding, water hauling, salting, shifted intense grazing, trampling, manure deposition, etc. all may have serious adverse effects to these species that occur in small and isolated patches in the landscape. This includes physical injury to the plant, soil compaction, soil erosion, destruction of pollinator habitats, etc.

> **REPONSE 9n3.** Effects to TES species that occur within the analysis area are disclosed in the Biological Assessment and Biological Evaluation for the North Sheep EIS. Effects to Management Indicator Species are disclosed in Chapter 3, section 3.8.2.3, and in chapter 4, section 4.8.2 of the FEIS and SEIS.

COMMENT 9o3. Livestock grazing during all periods of the year damage soils and microbiotic crusts, and increase soil vulnerability to wind and water erosion. Trampling damage to soils effects everything from burrows of native animals, to larvae of native pollinators to roots and soil mycorrhizae essential to native tree shrubs and trees. The North Sheep EIS ignores consideration of the effects of livestock trampling disturbance on microbiotic crusts. There is no baseline information provided on the current condition and extent of microbiotic crusts, or the effects of grazing and trailing, including through unsuitable land, on these important components of arid lands systems. Microbiotic crusts should be found (but are much-diminished in many areas) in sagebrush communities (mosses, lichens, blue-green algae). Mosses and lichens are also present in understories of arid conifer communities. Sheep grazing and trailing, especially in the narrow and confined stringers of land area that sheep are able to move through here, causes repeated year-after-year disturbance to the same narrow and confined areas – including slopes adjacent to and above steams.

> **REPONSE 9o3.** Damage to soils and microbiotic crusts was not identified by agency resource specialists as an issue requiring analysis in detail. In the absence of evidence that such issues are significant within the analysis area, they fall outside the scope of this analysis. Grazing related impacts to soil resources were

considered and are disclosed in Chapter 4, section 4.3 of the Draft Supplement. Repeated disturbance of narrow confined areas is addressed in Annual Operating Instructions that stipulate varied rotations and routes from year to year (examples are available in allotment folders). Desired conditions for the Baker and North Fork-Boulder allotment project areas associated with soil resources are described in Appendix B, Table B-1 of the Forest Plan. The desired soil resource conditions are currently being met, even though there are localized areas that are slowly recovering from severe impacts of historic grazing or are currently being impeded such as corral areas, bed grounds, or marginally capable areas.(P. 64 Supplement)

Range - Sub Issue 4 – Grazing Permits

COMMENT 9a4. WWP requests that all measures to reduce and minimize Wolf conflicts with livestock use be adopted as Terms and Conditions of grazing permits. Plus first an evaluation of all areas where wolf conflicts may be difficult to mitigate must be defined and closed to domestic sheep use – including trailing – as part of this EIS Process. Wolves are Keystone predators, and essential to a functioning healthy and natural ecosystem here. Due to the significant new information on the ESA de-listing process, and the IDFG Wolf Plan, we have submitted recent additional comments on the Forest MIS analysis that we incorporate by reference and Attached.

REPONSE 9a4. Issues involving potential wolf / livestock conflicts are routinely addressed during annual permittee meetings, and in frequent communication with local wolf advocates responsible for tracking pack locations. "Potential Adaptive Management Actions" include "Closure of Areas. Close areas within allotments where monitoring shows that desired conditions cannot be met while sustaining grazing use" (Draft Supplement, pg. 19). Standard provisions of term grazing permits stipulate that the AMP (implementing adaptive management in this case) is attached and made a part of the permit. The agency's authority to dictate wildlife management is limited, as numerous laws, regulations, and policies establish direction for predator control activities. (e.g. IDFG's Policy for Avian and Mammalian Predation Management, the Idaho Wolf Conservation and Management Plan, and the EIS and regulations governing the Central Idaho Experimental Wolf Population.)

Wolf populations in the Northern Rockies has exceeded its recovery goal and continues to expand its size and range. There are currently more than 1,500 wolves and at least 100 breeding pairs in Montana, Idaho, and Wyoming. The topic of Gray Wolves is outside the scope of the North Sheep Supplement. At the time this is written, there are no changes in the regulatory requirements for Gray Wolves; however, it is recognized that Fish & Wildlife Service has proposed the Gray Wolf for delisting from the Endangered Species list. If the Final Delisting Rule proceeds, it will take effect in mid-March, 2008 and management of the wolves would be turned over to the States.

COMMENT 9b4. IDFG's actions that place Conflict with livestock front and center in determining the fate of Idaho's wolves necessitate that the Forest take all necessary immediate measures to maximize protections for the Gray Wolf in the SEIS, AMPs, and AOPs – including potential cancellation of all or part of permits in order to protect viable and healthy populations of this keystone predator. Please carefully the following information, and incorporate it into all facets of livestock management here, including Terms and Conditions on permits, SEIS evaluation of a range of carnivore protection alternatives, and other necessary actions to protect the Gray Wolf and the wealth of other native predators here. [See "Wuerthner New West Article Provides a Template for Management Actions to be Adopted" Citation in comment letter.]

> **REPONSE 9b4.** Issues involving potential wolf / livestock conflicts are routinely addressed during annual permittee meetings, and in frequent communication with local wolf advocates responsible for tracking pack locations. "Potential Adaptive Management Actions" include:
>
> > "Closure of Areas. Close areas within allotments where monitoring shows that desired conditions cannot be met while sustaining grazing use" (Draft Supplement, pg. 19).
>
> The Forest Service is limited in what actions can be taken regarding wolf conflicts with livestock. We do not have the authority to close an allotment due to such conflict. We may support the permittee in changing routes, seasonal deferment, defensive actions, or non-use if the permittee agrees. All of these actions were taken in 2007 on both the North Fork Boulder and Baker Creek allotments.

Range - Sub Issue 5 – Roads

COMMENT 9a5. The Forest has failed to examine how domestic sheep grazing activities may be degrading roadless areas, and increasing "creep" of roads into roadless lands. In fact, many of the management activities may help extend roading, or lead to road improvement that then further extends jump off points for OHV and other motorized uses of previously unroaded lands. The Forest has failed to identify roading that may exist in these areas due to sheep camp placement, water hauling, salting and other practices, ad evaluate such roads that may be harming wild lands or habitats, and take action to minimize the Footprint sheep-associated roading, through closures and other measures.

> **REPONSE 9a5.** Impacts of domestic sheep grazing activities are disclosed in chapter 4 of the NSEIS. Issues involving enforcement of regulation restricting OHV activities fall outside the scope of this analysis. The issue of roads raised by the commentor was not carried into the FEIS for the reason that no new roads have been created, extended, or improved to favor livestock management. In fact roads have been closed within the Baker Creek and North Fork-Boulder allotments that have hampered access to potions of the allotments for

administration as well as permittee convenience.

Range - Sub Issue 6 – Suitability

COMMENT 9a6. Other recent fires both in and outside the allotment have resulted in a significant cumulative loss of sagebrush habitat – both locally and regionally. The Forest must fully assess the effects of the continued grazing disturbance of microbiotic crusts and native vegetation communities in making its Determination of the Suitability of continued livestock grazing here. In addition, as ALL of the ICBEMP analyses from the mid-1990s through 2002 showed, invasive species are a grave and growing threat across the region.

> **REPONSE 9a6.** Cumulative effects to species occurring within the analysis area that are dependant on sagebrush habitat were considered in the Biological Evaluation (pg. 31) "Disturbance of microbiotic crusts" was not identified by agency resource specialists as an issue requiring detailed analysis within the project area. Effects to native vegetation communities are disclosed in chapter 4 of the NSEIS. Areas affected by the 2007 Castle Rock fire will be rested for a minimum of two years. Some areas may be rested longer depending on the severity of the fires effects and we will look to the BAER recommendations.

COMMENT 9b6. Suitability analysis is to "identify areas within the capable land base where grazing is appropriate" (SEIS at 9). So as part of its Suitability analysis, the Forest must weigh not just each of the above concerns individually, but must also examine them as a whole, and cumulatively, in determining the Suitability for continued use in these nationally significant wild lands. A series of mapping and analysis must be conducted to overlay Riparian Concern Areas, Sagebrush degradation concern areas, Toadflax, middle and higher elevation degraded and eroding trib and spring, seep network, areas of Gray Wolf conflict such as denning sites or other important wolf use areas. WWP is Attaching the New West Column by Naturalist George Wuerthner that describes the serious flaws of the Idaho Wolf Plan, and the conflicts of livestock use with Wolves. Measures to reduce and minimize such conflicts must be incorporated into any grazing schemes, and this deficient SEIS does not do that.

> **REPONSE 9b6.** Suitability analysis identifies areas within the capable land base where grazing is appropriate in the context of other land management considerations. Suitability is addressed in the proposed action by closure of certain areas to "eliminate" or "reduce the potential for recreation/livestock conflicts". Suitability is further addressed under the proposed action where "Potential Adaptive Management Actions" include "Closure of Areas. Closed areas within allotments where monitoring shows that desired conditions cannot be met while sustaining grazing use" (Draft Supplement, pg. 19). Adaptive management allows for ongoing assessment of suitability based on desired conditions for other resources, and for additional action to address newly identified suitability issues. Any additional mapping needs or data that is pertinent to grazing management on these allotments will be collected as funding

and priorities dictate.

The issue of the Gray Wolf was addressed in the North Sheep FEIS on pp. S-14, 3-81 to 3-83, 4-69, 4-71, 4-76, 4-79, 4-84, and F-38. Wolf populations in the Northern Rockies has exceeded its recovery goal and continues to expand its size and range. There are currently more than 1,500 wolves and at least 100 breeding pairs in Montana, Idaho, and Wyoming. The topic of Gray Wolves is outside the scope of the North Sheep Supplement. At the time this is written, there are no changes in the regulatory requirements for Gray Wolves; however, it is recognized that Fish & Wildlife Service has proposed the Gray Wolf for delisting from the Endangered Species list. If the Final Delisting Rule proceeds, it will take effect in mid-March, 2008 and management of the wolves would be turned over to the States.

COMMENT 9c6. Moreover, the Forest must have this information in hand to make a proper Suitability Determination for sheep use in this constricted and bottlenecked landscape, and to understand the effects of its actions under NEPA and abide its own polices for sensitive species. It is essential to understand the feasibility of continued use in rare plant habitats, adopt closures, etc. Botanizing, and wildflower photography, just like wildlife viewing and enjoyment, are increasing uses of public lands, including by WWP members, and sheep grazing greatly conflicts with such uses.

REPONSE 9c6. The Suitability analysis identifies areas within the capable land base where grazing is appropriate in the context of other land management considerations. Suitability is addressed in the proposed action by closure of certain areas to "eliminate" or "reduce the potential for recreation/livestock conflicts". Suitability is further addressed under the proposed action where "Potential Adaptive Management Actions" include "Closure of Areas. Close areas within allotments where monitoring shows that desired conditions cannot be met while sustaining grazing use" (Draft Supplement to the NSEIS, pg. 19). Adaptive management allows for ongoing assessment of suitability based on desired conditions for other resources, and for additional action to address newly identified suitability issues.

COMMENT 9d6. This is necessary to understand the Suitability of these lands for continued livestock grazing, the productivity and carrying capacity of these lands for grazing, the effects of any alternatives developed here, the ability to meet any objectives, and the ability to sustain, enhance or restore habitats and populations of special status and other important species and native plant communities. For example, how has the extensive depletion of understories in many areas of big sagebrush affected the degree and rate of desertification processes? How has this affected livestock patterns of use, acres per AUM, etc.? What are the acres per AUM across all vegetation types in all conditions? How many acres per AUM are required to sustain cattle or sheep in the big sagebrush communities – for example in the big sagebrush communities near Beaver and Little Creeks? What actions can be undertaken to halt desertification processes and begin recovery – including of desiccated blown out sections of Frenchman Creek? Please assess

the combined effects of desertification and exotic species/weed increase and infestation.

> **REPONSE 9d6:** Neither depletion of understories, nor desertification were identified by agency resource specialists as issues requiring analysis in detail for this analysis area. Section 3.2.4.7.1 of the Supplement to the NSEIS addresses grazing capacity estimates. The project file contains estimates of forage production. Since the commenter does not refer to specific locations of "blown out" sections of Frenchman Creek, the question of what actions can be undertaken to begin recovery can only be addressed in general terms: Resource concerns associated with livestock grazing in Frenchman Creek are addressed by the proposed action and action alternatives.

Issue 10: Recreation

COMMENT 10a. The Forest closed Adams Gulch to grazing in spring and fall due to conflicts with sheep – including objections to sight and smell of sheep, and attacks of guard dogs on people. SEIS at 5. The Forest has not systematically evaluated such conflicts, including increasing conflicts with private land owners and sheep trespass on private lands in the allotments. WWP has observed the degraded conditions, stench of sheep, conflicts with recreational uses including sheep concentrated use right in and through very frequently used campsites in the drainages of the smiley Creek and other allotments. Due to the confined topography, sheep disturbance to recreational uses is very intrusive across the most accessible areas of the allotments. Such conflicts are only expected to intensify. Although the Forest closed Adams Gulch to grazing, it is still allowing trailing. This SEIS should evaluate complete closure of the Adams Gulch area, and examine trucking rather than trailing of sheep- especially given the serious weed problems and likelihood of increased weed spread with continued use. The full ecological effects of trailing across the landscape used by these herds are never examined.

> **RESPONSE 10a.** While certain elements in the North Sheep FEIS were supplemented, other important aspects of the project and the analysis in the North Sheep FEIS were sufficient and therefore remain unchanged. The issue of closing Adams Gulch to grazing and the rationale for limited trailing raised in this comment was addressed in the North Sheep FEIS on pages 4-9 and 4-10.

COMMENT 10b. One of the reasons provided for closures of the higher elevation cirques is a conflict with recreational use. Yet the same conflicts are likely most intense at lower elevations because of the large amount of camping, fishing, sightseeing, hiking etc. that occurs in the lower elevations. Certainly conflicts are just as severe in many other areas of the allotments, including in areas where contact with bacteria and diseases carried by domestic sheep may threaten human health.

> **RESPONSE 10b.** While certain elements in the North Sheep FEIS were supplemented, other important aspects of the project and the analysis in the North Sheep FEIS were sufficient and therefore remain unchanged. The issue of

recreational use conflicts with grazing raised in this comment was addressed in the North Sheep FEIS on page 4-10. The issue of human health threats from domestic sheep was responded to in the North Sheep FEIS on page F-9.

Issue 11: Restoration

COMMENT 11a. There are no adequate prescriptions for restoration of these lands and no analysis of the ability of the land to be restored in the presence of sheep grazing with all the cumulative impacts to watersheds and habitats from the multitude of past activities. Instead, the SEIS merely lists "some of the more applicable" management direction relative to proper livestock management and the restoration of lands in less than satisfactory condition. The various cited "direction" are not specific to restoration and as pointed out earlier in these comments, restoration of riparian and upland areas in degraded condition, especially during periods of drought and now, global warming is unlikely with continued livestock grazing. There is no presentation in the SEIS of lands in degraded condition being restored using the various Forest Plan generic direction provided.

RESPONSE 11a. Restoration of lands in less than satisfactory condition is more specifically addressed in the Draft Supplement (Chapter 3, pp. 87-89) by reference to management direction in the Sawtooth Forest Plan. Assertions concerning the adequacy of Sawtooth Forest Plan management direction for restoration of lands in less than satisfactory condition are speculative and fall outside the scope of this analysis.

COMMENT 11b. Finally, an inspection of the AMP for Smiley Creek reveals the Desired Future Condition for uplands is for the most part, "Fair" condition. "Fair" condition as described earlier is a degraded condition where the plant community may only represent 26 – 50% of potential. This constitutes a reduction from potential of up to 74% in species and production of native forage. This is setting a DFC of degradation, not restoration and is insufficient as is the AMP or SEIS in providing specific requirements that will lead to recovery within time frames that are known. The research cited earlier in these comments places those recovery times in the ABSENCE of livestock on the order of decades. There is no research that shows recovery is possible in the PRESENCE of livestock.

RESPONSE 11b. Desired conditions specific to uplands in the analysis area are disclosed in the Smiley Creek Standards & Guides (S&G) / Fisher Creek S&G Allotment Management Plan (pp. 11-13), and the Baker Creek and North Fork Boulder Allotment Management Plan (AMPs) (pp. 7-9). The conditions are defined in terms of cover, age class, vigor, erosion, presence or absence of undesirable species, % production by species, species dominance, regeneration, size class, stem density, abundance of perennial vegetation, compaction, and potential grazing impacts other than compaction. The desired "Condition Rating" shown for upland Designated Monitoring Areas (DMAs) simply represents one

additional element of desired condition measured in terms of species composition. The combined elements of desired condition for uplands stipulated in the AMP preclude "degradation" of uplands. Recovery (progress toward meeting desired conditions, Forest Plan S&Gs, etc.) is addressed in the North Sheep FEIS (pp. S6 - S16 and Chapter 4 - Environmental Consequences), and in the Draft Supplement to the North Sheep FEIS (Chapter 4 - Environmental Consequences).

COMMENT 11c. We recommend that the Forest Service make it a priority to restore sage grouse habitat, fully implement all Forest Plan direction to restore lands in less than satisfactory condition, and ensure that permitted grazing and other uses do not further degrade or retard the recovery of capable sage grouse habitat.

RESPONSE 11c. Restoration of lands in less than satisfactory condition is more specifically addressed in the Draft Supplement (Chapter 3, pp. 87-89) by reference to management direction in the Sawtooth Forest Plan. Assertions concerning the adequacy of Sawtooth Forest Plan management direction for restoration of lands in less than satisfactory condition are speculative and fall outside the scope of this analysis.

COMMENT 11d. Finally, an inspection of the AMP for Smiley Creek reveals the Desired Future Condition for uplands is for the most part, “Fair” condition. “Fair” condition as described earlier is a degraded condition where the plant community may only represent 26 – 50% of potential. This constitutes a reduction from potential of up to 74% in species and production of native forage. This is setting a DFC of degradation, not restoration and is insufficient as is the AMP or SEIS in providing specific requirements that will lead to recovery within time frames that are known. The research cited earlier in these comments places those recovery times in the ABSENCE of livestock on the order of decades. There is no research that shows recovery is possible in the PRESENCE of livestock.

RESPONSE 11d. Please see the response to 11b.

COMMENT 11e. We recommend that the Forest Service make it a priority to restore sage grouse habitat, fully implement all Forest Plan direction to restore lands in less than satisfactory condition, and ensure that permitted grazing and other uses do not further degrade or retard the recovery of capable sage grouse habitat.

RESPONSE 11e. Your recommendation for priorities is noted. The July 2006 Idaho Sage-grouse Conservation Plan (p. 4-99) states; "A small population existed historically in the Sawtooth Valley south of Stanley, but its current status is unknown." The North Sheep Supplement and the MIS Supplement (January, 2008) recognizes that all Sage-grouse source habitat in the project area has decreased by at least 60%. The identification of priority is based on the analysis in the MIS Supplement which identifies the highest priority watersheds for restoration. Relative to the assignment of priorities for treatment, without the establishment of some type of priority, restoration, which is needed throughout

the Forest, could be diluted across such a large area that it minimizes any real progress toward restoring degraded habitat conditions in those places where there could be the most 'bang for the buck'. The priority of areas requiring restoration is appropriate because it allows the FS to focus resources on the areas that need restorations the most and will provide the best restoration benefit to the sage grouse habitat.

COMMENT 11f. A full suite of restoration actions for damaged, degraded or desiccated riparian areas must be assessed under all alternatives – including an array of passive treatments, such as rest to jump start recovery, or cessation of grazing use due to fragility of long-degraded watershed and accelerating weed and other threats –or low pops, of species necessitating decisive and immediate action. Mandatory stubble heights, rest to jump start recovery, or until recovery, then limited, if any grazing.

RESPONSE 11f. "Cessation of grazing" was considered in the North Sheep FEIS under the "Grazing Phased Out" alternative (Chapter 2: Alternatives). An array of measures addressing livestock related impacts (including potential rest) are included in the proposed action (North Sheep FEIS Chapter 2, section 2.2, pp. 2-1 - 2-13), with elaboration in chapter 2, section 2.2.2.1 of the Draft Supplement. Restoration of lands in less than satisfactory condition is more specifically addressed in the Supplement (Chapter 3, pp. 87-89) by reference to management direction in the Sawtooth Forest Plan.

COMMENT 11g. Recovery of lower elevation areas will be exceedingly slow, especially considering the aridity of the region. Arid land recovers very slowly; massive soil erosion has exposed soils that are less able to support plant life because of lower organic content; and invader species have become well established and have the competitive edge (Sheridan CEQ at 21). Even though it is well recognized that "the way to end overgrazing is to reduce the number of livestock in the end" (Sheridan CEQ at 22), yet political pressures from ranchers results in strong political opposition to reduced grazing. Political pressures have hamstrung implementation of the Taylor grazing Act. This process provided an opportunity to gain a better understanding of the actual capability and productivity of the vegetation and soils that meets the desires and needs of the public on these lands.

RESPONSE 11g. Recovery or progress toward meeting desired conditions, Forest Plan S&Gs, etc. is addressed in the North Sheep Final Environmental Impact Statement (pp. S6 - S16 and Chapter 4 - Environmental Consequences), and in the Draft Supplement to the North Sheep Final Environmental Impact Statement (Chapter 4 - Environmental Consequences). Both political opposition to reduced grazing, and the effects of political pressure on implementation of the Taylor Grazing Act fall outside the scope of this analysis.

Issue 12: Soils

COMMENT 12a. The draft SEIS fails to address how, in watersheds that have highly erosive soils, like the Smiley Creek allotment, that may cause exceedences of desirable depth fines in spawning gravels for listed fish species of 28%, the additional negative impacts on sedimentation of creeks and spawning gravels caused by domestic sheep can be authorized at all.

> **RESPONSE 12a.** The North Sheep FEIS identified and responded to resource impacts from current management activities as well as the proposed action. By following the analysis findings and implementing adaptive management strategies, the majority of Smiley Creek allotment is not currently being grazed until adequate recovery is demonstrated through annual monitoring. The Smiley Creek allotment does occur within the Idaho batholith where soils are characterized by moderate to high surface erosion potential. However, the ability of sheep to graze is these areas is dependant on how well instructions in the Allotment Management Plan (AMP) and Annual Operating Instructions (AOI) are followed by the permittee and what is found through monitoring. As described in section 2.2.2.1 Adaptive Management Strategy, AMPs contain specific objectives related to grazing use of the allotment, specific livestock management direction to be carried out to achieve these objectives (includes the grazing prescription and specific management actions, requirements and restrictions), monitoring requirements (includes specification of location, protocol and scheduling), other direction needed to achieve the specified objectives, and direction for changing or adapting management and monitoring requirements based on the results of annual and long-term monitoring. The goal of the Adaptive Management Strategy is to limit ground disturbance caused by sheep grazing before it results in increased sedimentation and negative impacts to spawning gravels. This will require not only monitoring of established designated monitoring areas (DMAs), but periodic reviews of grazing routes to determine if soil in disturbed areas can reach streams.

COMMENT 12b. Soil Stability. The SEIS removed Landtypes with high inherent surface erosion and low inherent ground cover from consideration as capable while ignoring the long standing Regional capability criteria that recognized current soil conditions such as soil movement, pedestaling, rills, gullies, bare ground and other evidence of accelerated erosion . The SEIS has described these conditions as occurring throughout these allotments, yet has ignored current conditions or the relationship between ground cover, soil erosion hazard and risk that has been recognized by Region 4 since codified in the Range Analysis Handbook in 1964.

> **RESPONSE 12b.** One issue addressed in the SEIS was application of the Forest Plan capability analysis model. The capability determinations developed specifically for the draft SEIS utilized past and current range allotment analysis (RAA) data. This data was collected following protocols in the Range Analysis Handbook. The allotment specific capability analysis (SEIS pp. 41-42) did not ignore the Range Analysis process cited in the comment. The capability

determinations developed specifically for the draft SEIS utilized past and current range analysis data. This data was collected following protocols including those in the cited Range Analysis Handbook which evaluated erosion potential, ground cover, etc. This data was further modified and updated during the allotment specific capability assessment (SEIS pp. 41-42) consistent with Forest Plan Guideline RAGU01 (Forest Plan p. III-46) which removed additional areas based on landtype classifications, soil cover criteria, etc. The original analysis was modified and updated to make it consistent with current Forest Plan direction and criteria such as that used in the Forest Plan Capability Model. Documentation of the criteria used in the Forest Plan Capability Model and RAGU01 are found in the Rangeland Resources Technical Report No. 1 for the Boise, Payette, and Sawtooth National Forests Plan Revisions, USDA Forest Service, R4, July 2003 (Forest Plan Revision Project Record Document No. 2471).

COMMENT 12c. For example, that handbook (Range Analysis Handbook in 1964) recognized that soils with a low to medium erosion hazard with less than 60% ground cover were not suitable (capable). Even slopes of lower degree with ground cover less than 50% or 40% were not capable depending on the level of ground cover and considered capable only in the absence of evidence of erosion. When soils of moderately high to high erosion hazard were considered, slopes over 45% were not capable and slopes of less than 45% with less than 60% ground cover were not capable. In these soils, to be capable, ground cover had to be greater than 60% with erosion "light to none".

RESPONSE 12c. These are statements and discussion of erosion and ground cover relationships as described in the Range Analysis Handbook. The project specific capability analysis in the North Sheep Supplement was prepared using the erosion and ground cover variables for the landtypes and soils that are representative of the analysis area. Also, please see Response 12b.

COMMENT 12d. Paul Packer summarized Forest Service research on slope, ground cover and erosion rates. The source papers and data are available through the Intermountain Region Library in Fort Collins. The following chart shows the rapid increase in erosion as ground cover decreases and slope increases. This is a well known relationship in the Universal Soil Loss Equation. While the Intermountain Region tends to cite a ground cover criterion of 60% in its capability requirements, it appears to have forgotten its own research that shows the clear risk of grazing on steeper slopes. Inspection of the chart shows that this 60% ground cover criterion may only be effective on very low slope angles. For example the erosion rate at 60% ground cover on a 30% slope is about 7 times that on a 5% slope. In current research by WWP and our associates, modeling of watersheds in the Bear River Range in the Caribou NF, showed that the 60% ground cover criteria results in accelerated erosion of 13 to 15 times natural rates. If grazing were limited to capable acres, these values declined to 1.3 – 2.9 times natural rates.

