

Appendix B

Comments and Responses

A. Introduction

The Southwest Idaho Ecogroup Draft Supplemental Environmental Impact Statement (Draft SEIS) was released for public review on June 1, 2007, initiating a 90-day comment period that ended on August 29, 2007. This appendix presents a summary of the comments, written or oral, received during the public comment period and provides the Forest Service response to these comments.

B. Background

In response to the Notice of Availability published in the Federal Register and the Legal Notice published in the Idaho Statesman, the Southwest Idaho Ecogroup (SWEIG) received seven comment letters on the Draft SEIS. Of the comment letters, three were from other Federal and State agencies, three were from environmental organizations, and one from an individual concerned about livestock grazing. Two of the environmental organization comment letters were submitted by the same organization, Western Watersheds Project (WWP). Of the two letters received from WWP, one was specific to the MIS 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 MIS supplement, but rather appeared to be a generic comment letter about livestock grazing practices on public lands. This letter was thoroughly reviewed and any comments relative to the MIS supplement not covered in the organization's MIS specific letter were also addressed in the Response to Comments section below.

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, will be reviewed by the decision makers. The individual submissions are included in the project record, copies of the agency letters can be found at the end of this appendix.

C. RESPONSE TO COMMENTS

Issue 1: Models

COMMENT 1a: It is not clear what is meant by historic MIS capable habitat. Is historic 50, 100, 150 years ago?

RESPONSE: Relative to capable MIS habitat, "historic" habitat is not specific to a particular timeframe, but rather refers to the physical capacity of lands to develop source habitat, although at any one point in time acres may, or may not, be in source habitat condition. The method for creating the historic source habitat

used PVG for forested source habitat and cover types for non-forest combined with the historical range of variability structural means. The 2003 FEIS, Volume 2, page 3-415 includes a discussion regarding HRV concepts (HRV is also defined in the Glossary on page GL-18). There are three sources cited in the discussion that address timeframes (Swetnam et al. 1999, Morgan et al. 1994, Landres et al. 1999). The key concept of all three is that there is no single widely accepted optimal time period for describing historical range of variability because it varies depending on the landscape and ecosystem components being evaluated. For vegetative systems relevant time periods are those characterized by relatively consistent climate, soils, and topography and therefore relatively consistent kinds and patterns of disturbance. The timeframe should encompass multiple generations of the communities of interest.

Morgan and Parsons (2001) "Historical Range of Variability of the Forests of the Idaho Southern Batholith Ecosystem" used the time period of 100 to 700 years before present to describe successional dynamics and the resulting vegetative structures. They felt this time period adequately represented the kinds of disturbance regimes that would have occurred as a result of the climatic variability and Native American populations in the area. Hann et al. (1997) based the analysis for the Interior Columbia River Basin on a 2,000 year time frame because they were looking at a much larger landscape with a greater range of disturbance regimes.

COMMENT 1b: Much of the analysis is based on cryptic modeling that is poorly explained and it is impossible to understand just how analysis was conducted. Modeling appears to only examines a relatively narrow range of criteria in making sweeping determinations, and may have few current 2007 inputs of data on critical factors such as current species occurrence, and may have no sound basis for determining the actual ecological condition of any habitats identified as well as the role of ongoing livestock grazing disturbance in altering these habitats. Where, for example is the current extent of cheatgrass infestation applied in the model? Where is information on logged areas applied in the model? Wildfire acres? What "rangeland" areas are currently in poor, fair, good, excellent or PNC condition, and how is this factored into the model?