RESPONSE 12d. The research cited by Paul Packer was used in the

development of the Range Analysis process (July 1964 R-4 Range Analysis Handbook, p. 31.1-4). This process was used as a basis for the allotment specific capability analysis (SEIS pp. 41-42). Site specific studies of the soils in the project area are found in the North Sheep FEIS at pp. 3-9 to 3-66, 4-15 to 4-22.

Also, please see Response 12b and Response12c.

COMMENT 12e. Packer, Paul. 1998. Requirements for watershed protection on western mountain rangelands. Unpublished manuscript. Dr. Packer is retired from the USDA Intermountain Forest and Range Experiment Station, Logan, Utah.

RESPONSE 12e. Thank-you for the reference. Please see Response 12d.

COMMENT 12f. This increased erosion is also related to runoff. As Dr. Packer summarized in his manuscript, accelerated erosion and runoff go hand in hand. Trimble and Mendel (1995) estimated that peak storm runoff from a 120 ha basin in Arizona would be 2 to 3 times greater when heavily grazed than when lightly grazed. Soil erosion is further exacerbated by increased surface runoff triggered by loss of vegetative cover and litter (Ellison 1960) , both of which have been shown by numerous studies to be reduced by livestock grazing. Numerous studies have observed severe erosion in the western United States when comparing heavily grazed areas to ungrazed sites (e.g. Cottam and Evans 1945 , Gardner 1950 , Lusby 1979 , and Kauffman et al. 1983).

RESPONSE 12f. The Commentor has provided a discussion of monitoring and modeling efforts for grazing effects from other studies. The project specific capability analysis in the North Sheep Supplement was prepared using the erosion and ground cover variables for the landtypes and soils that are representative of the analysis area. Grazing intensity is set by Forest Plan Standards RAST06 and RAST07 (Forest Plan p. III-45) are equivalent to light grazing utilization.

COMMENT 12g. Furthermore, there are a number of extensive literature reviews on this topic that describe the indisputable impact of livestock grazing on soil stability and erosion (see Gifford and Hawkins 1978 , Fleischner 1994 , and Jones 2000). The Lusby study cited here demonstrated the significant change in sediment delivery and runoff in a watershed that was closed to livestock grazing when compared to its paired watershed that continued to be grazed. Sediment yield and runoff decreased in the ungrazed watershed compared to the grazed watershed. Ultimately, this increased sediment load enters streams and fine sediments increase in depositional environments (pools, quiet water areas) from the increased erosion. This results in impairment to spawning gravels due to high sediment content. The SEIS describes sediment impaired stream habitats throughout all the listed tributaries.

RESPONSE 12g. The habitat condition and trend information in the North Sheep FEIS and subsequent Supplement is based on data collection and analysis from numerous efforts, including monitoring designed specifically for the grazing allotments. The Sawtooth National Forest acknowledges that some reaches have

more sediment than would be anticipated within the allotments. However, it is unclear what higher sediment accumulations are from? We suspect sediment level reflect cumulative effects from historic and current management activities (i.e. mining, roads, and grazing) and natural disturbances. The adaptive management strategies in the North Sheep FEIS and Supplement are designed to modify or eliminate activities that continue to impair attainment of beneficial uses.

COMMENT 12h. Baker Creek and Fisher Creek are closed until standards are achieved, including ground cover criteria of 45 – 60%. As discussed above, these ground cover values are not sufficient to protect the soil from accelerated erosion. In addition, the stocking rate much be reduced to account for all the closed areas and their portion of currently available forage.

RESPONSE 12h. The ground cover criteria in the North Sheep Supplement is representative of the landtypes and soils for the analysis area. These values represent the inherent productivity and limitations of the soil-hydrologic-vegetation relationships of the landtype units in the North Sheep Allotment area. Consistent with the adaptive management approach (SEIS pp 11-25), stocking rates have been adjusted during the last several grazing seasons consistent with the closures. Stocking will continue to be modified as warranted by these and other situations. Also note that the criteria cited may be adjusted through the adaptive management process where monitoring information shows that changes are warranted.

COMMENT 12i. Under Soil and Watershed Resources (p25) the SEIS admits past grazing caused soil loss that is continuing to affect soil productivity. Then the SEIS cites progress in only having 10% of historic numbers now grazing, and state, "While no trend data is available, soil conditions are believed to be generally improving based on a significant reduction in grazing pressure compared to historic levels.

RESPONSE 12i. Professional judgment that utilizes cause-and-effect interpretations of monitoring results and anecdotal data was used, in part, to estimate impacts from historic grazing activities. These estimates of resource conditions and trend for historic grazing are derived from relationships of resilience and recovery resulting from changes in disturbances. Range analysis data used in the allotment specific capability analysis also provides information for evaluating livestock related impacts and trend of more recent grazing activities. The baseline ground cover for the representative soil-vegetation types are derived from the local landtype data and the range site descriptions. Desired conditions for the soil resource are described in North Sheep FEIS (p. 3-32). Monitoring has also been prescribed in the allotment management plans (SEIS App. C) to evaluate trends.

COMMENT 12j. While the SEIS brings up the highly erodible nature of the soils and underlying geology occurring in the allotments as leading to high percentages of sediment fines being natural, it forgets that if this is the case, then superimposing grazing

on these erodible soils is placing the sensitive, threatened and endangered fish species at further risk. For example, SEIS p62 states, "Granitic parent material results in a high natural sediment load… . Historic impacts from mining and intensive grazing have contributed to these loads by exposing additional surface area associated with mined areas, roads, and localized overgrazing on ridgetops." Yet the SEIS does not quantify the extent of these degraded areas.

> **RESPONSE 12j.** The scope of the analysis for this Supplement is not the same as the original analysis. (SEIS p. 2) Historic impacts from mining, livestock grazing, roads, and other activities were described in the Chapter 3 and 4 of the North Sheep FEIS. Soils were addressed in the North Sheep FEIS on pages 3-9 to 3-33 and 4-15 to 4-22. Effects of the proposed action on sensitive, threatened and endangered fish species are described in the North Sheep FEIS on pages 4-33 to 4-43. Consultation determinations (USFWS concurrence letter of June 7, 2004) concurred that the project was not likely to affect critical species or their habitat.

COMMENT 12k. The SEIS discusses flash flooding and scouring of banks from high flow events, but never discusses the condition of the watersheds in regards to the cause of this increased runoff and flood forces. The SEIS has admitted much degradation in sagebrush habitats, watering places, bedding grounds, ridgetops and riparian areas. It has not connected the loss of grasses, forbs and litter that retain water and promote infiltration. It has not connected the loss of ground cover and low amount of residual vegetation remaining at the end of the grazing season with the accelerated erosion and runoff that contributes to the increased flood forces, which, when combined with reduced bank stability and vegetative cover allow increased erosion of stream banks. The SEIS relies on the erosive nature of granitic watersheds to explain the high sediment fines levels in streams, but fails to recognize that the imposition of thousands of sheep trailing, grazing, bedding and watering are preventing recovery and are cumulatively increasing sedimentation.

> **RESPONSE 12k.** The watersheds originating from granitic landforms are primarily on the west slope of the upper Salmon River basin (Smiley, Frenchman, Cabin, and Alturas Creeks). These areas are characterized by sparsely vegetated headwaters and oversteepened slide slopes. The valley bottoms experience high bedload deposits from stochastic debris torrents or stream alterations from high intensity thunderstorms. In localized locations, sheep grazing has caused temporary bank erosion, stream widening, and trampling of riparian soils. However, there is no evidence that grazing impacts have been so extensive to exacerbate the potential for or effects of flash floods.

COMMENT 12l. Page 27, Issue – Sediments – the SEIS clearly describes damage to action area watersheds and aquatic habitats from legacy grazing, but fails to describe how continued grazing may allow for recovery of grazing and non-grazing sediment impacts on aquatic ecosystems and fish habitat. Included in the study area are several streams that the Idaho Department of Environmental Quality identified as impaired (included on their 303(d) list) and may require TMDLs for sediment loads. Once again, the wildfires

described earlier in the SEIS have apparently affected the sediment loads, particularly of fine sediments entering forest streams, and therefore the environmental baseline has been degraded. The degraded environmental baseline has a reduced capability of supporting MIS, ESA/MSA, Regionally Sensitive Species, and other fish and wildlife. With this reduced capability, there should be less capability for livestock grazing impacts under proposed Federal grazing permits and AOIs.

> **RESPONSE 12l.** Only Fisher Creek burned in the 2005 Valley Road Fire. The fire burned mainly the headwaters of this drainage that have intermittent stream flows in the summer. Perennial reaches burned at low intensity or not at all. Monitoring results in Fisher Creek showed that fine sediment decreased and was transported downstream from each site. This was likely due to scouring caused by higher fire induced base flows and the failure of several upstream beaver dams in 2006. So the Valley Road fire has not affected sediment loads in Fisher Creek in the first year after the fire monitored reaches. Furthermore, only a few streams (Cabin and Vat Creeks) are listed as impaired waterbodies. The pollution of concern for these streams is unknown and has not been identified as caused by excessive sediments.

COMMENT 12m. Page 59, Para 1: Because of the naturally high sediment loads associated with the decaying granitic soils, there really should not be any sheep grazing and associated impacts on high priority fishery resources such as Alturas Lake and its tributaries. High sediment fines translate into impaired spawning, incubating, and food-producing gravels in Alturas Lake Creek and its tributaries.

> **RESPONSE 12m.** Implementing the Proposed Action will more aggressively regulate grazing strategies through the Adaptive Management approach. Where instream and aquatic habitat objectives are impaired, changes to grazing practices are more likely to result in improving conditions.

COMMENT 12n. Page 62 – Apparently from the SEIS, Beaver Creek is limited by fine sediments, again from granitic soils. However, just because the environmental baseline is reduced by reportedly natural conditions and legacy grazing, does not give the SNF additional leeway to further degrade the capability of supporting bull trout (MIS and ESA), Chinook salmon (ESA and MSA), steelhead (ESA), and Westslope cutthroat trout (Regionally Sensitive Species). In fact, the evidence of effects from legacy grazing here and elsewhere in the North Sheep SEIS is evidence that future grazing effects will not attenuate rapidly over time with or without additional grazing pressures.

> **RESPONSE 12n.** The analysis for the Proposed Action does not conclude that further degradation of aquatic habitat will occur. Improving resource conditions is the objective of the FEIS and SEIS, however the rate of recovery is largely dependent on the occurrence and intensity of non-management disturbance mechanisms.

COMMENT 12o. Drainages have been made increasingly intermittent due to the effects

of chronic sheep grazing and trampling disturbance. Headcutting, widening of bare-banked gullies and other active erosion processes are widespread in middle to upper elevation sheep grazed and/or trampled in trailing areas across these watersheds. In narrow, bottlenecked watersheds like portions of upper Frenchman Creek, Smiley Creek, Beaver Creek, and Alturas Lake Creek, there are dozens if not hundreds of tributary drainages that contain segments undergoing current degradation from sheep use, and that bleed sediment to the larger watersheds. All or portions of many of these drainages may be seasonally intermittent, but considerable water flows with erosive force may be present during runoff events in these Idaho batholith soils. See WWP Photos submitted with e-mails and letters. See Attached Lit. describing Idaho batholith erosion processes.

> **RESPONSE 12o.** Several streams (Smiley, Frenchman, Cabin, and Alturas Creeks) have short stream segments with intermittent flows. Most of these areas are associated with excessive bedload deposits from oversteepened slide slopes or debris torrents. Clearly sheep grazing has caused bank erosion, stream widening, and trampling of riparian soils in localized areas, most notable in the Smiley Creek allotment. However, there is no evidence that grazing impacts have been so extensive as to increase intermittent stream flows on a large scale.

COMMENT 12p. WWP has previously submitted comments and photos to the Forest requesting that thorough surveys to establish Baseline conditions of these areas be conducted as part of the SEIS process. Sheep grazing and trampling disturbance removes and reduces protective riparian and mesic vegetation necessary to stabilize soils, and de-stabilizes sideslopes. See Belsky et al. 1999. Sheep trampling disturbs and de-stabilizes the banks and channels of these drainages, and surrounding slopes. This exacerbates bank erosion, downcutting, gullying and ultimately desiccation and desertification of the watershed. Belsky et al. 1999, Dregne 1986, Sheridan CEQ 1981, Steinfeld et al. 2006. Trampling effects of the many thousands of hooves run repeatedly year after year over the same narrow and confined areas (as shown by Capability mapping) dislodges soils from degraded drainage banks and surrounding slopes. These drainages act as conduits to deliver sediment and soils dislodged by sheep trampling into streams, including anadromous fish and Bull Trout habitat.

> **RESPONSE 12p.** All of the most recent data within the analysis area has been incorporated into the FEIS and SEIS. This includes PIBO, IDEQ, and designated monitoring areas (DMAs) data. The Forest intends to evaluate conditions and trends within each allotment on the DMA, photo point, and other available data. The appropriate Adaptive Management strategies will be applied where monitoring results indicate resources are not moving towards desired conditions.

COMMENT 12q. Such effects are exacerbated the steep slopes drained by many of these tributaries. Sheep moved across the landscape must use large areas of lands that the Forest's mapping has shown are not capable - as well as through degraded areas of Capable lands. Sheep concentrate on and congregate in (and even get hung up in the bottom) of highly degraded erodible tributaries. As the landscape becomes progressively drier, sheep use converges on any remaining spring or wetted areas receive especially

severe impacts – and trampling causes progressive heavy to severe erosion of banks. Disturbed areas never get a chance to heal. Both the bank areas and land adjacent on these steep slopes are highly erodible granitic or other soils lacking protective cover. Sheep hooves trample and churn up and dislodge soils in interspaces. These dislodged and loose soils particles from each grazing event end up moving downslope or downstream –especially in runoff events.

RESPONSE 12q. The Commenotor has provided a discussion of one scenario of erosion and sedimentation processes, which occur in localized areas within the allotments. The intent of the Proposed Action is to implement the Adaptive Management strategies where appropriate to attain desired resource conditions.

COMMENT 12r. Attached scientific papers describing extreme erosion potential of Idaho batholith soils, and ways to examine and understand erosion processes so that the effects of management activities, and various disturbances (fire, logging, grazing) can be better understood. See Post-fire erosion studies, Clayton and Megahan 1997, EPA Watershed Academy". Describing methods to characterize the physical landscape of watersheds and assess susceptibility to erosion from natural processes and land use practices. This includes an understanding of: Dominant erosion processes; how land use activities affect erosion; geomorphic land types in watershed; where and how much soil compaction is present; effects of landslides, sheetwash, roads and their contribution to sediment; effects of fire; effects of gully erosion as a sediment source; effects of streambank erosion and changes in erosion rates over time; other significant erosion sources such as wind; the need to account for all erosion processes in watersheds; understanding what are the primary sources of sediment and then evaluate all the erosion information.

RESPONSE 12r. Commentor has provided literature on erosion processes. Dominant hillslope erosion processes for the landtypes and soils representative of the analysis area were described in the North Sheep FEIS on pages 3-9 to 3-17.

COMMENT 12s. Integration of all of this information and production of an erosion report are essential to understanding the health of the lands, the capability and continued Suitability for grazing disturbance of all areas affected by such grazing disturbance. This has not been done. It is also essential for undertaking a comprehensive NEPA analysis of all indirect, synergistic and cumulative effects. The Forest's own past Managers have long understood the erosion severity in the Idaho batholith, and the importance of conducting systematic studies of past and current erosion rates in order to understand effects of disturbance activity. The current managers seem to have forgotten the past studies that showed serious conflicts with sheep use of these granitic soils.

RESPONSE 12s. Dominant hillslope erosion processes for the landtypes and soils representative of the analysis area were described in the North Sheep FEIS on pages 3-9 to 3-17. The inherent surface erosion potential and management limitations for the landtype and soil properties are factors incorporated in the project specific capability analysis.

COMMENT 12t. To provide a scientifically accurate analysis of the effects of grazing sheep in such an erosion-vulnerable and bottlenecked landscape, the Forest must conduct a full current analysis of the current condition of soils in lands used (grazing and/or trailing) by sheep (including all Non Capable lands as well) – and the erosion vulnerability– of the drainage networks. Factored into these analyses must be the consideration of the very slow rate of upland veg or soil recovery, and the extremely slow soil formation rates in this cold, mountainous terrain. In each annual sheep grazing event, how much additional soil is lost from de-stabilized soil surfaces on slopes, streambanks, margins of springs, etc. and how long (hundreds or thousands of years) may it take to replace these soils? The many bare-banked or poorly vegetated steep-sloped tributary areas are suffering heavy erosion that must be assessed in understanding the effects of grazing of and whether or not these lands are Capable of withstanding, and Suitable for, continued livestock use.

> **RESPONSE 12t.** Please see Response 12s. The project level Capability analysis in the SEIS was prepared through evaluation of past and current grazing effects as compared to the vegetation production and erosion characteristics for the landtypes across the allotments.

COMMENT 12u. EPA "Watershed Academy" http://www.epa.gov/owow/watershed/wacademy/wam/erosion.html describes "gully erosion can often occur in response to roads, grazing, or agricultural impacts in fine-grained soils. Evaluating gully erosion typically involves aerial photo and field surveys to determine an average rate of annual erosion". Why has the Forest not applied such techniques to understanding gullying and downcutting and effects of degraded intermittent tribs to sediment delivery to streams? And to inform its understanding of the continued Suitability of this landscape for grazing disturbance? Such analyses would also have informed the Forest as to: appropriate stocking rates; standards of livestock utilization, trampling, browse, etc.; necessary watershed closures; and NEPA examination of direct, indirect and cumulative impacts of continued sheep use.

> **RESPONSE 12u.** There is an unlimited number of tools and analysis methods available to resource specialists who conduct a variety of analysis at different scales. Recognizing this, the information presented in the North Sheep FEIS and the SEIS is appropriately based on data and analysis that depicts the erosion and sediment delivery characteristics for the landtypes and soils representative of the analysis area. Further, neither the EPA or the Idaho DEQ have implemented a TMDL that incorporates a sediment budget approach for nonpoint sources - because of the difficulty in defining individual sediment loads from multiple management and non-management disturbances occurring in watersheds.

COMMENT 12v. EPA also describes "evaluation of watershed-scale sources of erosion", and development of a sediment budget that considers sources and storage of sediment and ad the export of sediment from the watershed. Given the calamitously low Bull Trout numbers in these streams, such information is critical to understanding the

Suitability of these lands for continued grazing disturbance to soils and vegetation. This can be used to compare natural sources of sediment, soil creep, fire, natural mass wasting, etc. with management-related sources of sediment (grazing, roads, mining). The relative differences can be used to better judge the impacts of land use and need for management change.

> **RESPONSE 12v.** Continuing from the previous response, it is possible to estimate total erosion and sedimentation for a watershed and even separate the total accelerated erosion and sediment delivery resulting from management activities as compared to natural rates. However, any of the numerous analysis approaches and methodologies for nonpoint sources have a high rate of uncertainty and are best used to compare management alternatives - not derive absolute amounts. The project level Capability Model that was derived using landtypes and soils representative of the analysis area incorporate the hillslope erosion and sediment delivery characteristic of the watersheds in the allotments.

COMMENT 12w. Better understanding the effects of runoff and the ability of a watershed to capture and slowly release water (increasing perennial nature of steams and water available for fish and recreational and consumptive sues downstream,) would also enable understanding of changes in water volumes/quantity, a matter of growing concern in the region. For example, recent articles in the Wood River Valley papers discuss concern over aquifers and stream water supplies. How is grazing that contributes to watershed degradation affecting the quantity of water on public lands that is used downstream - either through aquifer movement, or downstream streamflow?

> **RESPONSE 12w.** The scope of the Supplement analysis has been narrowed to focus on the effects as they relate to capability and suitability determinations for livestock grazing; full explanation of the adaptive management strategy and its protocols; and consideration of new information for Management Indicator Species (SEIS p. 2). The issue of water quantity, streamflows, and aquifers is not within the scope of the Supplement analysis.

COMMENT 12x. The Forest has ignored integrating understanding the effects of livestock grazing on watershed processes, including rapid flushes of large volumes of water flow in runoff in eroding drainages that are dry by late summer. This runoff contributes large amounts of erosion in snowmelt runoff

> **RESPONSE 12x.** Please see Response 12s. The issue of soil erosion was addressed in the North Sheep FEIS and also incorporated into the project level Capability Model. The issue of water quantity is not within the scope of the Supplement analysis.

COMMENT 12z. How are the effects of sheep grazing on slopes adjacent to, and within, eroding gullying drainages in steep terrain is similar to the effects of logging roads in steep terrain? How does the weight of groups of sheep concentrating on banks cause collapse of downcut mainstem banks here? How much sediment does this deliver?

Violent storm events in Idaho batholith and other central Idaho Mountain areas can result in significant erosion events, and flows and downcutting in tributary drainage networks, as well as slopes of degraded watersheds. Such summer storms, on sheep denuded slopes, may greatly affect headwaters and drainages and deliver sediment to streams including during period when Bull Trout are spawning.

> **RESPONSE 12z.** Beyond segregating natural sediment delivery from total accelerated sediment, it is difficult, if not impossible to link sediment to individual management activities. The intent of the proposed action to ensure does not cause excessive gully erosion or erosion that can affect fish bearing reaches downstream.

COMMENT 12aa. In order to understand how ALL the sediment gets delivered, the Forest must examine the condition of soils on slopes, and all the intermittent, ephemeral, and springbrook trib drainages that act as sediment conduits. Instead, the Forest only examines a smattering of data on the "mainstem" drainages. Every time AOPs try to shift use away from the main drainages – they run up against rocks, trees, or steep unstable, eroding sideslopes and intermittent tribs, that are trashed and in very poor condition and Not Capable of withstanding sheep trampling.

> **RESPONSE 12aa.** All available information on soils and erosion processes for the allotments was used in the North Sheep FEIS and Supplement. There is high variability in the soil-hydrologic functions and processes within and across watersheds, mostly due to the variability in the occurrence and types of disturbances that affect these processes. Even if this data existed, it would be difficult to tease out impacts from a specific management activity because of the variability in disturbance processes. The Forest acknowledges degraded resource conditions exist. The project level Capability Analysis identifies capable or suitable grazing, and the purpose of continued monitoring and Adaptive Management approach is to modify grazing strategies to promote recovery of degraded resource conditions across the entire allotments.

COMMENT 12bb. The Forest also ignores: Consideration of microbiotic crusts in protecting sagebrush soils from erosion and weed invasion (Belnap et al. 2000 USDI BLM Technical Bulletin, Heines et al. 2006, Belnap 2000; the effects of grazing in promoting the rampant Toadflax infestation; a looming/highly foreseeable cheatgrass invasion especially with continued livestock disturbance (see Belsky and Gelbard 200, Wisdom et al. 2002, Wisdom et al. 2003, Wamboldt et al. 2003, Welch and Criddle 2003, Pellant Congressional testimony 2007, and a wealth of other current science including climate change science.

> **RESPONSE 12bb.** Please see Response 12s.

COMMENT 12cc. The North Sheep SEIS at 37-38 lists "Landtypes excluded from Consideration for Capable Grazing Lands" under the Forest Plan. How does the Forest Plan address degraded riparian arteries that are eroding and not capable of withstanding

continued livestock use? We can find no record of the Forest considering degraded areas Not Capable of withstanding continued livestock use. Forests have recognized degradation- and Closed areas – for example, even this EIS would close a small area of higher elevation lands in the Smiley Creek allotment. It is not explained –why the Forest only selected one portion of the much larger area of high elevation and drainage network degradation.

> **RESPONSE 12cc.** The Forest acknowledges degraded resource conditions exist. Even for those areas where the project level Capability Analysis identifies capable or suitable grazing, the purpose of continued monitoring and Adaptive Management approach is to modify grazing strategies to promote recovery of degraded resource conditions across the entire allotments.

COMMENT 12dd. The FEIS at p. 25 admits that no soil trend data is available. How can an agency manage ESA-listed species in the highly erodible Idaho batholith without understanding current conditions of soils, the condition of the extensive drainage network that these soils erode into bull trout habitats by, and the ecological condition of veg communities – all necessary to understand if actions are adequate to protect soils from erosion and impairment of waters? No valid claims of non-impairment can be made until this basic info is collected and examined.

> **RESPONSE 12dd.** The project level Capability Model presented in the North Sheep Supplement incorporates the available information on soils and erosion processes for the allotments. The purpose of the proposed Adaptive Management approach and monitoring is to continuously evaluate resource conditions and modify grazing strategies as necessary, so livestock uses comply with resource objectives and allow recovery of degraded conditions.

COMMENT 12ee. There is an extensive body of scientific literature on desertification of watersheds, including in the western United States. Desertification is defined as: "a change in the character of the land to a more desertic condition", involving "The impoverishment of ecosystems as evidenced in reduced biological productivity and accelerated deterioration of soils and in an associated impoverishment of dependent human livelihood systems". See Sheridan 1981, CEQ Report 1981 at iii. Major symptoms of desertification in the U. S. include: declining groundwater tables; salinization of topsoil or water; reduction of surface waters; unnaturally high soil erosion; desolation of native vegetation (Sheridan CEQ at 1). The existence of any one can be evidence of desertification.

> **RESPONSE 12ee.** Commentor providing a summary of available literature on desertification. The scope of the Supplement analysis has been narrowed to focus on the effects as they relate to capability and suitability determinations for livestock grazing; full explanation of the adaptive management strategy and its protocols; and consideration of new information for Management Indicator Species (SEIS p. 2). Issue of desertification is not within the scope of the Supplement analysis.

COMMENT 12ff. As lands become desertified, they become less productive, and activities such as livestock grazing become less sustainable. Continuing activities like livestock grazing may result in grazing becoming permanently unsustainable across the landscape. In many areas of these allotments, ecological conditions because of desertification and degradation processes that has already occurred and which is still underway, have already crossed the threshold between sustainability and, essentially, "mining" of increasingly non-renewable natural resources. Desertification can be both a patchy destruction, often exacerbated by drought, as well as the impoverishment of ecosystems within deserts. See also Dregne 1986, Steinfeld et al. 2006.

RESPONSE 12ff. Please see Response 12dd.

COMMENT 12gg. Please assess the levels and degree of desertification that have occurred across these lands. The Forest repeatedly references the effects of Historic Grazing –yet never systematically never examines these effects, including desertification, and the effects of chronic ongoing grazing disturbance in causing desertification as well. Once areas are desertified, or desiccated, recovery may be much more difficult.

RESPONSE 12gg. The North Sheep FEIS discussed soil productivity on pp. 3-9 to 3-17 and p. F-35. The issue of soil productivity is not within the scope of the SEIS analysis.

COMMENT 12hh. Through repeated disturbance of microbiotic crusts and soil surfaces in these narrow and confined areas including steep sideslopes year-after year, soil surfaces are constantly de-stabilized and protective microbiotic crusts degraded or destroyed altogether.

RESPONSE 12hh. Please see Response 12s and Response 12hh.

COMMENT 12ii. BLM's Technical Bulletin (Belnap et al. 2000) describes their importance. Recent research (Deines et al. 2006) describes the importance of microbiotic crusts as a Front Line defense against invasive species. Cheatgrass is now appearing in disturbed soils (road margins,and areas of most intense livestock concentration) in central Idaho ranging from Leadore to Burnt Creek in the Pahsimeroi to the Sawtooth area. As part of determination of the sustainability and Suitability of continued livestock grazing here, please examine the risk of cheatgrass expansion in sagebrush communities across the lands of the allotment and the landscape through which the sheep are grazed and trailed in association with grazing use of the North Sheep allotments.

RESPONSE 12ii. Damage to soils and microbiotic crusts was not identified by agency resource specialists as an issue requiring analysis in detail. In the absence of evidence that such issues are significant within the analysis area, they fall outside the scope of this analysis. Grazing related impacts to soil resources were considered and are disclosed in Chapter 4, section 4.3 of the Draft Supplement. The issue of weed susceptibility was evaluated in the Forest Plan FEIS (Non

Natives Plants) as well as in the site-specific North Sheep FEIS analysis. (pp. 3-75, 3-76, 4-64 to 4-66) Also, please Response 16a as well as all the responses under Issue #16 – Noxious Weeds & Non-Native Plants.

Issue 13: Substantial Impairment (Public Law 92-400)

COMMENT 13a. The Forest Service has carried out an inadequate and incomplete analysis in the draft SEIS of what constitutes substantial impairment of primary values on the SNRA.

RESPONSE 13a. Direction for evaluating substantial impairment of the key SNRA values originates in 36 CFR Part 292: 36 CFR 292.17 (b) (10): "Substantial impairment means that level of disturbance of the values of the SNRA which is incompatible with the standards of the General Management Plan. (GMP)". The direction contained in the Forest Plan represents the GMP as required by Public Law 92-400. Contained in the 2003 Sawtooth Forest Plan is Appendix I "Guidance for Determining Substantial Impairment" (pp. 15-29). Appendix I provides process guidance for determining substantial impairment of each of the key values identified in Public Law 92-400. Each key value has a general description of the desired condition related to Forest-wide and Management Area direction; specific standards from the Forest Plan to be used as measures of substantial impairment; the scope and scale at which to apply those standards; the supporting rationale as to why the specific standards were chosen; when to invoke the substantial impairment analysis, and how to document it.

The North Sheep Draft Supplement Appendix A shows the Substantial Impairment Worksheet based on Forest Plan Appendix I direction. The Worksheet elements examine the key values identified in Public Law 92-400. The worksheet is labeled draft and will not be finalized until the Supplement is finalized, in order to consider public comments.

COMMENT 13b. Finally, as discussed earlier, the Desired Future Conditions provided in the AMPs themselves represent substantial impairment. To have a DFC for upland plant communities of "Fair" is equivalent to a loss of up to 74% of the potential plant community in cover and production. If 74% is not substantial, what is?

RESPONSE 13b. Please see Response 13a. The process for determining "substantial impairment" as defined by Public Law 92-400 is clearly outlined and was followed.

COMMENT 13c. Until the Forest carefully examines such information on soils, vegetation and inter-related watershed processes, it can not conclude that its Proposed Action will "move toward meeting all applicable soil and watershed resource objectives … affected by grazing on the North Sheep allotments"" (SEIS Exec Summary), or determine the level or degree of Impairment to SNRA and other values.

RESPONSE 13c. The issues of soils, vegetation, and watershed processes was addressed in the North Sheep FEIS on pp. 3-9 to 3-32(soils/hydrology), 3-63 to 3-76 (vegetation), 4-14 to 4-32 (soils/hydrology) and 4-50 to 4-56 (vegetation). This information was supplemented in the Draft North Sheep Supplement on pp. 49-67 (soils/hydrology), 78-81 (vegetation) and 96-105(soils/hydrology) and 106-107 (vegetation). In addition, a Forest Plan Consistency Checklist, that looks at all relevant standards and guidelines was completed and is part of the project record. To determine "Substantial Impairment" as defined by PL 92-400, we use Forest Plan Appendix I (pp. 15-29). Please see the response to Comment 13a for more detail on the Substantial Impairment analysis.

COMMENT 13d. Instead, the Forest (SEIS at 81) contents itself with continued degradation and excessive erosion in the areas that receive the confined sheep use and are already greatly damaged: "While desired conditions for an allotment or drainage can be set for an allotment or drainage … not all sites within that area would be expected to achieve that condition". What this really means is that with continued grazing re-disturbance in the confines of this largely Non Capable Landscape – the same areas will be used by sheep year after year, and conditions can not be stabilized or suitable for habitat requirements. Yes, the areas the sheep do not graze will be in "desired condition", but the constricted and bottlenecked areas grazed by sheep have not been shown to be recoverable under this analysis. As the Forest has not collected necessary data on conditions across the vast watershed areas traversed by sheep (Capable and Non-Capable lands), it has not basis for determining the level or degree of Impairment that is occurring.

RESPONSE 13d. Please see Response 13a. The process for determining "substantial impairment" as defined by Public Law 92-400 is clearly outlined and was followed. The Proposed Action was found to be in conformance with relevant Forest Plan direction.

Issue 14: Vegetation

COMMENT 14a. While the forage production from the 1960's is used to indicate that PVG1 (dry ponderosa pine/xeric Douglas fir); PVG5 (dry Grand fir); and PVG11 (high elevation subalpine fir) are capable for forage production, the SEIS did not present any map or table revealing the number of acres in each capable PVG for sheep. The current conditions for these conifer forest types were described in the Intermountain Regional Assessment as mature with few early seral stages . This may indicate significant changes in the ability of these types to produce forage or allow livestock access due to fallen timber blocking access and reduced forage production since the REA in the 1960's.

RESPONSE 14a. On page 35 of the North Sheep SEIS, it is noted that Range Environmental Analysis (REA) production data collected in the early 1960s through the early 1980s and used in the site-specific capability analysis process

for the NSEIS allotments was updated for the NSEIS analysis and is therefore more current than the production data used to develop the model.

COMMENT 14b. The Non-Forest PVG99 (grass, shrub) is described as capable, yet the SEIS at p85 describes conditions in sagebrush habitats including, "terraced slopes, pedestaling of shrubs, reduced forb cover, and bare patches throughout portions of the allotment". This indicates that a significant decrease of forage from the 1960's estimates may have occurred. Other descriptions of reduced productivity occur in the SEIS such as on p56 for the Smiley Creek Allotment where it states, "Current sheep use in some upland and riparian areas has resulted in the overuse of vegetation, soil compaction, and exposed soil surfaces…". These conditions are reflective of reduced vegetation productivity and ongoing soil loss.

RESPONSE 14b. On page 35 of the North Sheep SEIS, it is noted that Range Environmental Analysis (REA) production data collected in the early 1960s through the early 1980s and used in the site-specific capability analysis process for the NSEIS allotments was updated for the NSEIS analysis and is therefore more current than the production data used to develop the model.

COMMENT 14c. The Smiley Creek AMP p.39 described current and desired future conditions for sagebrush habitats as "Fair" for most watersheds. To quote the 1996 Region IV assessment, "Most big sagebrush stands are currently outside a balanced range of structural classes. Most of the type presently occurs as mature plants in sites with more than 15 percent sagebrush cover and greater than 20 percent bare mineral soil exposed. These types and conditions have significantly increased within the Region in the last 100 years, due to grazing practices and fire exclusion. The grass and forb understory on these sites is diminishing because of grazing in combination with the increase in overstory sagebrush (>15 percent). As a result of this loss in understory vegetation, soil stability and productivity may also be seriously affected. Overland flow as a result of rain, is causing surface soil erosion and deposition in other cover types, i.e. riparian areas. Additionally, transpirational losses are occurring due to the dense sagebrush canopies. This reduces underground recharge of soil water in adjacent types, especially riparian areas" .

RESPONSE 14c. The Forest Service has recorded your comment to the North Sheep SEIS project record.

COMMENT 14d. The Smiley Creek AMP p.39 described current and desired future conditions for sagebrush habitats as "Fair" for most watersheds. "Fair" condition only represents 26 – 50% of potential. The range of sagebrush canopy is given as up to 47%. These factors indicate that sagebrush alone could account for Fair condition with little in the way of grass and forbs that are useful as forage for sheep or wildlife. When these conditions are considered along with the 100+ sheep bedding and watering places that are used annually, sheep trailing routes, degraded high elevation basins or forested areas it is clear that current forage production is much less than potential. The SEIS by using 40+ year old information and ignoring the degradation that has continued since the REA

appears to be overstating current forage production of desirable species, particularly in the recent years of drought when the already depleted forage production would be reduced even more.

> **RESPONSE 14d.** On page 35 of the North Sheep SEIS, it is noted that Range Environmental Analysis (REA) production data collected in the early 1960s through the early 1980s and used in the site-specific capability analysis process for the NSEIS allotments was updated for the NSEIS analysis and is therefore more current than the production data used to develop the model.

COMMENT 14e. Grazing and rest requirements for key species of grass can be critical. Native cool-season perennial bunchgrasses such as those occurring on the North Sheep Allotments can be very sensitive to defoliation and growing season use. For example, Anderson (1991) stated in regards to bluebunch wheatgrass, "Effects of growing season defoliation injury are well documented: basal area, stem numbers and both root and forage yields are reduced and mortality can be high. … Defoliation to very short stubble heights during the boot stage has been reported to essentially eliminate plants within as few as three years. … Vigor recovery has been found to require most of a decade, even with complete protection from grazing." The author went on to describe experiments in which a single clipping of the grass during the growing season produced 43% less herbage and 95% fewer flower stalks the following year than unclipped plants.

> **RESPONSE 14e.** The Forest Service has recorded your comment to the North Sheep SEIS project record.

COMMENT 14f. Under a deferred system in eastern Oregon, it was reported that bluebunch wheatgrass could not be maintained at 30 – 40% use in the boot stage (early June). A one time removal of 50% of the shoot system during active growth may require six years' rest even in an area with 17" precipitation. Anderson (1991) also makes the point regarding bluebunch wheatgrass that, "The belief that range improvement will occur after one or two years of rest following a single season of more than 'light' use during the growing season is erroneous." Mueggler (1975) also determined that Idaho fescue of moderately low vigor required 3 years of rest for recovery and that plants of bluebunch wheatgrass and Idaho fescue in very low vigor may require 8 years and 6 years of rest, respectively for recovery.

> **RESPONSE 14f.** As stated on page 48 of the SEIS, the adaptive management process provides for adjusting grazing use when annual proper use criteria are not met, when monitoring indicates that adequate progress is not being made toward achieving desired conditions, and when unacceptable conflicts occur with other resource uses. These adjustments may include changes in stocking rates (number of animals and/or grazing season), grazing restrictions, grazing closures, adjustments in grazing and trailing routes, etc.

COMMENT 14g. Following exclusion of livestock, Anderson & Holte found recovery of perennial grasses was slow, but nevertheless it gradually occurred. Basal area of

perennial grasses increased from 0.28% to 5.8% over 25 years. Anderson & Inouye found that cheatgrass was less competitive and able to establish in areas where native perennial grasses were thriving. McLean & Tisdale found it took 20-40 years for bunchgrasses to fully recover from poor to excellent condition under complete rest. Evanko & Peterson found that 18 years of livestock exclusion of an area heavily grazed for 50 years resulted in a decrease in unpalatable forbs and shrubs, while grass cover, herbage yield, litter cover and water absorption were greater in the protected areas than in those areas that continued to be grazed. Orr found that more than one complete season of rest was needed for significant soil recovery as measured by pore volume and infiltration. Bryant et al found that under increasing trampling frequency, soil compaction increased and resulted in a significant decrease in forage production for tramplings in June & Sept.

> **RESPONSE 14g.** The Forest Service has recorded your comment to the North Sheep SEIS project record.

COMMENT 14h. There has been no determination of condition and trend for the different plant communities present on the allotments, no identification of lands in less than satisfactory condition and no action planned for their restoration. According to the Intermountain Regional Assessment referenced earlier, many plant communities such as conifer, sagebrush, riparian, aspen, alpine are not in proper functioning condition and face continued risks of deterioration. Now with the growing specter of climate change, increased drought, providing for restoration of degraded plant communities, soils and watersheds to store carbon and provide a steady water delivery are increasingly valuable.

> **RESPONSE 14h.** The Forest Service has recorded your comment to the North Sheep SEIS project record.

COMMENT 14i. The SEIS further describes sagebrush habitats with terraced slopes, pedestaling of shrubs, reduced forb cover, and bare patches "throughout portions of the allotments" (SEIS p85). There are no ground cover monitoring data to describe the extent of this degradation, there is no production data for native forbs and grasses to describe the current community and its ability to provide forage and cover for sage grouse, or other wildlife, while still allowing domestic sheep grazing.

> **RESPONSE 14i.** Monitoring guidelines to achieve desired conditions are described in the North Sheep FEIS – Appendix C, including compliance with the Forest Plan direction

COMMENT 14j. There is no comparison of the areas of sagebrush habitat occurring on the allotments to the lands determined as capable for domestic sheep grazing. There are no maps or overlays of sagebrush habitats for nesting and brood rearing sage grouse with those capable acres for sheep. There are no maps of lands in satisfactory and unsatisfactory condition. WWP suspects that nearly ALL capable lands for sage grouse are within capable lands for sheep grazing.

RESPONSE 14j. The acres that the Forest is analyzing in the North Sheep Supplement are acres of MIS source habitats that are coincident with acres that are actively used by livestock. As previously described in the North Sheep FEIS, many of the impacts to sage grouse habitat are the result of historic rather than current livestock grazing practices and will require specific restoration projects, which is beyond the scope of this analysis. Within the scope of this project, the analysis recommends decreasing livestock grazing impacts through the use of area closures, annual monitoring of livestock activities, and the adaptive management process. If Sage-grouse source habitat areas are identified as sustaining negative impact from livestock grazing activities, then using adaptive management, appropriate steps will be taken to minimize or remove those activities causing the habitat degradation. The North Sheep Analysis used the North Sheep Project Area for identifying Sage-grouse source habitats.

COMMENT 14k. The Draft Supplemental North Sheep Environmental Impact Statement ("SNSEIS") supports my observations of degraded conditions on these allotments, including the following:
--3.7 Vegetation: sheep grazing has impacted shrub riparian and herbaceous riparian, including impacts that exceed Forest Plan standards (p 79).

> **RESPONSE 14k.** The Forest Service has recorded your comment to the North Sheep SEIS project record.

COMMENT 14l. There is significant potential for passive restoration and recovery of microbiotic crusts and grass and forb understories in the North Sheep landscape – if sheep grazing disturbance is removed or sharply curtailed. See Wisdom et al. (2002) describing management actions for such sagebrush habitats. With continued abusive sheep use (even above the numbers actually grazed here in the past), expanded and intensified disturbance through use of "temporary" corrals, water hauling, shifting of sheep use to try to avoid beat out sections of streams, and other practices, there is a serious risk of rampant weed infestations that may be uncontrollable.

> **RESPONSE 14l.** As stated on page 48 of the SEIS, the adaptive management process provides for adjusting grazing use when annual proper use criteria are not met, when monitoring indicates that adequate progress is not being made toward achieving desired conditions, and when unacceptable conflicts occur with other resource uses. These adjustments may include changes in stocking rates (number of animals and/or grazing season), grazing restrictions, grazing closures, adjustments in grazing and trailing routes, etc.

COMMENT 14m. The Forest ignores serious current scientific concern about Aspen decline across the Region, and the known effects of livestock grazing in aspen decline and loss (See Charles Kay Nevada aspen survey papers). Under these circumstances, the Forest should apply criteria for Pileated Woodpecker to aspen, or have conducted necessary site-specific analysis to understand grazing effects. Aspen clones –at the margin of sagebrush areas or intermixed with conifers show very poor recruitment in sites accessible to sheep. Plus now increased logging of dead lodgepole has opened up

mixed stands to light – as well as greater sheep access, and herbivory on aspen suckers may increase. Pileated woodpecker here occurs at the periphery of its range, and loss of essential habitat components may result in reduction of that range.

> **RESPONSE 14m.** Monitoring guidelines for aspen are described in the North Sheep FEIS – Appendix C, including compliance with the Forest Plan direction.

COMMENT 14n. The 2004 Biol Eval. Stated 'although aspen is uncommon ... it provides important habitat for wildlife". The Forest elsewhere notes recent fires consumed aspen communities – so just what is the current extent of mature aspen here? As described in WWP comments on MIS Supplement (Attached), grazing can affect conifer density and other condition of forested vegetation – thus altering potential fire frequency by increasing doghair thickets of trees and ladder fuels, and affecting fire intensity. See Belsky and Uselman 1997, Neuenschwander 1997, Attached). The Forest needs specific data to do a "measurable" analysis. It also must conduct at least some site-specific scientific analysis to say that sheep grazing impacts to conifer habitat and/or aspens Pileated habitat are not significant, and to determine the continued Suitability of grazing declining aspen areas with sheep use conflicts. This concern is amplified by concern over climate change effects on aspen across the region. Has the Forest conducted current or Baseline surveys for the Pileated Woodpecker her? If so, what did it find?

> **RESPONSE 14n.** Monitoring guidelines for aspen are described in the North Sheep FEIS – Appendix C, including compliance with the Forest Plan direction. The Forest recognizes that Sage-grouse and Pileated Woodpecker use aspen stands for foraging and cover. If livestock grazing and associated activities are having negative impacts on aspen stands, then the Forest will use area closures, annual monitoring of grazing activities, and the "adaptive management process" to reduce or eliminate those impacts. Within the North Sheep project area, annual Pileated Woodpecker survey are conducted to eventually establish a long term population trend for this species. Since Sage-grouse are only seen occasionally within the project area, only occurrence data is recorded for this species.

COMMENT 14o. This vegetation may be reduced by diversion, burning, vegetation control and grazing, so suitable habitat is eliminated or degraded, with the result that the songbird nest parasites like the brown-headed cowbird can more readily invade and parasitize the nests of migratory birds. Migrating birds may use spring waters to drink, and vegetation and insects associated with springs to refuel. Migration stresses cause insectivorous and frugivorous bird species to drink. Granivorous species are more dependent on water. Birds are vulnerable to predation, and seek watering sites with greater tree and shrub cover. Areas with larger intact riparian vegetation may attract more migrants, and thus provide more prey for raptors such as Cooper's hawk or Northern Goshawk. These areas also provide succulent green vegetation for Sage Grouse broods.

> **RESPONSE 14o.** The Forest recognizes the importance of well vegetated water sources and riparian areas for Sage-grouse foraging, cover, and brood rearing. If

livestock grazing and associated activities are having negative impacts on springs, seeps, and riparian areas, then the Forest will use area closures, annual monitoring of grazing activities, and the "adaptive management process" to reduce or eliminate those impacts.

COMMENT 14p. Die-offs of forested vegetation within the Project Area is particularly severe. ALL Of this information must be incorporated, and systematically examined using current ecological science, in order to understand effects of agency actions, and for the Forest to be able to understand the level and degree of substantial impairment that currently exists, and that may be carried forward or increased under the . The SEIS continues to be woefully deficient in delineating and identifying specific actions to be triggered, as well as sideboards on actions, under any Adaptive Management Scheme.

RESPONSE 14p. The Forest Service has recorded your comment to the North Sheep SEIS project record.

COMMENT 14q. The Forest discussion of rare plants is greatly disappointing. Necessary comprehensive baseline surveys across all rare plant habitats of the allotments and surroundings where sheep are trailed, and where use may be shifted to, are not examined. How can the Forest not have conducted such surveys, and provided mapping, habitat condition examination including site-specific impacts of sheep, and population effects and viability analyses for rare and sensitive plants? Sheep eat plants, including the many rare forbs. Sheep trample and damage plants. Sheep consume other plant species that may be essential for pollinator life cycles.

RESPONSE 14q. The scope of the analysis for the Supplement is not the same as the original analysis. (p2) The issue of rare plants habitats raised in this comment was addressed in the North Sheep FEIS on pages 3-68 to 3-74. This issue of rare plants is not within the scope of the Supplement analysis.

COMMENT 14r. The need for intensive comprehensive surveys and site-specific analysis of impacts is even greater in this landscape were compressed and bottlenecked use of nearly all the limited relatively open terrain (which is where most of the rare plats grow – and not the dense dark forest floor. Guardian Buckwheat (exposed granitic soils) may be threatened by trailing and grazing impacts, as is White Cloud Milkvetch and several other species. Until it understand the dispersion and condition of plant occurrences and status of populations across the allotments and surrounding lands affected by sheep operations in this landscape, the Forest can not determine whether the lands will still be capable of supporting these species.

RESPONSE 14r. Please see Response 14q.

COMMENT 14s. Sheep use may be shifted onto eroding granitic soils and rare plant habitats to avoid ESA species redds and streams – and this may occur quickly with no time for plant surveys to preceded use.

RESPONSE 14s. While certain elements in the North Sheep FEIS were supplemented, other important aspects of the project and the analysis in the North Sheep FEIS were sufficient and therefore remain unchanged. The scope of the analysis for the Supplement is not the same as the original analysis. (p2) The scope of the Supplement analysis has now been narrowed to focus on the effects as they relate to capability and suitability determinations for livestock grazing; full explanation of the adaptive management strategy and its protocols; and consideration of new information for Management Indicator Species. The issue of rare plants habitats raised in this comment was addressed in the North Sheep FEIS on pages 3-68-74. This issue of rare plants is not within the scope of the Supplement analysis.

COMMENT 14t. The Forest's own database "http://www.fs.fed.us/database/feis/plants/graminoid/cargey/all.html" shows that sheep grazing causes an INCREASE in unpalatable elk sedge. This is precisely what is occurring on the slopes of the watershed. The illusions of green on the slopes are elk sedge. All other native herbaceous species are greatly reduced across large areas. "palatability poor to fair in interior Northwest.

RESPONSE 14t. Studies do not all agree on the effect of grazing on elk sedge forage production. In Douglas-fir/ninebark, elk sedge cover was essentially the same in grazed and ungrazed plots, but production in grazed plots was twice that in ungrazed plots [Zimmerman, G. T.; Neuenschwander, L. F. 1984]. In contrast, elk sedge under heavy stocking produced 74% less plant material than it did when it was protected from grazing [Garrison, George A.; Bjugstad, Ardell J.; Duncan, Don A. 1977]. Overgrazing over several decades has caused understory community composition to shift in many western forests, including a decrease in elk sedge cover as it is replaced with more grazing-tolerant grasses. Elk sedge withstands grazing well because it reproduces from underground rhizomes and forms dense tufts or sod; however, continued heavy use can eventually lower elk sedge cover [U.S. Department of Agriculture, Forest Service. 1937]. Driscoll [Driscoll, Richard S. 1957] found elk sedge vigor, as indicated by flowering stalk production, was significantly lower on plants with 40% and 60% of their herbage removed, compared to plants with 20% removed. Because significant changes in vigor were noticeable in just 3 years, he indicated that heavy grazing over several years is likely to reduce cover of elk sedge. Elk sedge may be replaced by forbs and pasture grasses in some areas in the intermountain West that have been heavily grazed by domestic sheep in the past, and in some cases may be absent from the understory altogether [Schlatterer, Edward F. 1972]. Because it often decreases under heavy grazing pressure, elk sedge is an indicator of good range condition where it is dominant in the understory below ponderosa pine and Douglas-fir in the Blue Mountains of northeastern Oregon and southeastern Washington [Hall, Frederick C. 1973]. Under heavy grazing pressure elk sedge is often replaced by pasture grasses in the Douglas-fir/ninebark habitat type of the northern Rocky Mountains [Cholewa, Anita F. 1977, Cholewa, Anita F.; Johnson, Frederic D. 1983] and in quaking aspen/elk sedge sites [Mueggler, Walter F.;

Campbell, Robert B., Jr. 1986]. In some cases elk sedge may respond favorably to grazing. Powell [Powell, David C. 1988] stated that heavy grazing by domestic sheep would cause an increase in cover of elk sedge relative to the variety of palatable forbs present in the understory of the quaking aspen/Fendler meadowrue (Thalictrum fendleri) community type in Colorado. Zimmerman [Zimmerman, Gordon Thomas. 1979] found that livestock grazing had no adverse influences on the reproduction of elk sedge, and that cover of elk sedge was the same in grazed and ungrazed stands in the Douglas-fir/ninebark habitat type in Idaho. However, frequency of elk sedge was slightly higher in grazed stands.

COMMENT 14u. Desertification symptoms in arid lands include: Sparsity of grass; presence of invading plant species both native and non-native into native areas that have survived: plants are of poor vigor; topsoil losses - in many places, topsoil is held only by pedestals of surviving plants. Surface signs of soil erosion include: pedestaling, gullies, rills, absence of plant litter to stabilize soils.

RESPONSE 14u. The Forest Service has recorded your comment to the North Sheep SEIS project record.

COMMENT 14v. Desiccation and erosion caused by livestock can cause water tables to drop, rilling, gullying and arroyo cutting to occur, and result in sediment flow from degraded areas (Sheridan CEQ at 14). Grazing creates extremely dry site conditions for plants due to removal of litter, loss of soil cover, and trampling of the ground that prohibits rainfall from reaching plant roots (CEQ at 15). Livestock grazing exacerbates any climate changes and shifts that may be occurring (CEQ at 16), Steinfeld et al. 2006 United Nations Report. This is of particular concern in the western landscape periodically plagued with severe drought, and which is facing increasing heat and aridity due to Global Warming.

RESPONSE 14v. The Forest Service has recorded your comment to the North Sheep SEIS project record.

COMMENT 14w. The reduction or loss of many species of larger native bunchgrasses, such as larger-sized native grasses from many areas of these lands, signals stress of overgrazing (CEQ at 19). Such losses may be shown in Key Area or other monitoring data.

RESPONSE 14w. The Forest Service has recorded your comment to the North Sheep SEIS project record.