RESPONSE: It's true there are only a few parameters used in the model, that is why this model is suitable for portraying large-scale (watershed and above) patterns but would not be best for finer-scale needs. The model characterizes the vegetation component and structural stages of source habitat for the MIS using parameters we can select for/detect across the three Forests. We model what lands currently exhibit those parameters (Existing condition) and we use Appendix A to 'backtrack' and characterize historic habitat conditions. For forest species this is accomplished by using the structural breakdowns of tree size, canopy cover and species composition for each PVG to show how much habitat at any one point in time historically exhibited those conditions. A quantity comparison of historic and current habitats allowed us to portray the relative change in habitats within specific areas (watersheds, forests). We can use the patch dynamics work by

Agee, to help look for patterns we would expect (habitat patch size and juxtaposition) compared to patterns we see with the modeled existing habitat. For non-forest habitats, the lack of a PVG type data set meant we looked at current patterns of existing habitat and used the expected fire regime patch dynamics patterns to evaluate whether what we expected, appears to be similar to what we see today. In the case of habitats like cheatgrass, annual grasslands were not modeled for existing, and historically would not have been present, but without a model to show where and how much there is we are unable to address this. The state plan can though. Regarding wildfires and their incorporation, it's true since 2000 our imagery has not been 'refreshed' to show current conditions so that is a limitation of our current modeling. Occurrence data was not used to develop the model but is of importance in validating the models. A more detailed description of the model and its components can be found in the project record.

COMMENT 1c: Pages 3-4 state that data from source habitat capability assessments were overlaid with open grazing allotments. It is also essential that the Forest examine the vegetation structure and condition of lands adjacent to the Forest including BLM or state lands and all allotments -open or not - to better understand the available habitat and its condition for species like sage grouse that may move across hundreds of square miles in the course of a year.

How does the "source habitat" modeling of the Forest differ from source habitat modeling that would be conducted in geographic areas if ALL Lands -regardless of administrative boundaries - were examined?

RESPONSE: As previously described, the scope of this analysis is to address the requirements of 36 CFR 219.20 relative to terrestrial MIS. 36 CFR 219.20 requires the identification of "lands suitable for grazing and browsing" and "the capability of these lands to produce suitable food and cover for selected wildlife species" to be estimated. Consistent with this requirement, the analysis of MIS capable habitat was limited to open grazing allotments. However, as long as the definition of source habitat is consistent, then modeling would be similar across ownerships. The subset of source habitat portrayed in this Supplement is the result of focusing only on those lands within open grazing allotments on Boise, Payette or Sawtooth National Forest lands. The multi-scale analysis described on page 2 of the MIS supplement does consider all lands considered current or potential sage-grouse habitat, as well as the juxtaposition of those lands to BLM, state and private lands.

COMMENT 1d: We also have concerns about the methodology used to calculate historical source habitat. How were the effects of mining deforestation, promiscuous burning by shearherders and other grazers, and other known human historical alteration of the landscape taken into account here? Where have all Forest or BLM or state lands vegetative manipulation, post-fire seeding with exotics, etc. occurred?

RESPONSE: The method for creating the historic source habitat used PVGs for

forested source habitat and cover types for non-forest source habitat combined with the structural historical range of variability. The forested vegetation historical ranges of variability means were created from the work of Morgan et al (1994), Morgan and Parsons (2001), Steele et al (1981) and Sloan (1998). The non-forested vegetation historical range of variability was created from the draft Properly Functioning Condition Process (USDA Forest Service 1996). The process for creating the overall historical source habitat percentage for a watershed involves determining the historic range of variability means for each PVG and/or cover type. Once the HRV means are assigned they are merged into the historic source habitat percent using a weighted average. This method allowed us to depict the amount of historic source habitat in a watershed but did not allow us to display where it would have occurred within that watershed.

The 2003 FEIS, Volume 2, page 3-415 includes a discussion regarding HRV concepts (HRV is also defined in the Glossary on page GL-18). There are three sources cited in the discussion that address timeframes (Swetnam et al. 1999, Morgan et al. 1994, Landres et al. 1999). The key concept of all three is that there is no single widely accepted optimal time period for describing historical range of variability because it varies depending on the landscape and ecosystem components being evaluated. For vegetative systems relevant time periods are those characterized by relatively consistent climate, soils, and topography and therefore relatively consistent kinds and patterns of disturbance. The timeframe should encompass multiple generations of the communities of interest.