COMMENT 14x. Sagebrush and other arid vegetation communities in Idaho, Utah and Nevada are now showing signs of "extensive changes" and significant stresses, with livestock grazing and aggressive non-native weeds recognized as among important causal factors. Nevada Natural Resources Status Report 2002 http://dcnr.nv.gov/nrp01/bio02.htm . Continued grazing disturbance, degradation and weed invasion will cause native plant communities to cross thresholds from which

recovery is very difficult, if not impossible. The decline in sage grouse populations and other species dependent on arid land shrub habitats is a landscape-scale biological indicator that the loss of functions and values of sagebrush ecosystems are serious and widespread. These are also signs of desertification processes across the landscape. These processes are operating in the North Sheep SEIS area, and their full range of impacts is not examined here.

> **RESPONSE 14x.** The Forest Service has recorded your comment to the North Sheep SEIS project record.

COMMENT 14y. A recent analysis, Dobkin and Sauder 2004,"Shrubsteppe Landscapes in Jeopardy: Distribution, abundances, and the uncertain future of birds and small mammals in the Intermountain West", examined bird and small mammal species in the sagebrush biome. The authors found that "very little of the sagebrush biome remains undisturbed", the inherent resilience of the ecosystem has been lost and the ability to resist invasion and respond to disturbance has been compromised (Dobkin and Sauder at 5). At least 60% of sagebrush steppe now has exotic annual grasses in the understory or has been converted completely to non-native annual grasslands (citing West 2000). More than 90% of riparian habitats have been compromised by livestock or agriculture. The authors distilled a list of 61 species of birds and small mammals that are completely or extensively dependent on shrubsteppe ecosystems, and conducted an analysis of their distributions, abundances, and sensitivity to habitat disturbance to assess current state of knowledge and conservation needs of these species.

> **RESPONSE 14y.** The Forest Service has recorded your comment to the North Sheep SEIS project record.

Issue 15: Water & Fisheries

COMMENT 15a. The SEIS fails to analyze and acknowledge that in many watershed sheep will water at a small number of accessible creek watering areas thereby creating magnified impacts at those locations. This is especially true of Frenchman and Beaver Creeks in the Smiley Creek allotment.

> **RESPONSE 15a.** The North Sheep FEIS requires that all watering sites only have "one time use". Allotments should also only have once-over grazing. These requirements should help to minimize impacts associated with continued use of watering sites.

COMMENT 15b. The SEIS fails to describe springs, seeps and wetlands that occur on the allotments or their condition. These are generally sacrifice areas to livestock, either dewatered and destroyed for livestock water developments or trampled into a severely degraded state with loss of function for water storage or wildlife such as amphibians or birds.

RESPONSE 15b. Several streams (Smiley, Frenchman, Cabin, and Alturas Creeks) have short stream segments where flows go subsurface. Most of these areas are associated with excessive bedload deposits from oversteepened slide slopes, debris torrents, or stream alterations from diversions and roads in the case of Cabin Creek. Clearly sheep grazing has caused bank erosion, stream widening, and trampling of riparian soils in localized areas within the Smiley Creek allotment. These impacts can reduce water infilitration and storage. However, there is no evidence that grazing impacts have been so extensive as to cause mass hillslope erosion or large scale channel changes that could significantly reduce instream flows or alter flow regimes. To our knowledge there are no long term instream flow data for streams within the Smiley or Fisher Creek allotments. Even if this data existed, it would be difficult to tease out impacts from a specific management activity when there is large amounts of annual variability in precipitation.

COMMENT 15c. An example of Forest Service reaching to explain away livestock impacts to these streams is also evident in the SEIS Table Water 3 – 1 and 3 – 2. Here, data from IDEQ shows high percentages of sediment fines (59 – 88%) and low percentages of stable banks (22 – 100%), while Forest Service data gives fines ranging from 11% to 65% and bank stability of 91 – 100%. This pattern continues through the SEIS, where invariably, the Forest Service monitoring finds better conditions than IDEQ.

RESPONSE 15c. The data in the North Sheep Supplement represents that was collected at those sites in that given year. It is unclear why there are differences in results in similar channel types. Some of the difference may be due to observer variability, timing of collection, etc. Regardless the Sawtooth National Forest acknowledged that sites in C and B channels have more sediment than Natural Conditions Database values resulting in a functioning at risk condition.

COMMENT 15d. The SEIS states that "depth fine measurements exceeding 28% are generally considered to be unhealthy for salmonid species." Then, the SEIS goes on to present surface fines data which do not represent depth fines. It is not clear if the IDEQ data provided in the SEIS is surface fines or depth fines, so comparisons of fines data based on the 28% depth fines noted above are uncertain.

RESPONSE 15d. IDEQ data presented in the North Sheep Supplement is based on surface fines, not depth of fines. Although 28% depth fine statement is mentioned, baselines functionality were evaluated based comparable surface fine data in the Natural Condition Database.

COMMENT 15e. Although not fully discussed in the SEIS, it is reasonably certain the Upper Salmon Basin Watershed Project, the Custer Soil and Water Conservation District, Idaho Department of Water Resources, Idaho Office of Species Conservation, U.S. Fish and Wildlife Service, and the National Marine Fisheries Service will continue to improve habitat conditions and connectivity in the Upper Salmon River Basin including the action area for the North Sheep SEIS. It is important that the SNF not allow grazing or other

Federal actions to take listed fishes or adversely modify critical habitat, while some seasonally unoccupied streams become reconnected; otherwise, the SNF actions will retard recovery of ESA/MSA listed salmonids. For example, the SEIS (Page 71) describes Smiley Creek as seasonally disconnected by unscreened diversions in its lower reaches from the Salmon River, which may deny access to anadromous and fluvial salmonids on many occasions.

> **RESPONSE 15e.** The majority of the Smiley Creek Allotment is currently not being grazed until adequate recovery is demonstrated through annual monitoring.

COMMENT 15f. Page 5, Para 5, Lines 9-10: The SEIS claims the 2005 fires had little effect on fish or riparian habitat but follows with the fact the fine sediment transport has increased, which indicates that spawning and rearing habitat for ESA-listed salmonids (bull trout, Snake River spring/summer Chinook salmon, and Snake River Basin steelhead) has been degraded by increased gravel embeddedness and smothering of spawning and incubating instream gravels. With increased fine sediments, also there is a decrease in the quantity of capable food-producing stream habitat and therefore, a decline in the quality of juvenile rearing salmonid habitat.

> **RESPONSE 15f.** Monitoring results in Fisher Creek showed that fine sediment decreased and was transported downstream from each site. This was likely due to scouring caused by higher fire induced base flows and the failure of several upstream beaver dams in 2006. So fine sediment did not increase in the first year after the fire monitored reaches.

COMMENT 15g. Page 26, Issue – Streambank Stability – The SEIS clearly identifies some streams in the action area as functioning at risk with some areas not moving towards desired conditions. The SEIS states that adaptive management "could" result in more stable banks, but fails to mention how long it takes for damaged banks to recover from overgrazing and watering livestock when livestock are removed from the watershed; let alone, with continued grazing impacts on streams and riparian areas. There is no mention of stream restoration work where ESA, MSA, MIS, and Regionally Sensitive Aquatic Species occur or habitat important for recovery is found in the action area.

> **RESPONSE 15g.** Streambanks will not reach desired conditions until enough vegetation reestablishes. How long this takes is dependent on climate, natural stream channel changes in response to high flows, and impacts from current grazing. It is hoped that grazing under the adaptive management strategy will only cause localized areas of bank instability and not prevent obtainment of desired conditions. If grazing impacts become too severe actions such as restricting season length or closing areas to grazing may be needed.

COMMENT 15h. Page 27 - Sediment effects on MIS and ESA/MSA-listed salmonids are varied and affect all of the freshwater life stages of the salmon and trout species found in the action area. Fine sediments impair spawning, incubation, food production by

smothering and embedded productive gravels in area streams. Increased turbidity in the form of suspended sediments impairs predator-avoidance by juvenile salmonids and feeding success. Increased turbidity may be deleterious to individual fish survival and growth by irritating gills. Sediment in the form of silt, in addition to smothering important riffle production areas, may result in the filling of pool habitat and important instream cover habitat, resulting in reduced capability to support bull trout (MIS and ESA species), steelhead (ESA species), Chinook salmon (ESA and MSA species), and Westslope cutthroat trout (Regionally sensitive species) adults and populations. With the filling of pool habitat and the collapsing of banks, resulting in the loss of undercut bank cover, predation will increase and survival of salmonids will decline.

> **RESPONSE 15h.** This is a statement of what elevated sediment levels can do to various fish life stages. The analysis in the North Sheep Supplement does not conclude this will occur with implementation of the proposed action.

COMMENT 15i. Page 27 – sediment levels under adaptive management are said to improve but the monitoring does not seem to include gravel embeddedness, turbidity, and total sediment loadings. How will FS tell if the sediment loads are being maintained, increasing, decreasing, or even responding to their grazing management practices and adaptive management.

> **RESPONSE 15i.** Currently monitoring at DMAs does not have a component that evaluates inchannel sediment. This is because it is very difficult to link inchannel sediment to a specific management activity. Instead we will evaluate bank stability, bank alteration, greenline to greenline width, and photo points to determine if sheep grazing is causing bare ground or sources that could increase inchannel sediment. We may also use results from PIBO and IDEQ monitoring to see if inchannel sediment is increasing.

COMMENT 15j. Page 28 – Fisheries Resources – SEIS indicates that Smiley Creek Allotment is not meeting desired conditions for fishery habitat because of domestic sheep grazing impacts on SNF-managed lands. A two-year phase out of grazing is proposed even though the environmental baseline can no longer support any of the grazing efforts. The SNF decision should eliminate sheep grazing on the Smiley Creek Allotment now to avoid section 9 ESA take of protected species, adverse modification of designated critical habitat, retardation of recovery of listed species, and adverse effects to Chinook salmon essential fish habitat (EFH) under the Magnuson-Steven Fishery Conservation and Management Act (MSA).

> **RESPONSE 15j.** The majority of Smiley Creek is currently not being grazed until adequate recovery is demonstrated through annual monitoring.

COMMENT 15k. Page 50, Para 1 – It is faulty logic to assume "functioning appropriately" in the two Big Wood River subbasin allotments since there is no Overton data available to compare to. Why not assume where grazing occurs, to use at least "functioning at risk" or in some cases and sensitive stream reaches that are impaired,

"functioning at unacceptable risk."

RESPONSE 15k. There are many areas in Idaho and across the western United States where the Matrix is used by land and fisheries management agencies without applicable "natural conditions" quantitative data as well documented as that developed by Overton et al. In these cases, local biologists have to use what data is available along with their qualitative observations and professional judgment, classify the quality of baseline habitat conditions. "Functioning at risk" and the two other determinations are not a predictions of future conditions based on land use, but are an assessment of the current conditions of the area of analysis--grazing does not automatically substantially degrade any of the habitat indicators.

COMMENT 15l. Page 50, last line – It is immaterial whether impairments in the baseline assessments are attributable to grazing or not; just that the baseline is impaired and should not be subjected to additional abuses attributable to grazing.

RESPONSE 15l. The analysis does not conclude that baseline will be further impaired or that recovery will be retarded.

COMMENT 15m. Page 57: Again, Alturas Lake and Alturas Lake Creek are very important for the recovery of endangered Snake River sockeye salmon. Maintaining and improving the stream and riparian habitat, which is degraded by legacy and current sheep grazing practices, is crucial for the conservation and recovery of this endangered anadromous salmonid species.

RESPONSE 15m. We agree maintaining habitat conditions in Alturas Lake Creek is important for the recovery of sockeye salmon. The analysis combined with our professional judgment shows the proposed action will not further impair this habitat over the subwatershed scale.

COMMENT 15n. Page 65+ Fishery Resources: Page 66, Para 5: Just because fisheries are functioning at risk or unacceptable risk without livestock grazing, it is not alright to further impair them and retard recovery of rare, threatened, and endangered fishes with additional impacts from sheep and other livestock grazing. The SEIS authors and the SNF have demonstrated poor logic in this section, which may result in further erosion of their public trust responsibilities.

RESPONSE 15n. The analysis does not conclude that fisheries will be further impaired or that recovery will be retarded.

COMMENT 15o. Page 71, Para 2, Lines 2-3: None of the diversions in lower Smiley Creek have fish screens. Why not? Why are not there any law enforcement actions by IDFG, NMFS and/or FWS?

RESPONSE 15o. The Idaho Fish and Game is working with land owners to

screen diversion within the salmon basin. The status of screens being installed on Smiley Creek is not known at this time. Law enforcement actions on diversions is outside the scope of this analysis.

COMMENT 15p. Page 72, Para 2 – The SEIS indicates that sheep grazing has resulted in higher summer maximum water temperatures, which are not capable of supporting bull trout and possibly other native salmonids. Introduced brook trout seem to survive well in Smiley Creek. Page 72, Para 3 – The SEIS clearly indicates that trailing sheep in and along Smiley Creek has degraded stream and riparian habitat, including overgrazing and trampling of riparian vegetation and bank slumping, which results in a loss of cover habitat and higher water temperatures.

RESPONSE 15p. Impacts to riparian vegetation in Smiley Creek have been noted in the North Sheep FEIS. This is why sheep could only be trailed along the road until enough recovery has occurred. Page 72 of the North Sheep Supplement mentions that sheep grazing (historic and current) may have exacerbated temperatures through reduced streamside vegetation in localized areas. However, it also mentions that naturally wide, shrub-dominated glacial trough that lack conifer cover and irrigation diversions on private land are also contributors to higher water temperatures. So sheep grazing is likely not the only factor causing higher temperatures.

COMMENT 15q. Page 73, Alturas Lake Creek – although the SEIS mentions the historical presence of Snake River sockeye salmon and the unsuccessful stocking by IDFG of hatchery fry in Alturas Lake, there is no mention of the importance of Alturas Lake and Alturas Lake Creek to endangered sockeye salmon recovery plans.

RESPONSE 15q. The North Sheep Supplement should have noted that the interior Columbia technical recovery team designated Alturas Lake one of three areas important to sockeye because Alturas Lake kokanee were most similar to Redfish Lake kokanee.

COMMENT 15r. Page 76 – Frenchman Creek – October maxima for water temperature exceed bull trout spawning criteria and are in part high, because of sheep grazing of riparian vegetation, trampling of riparian vegetation, and collapsing undercut banks, making the streams wider and shallower and therefore exposed to more solar radiation.

RESPONSE 15r. Temperature readings in lower Frenchman Creek are above the 15 C that bull trout prefer. However, this is not due to collapsed banks and a wider/shallower stream. The majority of the lower portion of Frenchman Creek is well vegetated and narrow. Sheep collar data show that there is very little use along the stream in lower Frenchman Creek.

COMMENT 15s. Pages 77-78 – Fisher Creek – apparently water diversion seasonally dewater and isolate Fisher Creek from the Salmon River, denying access to anadromous

salmonids. Even when flows are seasonally suitable for anadromous Chinook salmon and steelhead and fluvial bull trout to reach Fisher Creek, a road culvert near the mouth acts as a fish passage barrier. Why is not this stream reconnected and its habitat protected for future occupancy and connectivity?

> **RESPONSE 15s.** There are many culvert barriers on the SNRA. The forest plans to correct as many of these as possible as time and funding allows. In the mean time the forest is protecting habitat on administered lands. For example, sheep did not graze Fisher Creek after the Valley Road fire. Sheep grazing along the perennial channel has also been very light based on monitoring information from the DMA and sites established to evaluate the fire.

COMMENT 15t. Page 105 – Fishery Resources – Environmental Consequences: Describes brook trout outcompeting native bull trout (MIS and ESA) and Westslope cutthroat trout (Regionally Sensitive Species), but fails to mention in detail that legacy and recent livestock grazing improve the competitive advantage against the native salmonids because of rising summer and fall water temperatures that are not suitable for bull trout and cutthroat trout.

> **RESPONSE 15t.** Page 72 of the North Sheep Supplement does mention that sheep grazing (historic and current) may have exacerbated temperatures through reduced streamside vegetation in localized areas. It also mentions that naturally wide, shrub-dominated glacial trough that lack conifer cover and irrigation diversions on private land are also contributors to higher water temperatures.

COMMENT 15u. Page 106 – The SEIS implies that because the brook trout are hybridizing and outcompeting native bull trout and cutthroat trout, then habitat improvement is not important. This is very poor logic and defies fishery management activities on other Federal lands with invasive brook trout. In Rocky Mountain National Park, brook trout removal by anglers is encouraged to help give native greenback cutthroat trout more of a competitive edge. It fails to mention that if the streams described in the action area are cooler due to improved riparian and undercut bank conditions without or reduced sheep grazing, that bull trout and other priority salmonids may make a strong comeback in the grazing impacted streams.

> **RESPONSE 15u.** The North Sheep Supplement does not imply improving habitat conditions are not important. Instead, it acknowledges that even if habitat conditions improve non-native brook trout will remain the dominant fish species and will continue to out-compete bull trout and other native fish species. Clearly improved habitat conditions will give native fish species a better chance of survival. But populations are not likely to improve significantly without removal of non-native brook trout.

COMMENT 15v. Page 69 – Smiley Creek Allotment (includes Alturas Lake tributaries): Not mentioned but important for recovery strategies for endangered Snake

River sockeye salmon.

> **RESPONSE 15v.** Agreed - Alturas lake and its tributaries are important in recovery strategies for Snake River Sockeye.

COMMENT 15w. In the text and in short, dispersed tables, the DS-FEIS provides additional stream survey information and water quality data, most of which is from the 1990s. There are a few recent additions since 2000. We are concerned that, overall, recent comprehensive water quality and stream survey data do not appear to be available, and what is available is difficult for a reader to assimilate in the manner presented. While the older data are important and useful for describing trends, there should be more recent data upon which to make current and future management decisions. Information presented in the text indicates that aquatic resources are functioning at risk or are not functioning properly, mainly due to sediment and temperature exceedences of water quality standards. This is particularly true for Smiley Creek and Fisher Creek drainages within the SNRA.

> **RESPONSE 15w.** All of the most recent data within the assessed allotments has been included in the baseline. This includes PIBO, IDEQ and designated monitoring areas (DMA) data. The forest plans to base trends within each allotment on a series of DMAs, photo points, and other field observations.

COMMENT 15x. For the final DS-FEIS, we recommend that all available water quality data be presented in a central, comprehensive set of tables grouped according to allotments, watersheds, subwatersheds, and individual drainage basins. Along with the monitoring data, the tables should include the year the data were gathered, designations such as FA, FR, FUR, Clean Water Act Section 303(d) listings and the parameters for which the streams are listed. We also recommend, as discussed under adaptive management above, that the final DS-FEIS disclose how adequate monitoring data will be acquired in order to implement the adaptive management Alternative B. The monitoring program should be designed to assess the cumulative effects of all allowed and permitted uses of the SNF and SNRA that have the potential to negatively impact water quality and designated uses of these waters. These data are needed to inform decision making, particularly with respect to substantial impairment within the SNRA, and to support needed management actions.

> **RESPONSE 15x.** The "water quality" data the commenter seeks is provided in the North Sheep FEIS and associated documentation, primarily in the Matrices of Pathways and Indicators; it is not obvious that a superior analysis of the existing data will be facilitated if displayed in the recommended format. Proposed monitoring is disclosed in the North Sheep FEIS and the Supplement appendices and should be adequate to determine compliance with Forest Plan and SNRA substantial impairment goals, objectives, standards, and guidelines.

COMMENT 15y. Pg. 49: First paragraph under 3.3 “Removal of riparian vegetation and soil disturbance due to hoof action can destabilize banks…” Removing vegetation and

hoof action don't destabilize banks in every situation. Should re-phrase this sentence to something of the effect: "Excessive removal of riparian vegetation and excessive disturbance due to hoof action…"

> **RESPONSE 15y.** We agree and the North Sheep Supplement will be modified accordingly.

COMMENT 15z. Pg 57: section 3.3.3.2.2, middle of first paragraph "Intensive sheep grazing has occurred in the past in some localized areas of the watershed, including some ridgetop areas and near corrals used for loading and unloading sheep. This has resulted in substantial changes to stream channels in these areas." I'm not sure how overgrazing ridgetops has lead to changes in stream channels?

> **RESPONSE 15z.** The statement is in reference to historic sheep impacts to stream channels near ridgetops. Impacts to headwater streams and areas near corrals were noted in the North Sheep FEIS and Supplement. The Forest believes that proper implementation of the adaptive management strategy should reduce these impacts and trend these areas toward their desired conditions.

COMMENT 15aa. Pg 62: Two statement, one in second paragraph and last paragraph "Headwater reaches are characterized by steeper gradients, large substrate (cobble and boulder) and heavily armored streambanks. Sheep use in these armored portions of the stream has very little potential to affect streambank stability." The end of the page goes on to say, "Existing impacts associated with sheep grazing occur in the upper portion of this drainage. Stream channel corridors are more open and provide ready access to water and vegetation." These two sentences seem to be contradictory unless upper portion and headwaters mean different things/locations?

> **RESPONSE 15aa.** The paragraph referred to by the commentor could have been written better. The headwater reaches is referring to the main Beaver Creek channel whose stream banks are well armored. The impacts in the upper portion of this drainage is referring to intermittent and ephemeral stream based on field reviews.

COMMENT 15bb. Pg 76: Middle of second paragraph "The wide, shrub dominated, valley bottom is naturally susceptible to such heating; however, management of streamside vegetation has likely exacerbated these conditions." What "management"? Recreation, grazing, timber, riparian? Should be more specific here.

> **RESPONSE 15bb.** The quote from p. 76 of the North Sheep Supplement, as noted in the comment above, should be changed to reflect that historic uses and not current day management activities have exacerbated conditions. The North Sheep Supplement will be edited to reflect this change and will read: "The wide, shrub dominated, valley bottom is naturally susceptible to such heating; however, historic uses (recreation, grazing, timber, mining, roads) of streamside vegetation has likely exacerbated these conditions."

COMMENT 15cc. Pg 75: Second paragraph, last sentence "These changes may promote conditions that improve water temperature" Water temperature does not improve, but could be maintained due to the changes.

> **RESPONSE 15cc.** Since the majority of irrigation rights from Beaver Creek have been leased to the State of Idaho's Water Supply Bank for the period 2004 to 2015 and cattle grazing of these lands has been substantially reduced to dry land pasture of only a few animals, the forest believes these changes should help lower water temperatures at the mouth of Beaver Creek.

COMMENT 15dd. Page 98: Middle of first paragraph "Several impacts associated with livestock grazing are known to influence streambank stability including a decrease in plant roots and surface vegetation along streambanks and shearing forces associated with hoof action (Belsky et al. 1999, Glimp and Swanson 1994)." Should change phrasing to "Several impacts associated with mismanaged livestock grazing…."

> **RESPONSE 15dd.** This is a literature citation from the quoted papers. This information was considered, thank-you.

COMMENT 15ee. The Forest has still not conducted necessary data to make science-based decisions and develop a reasonable range of alternatives. There is still no full inventory and assessment of the location, condition and characteristics of all spring, seep and wet meadow areas, including historically wetted sites to determine the effects of grazing use on these areas. This must be done to understand if the the North Sheep riparian areas are capable of withstanding continued chronic grazing effects and if such use is Suitable here. It has not systematically studied the role of historic plus ongoing chronic livestock grazing and trampling activity (and other disturbances such as roads, mining, logging/woodcutting, OHVs, etc.) in altering, degrading or desiccating these areas, and factored this into the capability and suitability analyses. The inextricable link between the health of springs, seeps, wet meadows, tributary drainages and mainstem streams in watersheds must be addressed.

> **RESPONSE 15ee.** Your concerns for these areas are noted. The North Sheep Supplement does not provide a comprehensive inventory or review of condition of all hillside seeps, springs and wet meadows. The condition of hillside seeps & springs was not identified as an issue to be analyzed in detail in the North Sheep FEIS, and consequently was not brought forward into the North Sheep Supplement. However; the North Sheep Supplement does identifiy concerns related to grazing impacts on some sites (SEIS pp. 79 - 80) and sets the desired condtion for these seeps and springs as "late seral condition" (SEIS p. 81). Forage use standards and other management direction established in the Forest Plan also apply to these sites (Forest Plan pp. III-44 through III-46). Additionally desired condition, management critieria, and monitoring are addressed in the Allotment Management Plans (SEIS, App C, Smiley Cr.- Fisher Cr. AMP, pp. 11, 17, 18,

24,36, 37, 41, & 42; Baker Cr. AMP pp. 7, 23 & 26; and North Fork Boulder AMP pp. 7, 22, 23 & 25). Additional monitoring and adaptive management practices may be added to address these sites as need is indicated (SEIS p. 48). These sites are not viewed as sacrifice areas. The project record identifies adaptive management actions including resting specific spring areas to address grazing impacts. Additional monitoring and adaptive management practices may be added to address these sites as need is indicated (SEIS p. 48). The North Sheep Supplement discusses the criteria used for capability analyses at the Forest and allotment level. Current conditions for the allotments are described in Chapters 3 of the North Sheep FEIS and North Sheep Supplement which are the results of activities (current and historic) within the four grazing allotments. Cumulative effects of the analyzed alternatives are also described in chapters 4 of the North Sheep FEIS and North Sheep Supplement.

COMMENT 15ff. The health of the entire drainage network is critical to Bull Trout, anadromous fish, spotted frog, and other aquatic biota. Maximizing perennial flows of cold, clean water and instream habitats that provide for Bull Trout and other native cold water salmonids is critical to maintenance and restoration of the very low population levels here. It is also essential to enable Bull Trout to better compete with Brook Trout, since Brook Trout are more adapted to degraded conditions of the present, and are a major concern for the maintenance of ESA-listed trout and other aquatic biota.

RESPONSE 15ff. We agree that maintenance of perennial, high-quality streamflows is critical to aquatic biota and believe, and along with the Fish and Wildlife Service, that the proposed activities would maintain or improve aquatic conditions

COMMENT 15gg. The EIS is devoid of information and analysis of the current location, condition and ecological health of the drainage network, outside the mainstems - including the very important tributary streams, ad intermittent and ephemeral drainages, springs, and seeps. How can the Forest conduct an examination of the Capability of lands to sustain grazing use, and understand the Suitability of grazing use in the face of direct, indirect, and cumulative deleterious effects of grazing disturbance to these sites –without a full and thorough inventory of current conditions? FEIS at 80 contains one meager paragraph – less than 100 words – on "wet meadows and seeps". All the Forest does here is admit that "wet openings contain grasses, sedges, rushes … that thrive under saturated conditions". Well, as WWP letters, e-mails and Photos previously submitted, and additional submissions with these comments also show, many of these areas are NOT exactly thriving. They are being degraded, eroding and desertified/less saturated under sheep use.

RESPONSE 15gg. The Forest provides assessments (and data, where available) in the North Sheep FEIS and associated documents that describe baseline subwatershed habitat characteristics, especially through the Matrices of Pathways and Indicators. The quantitative and qualitative monitoring proposed is sufficient

to manage the allotments to Forest Plan direction. Your concerns for these areas are noted. The North Sheep Supplement does not provide a comprehensive inventory or review of condition of all hillside seeps, springs and wet meadows. The condition of hillside seeps & springs was not identified as an issue to be analyzed in detail in the North Sheep FEIS, and consequently was not brought forward into the North Sheep Supplement. However; the North Sheep Supplement does identify concerns related to grazing impacts on some sites (SEIS pp. 79 - 80) and sets the desired condition for these seeps and springs as "late seral condition" (SEIS p. 81). Forage use standards and other management direction established in the Forest Plan also apply to these sites (Forest Plan pp. III-44 - III-46). Additionally desired condition, management criteria, and monitoring are addressed in the AMPs (SEIS, App C, Smiley Cr.- Fisher Cr. AMP, pp. 11, 17, 18, 24,36, 37, 41, & 42; Baker Cr. AMP pp. 7, 23 & 26; and North Fork Boulder AMP pp. 7, 22, 23 & 25). Additional monitoring and adaptive management practices may be added to address these sites as need is indicated (SEIS p. 48). These sites are not viewed as sacrifice areas. The project record identifies adaptive management actions including resting specific spring areas to address grazing impacts. Additional monitoring and adaptive management practices may be added to address these sites as need is indicated (SEIS p. 48). The North Sheep Supplement discusses the criteria used for capability analyses at the Forest and allotment level. Current condition for the allotments are described in Chapters 3 of the North Sheep FEIS and North Sheep Supplement which are the results of activities (current and historic) within the four grazing allotments. Cumulative effects of the analyzed alternatives are also described in chapters 4 of the North Sheep FEIS and North Sheep Supplement.

COMMENT 15hh. The Forest (DEIS at 80) admits some problem areas, but ignores the widespread degraded conditions documented by WWP here. There is no systematic examination of conditions, or even of PFC or other studies on condition of lentic and many riparian areas. The Forest mentions “open meadows along Smiley Creek, Baker Creek, creeks coming off the Boulder face” as having problems, and refers to degraded aspen, and “hill side springs” in the East Fork of Baker Creek. Yet the Forest proposes to keep annually running even more sheep than have been able to be grazed in recent years (see discussion below about disparity between permitted numbers and Actual Use), and keep near-status quo management as part of the Proposed Action, without examining data necessary to understand if these lands are Capable and Suitable for such continued use.

RESPONSE 15hh. The Forest provides assessments (and data, where available) in the North Sheep FEIS and associated documents on all habitat in the subject allotments; as noted by the commenter, degraded conditions caused by recent grazing are also disclosed, but are widespread only in the sense of being dispersed across the allotments. The Forest believes that the quantitative and qualitative monitoring proposed is sufficient to manage the allotments to Forest Plan goals, objectives, standards, and guidelines.

COMMENT 15ii. The Forest has ignored concerns submitted by WWP as part of this

process over the past two summers related to conditions of springs, seeps and drainages in the Alturas watershed, the Frenchman Creek watershed, the Beaver Creek watershed, and Smiley Creek. We requested this information and necessary analyses be incorporated into this EIS process. Except for a bit of the very scenic headwater areas, the Forest identification of "problems" appears to focus solely on sites right by the primary access roads, and mainstems, and ignore many of the problems WWP brought to its attention.

> **RESPONSE 15ii.** The information provided by WWP was considered and has been added to the project record. However, even with this information the forest believes the overall functionality calls would not change because baseline conditions need to be put in perspective with what is occurring along the entire stream. The majority of the Frenchman, Beaver, and Alturas Creek are either comprised of wet beaver pond areas or thick forested areas that sheep rarely use. The majority of Smiley Creek is also not currently grazed. Clearly there are impacts from sheep in drier, more accessible riparian sites. But these comprise a smaller portion of the overall stream length. Therefore these impacts are not affecting enough of the overall stream to cause it to be in a FR or FUR condition.

COMMENT 15jj. Of critical concern is the condition of springs, seeps and drainages in middle and higher elevation and rugged terrain where sheep grazing and trailing trampling use is focused on spring and seep openings and sidehill eroding drainages. There are highly degraded headwater systems at the highest elevations in erodible soils (and often bordered directly by Pika habitats – see discussion later on the American Pika). An example is the headwaters of Beaver Creek where deepening erosion gullies in highly erodible soils carry flows during runoff, and deliver sediment right into headwater springs. Yet sheep movement through this bottlenecked area is planned to continue.

> **RESPONSE 15jj.** The North Sheep Supplement recognizes the importance of these areas. The Records of Decision based on the North Sheep FEIS closed high elevation areas to grazing in part to address these concerns (FEIS pp. 2-1, 2-2). Outside of these closure areas, your characterization of watershed conditions are not consistent with the analysis in sections 3.3 of the North Sheep FEIS and North Sheep Supplement.

COMMENT 15kk. Even BLM conducts some degree of systematic spring/lentic surveys these days, and recognizes the critical importance of spring and seep riparian areas, and examines to some degree intermittent and ephemeral drainages in watershed analyses. The Forest appears mired in the past. Just as with its out-dated and commodity-driven paragraphs on sagebrush habitats and Sage Grouse and MIS species use, the Forest's consideration of riparian areas and understanding of how watershed processes work is not based on current scientific analysis and current data that would enable it to understand overall Capability and effects of these lands, as well as conduct a proper Capability and Suitability of sheep use and effects on MIS habitats, SNRA values, impacts across the watersheds and all affected riparian areas.

> **RESPONSE 15kk.** Your concerns are noted. We disagree with the statement

that current science is not being used to address watershed and riparian management issues or that the Agency does not have an understanding of watershed processes. An analysis of watershed condition indicators was conducted and evaluated (FEIS section 3.3). Some of this analysis was updated and supplemented in the North Sheep Supplement (SEIS section 3.3).

COMMENT 15ll. Sheep use is bottlenecked year after year into the very small Capable areas and also Non Capable steep non-forested lands across these [Alturas] watersheds. These drainages may also deliver bacteria other sheep-harbored pathogens to Alturas Lake & other high use recreational waters.

RESPONSE 15ll. It is possible waste could impact water quality and bacteria. However, the North Sheep FEIS dropped this issue because there are no municipal watersheds within the grazing allotments and no streams have been listed as water quality impaired for bacteria.

COMMENT 15mm. As sheep move up these narrow valleys, they avoid the soggy and marshy areas, and use the same slopes and drier streambank areas year after year, and avoid the dense moist sedge areas. In the middle and higher elevations, where steep slopes and rocks and forested areas greatly confine movement, in traversing slopes, sheep re-disturb the very same open areas of eroding drainages and bare-soiled sideslopes making them bleed sediment. BUT instead of recognizing these effects and the role of livestock in degradation and ongoing erosion and loss –the Forest (SEIS at 81) claims "high natural levels of sediment in the stream systems; impacts from snowslides, high intensity summer storms, and high intensity spring runoff" as well as impacts from recreational uses, mining, changing density of lodgepole stands. Here the Forest lays out a List of many of the other cumulative processes at work that may impair habitats and recreational and other uses – all of which it should have factored into understanding the effects of, and serious ecological risks associated with continued livestock use.

RESPONSE 15mm. The Sawtooth National Forest did factor existing baseline conditions into the determination on whether sheep should continue to graze within the assessed allotments. However, the Forest believes the adaptive management strategy will provide the information to gage where grazing should occur as well as be restricted.

COMMENT 15nn. How much higher are sediment levels be in grazed vs. ungrazed watersheds? If there is already a naturally high level of sediment, the prudent course would to be to minimize livestock disturbance. Instead, the Forest prefers to write off analysis of the effects of livestock disturbance – including site-specific effects – in these watersheds. This is the dead opposite of the necessary course for an agency charged with protecting ESA-listed species habitats, the many important values of the SNRA including enhancement and protection of fish and wildlife, recreational uses and enjoyment, and an array of important and sensitive species.

RESPONSE 15nn. The only basis for comparison for sediment levels between grazed and ungrazed watershed is data from the Natural Condition Database. This comparison shows that some reaches have more sediment than would be anticipated. However, it is unclear what higher sediment accumulations are from? We suspect sediment level reflect cumulative effects from historic and current management activities (i.e. mining, roads, and grazing) and natural disturbances. The forest agrees we need to limit disturbance from sheep grazing where sediment and other conditions are not functioning appropriately. However, the Forest believes the adaptive management strategy will provide us the information to gage where grazing should occur as well as be restricted.

COMMENT 15oo. As erosion progresses year after year, intermittent ephemeral and spring brook areas may erode wider and wider and deeper and more downcut. Such effects also include a reduced capacity of the watershed to store and slowly release water. Such effects may be contributing to the drying/loss of perennial surface flows in a segment of Frenchman Creek, and other similar effects. How would improving the condition of both uplands and the drainage network across the watershed increase the ability of the watershed to store and capture water enhance perennial flows in Frenchman Creek and other areas? What other areas of the more major streams are also intermittent? Are records available that show changes in flows or flow regimes over time? If so, please provide these as part of the analysis of the changing capacity, capability and suitability of these lands to withstand grazing disturbance.

RESPONSE 15oo. Several streams (Smiley, Frenchman, Cabin, and Alturas Creeks) have short stream segments where flows go subsurface. Most of these areas are associated with excessive bedload deposits from oversteepened slide slopes, debris torrents, or stream alterations from diversions and roads in the case of Cabin Creek. Clearly sheep grazing has caused bank erosion, stream widening, and trampling of riparian soils in localized areas within the Smiley Creek allotment. These impacts can reduce water infiltration and storage. However, there is no evidence that grazing impacts have been so extensive as to cause mass hillslope erosion or large scale channel changes that could significantly reduce instream flows or alter flow regimes. To our knowledge there are no long term instream flow data for streams within the Smiley or Fisher Creek allotments. Even if this data existed, it would be difficult to tease out impacts from a specific management activity when there is large amounts of annual variability in precipitation. Several streams (Smiley, Frenchman, Cabin, and Alturas Creeks) have short stream segments where flows go subsurface. Most of these areas are associated with excessive bedload deposits from oversteepened slide slopes, debris torrents, or stream alterations from diversions and roads in the case of Cabin Creek. Clearly sheep grazing has caused bank erosion, stream widening, and trampling of riparian soils in localized areas within the Smiley Creek allotment. These impacts can reduce water infiltration and storage. However, there is no evidence that grazing impacts have been so extensive as to cause mass hillslope erosion or large scale channel changes that could significantly reduce

instream flows or alter flow regimes. To our knowledge there are no long term instream flow data for streams within the Smiley or Fisher Creek allotments. Even if this data existed, it would be difficult to tease out impacts from a specific management activity when there are large amounts of annual variability in precipitation.

COMMENT 15pp. Springs are "hot spots of "hot spots" in arid lands. 75 percent of 505 springs surveyed by Sada in northern Nevada were highly or moderately disturbed (Sada and Herbst 2001). Degradation of springs in the Great Basin is widespread. Their isolation and small size render many spring communities particularly vulnerable to disturbance and loss. "The continued development of springs for livestock by ranchers and state and federal agencies also poses a threat to the continued existence of spring biota". These actions typically involve fencing off an area, immediately adjacent to springs, piping most or all of the water off the site to livestock tanks. Although some riparian vegetation may be retained, "the essential flowing character of the spring is lost, and often no exposed water remains on the surface".

RESPONSE 15pp. The North Sheep Supplement does not provide a comprehensive inventory or review of condition of all hillside seeps, springs and wet meadows. The condition of hillside seeps & springs was not identified as an issue to be analyzed in detail in the North Sheep FEIS, and consequently was not brought forward into the North Sheep Supplement. However; the North Sheep Supplement does identify concerns related to grazing impacts on these sites (SEIS pp. 79 - 80) and sets the desired condition for these sites as "late seral condition" (SEIS p. 81). Forage use standards and other management direction established in the Forest Plan also apply to these sites (Forest Plan pp. III-44 through III-46). Additionally desired condition, management criteria, and monitoring are addressed in the Allotment Management Plans (SEIS, App C, Smiley Cr.- Fisher Cr. AMP, pp. 11, 17, 18, 24,36, 37, 41, & 42; Baker Cr. AMP pp. 7, 23 & 26; and North Fork Boulder AMP pp. 7, 22, 23 & 25). Additional monitoring and adaptive management practices may be added to address these sites as need is indicated (SEIS p. 48). Note that the North Sheep allotments are not comparable to the Nevada Great Basin in the cited research. Also note that only two springs on the North Sheep Allotments have been developed with livestock watering improvements (SEIS App. C, Baker Cr AMP, p. 22).

COMMENT 15qq. Livestock grazing poses a serious threat to spring communities. Livestock trampling reduces substrates to mud, can completely eliminate vegetation, and alters flow characteristics. Soil compaction (as by large herds of sheep) may sufficiently compact soils, along with other erosion forces, and reduce or kill all surface flows. The magnitude is likely great because of complete alteration of vegetation and substrate structure. www.biology.usgs/gov/s+t/SNT/noframe/gb150.htm

RESPONSE 15qq. Your concerns for these areas are noted. Please note that the

website reference cited [www.biology.usgs/gov/s+t/SNT/noframe/gb150.htm] is not functional. We were able to get to the USGS Status and Trends web page using this URL: http://biology.usgs.gov/status_trends/. But we could not determine the reference you were citing.

COMMENT 15rr. Sada and Pohlman (2003) provide a series of protocols to be followed to assess spring conditions. Given the scarcity of springs across these allotments, the extreme damage that has been caused by livestock grazing and other disturbance, often coupled the ill-conceived developments that have occurred, often killing all natural water flows at spring sources, Surveys include: Level I (locate and provide reconnaissance level characterization of springs, delineate important species distribution and salient aspects of habitat, and unique circumstances/challenges) Level II (qualitatively sample riparian and aquatic communities to determine community structure quantitatively sample salient physiochemical elements to identify aquifer affinities), and Level III Surveys (quantitatively sample to determine\aquifer dynamics, sample riparian and aquatic communities and habitats to determine spatial and temporal variation in environmental and biotic characteristics, and to quantitatively determine biotic and abiotic interactions).

RESPONSE 15rr. Your concerns for these areas and suggestions for an inventory protocol are noted.

COMMENT 15ss. We urge the Forest to very carefully examine all intermittent and ephemeral drainages, as well. Often, water not only persists in intermittent and perennial drainages in pockets as a result of runoff, but seep, spring and mesic areas may be present, and interspersed along the length of these drainages. Erosion, downcutting and lowered water tables stemming from livestock grazing is often a primary cause of perennial reaches becoming intermittent. Determine if stock ponds or other livestock facilities have been built/placed/gouged into or on top of spring, seep or meadow areas. Restoration potential must be assessed, and plans must be developed to restore such sites and increase perennial flow under all alternatives.

RESPONSE 15ss. Your concerns for these areas are noted. Please note that only two springs (SEIS, App C, Baker Cr. AMP p22) have livestock watering facilities.

COMMENT 15tt. Please conduct studies of all desiccated, eroding, or otherwise altered springs, and develop plans for restoration of riparian area structure (aerial extent of wetted area, native vegetation components), and flows. The benefits of restored springs to native species must be assessed. For example, what are the characteristics of a riparian community sufficiently restored to support nesting migratory birds?

RESPONSE 15tt. Desired conditions for the watersheds including riparian areas, springs, and upland areas have been identified in Chapter 3 of the North Sheep Supplement.

COMMENT 15uu. Aquifer sources: Springs are supported by precipitation that seeps

into soil and accumulates in aquifers (through fault zones, rock cracks, or orifices that occur where water creates a passage by dissolving rock) where it is stored. The hydrology of springs is affected by regional and local geology, and how water moves through an aquifer. Perched aquifers often characterize high elevations, where local aquifer springs may be fed by adjacent mountain range precipitation, and may change annually due to recharge from precipitation in mountain range. They typically have cool water, and may dry out during extended droughts. Regional aquifers support warmer springs fed by several recharge sources that may extend over vast areas. Aquifer flow is complex, and may extend beneath several valleys and topographic divides. Seeps are small springs that support vegetation adapted to drier conditions. Springs may be small, but have larger aquatic habitats, and support larger riparian zones with moist-soil affinity species. Springs are characterized by the morphology of their sources.

RESPONSE 15uu. Your concerns for these areas are noted.

COMMENT 15vv. The North Sheep EIS is woefully lacking in describing springs, seeps and the drainage network. Springs including those originating near mainstems, may provide important habitats for Spotted Frog, a Forest sensitive species.

RESPONSE 15vv. The North Sheep Supplement does not provide a comprehensive inventory or review of condition of all hillside seeps, springs and wet meadows. The condition of hillside seeps & springs was not identified as an issue to be analyzed in detail in the North Sheep FEIS, and consequently was not brought forward into the North Sheep Supplement. However; the North Sheep Supplement does identify concerns related to grazing impacts on these sites (SEIS pp. 79 - 80) and sets the desired condition for these sites as "late seral condition" (SEIS p. 81). Forage use standards and other management direction established in the Forest Plan also apply to these sites (Forest Plan pp. III-44 through III-46). Additionally desired condition, management criteria, and monitoring are addressed in the Allotment Management Plans (SEIS, App C, Smiley Cr.- Fisher Cr. AMP, pp. 11, 17, 18, 24,36, 37, 41, & 42; Baker Cr. AMP pp. 7, 23 & 26; and North Fork Boulder AMP pp. 7, 22, 23 & 25). Additional monitoring and adaptive management practices may be added to address these sites as need is indicated (SEIS p. 48).

COMMENT 15ww. Each spring and seep is a unique combination of physical and chemical conditions (Sada and Herbst 2001, Sada and Pohlman 2003). These, coupled with disturbance factors, are dominant influences on riparian and aquatic plant and animal communities. Highly modified springs have less diverse riparian communities, and may include non-natives, and upland-associated species. Plant and animal communities associated with spring-fed wetlands are a function of physical and chemical characteristics of water and soils, proximity to other aquatic habitats, and prehistorical connections with regional drainage systems (Sada and Herbst 2001, citing Hubbs and Miller 1948, van der Kamp 1995, McCabe 1998). Primary abiotic factors that influence biotic qualities of unmodified springs include habitat persistence, geographical and

geological settings, and aquifer dynamics Sada and Herbst 2001 (citing Ferrington 1995, van der Kamp 1995). Springs have a more integral connection with ground water than streams (Sada and Herbst 2001).

> **RESPONSE 15ww.** Your concerns for these areas are noted. Please see the responses to 15pp and 15vv.

COMMENT 15xx. At Ruby Marsh, Sada et al. 2001 found that substrate composition, water depth, springbrook width, current velocity, conductivity and vegetation were most influential in affecting macroinvertebrate communities. Habitat condition strongly influenced biotic characteristics. Degraded conditions often masked the influences of natural events and chemical characteristics on the macroinvertebrate community structure. Riparian vegetation at springs may be restricted to areas just along immediate boundaries of aquatic habitat, or may extend outward over much larger areas. Wider riparian areas occur where water seeps outward and moistens hydric soils. Species may be restricted to spring sources. Rheocrene-inhabiting species are more similar to stream-inhibiting species, and limnocrene species to lake or pool inhabitants. Springs tend to be more constant environments than other aquatic habitats.

> **RESPONSE 15xx.** Your concerns for these areas are noted. Springs were not an issue indicator for watershed and fish. A review of the North Sheep FEIS shows they were mentioned in Big Wood River allotments and in the Botanical/Wildlife assessments. The North Sheep Supplement does not provide a comprehensive inventory or review of condition of all hillside seeps, springs and wet meadows. The condition of hillside seeps & springs was not identified as an issue to be analyzed in detail in the North Sheep FEIS, and consequently was not brought forward into the North Sheep Supplement. However; the North Sheep Supplement does identify concerns related to grazing impacts on these sites (SEIS pp. 79 - 80) and sets the desired condition for these sites as "late seral condition" (SEIS p. 81). Forage use standards and other management direction established in the Forest Plan also apply to these sites (Forest Plan pp. III-44 through III-46). Additionally desired condition, management criteria, and monitoring are addressed in the Allotment Management Plans (SEIS, App C, Smiley Cr.- Fisher Cr. AMP, pp. 11, 17, 18, 24,36, 37, 41, & 42; Baker Cr. AMP pp. 7, 23 & 26; and North Fork Boulder AMP pp. 7, 22, 23 & 25). Additional monitoring and adaptive management practices may be added to address these sites as need is indicated (SEIS p. 48).

COMMENT 15yy. Spring size and habitat conditions influence biodiversity of springs (Sada and Pohlman 2003, citing Sada and Nachlinger 1996 and 1998), with different species inhabiting spring sources than downstream reaches/springbrooks. Ephemeral springs and seeps with harsh environments may have fewer species. Spring-fed riparian habitats are of great importance to wildlife species for roosting, food, and shelter. Higher quality springs have high structural diversity created by a dense undergrowth of tangled vegetation and debris. A spring creates a continuum of soil conditions from wet to moist

to dry, each harboring plant and animal associations adapted to those habitat conditions. The link between the condition (health) of the watershed and the functionality springs and springbrooks must also be assessed.

RESPONSE 15yy. Please see Response 15xx.

COMMENT 15zz. Anthropogenic disturbances like livestock grazing and other uses degrade vegetation, increased water temperature, and increased fine sediments. Aquatic and riparian habitats can be degraded or eliminated through water diversion, intense grazing and trampling, and non-native plants. Springs have often been piped, spring brooks channelized, and excessive ground water withdrawal has occurred. This affects spring biota by decreasing habitat size (drying some habitats) and vegetative cover, and changing species composition.

RESPONSE 15zz. Please see Response 15xx.

COMMENT 15aaa. In order to understand condition and threats to springs and tributary drainages, the Forest must: Level I Surveys: Locations, type of spring - rheocrene/limnocrene, volume of spring discharge, springbrook length and depth, wetted perimeter width, DO, temperature, conductivity, pH, percent of emergent cover, percent and type of emergent cover, percent of vegetative bank cover, springbrook bank incision, spring brook bank stability, percent of wetted perimeter covered by watercress, substrate composition, animals present. Estimate site condition and identify influences causing disturbance, i.e. level and cause of disturbance, grazing, horses, "natural disturbances" – drought, fire, scouring floods, avalanche. These can be exacerbated – or caused – by grazing effects. Multiple surveys are needed to measure discharge, which may vary seasonally or otherwise.

RESPONSE 15aaa. Please see Response 15xx.

COMMENT 15bbb. Please research any existing information on spring characteristics – flow rates, aquifer depletion, records and project files regarding any water rights filings, any water rights surveys and any changes in flows over time. This is necessary to understand all direct, indirect and cumulative impacts of actions affecting spring flows, health and hydrologic integrity.

RESPONSE 15bbb. Please see Response 15xx.

COMMENT 15ccc. What type of springs occur across the Project Area? What functional changes or changes in biodiversity have occurred? How can function and/or biodiversity be restored in degraded springs? What are flow rates throughout the year – under drought or normal conditions? What is the current areal extent of wetted area vs. historical area? Please examine soil profiles and characteristics, remnant plant communities, etc. How much have these sites shrunk over time? Since the old REA or any other inventory as conducted? What vegetation would be present in an undisturbed site? Have you examined exclosure areas in similar landforms to inform your analysis

here? What is the potential of the site (vegetation, flows, habitat for species of concern) if livestock grazing or other disturbance is removed? Reduced by one half? Reduced by 75%? How are livestock grazing or other disturbances in the watershed affecting aquifer recharge or flow rates? Flows in mainstem drainages?

> **RESPONSE 15ccc.** The North Sheep Supplement does not provide a comprehensive inventory or review of condition of all hillside seeps, springs and wet meadows. The condition of hillside seeps & springs was not identified as an issue to be analyzed in detail in the North Sheep FEIS, and consequently was not brought forward into the North Sheep Supplement. However; the North Sheep Supplement does identify concerns related to grazing impacts on these sites (SEIS pp. 79 - 80) and sets the desired condition for these sites as "late seral condition" (SEIS p. 81). Forage use standards and other management direction established in the Forest Plan also apply to these sites (Forest Plan pp. III-44 through III-46). Additionally desired condition, management criteria, and monitoring are addressed in the Allotment Management Plans (SEIS, App C, Smiley Cr.- Fisher Cr. AMP, pp. 11, 17, 18, 24,36, 37, 41, & 42; Baker Cr. AMP pp. 7, 23 & 26; and North Fork Boulder AMP pp. 7, 22, 23 & 25). Additional monitoring and adaptive management practices may be added to address these sites as need is indicated (SEIS p. 48).

COMMENT 15ddd. How do runoff rates (and also recharge rates) from a watershed in pristine or good condition compare to the rates from watersheds in poor or fair condition? WHAT is the condition of all watersheds across the Project area and surrounding landscape? What is the condition of intermittent or ephemeral drainages in the watersheds? Is gullying, rilling, head-cutting or other erosion occurring, and how is grazing/trampling or roading or mining effects or other disturbance affecting this? What aquifer is each spring part of, and what are past, current or anticipated threats to these aquifers? How long will it take to recover flows to ¼, ½, all historically wetted areas of springs that have been highly degraded or altered through diversion? What are values of each spring as sheltering, rearing, feeding areas for Sage Grouse chicks, refueling stops for migrating birds (like warblers that may use forage for insects on woody vegetation), nesting habitat for songbirds, providing essential water to raptor chicks, etc.?

> **RESPONSE 15ddd.** Your concerns are noted. While certain elements in the North Sheep FEIS were supplemented, other important aspects of the project and the analysis in the North Sheep FEIS were sufficient and therefore remain unchanged. The scope of the analysis for this Supplement is not the same as the original analysis. (p. 2) Watershed conditions and effects of the alternatives were described in Chapters 3 and 4 of the North Sheep FEIS.