Morgan and Parsons (2001) "Historical Range of Variability of the Forests of the Idaho Southern Batholith Ecosystem" used the time period of 100 to 700 years before present to describe successional dynamics and the resulting vegetative structures. They felt this time period adequately represented the kinds of disturbance regimes that would have occurred as a result of the climatic variability and Native American populations in the area. Hann et al. (1997) based the analysis for the Interior Columbia River Basin on a 2,000 year time frame because they were looking at a much larger landscape with a greater range of disturbance regimes. The effects of mining, deforestation, burning, and other human alterations to the landscape are taken into account in HRV inasmuch as they were disturbances on the landscape in the timeframes discussed. It is more likely however that mining, deforestation, burning and other human alterations to the landscape are accounted for when modeling current source habitat and are part of the explanation regarding the differences between historic and current source habitat conditions.

COMMENT 1e: How do these models account for foreseeable or potential habitat changes and effects over the life of the Plan -especially in the face of progressive Global Warming, and livestock-promoted desertification processes that are known to contribute to Global Warming? See discussion below of desertification. See Steinfeld et al. 2006 United Nations Report on Global Warming. As part of any capability and suitability analysis, and determination of any unsatisfactory risk associated with livestock grazing

use here the Forest must determine the contribution of grazing use to further desertification and alteration of vegetation communities that may promote site warming or site drying processes - and examine direct, indirect and cumulative effects of continued livestock disturbance/use.

RESPONSE: The models were developed to determine historic habitat versus current habitat to determine where departure from historic habitat has occurred and to aid in determination of restoration priorities. The models do not predict future potential habitat changes and were not intended for that purpose.

COMMENT 1f: The location impacts of treatments, burns, wildfires, exotic seeding, etc. on livestock use and forage availability, as well as on important and sensitive species habitats must be thoroughly examined and factored into any modeling or analysis that occurs. We have previously discussed some concerns in relation to desired condition, Appendix A, etc.

RESPONSE: The effects of treatments, burns, wildfires, etc on livestock use and forage availability would be conducted at a site-specific level and is beyond the scope of this analysis.

COMMENT 1g: Removal or alteration including logging or timber activities or now biomass production of woody vegetation may affect the ability of grazing animals to move through or use lands. How is the Forest addressing this in all modeling, analysis, and management actions?

RESPONSE: Analysis of specific vegetation treatments including logging or timber activities would occur at the site-specific/project level.

COMMENT 1h: The Forest does not appear to have integrated the important ICBEMP work of Wisdom et al. 2002, and other recent extensions of such work, in assessment of habitat conditions and management actions. Wisdom et al, 2002 recommends maximizing protection of microbiotic crusts, and reducing/removing livestock disturbance from remaining better condition sagebrush sites and habitats. How has the Forest incorporated this component of the science and Wisdom report into its analyses and modeling - including any determinations of continued suitability for livestock grazing, and any assessment of risks of adverse effects or losses with continued grazing use?

RESPONSE: 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. We conducted a spatial assessment of source habitats 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. Risk factors to the MIS were identified by reviewing numerous broad-scale assessments that have been completed since the Forest Plan Revision. These assessments included statewide strategies, regional assessments, and subbasin planning documents. Many of these broad-scale assessments were undertaken to identify changes in habitats that have occurred across subbasin, state, or regional boundaries. Each of the assessments identified strategies, actions or practices to address restoration of habitats in decline and/or the conservation of certain species. All of the assessments reviewed overlaid part, or all, of the Southwest Idaho Ecogroup. Strategies, actions or practices identified in these documents have been identified in the species accounts for the MIS to assist with restoration of degraded habitats and conservation of habitats in desired conditions.

COMMENT 1i: Page 4-5 states the model uses satellite imagery, and identifies where (WHAT time period?) changes in vegetation have occurred - "but cannot identify what caused those changes". The Forest certainly can, for example, map and model timber harvest areas and provide data and analysis of lands that have not been harvested and tree age class and composition, as well as tree age class and structure of logged/harvested/"healthy forest" treated lands. This would show loss or reduction of pileated woodpecker habitat, and areas in open allotments where livestock use may have incidentally or unintentionally been shifted or expanded. The Forest can also identify sagebrush plowing, burning or chemical treatments, including exotic seeding, and other purposeful actions, as well as effects of wildfire and actions such as exotic seeding taken here, too.