COMMENT 15eee. For all streams and springbrooks in or related to the Project Area, please assess the following: How has vegetation been changed, reduced, eliminated? How have channels been widened or degraded? Have water tables been lowered? Has erosion potential increased? How have these effects impacted habitats for raptors, sage grouse and other special status and important species? How does livestock consumption

of overstory vegetation, elimination of shady cover, trampling of banks, etc. affect water quality (temperature, sediment, bacteria, algae) and aquatic species presence and habitats? What are the characteristics of the banks in areas accessible to livestock use? How is livestock grazing affecting recruitment of young willows and other riparian plants, and altering structure of older or mature shrubs and trees?

> **RESPONSE 15eee.** Your concerns are noted. While certain elements in the North Sheep FEIS were supplemented, other important aspects of the project and the analysis in the North Sheep FEIS were sufficient and therefore remain unchanged. The scope of the analysis for this Supplement is not the same as the original analysis. (p. 2) Watershed conditions and effects of the alternatives were described in Chapters 3 and 4 of the North Sheep FEIS.

COMMENT 15fff. What is/ was the historical potential of the [streams & springs] site? What would the potential of the site be under rest from livestock grazing (coupled with flow restoration if large volumes are diverted or the spring is damaged by diversion) in 5, 10, 15, 20 or more years? How much more quickly would sites heal if livestock were removed to jump start recovery? How is livestock grazing or other current disturbance (of the stream and its watershed) affecting vegetation, banks, water quality, aquatic species, flow, stream morphology? How is livestock grazing or other disturbance contributing to the intermittent or ephemeral conditions of the stream or spring brook?

> **RESPONSE 15fff.** Your concerns are noted. While certain elements in the North Sheep FEIS were supplemented, other important aspects of the project and the analysis in the North Sheep FEIS were sufficient and therefore remain unchanged. The scope of the analysis for this Supplement is not the same as the original analysis. (p. 2) Watershed conditions and effects of the alternatives were described in Chapters 3 and 4 of the North Sheep FEIS.

COMMENT 15ggg. Please pay particular attention to livestock trampling impacts, as over time, trampling of clay soils near springs may seal the spring, causing it to dry up completely. Please examine the impacts of intense or concentrated livestock use in areas in the vicinity of riparian areas, i.e. troughs or dug out ponds outside small exclosures, and water quality measurements throughout the time when livestock are present, as well as during spring runoff to assess livestock impacts to water quality. Please fully weigh the relative scarcity of these values in the arid landscape when balancing uses and making suitability determinations.

> **RESPONSE 15ggg.** Springs were not an issue indicator for watershed / fish. A review of the North Sheep FEIS shows they were mentioned in Big Wood River allotments and in the Botanical/Wildlife assessments. While certain elements in the North Sheep FEIS were supplemented, other important aspects of the project and the analysis in the North Sheep FEIS were sufficient and therefore remain unchanged. The scope of the analysis for this Supplement is not the same as the original analysis. (p. 2) Watershed conditions and effects of the alternatives were

described in Chapters 3 and 4 of the North Sheep FEIS.

COMMENT 15hhh. The Forest is exhibiting bias in using only its own blindered Good News as new info. For example, see SEIS at 5, proclaiming a different model finds the entire Frenchman Creek watershed as "functioning properly". So what if the Forest comes up with a modeling exercise that finds this? It is divorced from reality and the Forest knows this. If Frenchman drainage has bank stability "functioning appropriately", then it is time to throw out that model because it is does not accurately reflect stream conditions. WWP has submitted photos and locations of bank conditions in that watershed. We have repeatedly asked that the Forest examine the conditions of spring, seep and other drainages in that watershed. Yet the SEIS ignored any mention of this site-specific info on bare, eroding, cutbanks, gullying, etc.

RESPONSE 15hhh. The Sawtooth National forest has not completed a new modeling exercise. It did use new criteria from the Natural Condition Database as a benchmark to evaluate baseline conditions. It also used new data collected at the DMA to help make this determination. All functionality calls are made at the 6th field scale based on the all available data. WWP provided information showing localized impacts from sheep grazing and natural bank erosion in drier riparian sites and braided channels from sideslope debris torrents, which has been considered. Although localized impacts from sheep have occurred, these impacts need to be put in perspective with what is occurring along the entire stream. The majority of the Frenchman valley bottom is comprised of wet beaver pond areas where sheep rarely use riparian vegetation along the stream banks. The drier riparian sites, where impacts have been observed comprise a smaller portion of the overall stream length. Therefore these impacts are not affecting enough of the overall stream to cause it to be in a FR or FUR condition. This is reflected in the IDEQ and Forest Service DMA data portrayed in the North Sheep Supplement.

COMMENT 15iii. For example, have water temperatures become WARMER in burned segments of streams – how long will it take to recover necessary shading willow and other cover? Cover necessary for banks to withstand sheep herd trampling? Willow cover tall enough to withstand sheep herbivory? WWP has observed extensive sheep browse use on shorter-statured willows in stream areas accessible to sheep (the drier sites actually used by sheep). How much will resumed sheep grazing under the management schemes slow down and retard recovery - compared to an ungrazed site? Wamboldt et al. (2003), Montana Fish Wildlife and Parks 1995, Welch and Criddle 2003 describe the very long recovery time for big sagebrush communities following fire – we are talking several decades – and not the mere 2 years the Forest has come up with.

RESPONSE 15iii. Only a portion of the Fisher Creek allotment burned in the 2005 Valley Road Fire. The fire burned mainly the headwaters of this drainage that have intermittent stream flows in the summer. Perennial reaches burned at low intensity or not at all. Therefore, willow and other overstory vegetation is adequate to maintain stream temperatures. In fact, most vegetation is close to pre-

fire conditions based on post-fire monitoring. Clearly the forest wants to ensure streamside vegetation is maintained or improved in areas where sheep graze. However, the willows in perennial reaches of Fisher Creek are in a condition that they can withstand some grazing use.

COMMENT 15jjj. The depressing summaries of aquatic habitat info and fish surveys in the SEIS resoundingly demonstrate the loss and decline of native fish in streams of the allotments under the Forest management actions that are nearly identical to those under the proposed Action. Further, the Forest portrays information in Table 3-2 masks the occurrence of fish in these streams. Example, despite The Forest must explain what in its management actions has caused extirpation or further reductions in fish species and numbers of fish (loss if viable populations) in the past 20 years. Example: table Fish 3-2. "Smiley and Fisher Creek allotment fisheries distribution" makes no mention of Bull Trout in Frenchman Creek. Yet, during surveys from 1986 through 1995, IDFG "observed a few bull trout and cutthroat trout".

RESPONSE 15jjj. Native species have likely been reduced due to a combination of factors (1) changes in habitat conditions from historic and some current management activities, (2) presence of non-native species (brook trout), and (3) poor returns of anadromous species. The forest does not mention bull trout being present in Frenchman and other streams because more recent surveys have not found them. Electrofishing surveys in 2005 in Frenchman Creek detected a few steelhead in the lower reaches and a few cutthroat in headwater reaches, but no Chinook or bull trout. Brook trout were in high abundance in all sampled reaches of Frenchman Creek.

COMMENT 15kkk. Just like with Sage Grouse, the Forest appears prepared to write off ever achieving a viable population of native fish species of concern here again "because of all the factors that exist most streams were found to be FR or FUR for species persistence … even absent livestock grazing most streams would be continue to be FR or FUR for species persistence". The Forest has not provided a scientific basis for this conclusion, and has ignored the many exclosure studies that have been built to improve fisheries habitats across the West. Example: Lahanotan cutthroat trout exclosure in Mahogany Creek, Nevada. The Forest's "We might just as well let all damage continue" management violates NFMA, the Forest Plan, and the ESA.

RESPONSE 15kkk. Section 4.4.4.3 and the Fisheries baseline provide rationale why the native species persistence is currently FR or FUR. Two large factors are influencing species persistence. (1) Presence of brook trout and poor returns of adult salmon due to conditions within the Snake and Columbia Rivers. Unfortunately, regardless how much habitat conditions improve non-native brook trout will remain the dominant fish species and will continue to out-compete bull trout and other native fish species. This implies that biological indicators such as local population size, growth and survival, and genetic integrity in Appendix B for the forest plan will remain in a poorer functioning condition (i.e. functioning

at risk or unacceptable risk) because bull trout populations will be absent or small, and the threat of hybridization and competition from brook trout will remain high.

Issue 16: Noxious Weeds / Non-Native Plants

COMMENT 16a. Alarmingly, the Forest has ignored the principles of Integrated and prudent Weed Management, and the direction of the Forest chief who has long identified Invasive species as a primary threat to Forest lands. Over the past two years, WWP has documented expanding Yellow Toadflax populations and made many reports of our observations of this highly invasive noxious weed moving into zones of sheep trampling disturbance and depleted vegetation communities. We have made many observations of domestic sheep being run right through obvious patches of Yellow Toadflax, in violation of the permit Terms and Conditions. We have also reported this to the Forest. Instead of enforcing Terms of the Permit, and keeping sheep from being run through and grazed on these areas, or closing land areas with infestations until infestations can be controlled, the Forest has allowed intensive trampling disturbance of the sagebrush communities, lower elevation ephemeral drainages, and mesic meadow sites.

> **RESPONSE 16a:** The Forest Service recognizes the increasing threat of invasive species. The Weed Management Program inventories, monitors, and treats the North Sheep allotments annually. Additionally, adaptive management strategies would include modifications to allotment terms and conditions, management practices, and grazing routes when noxious weed infestations occur. The issue of the proposed action affecting the spread of noxious weeds was addressed in the North Sheep FEIS on pages 1-10, 2-24, 3-61, 3-75 to 3-77, & 4-64 to 4-67. This issue is not within the scope of the Supplement analysis. Note that recent information on location of Toadflax infestations provided by WWP have been added to the project record and are being used in weed management actions and will be considered during the adaptive management process described in Chapter 2 of the SEIS.

COMMENT 16b. These areas - which are supposed to be the more "productive" sites - area being overrun by Yellow Toadflax moving into areas of sheep trampling disturbance. Now, it is highly unlikely that this infestation will be brought under control – and any control will likely involve considerable herbicide use.

> **RESPONSE 16b:** Your concerns are noted. The issue of the proposed action affecting the spread of noxious weeds was addressed in the North Sheep FEIS on pages 1-10, 2-24, 3-61, 3-75 -- 3-77, & 4-64 -- 4-67. This issue is not within the scope of the Supplement analysis. Yellow Toadflax invades sites with a wide range of productivity and disturbance including pristine rangelands in excellent condition (Biology and Management of Noxious Rangeland Weeds, Roger L. Sheley & Janet K. Petroff. OSU Press. Corvallis, Or. 1999, p 204). Vectors for invasion include people, vehicles, wildlife and livestock. Control of this species is dependent on use of herbicides although some populations have been

effectively controlled by an introduced stem boring weavil Mecinus janthinus. Effective herbicides include Tordon, Tordon mixed with 2,4-d, and Plateau. Sheep grazing can be used to help suppress stands and limit seed production.

COMMENT 16c. We have Attached Ag. Extension Info on Yellow Toadflax, describing herbicides. WWP Notes: Sheep have not been "controlling" Toadflax – they have been promoting its spread especially thorough sampling disturbance in the Smiley, Alturas Lake Creek, Beaver and Frenchman watersheds and other areas. See http://www.whitman.wsu.edu/dtoadflax.html WSU describing potential use of Tordon in control.

RESPONSE 16c: The issue of the proposed action affecting the spread of noxious weeds was addressed in the North Sheep FEIS on pages 1-10, 2-24, 3-61, 3-75 to 3-77, & 4-64 to 4-67. This issue is not within the scope of the Supplement analysis. Thank-you for the additional information you've provided. It has been placed in the project record.

COMMENT 16d. See Attached Forest Invasive Species Report, describing Integrated weed Management. See also Attached WWP comments on Forest MIS process Attached.

RESPONSE 16d: Thank-you for the information you've provided. The issue of the proposed action affecting the spread of noxious weeds was addressed in the North Sheep FEIS on pages 1-10, 2-24, 3-61, 3-75 to 3-77, & 4-64 to 4-67. This issue is not within the scope of the Supplement analysis.

COMMENT 16e. From Washington State Extension Service: Chemical control of toadflax has been highly variable and is impractical or inadvisable over large infestations. Picloram (Tordon) has been the most effective herbicide for toadflax control, although imazapic (Plateau) and picloram + 2,4-D may also provide effective control. Whichever of these herbicides is used, repeated applications may be necessary to achieve control. The herbicide should be applied just after a killing frost in the fall (the frost breaks up leave cuticles, allowing greater penetration) or at flowering when plant reserves are low. Soil type should be considered, since leaching of the herbicide below the plant root zone is more likely in sandy soils or soils low in organic matter. Herbicide efficacy can also be reduced if lack of moisture limits the chemical's incorporation resulting in subsequent photo-degradation (significant loss of the chemical in sunlight)."

RESPONSE 16e: Your concerns are noted. The issue of the proposed action affecting the spread of noxious weeds was addressed in the North Sheep FEIS on pages 1-10, 2-24, 3-61, 3-75 to 3-77, & 4-64 to 4-67. This issue is not within the scope of the Supplement analysis. The current size of infestations on these allotments are within a size for reasonable control with application of herbicides for treatment. The type and application timing for herbicide treatment is dependent on the location and potential for leaching into groundwater. Plateau should be used where there is a potential for leaching into ground water or

transport to adjacent streams or ponds. Fall treatment with Plateau is more effective than fall treatment with Tordon.

COMMENT 16f. There is growing public concern about the use of herbicides, especially the witch's brew of chemicals discussed above as "controls" for Toadflax. Not only is the Forest's continued mis-managment of domestic sheep use here allowing a proliferation of Toadflax that is impairing the public lands and MIS habitats of the SNRA, any belated "monitoring" or "treatment" with chemical, especially now that this aggressive weed has increased so much over the past two years (of WWP-documented continued sheep disturbance and grazing and running of sheep right through Toadflax patches), may have serious adverse effects to public health and recreational uses, as well as potential infiltration into ground waters or streams home to ESA-listed species.

RESPONSE 16f: Your concerns are noted. The issue of the proposed action affecting the spread of noxious weeds was addressed in the North Sheep FEIS on pages 1-10, 2-24, 3-61, 3-75 to 3-77, & 4-64 to 4-67. This issue is not within the scope of the Supplement analysis. The characterization of use of herbicides as "witches brew" is inaccurate. Use of herbicides described above is consistent with label requirements and Forest Service mitigation requirements related to TES species. Application of these herbicides do not constitute a risk to public health. Health and environmental risk assessments for their use have been prepared and are available at http://www.fs.fed.us/foresthealth/pesticide/risk.shtml. Note that the information provided by WWP on Toadflax infestations has been added to the project record.

COMMENT 16g. The Forest has woefully failed to take necessary measures to arrest Toadflax spread and disturbance and spread by sheep. Please see WWP Fite series of 2006 and 2007 letters and e-mails including Toadflax locations to District Ranger Baldwin and other Forest staff, which we incorporate by reference here. We had asked that this information be used in the North Sheep SEIS, and there is certainly no evidence that this has been done to date. There is grave risk of Toadflax expansion over large areas of the landscape with continued grazing disturbance. This must be considered in any forage allocation, production study, carrying capacity, Capability and Suitability process, and in understanding the effects on sensitive and MIS species and populations of continued livestock use under any alternative scheme.

RESPONSE 16g: The issue of the proposed action affecting the spread of noxious weeds was addressed in the North Sheep FEIS on pages 1-10, 2-24, 3-61, 3-75 to 3-77, & 4-64 to 4-67. This issue is not within the scope of the Supplement analysis.

COMMENT 16h. The expanding Toadflax infestation – with the neglect of recent years where sheep have been run right through patches and large new areas of toadflax have expanded into bare and trampled soils. Toadflax has now exploded into many areas that each and every year receive intensive sheep use. If these areas are not grazed each year, there is no way to graze or move sheep across the landscape. It is impossible to graze or

trail sheep through the "Capable" areas without running them right through Toadflax patches. Example: Beaver Creek, Little Beaver tribs. Thus, even if herbicides are sprayed, recovering any desirable native vegetation will be very difficult under continued sheep grazing disturbance. Toadflax is now so widespread in so many portions of the Capable areas that continued grazing disturbance unit this wed is brought under control and native vegetation re-established is, if examined from a site-specific, real world view, impossible.

> **RESPONSE 16h.** The issue of the proposed action affecting the spread of noxious weeds was addressed in the North Sheep FEIS on pages 1-10, 2-24, 3-61, 3-75 to 3-77, & 4-64 to 4-67. This issue is not within the scope of the Supplement analysis.

COMMENT 16i. Please include in any Risk Analysis that is conducted the effects of herbicide use and degradates on amphibians such as Spotted Frog, and herbicide infiltration into aquatic species habitats. Please also include an examination of the effects of any biocides that may be used in or on sheep, and their potential effects on waters, native biota and recreational uses.

> **RESPONSE 16i.** While certain elements in the North Sheep FEIS were supplemented, other important aspects of the project and the analysis in the North Sheep FEIS were sufficient and therefore remain unchanged. The scope of the analysis for this Supplement is not the same as the original analysis. (p. 2) The scope of the Supplement analysis has now been narrowed to focus on the effects as they relate to capability and suitability determinations for livestock grazing; full explanation of the adaptive management strategy and its protocols; and consideration of new information for Management Indicator Species. The issue of herbicide use and degradates on amphibians, and infiltration into aquatic habitats raised in this comment was not carried into the FEIS because it is outside the scope of the FEIS.

COMMENT 16j. Toadflax was not present during the days of the REA survey – and we doubt any was present in 2000, when those studies concluded. It is a very recent invader, and spreads aggressively from creeping rootstocks once it is established. WHEN was Yellow Toadflax first documented in the allotment? In the Stanley area? Where? What control actions have been taken? Where? How effective have they been, at controlling or eradicating Toadflax in any areas of the allotments or the Forest since it was first documented? The Forest must also examine the conditions and extent of infestation on surrounding lands, and all areas where these large sheep operators trail and graze sheep. Sheep herded through and grazed in the Toadflax infestations of the North Sheep allotments may be spreading this noxious weed over a broad swath of central Idaho in the course of a year. Livestock transport weed seeds in mud on hooves, seeds, in fur, seeds in gut excreted in manure. Plus, with all the water hauling and sheep camp and other motorized activity – sheep-associated vehicles have a very high likelihood of spreading toadflax and other weed seeds through tires or undercarriages. As these sheep herding, watering, salting and corraling-associated vehicles frequent areas of the most intensive

sheep trampling soil disturbance and manure, they are highly likely to transport weeds, including onto and along roads where recreational vehicles would subsequently be likely to transport seeds from infestations. Herding and trailing sheep along roads also increases likelihood of sheep picking up weed seeds, and spreading seeds into the hinterlands while grazing.

> **RESPONSE 16j,** The issue of the proposed action affecting the spread of noxious weeds was addressed in the North Sheep FEIS on pages 1-10, 2-24, 3-61, 3-75 to 3-77, & 4-64 to 4-67. This issue is not within the scope of the Supplement analysis.

COMMENT 16k. The lower elevation lands shown as Capable, i. e. nearly all of the larger blocks of "Capable" land in the allotments, are vulnerable to Toadflax infestation and spread with continued grazing disturbance. The WSU Extension information also includes the following: Cultural Control: The poor viability of toadflax seedlings makes competition by desirable species an even more effective strategy in managing the species. Maintaining healthy pastures with vigorous perennial grass stands as a competitive deterrent reduces the chance that toadflax seedlings will establish since they are poor competitors for soil moisture. The Forest must reconcile its claims of lands being in good or improving conditions with the Toadflax explosion. The Forest has ignored the ongoing adverse effects of trampling disturbance and depletion here. Since the Toadflax has spread into so many areas so rapidly, this is a strong indication that extensive sagebrush and mesic areas are in poor condition, and not able to withstand the effects of continued sheep use and disturbance – and especially at the near-status quo very high stocking rates.

> **RESPONSE 16k.** The Forest Service recognizes the increasing threat of invasive species. The Weed Management Program inventories, monitors, and treats the North Sheep allotments annually. Additionally, adaptive management strategies would include modifications to allotment terms and conditions, management practices, and grazing routes when noxious weed infestations occur.

COMMENT 16l. In order to understand the full Invasive Species risks of continued livestock grazing here, and determining if lands could withstand sheep grazing and weeds be controlled at the same time, the Forest sat back – allowed Toadflax to explode. It is critical in making a Determination of the Suitability of lands for grazing use that baseline information be systematically collected across the North Sheep and lands where sheep grazed here are herded into or moved through – and compiled and analyzed as part of this EIS process. Instead, the Forest only plans to "monitor" in the future – and somehow graze even more sheep tan have been grazed during the period when Toadflax has been rapidly expanding. There is no baseline acreage or systematic current survey info provided, no SEIS mapping of weed locations so a viewer and the Forest can understand the location of Toadflax or other weed infestations in relation to sheep movement corridors, Capable lands, recreational use areas, roads, etc.

> **RESPONSE 16l.** The Forest Service recognizes the increase in invasive species.

The Weed Management Program inventories, monitors, and treats allotments annually. Additionally, adaptive management strategies would include modifications to terms and conditions, management practices, and grazing routes when infestations are encountered.

COMMENT 16m. There is no reality-based examination of the feasibility of Toadflax control now that the Forest has allowed it to infest so many areas - if sheep grazing is continued in these areas. There is no examination of the acreage that would likely be sprayed, and non-target vegetation including "forage" vegetation and sagebrush that may be killed (and thus removed from "forage" base) by application of herbicides. What herbicides would the Forest use? What are their effects. What will be the effects to sagebrush-dependent species? What will be the potential effects to aquatic species – including Bull Trout and Chinook salmon of herbicide or degradate products in runoff, or that may contaminate soils and seep into ground or spring or stream waters? What may be the effects to recreational users?

RESPONSE 16m The issue of the proposed action affecting the spread of noxious weeds was addressed in the North Sheep FEIS on pages 1-10, 2-24, 3-61, 3-75 -- 3-77, & 4-64 -- 4-67. This issue is not within the scope of the Supplement analysis.

COMMENT 16n. The mushrooming of Toadflax infestations across the landscape further jeopardizes rare plants. This aggressive highly competitive rhizomatous species may invade some rare plant habitats – such as the meadow/sagebrush Bugleg Goldweed and meadow/moist Least Phacelia habitats. These species may be choked out by Toadflax and killed by herbicides sprayed in control attempts for Toadflax, Knapweeds and other noxious weeds and invasive species.

RESPONSE 16n While certain elements in the North Sheep FEIS were supplemented, other important aspects of the project and the analysis in the North Sheep FEIS were sufficient and therefore remain unchanged. The issue of rare plants was addressed in the North Sheep FEIS on pages 3-68 to 3-74. This issue of rare plants is not within the scope of the Supplement analysis.

Issue 17: Wildfire

COMMENT 17a. Custer County Commissioners would like to encourage the continuation of the Sheep and Goat Grazing Allotments in Fisher, Smiley, North Fork-Boulder, and Baker. We feel the continuation of grazing in these areas is important as the "no graze" allows for the potentially devastating wildfires so common in Idaho. The wildfire danger to private and public property is a concern as it places economic hardships not only on those ranchers dependant upon the allotments but also local outfitters and supporting business in the areas and adjoining areas.

RESPONSE 17a. Livestock grazing, in the short term, may be an effective tool for reducing wildfire potential in some vegetation types such as early seral

grass/shrub. In the areas affected by the Valley Road and Castle Rock fires, the grass/shrub (specifically grass/sagebrush vegetation type), natural fire return intervals would range from 0-35 years. The grass component is the primary carrier of fire in an ungrazed grass/sage ecosystem. This type of fire return interval keeps the higher flame intensity sagebrush at lower densities and limits its continuity over the landscape. Grazing reduces the grass component, thus may be effective in the short term at reducing fire. Over time however, the lack of fire allows sagebrush as well as other brush vegetation types to out-compete the grazed grasses thereby producing higher shrub densities and more continuous fuels resulting in wildfires with greater intensity and resistance to control. Once shrub densities and continuity are at sufficient levels, the shrub component becomes the primary carrier of fire.

Forested areas that were burned in wildfires would not benefit in the mid or long term at reducing wildfire potential since reestablishment of pioneer tree and shrub species would not be palatable to livestock. In areas where tree mortality from wildfire was minimized, it is anticipated that fuel loadings of woody debris were reduced sufficiently to minimize future fire potential for many years to come. In both grass/shrub and timbered areas where fire did not burn, most likely the high density of shrub component as well as fuel loading in timbered stands is great enough that reintroduction of grazing would not help minimize wildfire potential.

Regarding grazing of areas outside previous wildfire areas but within the watersheds listed in the comment, the wildfires that the Sawtooth Forest and Idaho have been witnessing over the past several years are being driven by drought, weather conditions, and fuel conditions. Although the grass/forb component that livestock graze upon is an important characteristic of the fuel condition, it is not a characteristic that, if managed through proposed levels of grazing (grazing in compliance with Forest Plan direction), would eliminate or reduce wildfire potential.

COMMENT 17b. Wildfires (Page 5) – The 2005 wildfires burned approximately 75% of the Fisher Creek Allotment, greatly degrading the environmental baseline for several years and reducing the allotment's capability of supporting MIS species, ESA/MSA-listed species, and livestock grazing. Federal actions including grazing management need to be reduced until the watersheds' capabilities recover. BAER team recommendations (Page 6) suggest a minimum of two seasons of grazing rest. Instead of a set time of rest, livestock should not be reintroduced until the land recovers for MIS species and can support in addition the Federal action of permitted, sustainable grazing.

RESPONSE 17b. The areas affected by wildfire were evaluated following the fire by Burned Area Emergency Response (BAER) specialists as required by Forest Service Policy. Criteria were set for when grazing would resume on burned rangelands. This includes resting the burned area for a minimum of two growing seasons or longer until specific resource conditions are achieved. Once achieved, land managers will evaluate returning livestock grazing to those areas,

and specify the conditions (timing, band size, grazing routes etc.) through the adaptive management process consistent with Forest Plan direction, the North Sheep FEIS and the Supplement. Note that while a new site-specific capability assessment could be made at that time for the burned area, it would likely result in additional areas being identified as capable especially where burned forest vegetation has reverted to earlier seral forb/grass/shrub stages. A more conservative approach is to rely on existing analyses in combination with the BAER assessment and resume grazing consistent with BAER findings and Forest Plan direction.

COMMENT 17c. Wildfires (Page 6) – The 2007 Castle Rock wildfire burned approximately 20% of the Baker Creek Allotment, significantly degrading the environmental baseline for several years and reducing the allotment's capability of supporting MIS species, ESA/MSA-listed species, and livestock grazing. Federal actions including grazing management need to be reduced until the watersheds' capabilities recover. BAER team recommendations (Page 6) suggest a minimum of two seasons of grazing rest. Instead of a set time of rest, livestock should not be reintroduced until the land recovers for MIS species and can support in addition the Federal action of permitted, sustainable grazing.

RESPONSE 17c. Please see Response 17b.

COMMENT 17d. Page 7, Para 2: In is not logical that the SEIS indicates significant fire damage to the Fisher and Baker Creek Allotments and that BAER teams recommended at least two years of rest for each and then states that the fires "do not change the original analysis found in the North Sheep FEIS, nor do they affect this Supplement…" When the environmental baseline is severely degraded for MIS, ESA, and livestock capabilities, the analyses of the effects of proposed Federal actions should be carefully refocused and if necessary, the effects of the Federal actions, in this case permitted livestock grazing, need to be reduced to reflect the reductions in land capabilities through the reduction and modification of livestock impacts (e.g., less AUMs, shorter grazing season, faster rotation, increased rest and retirement of sensitive and critical habitats).

RESPONSE 17d. Please see Response 17b.

COMMENT 17e. Page 52, Para 3: It is hard to believe that the large fires (75% of the Fisher Creek drainage) of 2005 did not negatively impact the aquatic and riparian habitats within the Fisher Creek Grazing Allotment. Perhaps the monitoring is not picking up the changes or the grazing, mining, and road effects that help shape the environmental baseline are masking the wildfire effects. The SEIS mentions increases in fine sediment recruitment and transport, which definitely negatively affects aquatic habitat and fish populations. Page 54, Para 1: The SEIS clearly states that excessive fine sediments in the Fisher Creek Basin are partly associated with localized grazing impacts.

RESPONSE: Prior to the Valley Road fire, Fire Regime Condition Class (FRCC) for the area was completed. The FRCC describes the role fire would play

naturally on an ecosystem without human influence, exclusive of aboriginal burning. The Fisher Creek area is functioning at or near this historic level according to FRCC data. Certainly many areas exist where fire burned so intensely that no living vegetation survived. However in much of the drainage, the two growing seasons following the fire have produced vegetation species and volumes expected following a characteristic fire. Had the fire been uncharacteristic, we would expect vast areas where fire adapted vegetation such as fireweed and aspen are struggling or even non existent, but this is not the case. Rather, in some areas, we are seeing vegetative responses exceeding initial expectations. Given that characteristic fire is a significant natural force that shapes and maintains these ecosystems, the Valley Road fires effects appear to be normal and not negative.

COMMENT 17f. The Forest claims minimal post-fire effects – but never considers the ability of watersheds and streambanks to withstand sheep grazing use when grazing resumes especially in sagebrush areas and slopes where protective woody cover has been greatly reduced. The Forest also fails to examine the adequacy of any "recovery" standards before grazing resumes (see SEIS at 5-6 proposing only minimal rest from grazing use), despite the significant habitat losses for species that have occurred.

RESPONSE: Lack of fire in the sage/grass community has, to some extent, converted areas where grass was the primary ground cover to sagebrush. Generally, sage/grass communities that have not had a fire disturbance in more than 35-100 years are converting to sagebrush with canopy covers exceeding 30%. The Valley Road fire has reduced the sagebrush competition and allowed grasses to reestablish in locations where it had previously been declining. On slopes where protective woody cover has been greatly reduced, revegetation is occurring more slowly. In other areas, we are seeing vegetative responses exceeding initial expectations. Overall, the regeneration being witnessed appears to be at pace with a generally natural, characteristic disturbance. The areas affected by wildfire were evaluated following the fire by Burned Area Emergency Response (BAER) specialists as required by Forest Service Policy. Criteria were set for when grazing would resume on burned rangelands. This includes resting the burned area for a minimum of two growing seasons or longer until specific resource conditions are achieved. Once achieved, land managers will evaluate returning livestock grazing to those areas, and specify the conditions (timing, band size, grazing routes etc.) through the adaptive management process consistent with Forest Plan direction, the North Sheep FEIS and the North Sheep Supplement. Please note that while a new site-specific capability assessment could be made at that time for the burned area, it would likely result in additional areas being identified as capable especially where burned forest vegetation has reverted to earlier seral forb/grass/shrub stages. A more conservative approach is to rely on existing analyses in combination with the BAER assessment and resume grazing consistent with BAER findings and Forest Plan direction.

Issue 18: Wildlife

Wildlife Sub Issue 1 – Wildlife General

COMMENT 18a. We ask that the Forest carefully review information and analysis presented in Wisdom et al. 2002 for Terrestrial Vertebrates of concern in the Interior Columbia Basin. Attached. Not only is it relevant to the various MIS, Ecogroup and other efforts that the Forest is undertaking, it is critical to understanding the effects of current and continued grazing use here. The risks of continued losses of species – such as Sage Grouse that have already been eliminated from the Sagebrush habitats here or native carnivores or resident and migratory birds of concern– must be fully examined. Are Brewer's Sparrow or Sagebrush Vole going to be the next species to be eliminated from the North Sheep EIS area? The Forest has already burned a significant block of Sage Grouse, Brewer's Sparrow, Sagebrush Vole, Pygmy Rabbit mountain big sagebrush habitat (seen on tour and pointed out by Range Staff Mr. Ririe) to try to grow more "forage" for sheep in the Smiley Creek allotment.

> **RESPONSE 18a.** The Forest Plan and the MIS Capability Supplement (January, 2008) used to develop the North Sheep Supplement, was predominantly based on the information and analysis presented in Wisdom et al. (2002) and additional population and habitat information develop since 2002. The North Sheep Supplement recognizes the effects of current and continued grazing use on MIS within the North Sheep project area. Through the use of grazing closures, annual livestock grazing monitoring, and the "adaptive management strategy," impacts to MIS from livestock grazing impacts will decrease as is stated in the North Sheep FEIS and Supplement. Conserving or restoring source habitat for non-MIS within this project area is outside the scope of the North Sheep Supplement analysis.

COMMENT 18b. The Wisdom (2002) report found: Habitats for species, groups and families associated with old-growth forest, native grasslands and native shrublands have undergone strong, widespread decline. Implications of these results for managing rangelands include the potential to Conserve, Control and Restore described above and in appendix A.

> **RESPONSE 18b.** The MIS Capability Supplement (January 2008) utilizes the findings in Wisdom (2002) and builds upon those findings with more recent local population and habitat data. The MIS Supplement recognizes that all of the Sage-grouse source habitats within the North Sheep project area are in less than satisfactory condition. Given the closures to protect sensitive plant communities and the more careful management under the adaptive management process, the Proposed Action would likely result in a trend towards desired conditions for vegetation and thereby contribute to the restoration of lands in less than satisfactory condition. As described in Section 4.8.7.1.3 of the North Sheep FEIS, grazing closures and adaptive management strategies would effectively move sagebrush communities towards desired condition, thereby contributing to the restoration of lands in less than satisfactory condition for MIS. As described in

section 4.7.2.3.1 of the North Sheep FEIS, while manipulation of timing and intensity of livestock grazing through the adaptive management process will result in a trend towards desired conditions, some vegetative communities such as the sagebrush steppe may not return to the original community without vegetation manipulation projects or wildfire. This is consistent with the findings in the 2006 Sage-grouse Conservation Plan which states that "while subsequent changes in livestock management may be appropriate to nurture and maintain the restored area, such changes alone in the absence of restoration activities would likely provide little if any progress." (2006 Sage-grouse Conservation Plan, p. 4-55)

COMMENT 18c. The Forest gives short shrift to examination of the effects of grazing disturbance on Northern Goshawk, many species of migratory birds, and sensitive owl species. The Forest has not systematically examined the full effects of potential disturbance to nesting or foraging species, or how sheep grazing may alter or reduce prey species dependent on Particular components of understory vegetation. It is unclear whether necessary site-specific surveys have been conducted for all of these species. Such surveys must be conducted for all important and sensitive species, including also Townsend's and Spotted Bat so the Forest can understand their occurrence and potential conflicts with sheep use –such as degradation and loss of wetted areas and healthy native communities that produce insects consumed by bats.

RESPONSE 18c. The scope of the North Sheep Supplement has been narrowed relative to the North Sheep FEIS. Relative to terrestrial wildlife, the scope of the North Sheep Supplement only considers new population and source habitat information for Management Indicator Species. These issues raised by the commentor are outside the scope of the SEIS. Townsend's Bat, Spotted Bat, Northern Goshawk, and Boreal owl are discussed in the North Sheep FEIS on pp. 3-83, 3-85, 3-86, 3-87, 4-69, 4-73, 4-74, 4-77 to 4-79, and 4-80. Predators are discussed on pp. 3-92 and 4-83 to 4-84. Forest Service Sensitive Species requirements were complied with and are discussed at length in the 2004 "Biological evaluation of effects for the North Sheep Project: Fisher Creek, Smiley Creek, Baker Creek, and North Fork- Boulder Sheep and Goat Grazing Allotments."

COMMENT 18d. The American Pika has recently been petitioned for ESA Listing (August 21, 2007) due to a variety of threats – particularly Global warming. The Pika is a high elevation species known to be threatened by climate change. The Pika is adapted to survive cold temperatures, but is poorly adapted to dealing with heat. It inhabits rocky, windswept mountainous areas. WWP (Fite) has observed Pikas in both 2006 and 2007 in the headwaters of the Smiley Creek allotment in the Beaver Creek watershed, where foraging areas for grass at the base of rocky talus are grazed by sheep. We reported Pika observation to the Forest and requested this species be considered in the SEIS process. Global warming threatens Pikas by shortening the period available for them to gather food in summer (too hot), causing changes in types of plants that are available as food, and reducing the insulating snowpack causing Pikas to die from heat.

RESPONSE 18d. The scope of the North Sheep Supplement has been narrowed relative to the North Sheep FEIS. Relative to terrestrial wildlife, the scope of the North Sheep only considers new population and source habitat information for Management Indicator Species. The Northern American Pika was not raised as a species of concern in the 2004 North Sheep FEIS. American pikas inhabit high elevations of about 8,000-13,000 ft. throughout the North American West. Pikas live above the montane treeline, between meadowland and rocky terrain. Taluses are other preferred locations, which are boulder piles at the bases sloping cliffs. Any high elevation area with numerous rocks and vegetation is an ideal habitat for a pika. This habitat coincides with the closures in the allotments of the high elevation cirque basins (Baker Creek, Prairie Creek, North-Fork Boulder Creek, Frenchman Creek, Smiley Creek, and Mill Gulch, Beaver Creek, Jake's Gulch, Alturas Lake Creek) to livestock grazing.

Mountain goats graze primarily on grasses, sedges, rushes, and forbs in summer, often in alpine cirques, but will also browse on shrubs and conifers. This is similar to the forb needs of the Pika. Mountain goats were analyzed in the North Sheep FEIS on pp. 3-91 and 4-80 to 4-83.

Please see Response 1 for Climate Change issues.

COMMENT 18e. In the SEIS allotments, the Pika inhabits the headwater areas of the higher elevations of all of the allotments. Sheep grazed in or trailed across these headwaters –including many Non Capable areas and/or very narrow "capable" strips, may reduce available food (eat or trample) live vegetation, disrupt Pika foraging behavior, and disrupt Pika activities critical to Pika survival – like the "haypiles" of harvested grasses drying in rocks. Domestic sheep conflicts with Pikas will intensify and exacerbate the effects of Global warming. As part of this process, the Forest must identify conflicts with this sensitive higher elevation species that may serve as a bellwether for climate change processes. The Forest must weigh conflicts with Pika habitats in determining suitability of higher elevation areas for continued sheep grazing and trailing.

RESPONSE 18e. Please see Response 18d.

COMMENT 18f. The North Sheep allotments lie at the heart of critical Wolverine habitat, and some of the habitats most critical to a diversity of native carnivores in the West. See Map in Edelmann and Compton (1999), Attached. This refers to Pulliam and Danielson (1991) identifying Wolverine Core habitat in central Idaho, as depicted in the Map. See also Attached Wolverine bibliography. The lands of the North Sheep SEIS area encompass habitats for what may be the greatest concentration of wolverines in the lower 48 states. Based on rough estimates calculated by population densities, Copeland now estimates that Central Idaho, from the South Fork of the Boise River to the Middle Fork of the Salmon River, probably supports between 50 and 150 wolverines—perhaps the greatest concentration in the Lower 48. But, says Copeland, there is concern in the scientific community about the long-term future of the wolverine in Idaho and other parts

of the West. This article also notes the vulnerability of wolverines in dens with young to disturbance. http://www.svguide.com/w06/w06_wolverines.htm

RESPONSE 18f. The scope of the North Sheep Supplement has been narrowed relative to the North Sheep FEIS. Relative to terrestrial wildlife, the scope of the North Sheep Supplement only considers new population and source habitat information for Management Indicator Species. Wolverine were discussed in the North Sheep FEIS on pp. 3-84 and 4-73. It concludes that implementation of the Proposed Action would not impact wolverine denning habitat as these areas provide little, if any, forage for sheep. Denning females would not be impacted since sheep are not on the allotments during the denning period.

COMMENT 18g. Predator-control activity associated with sheep grazing may kill or injure wolverines if traps are set. The SEIS fails to provide any analysis of any kind on the effects of predator control – including potentially for Gray Wolf – on other carnivore populations including non-target species. This is especially critical since the IDFG Plan (attached) bases Wolf Control and killing activities, including potentially trapping, on Conflicts with livestock - yet requires no accountability or use of reasonable management actions by ranchers to reduce Conflicts.

RESPONSE 18g. The scope of the North Sheep Supplement has been narrowed relative to the North Sheep FEIS. Relative to terrestrial wildlife, the scope of the North Sheep Supplement only considers new population and source habitat information for Management Indicator Species.

The issue of the Gray Wolf was addressed in the North Sheep FEIS on pp. S-14, 3-81 to 3-83, 4-69, 4-71, 4-76, 4-79, 4-84, and F-38. Wolf populations in the Northern Rockies has exceeded its recovery goal and continues to expand its size and range. There are currently more than 1,500 wolves and at least 100 breeding pairs in Montana, Idaho, and Wyoming. The topic of Gray Wolves is outside the scope of the North Sheep Supplement. At the time this is written, there are no changes in the regulatory requirements for Gray Wolves; however, it is recognized that Fish & Wildlife Service has proposed the Gray Wolf for delisting from the Endangered Species list. If the Final Delisting Rule proceeds, it will take effect in mid-March, 2008 and management of the wolves would be turned over to the States.

On page 4-83 of the North Sheep FEIS it states: "Control efforts reported by USDA Wildlife Services in 1990 had no significant impact on target populations of predators at the national level, but target populations may be significantly impacted in localized areas where they are reduced to minimize damage. Of the predators that prey on sheep, coyotes are the largest threat and have received the greatest control by Wildlife Services. Despite considerable control efforts, coyote populations are self-maintaining through behavioral adaptations and biological compensatory mechanisms such as increased rates of reproduction, survival, and immigration. (Andelt 1996.)"

COMMENT 18h. With foreseeable de-listing and dramatic increases in Wolf Killing under IDFG's scheme, significant increases in non-target carnivore mortality could occur. The Forest has never provided necessary information and analysis of Gray Wolf and other predator conflicts, or use of these lands, and the effects of sheep grazing – including associated predator control – on them. This is critical, as the IDFG Wolf Killing Plan is based on real or perceived Conflict with livestock, and methods used to remove wolves may also case mortality or disturbance of other native carnivores.

RESPONSE 18h. Please see Response 18g.

COMMENT 18i. The Forest has not examined the full range of effects of sheep grazing in reducing Snowshoe Hare or Pika habitats, and thus a part of the prey base for the wolverine.

RESPONSE 18i. The scope of the North Sheep Supplement has been narrowed relative to the North Sheep FEIS. Relative to terrestrial wildlife, the scope of the North Sheep Supplement only considers new population and source habitat information for Management Indicator Species.

Snowshoe hare are discussed as a main prey base for lynx in the 2004 North Sheep FEIS. (pp. 3-81, 4-71 to 4-72).

Please see Response 18d for Pika issues. Please see Response 18f for Wolverine issues.

COMMENT 18j. As explained elsewhere in WWP comments, the Forest has not examined competition between domestic sheep, and elk, moose, mule deer and other native herbivores for forage and other habitat components.

RESPONSE 18j. The scope of the North Sheep Supplement has been narrowed relative to the North Sheep FEIS. Relative to terrestrial wildlife, the scope of the North Sheep Supplement only considers new population and source habitat information for Management Indicator Species.

Rocky Mountain elk were discussed in the North Sheep FEIS on pp. 3-93 to 3-95, 4-84to 4-86.

COMMENT 18k. WWP is attaching the ESA Petition seeking Listing of the Pygmy Rabbit cross its range. We ask that the Forest incorporate all relevant information on threats to sagebrush communities and sagebrush habitats, and use this information to develop alternatives that better protect sagebrush habitat values. The Forest's MIS Supplement and DFCs will further alter, degrade and destroy Pygmy Rabbit habitats. Pygmy rabbits require dense old and mature sagebrush, with structural complexity that is not reduced by livestock use and breakage. Just as is the case with other burrowing

mammals, livestock trampling may collapse Pygmy Rabbit burrows. Such effects are indicative of the some of the conflicts of sheep grazing with small mammals, including carnivore, Goshawk, owl, and other prey species. See Also Federal Register Listing Rule for Columbia Basin DPS of Pygmy Rabbit (Attached).

RESPONSE 18k. The scope of the North Sheep Supplement has been narrowed relative to the North Sheep FEIS. Relative to terrestrial wildlife, the scope of the North Sheep Supplement only considers new population and source habitat information for Management Indicator Species.

Sagebrush and sagebrush communities within the project area, relative to Sage-grouse, a Forest MIS, is addressed in the North Sheep Supplement and also analyzed in the recently completed MIS Capability Supplement. Through the use of grazing closures, annual livestock grazing monitoring, and the "adaptive management process", adjustments will be made when livestock grazing is having negative impacts to Sage-grouse source habitats.

The North Sheep FEIS addresses potential impacts to one species of burrowing animal, which is a Forest Service sensitive species, the pygmy rabbit (sections 3.8.2.2.5 and 4.8.2). The potential, minor impacts discussed for this species relative to soil compaction and forage and cover reduction would generally apply to other burrowing species as well.

COMMENT 18l. The original sensitive species discussion in the EIS and BA (conducted by consultants) were glaringly deficient and biologically invalid at the time of the original EIS. Now, they are even more outdated and comprehensive new information as well as valid baseline info on important and sensitive species, must be prepared and incorporated into this SEIS analysis. The original BAs never addressed Climate Change, the full effects of the large-scale conifer die-off – both lodgepole pine and whitebark pine on sensitive species. Sheep conflicts with native carnivores and other species may only be heightened by grazing/trailing of sheep through large areas of habitats that are degraded, or are Not Capable. Native carnivores and other species may be under increased stress due to die-off of habitat types that provide important food sources for prey species, as well as escape and hiding cover from human disturbances.

RESPONSE 18l. The scope of the North Sheep Supplement has been narrowed relative to the North Sheep FEIS. Relative to terrestrial wildlife, the scope of the Supplement only considers new population and source habitat information for Management Indicator Species.

Please refer to Response 1 for Climate Change issues.

The lifecycle of the lodgepole pine forests were considered to be part of the baseline assessment for the North Sheep FEIS. Predators (other than wolves) were discussed in the North Sheep FEIS in Section 3.8.4 “Predators” (pp. 3-92 to 3-93) and Section 4.8.4 “Predators” (pp. 4-83 to 4-84).

The issue of the Gray Wolf was addressed in the North Sheep FEIS on pp. S-14, 3-81 to 3-83, 4-69, 4-71, 4-76, 4-79, 4-84, and F-38.

COMMENT 18m. In Canada Lynx, ESA-listed aquatic species, Gray Wolf, and sensitive and MIS species habitats, the Forest MUST describe the lands that should not be exposed to livestock grazing due to significant conflicts. This has not been done, as in FEIS at 32. It can only be done when the Forest has conducted current site-specific surveys to identify habitats, and species occurrence in the landscape. A series of maps and analyses must be prepared to understand the juxtaposition of these important values with Capable and Non-Capable lands and sheep disturbance (grazing and trailing) areas.

RESPONSE 18m. The scope of the North Sheep Supplement has been narrowed relative to the North Sheep FEIS. Relative to terrestrial wildlife, the scope of the Supplement only considers new population and source habitat information for Management Indicator Species.

Biological Evaulations and Biological Assessments (BE/BAs) were prepared for listed and sensitive species. Consultation on these species occurred with the U.S. Fish and Wildlife Service and the NOAA Fisheries and they concurred with the determinations found in the BE/BAs.

The FEIS did analyze potential conflicts. The upper basins in Baker Creek, Prairie Creek, and North Fork-Boulder are examples where it was determined that further sheep grazing would be detrimental to the resource with little value to livestock use. The decision in 2007 to defer livestock grazing on the North Fork-Boulder allotment to avoid conflict with denning wolves was in conformance with direction outlined on pages 12-22 of this Supplement.

Regarding Capable lands, the Court required the Forest Service in the North Sheep Supplement: to describe how it used the criteria in the capability model, display allotment specific capability maps generated by the capability model, and include the data generated by the capability model in the North Sheep EIS decision (Case 4:05-cv-00189-BLW Doc. 47, 2/7/2006, p.15). The analysis included in the Supplement, pp. 31- 46 & 91-96 address these criteria.

Just because an area is identified as non-capable does not mean it cannot be crossed by livestock or some forage removed by livestock. Example - areas with enough tree canopy to reduce forage production to less than 200 lbs/acre. That does not mean livestock could not or should not pass by or remove some forage while passing by. It means that the area was not deemed to have enough forage production to base permitted capacity on and therefore was not deemed capable. Also, please see Response 9e2.

COMMENT 18n. The presence of the Gray Wolf and other native carnivores may increase grazing conflicts with rare plants and other rare biota such as Northern

Goshawk. If sheep are routed away from wolves, or if they are spooked by wolves, any "avoidance" of rare species habitats may be cast aside.

> **RESPONSE 18n.** The scope of the North Sheep Supplement has been narrowed relative to the North Sheep FEIS. Relative to terrestrial wildlife, the scope of the Supplement only considers new population and source habitat information for Management Indicator Species. Potential impacts to rare plants from sheep grazing was described in the North Sheep FEIS and those potential effects are summarized in the tables on pages 4-58 to 4-62. While wolf populations have increased over the last few years, other native carnivores have always been present while sheep have been grazing these allotments and current impacts to rare plant populations as displayed in the North Sheep FEIS are reflective of this co-existence.

COMMENT 18o. Unlike the Smiley and Fisher allotments, this AMP (North Fork-Boulder) seems to ignore Threatened and Endangered species, Regionally Sensitive Species, MIS species and bighorn sheep/mountain goat conflicts with domestic sheep/goats.

> **RESPONSE 18o.** The author of the AMP chose not to restate Forest Plan direction that was included in the Smiley Fisher Allotments AMP. It should be noted that Forest Plan direction still applies whether or not it is stated in the AMP.

Wildlife Sub Issue 2 Bighorn Sheep & Lynx

COMMENT 18a2. The Forest Service has failed to address the impacts of domestic sheep on Rocky Mountain Bighorn Sheep which have been reported in sightings on the Smiley Creek allotment near Alturas Lake. This is especially important when these reports of bighorn sheep sightings have taken place for more than a decade and because of the risk of disease transmission from domestic sheep to bighorn sheep. The agency has failed to include anything about protecting bighorn sheep in the draft Smiley Creek allotment AMP.

> **RESPONSE 18a2.** Bighorn Sheep were discussed in the North Sheep FEIS in Chapter 1 on pp. 11,14, and 15; Chapter Two on p. 27; Chapter Three on pp. 78, 84, 95-96; and in Chapter Four on pp. 68-69, 86-87, 90. In his Memorandum Decision and Order (Case # CV-05-189-E-BLW), Judge Winmill writes: "The Forest Service satisfied NFMA and NEPA in its discussion of Bighorn Sheep…" (p. 25, Docket #47)
>
> In the Smiley / Fisher AMP, it states: "If bighorn sheep are sighted in any of the allotments, permittees shall report sitings to SNRA personnel immediately. This information will be used in coordination with IDFG to determine the appropriate management steps for the protection of this species."

COMMENT 18b2. The SEIS and monitoring of sheep grazing addressed in the Allotment Management Plans fails to analyze or address in any way the impacts of domestic sheep on lynx and lynx habitat.

RESPONSE 18b2. Lynx and its' habitat relative to livestock grazing were discussed in the North Sheep FEIS in Chapter 3 pp. 79 – 81, 96-97, and in Chapter 4, pp. 68, 71-72, 76, 88, and 91. Relative to terrestrial wildlife, the scope of the Supplement considers new population and source habitat information for Management Indicator Species.

COMMENT 18c2. There The North Sheep SEIS and surrounding lands consist of some of the most important documented Canada Lynx habitat in Idaho, and habitats very important to the species persistence here. See Lewis and Wenger 1998. Idaho BLM Technical Bulletin No. 98-15 October 1998. (Attached). The Forest has not conducted an analysis in North Sheep that provides necessary information for adequate consultation under ESA over Canada Lynx occurrence – or potential recovery efforts – in the North Sheep lands. As with Wolverine, the lands of North Sheep EIS area and their immediate surroundings are of critical importance to maintenance of viable populations of Canada Lynx in Idaho. Canada Lynx are documented as occurring in the allotments and landscape in several instances in this report.

RESPONSE 18c2. Please see Response 18b2.

COMMENT 18c2. The Forest has not conducted necessary detailed examination of potential conflicts with domestic sheep disturbance of Canada Lynx prey habitats ands populations, denning sites, disturbance related to sheep herding including dogs, food supplies for rearing of young, and predator trapping that may occur in association with domestic sheep conflicts with wolves or other predators. Some of the Forest REA Mapping dates back to the 1960s – what if any vegetative changes are shown between 1960 and the present that could help inform understanding of potential changes in Lynx habitats? What is the current status of Lynx in the allotments and surrounding landscape?

RESPONSE 18c2. Please see Response 18b2. In accordance with the Lynx Conservation Assessment and Strategy, Lynx Analysis Units (LAUs) were delineated on the Sawtooth National Forest, and foraging and denning habitat within these LAUs was defined with the use of computer modeling. Baseline information for these LAUs is described in the programmatic Biological Assessments for Canada lynx prepared for the Wood River Watershed and Sawtooth Valley (February, 2003).

COMMENT 18c2. Sheep grazing conflicts with Lynx habitat requirements in several ways:

- • It alters sagebrush habitats critical to white-tailed jackrabbit, and at times to snowshoe hare or other lynx prey including various squirrels.
- • It alters dense woody shrub vegetation including willow thickets that provide habitat for Snowshoe Hare and Canada Lynx. WWP Fite has observed snowshoe

hares in the periphery of willow thicket areas in the Smiley Creek allotment. By limiting willow recruitment and growth in the margins of wetted stream areas, and contributing to progressive drying of watersheds, sheep grazing may degrade the quality and quantity of Canada Lynx prey habitats.

- • It alters dense understory vegetation especially at the margins of forested areas where the necessary light penetrates forest canopies to allow for dense lower tree branch and understory development. This may reduce snowshoe hare habitat.
- • Disturbance of sheep herding and trailing may disrupt Lynx during summer periods when kittens are present.

RESPONSE 18c2. Please see Response 18b2 and 18bc.

Wildlife Sub Issue 3 Sagegrouse

COMMENT 18a3. The SEIS downplays the importance of sage grouse in the project area in comparison to areas further south. This is predicated on the relative percentage of an area that provides sagebrush habitats with the project area in the range of 0 – 25% and areas further to the south at much higher levels. Figure Wildlife 3 – 1 shows that all the allotments have the potential for habitat for sage grouse and summarizes the percentages by allotment with a range of 4% to 14%. Figure Wildlife 3-2 shows the sage grouse habitat in these allotments has decreased ≥ 60%, a significant decrease in quality from potential. Page 85 in the SEIS describes the conditions leading to the current degraded condition of sagebrush habitats from fire suppression, historic grazing impacts, and seeding of introduced grasses.

RESPONSE 18a3. It is not the intent of the Forest to “downplay" the importance of Sage-grouse or Sage-grouse source habitats in the North Sheep project area.

The July 2006 Idaho Sage-grouse Conservation Plan (p. 4-99) states; "A small population existed historically in the Sawtooth Valley south of Stanley, but its current status is unknown."

The North Sheep FEIS states: “A translocated population of greater sage-grouse was studied in the Sawtooth Valley in 1986 and 1987 (Musil 1989). Several observations of these grouse, including nest sites, were made just east of the Smiley Creek allotment (northern section). Observations of sage-grouse were also made in the western-most portion of the Fisher Creek allotment, but no nest sites were recorded. Sagebrush habitat is limited in these allotments, comprising less than 12 percent of the vegetation. The reintroduction efforts were ultimately unsuccessful and the population status of this species in the Upper Salmon River Valley is unknown. There have been scattered sightings of sage-grouse in the upper portion of the Salmon River in the last 5 years, but no observations have been made in the Fisher Creek or Smiley Creek allotments. Sage-grouse were historically present in the southeast portion of the North Fork–Boulder allotment.

There are currently no known populations of sage-grouse within the North Fork–Boulder and Baker Creek allotments, and sagebrush habitat is limited primarily to the southern-most and eastern-most portions of these allotments, respectively." (FEIS, p. 3-91)

Both the North Sheep Supplement and MIS Capability Supplement (January 2008) recognize that all Sage-grouse source habitat in the project area has decreased by at least 60%. The identification of priority is based on the analysis in the MIS Supplement which identifies the highest priority watersheds for restoration. Relative to the assignment of priorities for treatment, without the establishment of some type of priority, restoration, which is needed throughout the Forest, could be diluted across such a large area that it minimizes any real progress toward restoring degraded habitat conditions in those places where there could be the most 'bang for the buck'. The priority of areas requiring restoration is appropriate because it allows the FS to focus resources on the areas that need restorations the most and will provide the best restoration benefit to the sage grouse habitat.

As described in the MIS Capability Supplement, the capable MIS habitat analysis was completed at a broad, programmatic scale and the determination of specific changes in Capable MIS habitat needs to be assessed on a case-by case basis at the project or site level. This is what was done for the North Sheep supplement. As described in the North Sheep Supplement, the findings of the MIS Capability Supplement were compared against local occurrence data and the findings in sections 3.8.2.3.2 and 3.7.1.4.3 of the North Sheep FEIS. The North Sheep Supplement assessed the findings in the MIS Capability Supplement against what was already in the original North Sheep FEIS and determined that the findings of the MIS Capability Supplement were consistent with the findings of site-specific data already documented in the North Sheep FEIS.

As described in section 4.7.2.3.1 of the North Sheep FEIS, while manipulation of timing and intensity of livestock grazing through the adaptive management process will result in a trend towards desired conditions, some vegetative communities such as the sagebrush steppe may not return to the original community without vegetation manipulation projects or wildfire. This is consistent with the findings in the 2006 Sage-grouse Conservation Plan which states that "while subsequent changes in livestock management may be appropriate to nurture and maintain the restored area, such changes alone in the absence of restoration activities would likely provide little if any progress." (2006 Sage-grouse Conservation Plan, p. 4-55)

COMMENT 18b3. The Draft Supplemental North Sheep Environmental Impact Statement ("SNSEIS") supports my observations of degraded conditions on these allotments, including the following:

--3.8 Wildlife Resources: Subject allotments have experienced at least 60% decrease in Sage Grouse capable habitat (p 85; see also vivid illustration at p. 86, where areas of greatest decrease in SNRA include all 4 allotments).

> **RESPONSE 18b3.** The Forest will use adaptive management strategies described in the North Sheep Supplement to reduce impacts that livestock may have on MIS source habitats in less than satisfactory condition. As previously described in the North Sheep FEIS, many of the impacts to bull trout and sage grouse habitat are the result of historic rather than current livestock grazing practices and will require specific restoration projects, which is beyond the scope of this analysis. Within the scope of this project, the analysis recommends decreasing livestock grazing impacts through the use of area closures, annual monitoring of livestock activities, and the adaptive management process.

COMMENT 18c3. Based on the degraded conditions and capability analysis set forth in the SNSEIS, the "no grazing with 2 year phase out" alternative, alternative 3, should be selected. In addition, the MIS capability analysis for sage grouse is inadequate, as it shows substantial impairment of sage grouse, but dismisses further analysis because watersheds within these allotments were not identified as "high priority watersheds in the 2006 Sage Grouse Conservation Plan." (p. 87).

> **RESPONSE 18c3.** Please see Response 18a3 and Response 18b3.

COMMENT 18d3. The DS-FEIS indicates that all allotments have experienced a 60% or greater decrease in MIS capable habitat for sage grouse from historical conditions. This is due to several decades of wildfire suppression, grazing impacts, and invasive species, including the seeding of introduced grasses for site stabilization or forage production. There have also been insufficient post-fire recovery periods for sagebrush. While less than 12% of vegetation in these allotments is sagebrush habitat, these lands are important as sage grouse capable habitat. We are concerned that because none of these lands fall within high priority watersheds in the Sage Grouse Conservation Plan, or provide >50% of total watershed acreage as capable MIS habitat, the Forest Service does not consider these lands a high priority for restoration (p. 87). Historically, sage grouse capable MIS habitat on the SNF included 60 of 64 watersheds. Now sage grouse numbers are too depleted to sustain further habitat losses and degradation.

> **RESPONSE 18d3.** Please see Response 18a3 and Response 18b3. The identification of priority is based on the analysis in the MIS Capability Supplement which identifies the highest priority watersheds for restoration. Relative to the assignment of priorities for treatment, without the establishment of some type of priority, restoration, which is needed throughout the Forest, could be diluted across such a large area that it minimizes any real progress toward restoring degraded habitat conditions in those places where there could be the most 'bang for the buck'. The priority of areas requiring restoration is appropriate because it allows the FS to focus resources on the areas that need

restorations the most and will provide the best restoration benefit to the sage grouse habitat.

COMMENT 18e3. Drainage areas (such as portions of Little Beaver Creek) provide the type of habitats that would be critical to Sage Grouse brood rearing and the functioning of healthy watersheds. These lower elevation relatively open sagebrush areas are in very poor condition in many portions of the sagebrush lands of the allotments, and surrounding areas as well. They are also being desertified and desiccated due to watershed-level effects of grazing use, as well as site-specific effects of sheep grazing and trampling on accessible drainage areas in lower elevation sagebrush communities.

RESPONSE 18e3. Please see Response 18a3 and Response 18b3

COMMENT 18f3. WHAT actions may be required to restore Sage Grouse habitat and populations to the SEIS area and the broader landscape? To restore and recover sagebrush to lands where it has been removed by prescribed burning. Please provide specific measures. How does domestic sheep grazing conflict with such restoration. The Forest has not examined the extent and severity of habitat fragmentation that exists across habitats potentially used by a Sage Grouse population here. Those elements of fragmentation also affect habitats and populations for other sagebrush-dependent species. See Knick 2003, Connelly et al. 2004. The Forest, in understanding the effectiveness of any use standards, stocking levels, uncertain AM scheme, in providing habitat and supporting viable populations, must determine what is actually required to support Sage Grouse and other sagebrush-dependent wildlife here.

RESPONSE 18f3. Please see Response 18a3 and Response 18b3. As previously described in the North Sheep FEIS, many of the impacts to Sage-grouse habitat are the result of historic rather than current livestock grazing practices and will require specific restoration projects, which is beyond the scope of this analysis. As described in section 4.7.2.3.1 of the North Sheep FEIS, while manipulation of timing and intensity of livestock grazing through the adaptive management process will result in a trend towards desired conditions, some vegetative communities such as the sagebrush steppe may not return to the original community without vegetation manipulation projects or wildfire. This is consistent with the findings in the 2006 Sage-grouse Conservation Plan which states that "while subsequent changes in livestock management may be appropriate to nurture and maintain the restored area, such changes alone in the absence of restoration activities would likely provide little if any progress." (2006 Sage-grouse Conservation Plan, p. 4-55)

COMMENT 18g3. For example, the Forest claims "under the Proposed Action, grazing closures and adaptive management strategies would effectively move sagebrush communities toward desired conditions" (SEIS Exec Summary). Yet the SEIS contains no protective closures for sagebrush communities, and the actions described as AM such as salting, water hauling, shifting and intensifying impacts – all would increase sagebrush habitat fragmentation and loss. See Connelly et al. 2004, Knick et al. 2004. The Forest

must examine effects of these grazing operations on a much larger land area – both that includes the Footprint of these grazing operations, as well as in an ecologically meaningful area to meet the year-round habitat needs of a Sage Grouse population and the needs of other important and sensitive native upland species.

> **RESPONSE 18g3.** The intent of the North Sheep Supplement and Forest Plan direction is to move vegetative communities towards the desired condition. More specifically, each Potential Vegetation Group (PVG) should be moving towards their historic range of variability relative to current vegetative stage and specific site conditions. As stated in the North Sheep Supplement (page 3-1 to 3-9 and 4-1 to 4-14), relative to livestock grazing activities; area closures, annual monitoring of grazing, and using the "adaptive management process" will be used to move vegetative communities towards the prescribed desired conditions. This in turn is expected to better provide source habitat for Forest Plan Management Indicator Species.

COMMENT 18h3. The limited and range science blindered SEIS discussion at 83-87 "Greater Sage-Grouse Capability Analysis" provides a vivid demonstration of Agency mindsets that shows why Sage Grouse continue to decline across their range, and why ESA listing is urgently needed to require agencies to get serious about addressing Sage Grouse and other sagebrush species habitat needs. It is essential to protect the sagebrush habitats on which this landscape level species relies, and conduct a systematic analysis of Capable Sage Grouse habitats based on understanding of habitat needs. Then, after doing this – determine if lands are still Suitable for grazing use while meeting habitat needs and conducting restoration activities in areas that have suffered drastic declines.

> **RESPONSE 18h3.** Please see Response 18a3, Response 18b3, and Response 18f3.

COMMENT 18i3. There is a Baseline degree of natural fragmentation on the Sawtooth –as SageGrouse do not use large areas of trees and steep topography. The mapping of Capable habitats shown in the SEIS for lower elevations pretty much correspond to sagebrush. In the higher elevations of the allotments, though, there are so many trees and steep or rugged non-suitable terrain separating Sage Grouse habitats that the Forest's claims of protecting potential SageGrouse habitat in closing a few higher elevation areas is overblown. In these allotments, there is little potential for SageGrouse use of the ridge areas described. See SEIS 106 claiming the SEIS closes "12% of capable sage grouse habitat". It does not close the ANY of the lower elevation capable habitat in blocks that would actually be used by SageGrouse. This is not to say in other areas, where these is a little less forested veg, less steep terrain, and knife-edge ridges - that higher elevation open ridge areas might not be used by Sage Grouse –they may be. For this area, the reality is that all of the foreseeable usable areas for SageGrouse remain Open to grazing use.

> **RESPONSE 18i3.** Please see Response 18a3, Response 18b3, and Response 18f3. The effects of grazing on MIS capable habitat for greater sage-grouse is

discussed in the North Sheep Supplement on pages 106 – 107.

COMMENT 18j3. SEIS at states 9906 acres of sage grouse habitat is considered open for livestock grazing. So this means that there must be 9900 or so acres of sagebrush that the Forest considers "Capable" for sheep grazing??? So – what, then is the remaining Capable habitat vegetation type used for grazing of sheep? The soggy marshy broader stream bottoms are not Capable. What is the Veg, then, on the Capable acres. Sheep grazing in Forests is not commonly practiced. Where are the sheep grazing – in Forests? The Forest, on the basis of this trumped-up Sage Grouse Watershed analysis –then proceeds to write off the lands of the North Sheep EIS area for Sage Grouse restoration. And what exactly is the definition of a watershed that the Forest is using for Sage Grouse? Is it the entire Wood River watershed? The entire Salmon River watershed?

RESPONSE 18j3. The acres that the Forest is analyzing in the North Sheep Supplement are acres of MIS source habitats that are coincident with acres that are actively used by livestock. As previously described in the North Sheep FEIS, many of the impacts to sage grouse habitat are the result of historic rather than current livestock grazing practices and will require specific restoration projects, which is beyond the scope of this analysis. Within the scope of this project, the analysis recommends decreasing livestock grazing impacts through the use of area closures, annual monitoring of livestock activities, and the adaptive management process.

If Sage-grouse source habitat areas are identified as sustaining negative impact from livestock grazing activities, then using adaptive management, appropriate steps will be taken to minimize or remove those activities causing the habitat degradation. The North Sheep Analysis used the North Sheep Project Area for identifying Sage-grouse source habitats.

COMMENT 18k3. Then, the Forest wrongfully claims that many of the actions it routinely conducts are supposed to lead to restoration of lands in less than satisfactory condition - and its list contains many actions known to be harmful to Sage Grouse, to fragment habitats, to spread weeds, etc. The actions that are referred to under "restore" habitats to the Forests artificial "desired condition" actually are the very same actions known FRAGMENT and destroy habitats and that are leading to declines in Sage Grouse and other sagebrush-dependent wildlife species across their range. See Connelly et al. 2004, Belsky and Gelbard 2000.

RESPONSE 18k3. Please see Response 18a3, Response 18b3, and Response 18f3.

COMMENT 18l3. Forbs are critical to Sage Grouse chicks, as they produce insects that chicks eat, as well as are a significant portion of the late summer diet. Hockett 2003, Connelly et al. 2004. They are a critical component of ground cover necessary to protect watersheds, and support many other native wildlife species.

RESPONSE 18l3. The Forest is aware of Sage-grouse food requirements at all life stages for this species. Forest Plan direction requires that management activities move vegetative communities towards desired conditions that are within the historic range of variability. Forbs are a significant portion of Sage-grouse source habitats and would increase as the condition of sagebrush communities improves.

COMMENT 18m3. The Forest must use this process to re-examine the limited Forest Plan discussion and objectives for Sage Grouse. These were developed prior to the Connelly et al. (2004) Sage Grouse Conservation Assessment and new science showing even more effects of habitat fragmentation (Wyoming Holloran, Naugle and other research on fragmentation and disturbance effects), new threats such as West Nile, recent large-scale wildfires increasingly recognized to be linked to cheatgrass and Global warming processes, and other accelerating threats. The Forest (SEIS at 107) discussing vegetation manipulation projects or wildfire would resort to additional disturbance and fragmentation instead of passive restoration and healing and recovery of already burned or disturbed communities –instead of actions to minimize disturbance to understories and reconnect wildfire and Forest-prescribed fire sagebrush habitats.

RESPONSE 18m3. Please see Response 18a3, Response 18b3, and Response 18f3.

COMMENT 18n3. The Forest has never examined the relative scarcity of old growth and mature sagebrush communities across the landscape – both within and between allotment and "watershed" areas here. Moreover, if the basis for management of sagegrouse habitats is to be the watershed–then the Forest must greatly expand its cumulative effects analysis area to consider the effects on Smiley Creek sagegrouse downstream along the Salmon River watershed to Stanley and beyond as part of the "watershed" where the degree of fragmentation and impairment of sagegrouse habitats must be examined. The full effects of irrigated pastures and fences, myriad other fences on private lands & on public lands, gravel pits, roads, power lines, and new and foreseeable development, must all be examined–as well as wild & prescribed fire effects. The Forest analysis is poisoned by old school "range" science blinders that has already destroyed and fragmented so much sagebrush across the West. See Montana Fish Wildlife & Parks 1995, Braun 1998, Wisdom et al. 2002, Welch & Criddle 2003, Wambolt et al. 2003, Knick et al. 2003, Dobkin & Sauder 2004.

RESPONSE 18n3. Please see Response 18a3, Response 18b3, and Response 18f3. All acres found in sagebrush communities are being considered as Sage-grouse source habitats. The acres that the Forest is analyzing in the North Sheep Supplement are acres of MIS source habitats that are coincident with acres that are actively used by livestock.

COMMENT 18o3. The Forest approach to Sage Grouse also forsakes basic information on Sage Grouse habitats and populations. Example: Connelly et al. 2004: Sage-grouse populations depend on relatively large expanses of sagebrush-dominated shrub steppe.

However, the appropriate patch size needed for winter and breeding habitats used by greater sage-grouse is uncertain. It is likely that this patch size is not a fixed amount but depends on various factors including migration patterns and productivity of the habitat. The bottom line is that Sage Grouse are a landscape-level species, and birds in populations may move between watersheds over the course of a year. In order to conduct a valid MIS examination for Sage Grouse, the Forest must systematically examine the Sage Grouse habitat conditions across the landscape and provide a solid scientific basis for understanding and predicting the effects of its management actions. This must be done from the perspective of what the Sage Grouse need, not what a range staffer wants to see happen to sagebrush, or from solely a Watershed perspective.

> **RESPONSE 18o3.** The July 2006 Idaho Sage-grouse Conservation Plan (p. 4-99) states: "A small population existed historically in the Sawtooth Valley south of Stanley, but its current status is unknown." Within the North Sheep Project Area, the Forest is considering all sagebrush communities to be Sage-grouse source habitat. It is highly probable that the birds in this population move between watersheds and spend the winter and breeding seasons outside the North Sheep Project Area. When Sage-grouse source habitats are identified as sustaining negative impacts from livestock grazing activities, then appropriate steps will be taken to minimize or remove those activities causing the habitat degradation.

COMMENT 18p3. The Forest wrongly examines only Watersheds, and only the percentage of sagebrush within the individual allotments – instead of examining the broader landscape including sagebrush habitats in neighboring allotments that would be used by Sage Grouse in the course of a year. Essentially, having Sage Grouse as an MIS species forces the Forest to expand its cumulative effects analysis areas to encompass a landscape large enough to sustain a Sage Grouse population. What foreseeable actions would be necessary to restore Sage Grouse populations in the affected sagebrush landscapes?

> **RESPONSE 18p3.** Please see Response 18a3, Response 18b3, and Response 18f3.

COMMENT 18q3. The recent wild fires, which have further reduced and fragmented sagebrush habitats – including significant loss of sagebrush in the Castle Rock wildfire, may also in some areas enhance potential Sage Grouse movement between watersheds (opening forested areas for Sage Grouse to move through in accessing sagebrush habitats) more likely. But the Forest must take much better care of the remaining unburned sagebrush habitats - instead of promoting further fragmentation through “temporary” corrals, water hauling, stocking above even Average Actual Use, shifting impacts through alternative trailing, etc. – and the Forest range staff’s fixation on burning even more old growth or mature sagebrush to grow grass for sheep.

> **RESPONSE 18q3.** Please see the responses under Issue #17 – Wildfire. The areas affected by wildfire were evaluated following the fire by Burned Area

Emergency Response (BAER) specialists as required by Forest Service Policy. Criteria were set for when grazing would resume on burned rangelands. This includes resting the burned area for a minimum of two growing seasons or longer until specific resource conditions are achieved. Once achieved, land managers will evaluate returning livestock grazing to those areas, and specify the conditions (timing, band size, grazing routes etc.) through the adaptive management process consistent with Forest Plan direction, the North Sheep FEIS and the Supplement. Please note that while a new site-specific capability assessment could be made at that time for the burned area, it would likely result in additional areas being identified as capable especially where burned forest vegetation has reverted to earlier seral forb/grass/shrub stages. A more conservative approach is to rely on existing analyses in combination with the BAER assessment and resume grazing consistent with BAER findings and Forest Plan direction.

COMMENT 18r3. The SEIS at 107 tries to further justify forsaking Sage Grouse habitat needs by claiming that the 2006 Idaho Sage Grouse Plan states that "while subsequent changes in livestock management nay be appropriate to nurture and maintain the restored area, such changes alone in the absence of restoration activities would likely provide little if any progress". Here the Forest relies on a plan that has not undergone NEPA, and that is strongly bound by livestock industry constraints. Such a statement may apply to some degree to the degraded cheatgrass monocultures – but is not relevant to higher elevation sagebrush wild lands here.

RESPONSE 18r3. Negative impacts to Sage-grouse habitats will be analyzed on a case-by-case basis. Appropriate actions will be taken to eliminate or reduce those impacts depending on the area, season of use, activity causing those impacts, etc.

The National Environmental Policy Act (NEPA) applies to federal actions, so you are correct in that the State of Idaho does not use this federal law. However, the 2006 Idaho Sage-grouse Plan underwent extensive public comment and peer review. The 2006 Conservation Plan for the Greater Sage-grouse in Idaho currently represents the most comprehensive review of the status, known threats, and potential conservation measures for greater sage-grouse in Idaho. This plan is not required to undergo a NEPA analysis since conservation measures listed in the plan are generic in nature. Future environmental analysis may be required for individual federal land management agencies to implement specific measures recommended by the plan, but the plan itself does not in itself constitute any proposal for ground disturbing activity. While the livestock industry is represented on the statewide advisory committee who developed the plan (along with representatives from other groups including the environmental community), the 2006 Sage-grouse plan is not "bound by livestock industry constraints" as implied.

We have not relied solely upon the 2006 Idaho Sage-grouse Plan for direction. As an example, the comment about changes in livestock grazing alone, is

consistent with what was written in the North Sheep FEIS at 4.8.7.1.3 (relative to sagebrush communities and MIS habitat) which states "However, without restoration efforts, these communities would likely not recover completely during the planning period." The North Sheep FEIS (pp. 3-91, 3-97, 4-51,) as well as the MIS Capability Supplement (pp. 5, 19,) also addresses the lack of fire or altered fire regimes that affected sagebrush communities and that absent some type of active restoration with projects specifically designed to address this issue, the landscape won't improve. The current condition of sagebrush steppe vegetation types is believed to be the result of first, the suppression of wildfires for several decades that has resulted in a reduced fire return interval and larger wildfires. (MIS Capability Supplement Jan. 2008, p. 19). Much of this information is based on the Sawtooth Forest Plan, which did undergo an environmental analysis subject to NEPA.

COMMENT 18s3. These Protocols must include collecting information necessary to assess the extreme importance of springs and the continuum of hydric and mesic vegetation communities in their vicinity to Sage Grouse, especially in providing essential summer brood rearing habitats (green forbs); to migratory birds (deciduous shrubs and trees); egg-laying, foraging, and hibernacula sites for spotted frog; and many other important attributes vital to other native animals. Level III surveys can add this element. Thus, in addition to all the important issues raised for consideration, the importance to Sage Grouse and other wildlife must be fully considered. We believe this elevates ALL spring areas here (especially since so much damage - including harmful development - has been allowed to occur, and the potential at many sites so greatly reduced) that ALL springs, seeps, wet meadows here are worthy of restoration to whatever potential can be achieved.

RESPONSE 18s3. The Forest recognizes that water sources and habitat connectivity is very important to Sage-grouse populations. Negative impacts to Sage-grouse habitats or important components to those habitats will be analyzed on a case by case basis. Appropriate actions will be taken to eliminate or reduce those impacts depending on the area, season of use, activity causing those impacts, etc.

COMMENT 18t3. In the case of a mobile species like Sage Grouse where individual birds may move over hundreds of miles to fulfill habitat needs in the course of the year (see Braun 1998, Connelly et al. 2004) the Forest must consider such things as the condition (including sagebrush loss and fragmentation) of its own lands as well as the lower elevation BLM lands. This is necessary to understand the range of management actions, and actions that must be immediately applied, on the Forest to maintain or recover viable populations.

RESPONSE 18t3. Please see Response 18a3, Response 18b3, and Response 18f3. The Forest recognizes that Sage-grouse source habitats span multiple watersheds as these populations undertake their seasonal movements. Habitat condition and connectivity is a major concern. For this analysis, the scope of the

SEIS is the North Sheep Project Area only. As terrestrial habitats are identified as being in need of restoration relative to livestock activities; management actions, passive restoration, and active restoration plans will be developed to correct the identified impacts. For grazing activities, negative impacts will be minimized or eliminated by using either area

COMMENT 18u3. As long as sheep use relies heavily on the sagebrush habitats, their recovery and restoration of Sage Grouse populations will just not be possible. With the existing fires, and a very inadequate proposed "rest" of two growing seasons, the Forest proclaims: "alternate routing would need to be resolved" (SEIS at 80. There is no place to move sheep to or shift them onto in this bottlenecked, fragmented landscape – let alone new areas to be pioneered for sheep movement when fires occur, or "rest" is needed. Recovery of Sage Grouse and other native biota just is not possible with this concentrated and constricted sheep use.

RESPONSE 18u3. Please see Response 18a3, Response 18b3, and Response 18f3.