RESPONSE: The MIS models provide the basis from which finer-scale analyses, such as the effects of specific vegetation treatments, can be completed (below the watershed-scale) and serve as an umbrella of coarse-scale source habitat parameters for which additional data can be queried at more local scales to increase the accuracy of predicted source habitat across an area and its mapping. It is important to understand that modeling is a tool that can both inform further data needs as well as contribute to analysis of an area but is not a substitute for either and site-scale analyses should use them appropriately. Modeling spatially accurate source habitat below the project scale is necessary to effectively evaluate what factors may be affecting the changes between historic and current conditions but the models in this analysis (Forest and Ecogroup-level) only allow us to intersect potential risk factors with areas capable of developing source habitat to try and discern patterns that may be indicative that the particular risk factor corresponds with an area exhibiting a negative change in source habitat. Identifying these patterns allows us to focus on areas of overlap that require finer-scale work to identify the validity of this pattern, and possible actions that should be taken to achieve desired conditions.

COMMENT 1j: Are the source habitat models based on CURRENT info, *or* do they re-use old ICBEMP info without integrating recent information on degree and severity of habitat loss and fragmentation, cheatgrass presence, fire effects, etc.?

RESPONSE: The source habitat modeling is based on 1994-95 Landsat imagery (except for the Minidoka RD) for the three Forests and did not use ICBEMP information. The dilemma regarding recent changes is a good point in that the information used does not have large fire information updated in it since 2000. The three SWIEG forests are in the process of “refreshing” the existing vegetation data to include changes that have occurred as a result of fire and insect and disease. This new data is expected to be available some time in late 2008. It is important to note that the area where some of the recent disturbance events have occurred (at least as it relates to sage grouse) also seem to be the same areas where we have already identified large decreases and identified as active, high priorities in the short and long term restoration strategy.

COMMENT 1k: How was the source habitat for each of the MIS species at issue here determined? How current was the data used? How much on-the-ground collection of current information or verification of modeling components were plugged into the Model?

RESPONSE: Source habitat models were based on a combination of literature reviews and expert opinions and define vegetative parameters capable of being modeled at the mid-scale that characterize source habitat for the species. These parameters include PVG, canopy closure and tree size in forest habitats and cover type and canopy closure for non-forest habitats. Where possible, if a species was strongly associated with a physical feature on the landscape (i.e. riparian areas, cliffs, etc) the model buffered those features and modeled source habitat within the buffer rather than across the entire landscape. The models are limited in their ability to account for fine-scale features that were unable to be addressed at the mid-scale. Those limitations are noted, where they occur. Issues of accuracy relative to the spatially displayed information are important to be aware of but were not great enough to negate the validity of patterns and trends detected via the analysis. These models represent the best available information at the time of development. Imagery data used is from 1994-95 with a refresh for large fire events as recent as 2000. Data from the Minidoka Ranger District was collected in 2001 and did not use the imagery data. Validation of models is expected to occur over time by collecting habitat parameters in conjunction with documenting species occurrences from animals that successfully occupy and reproduce in a given habitat.

Issue 2: Desired Conditions

COMMENT 2a: We are deeply concerned about the Appendix A Desired conditions. As a result of the very significant and extraordinary recent habitat losses of sagebrush, the

Forest must amend this section and consider alternatives that make the Desired Condition focus on Retention of All Sagebrush Communities and Restoration of Lands Where Sagebrush Has Been Reduced or Lost.

RESPONSE: Appendix A does not contain language indicating sagebrush communities would be decreased. Appendix A does emphasize restoration of degraded sagebrush communities by moving them toward desired conditions. Desired conditions are reflective of what is historically believed to have been present. Pages 3-480 through 3-484 of the 2003 FEIS describe how desired conditions for sagebrush were derived. Various management activities, such as fire, mechanical, thinning, chemical are available tools, but there is no recommendation for use of any of these. The Direct and Indirect Effects on non-forest vegetation regarding some of these tools are discussed on FEIS pages 3-515 through 3-517. Pages 3-417 through 3-420 also discuss influences in shaping non-forest vegetation structure.

COMMENT 2b: The Forest contemplates extensive manipulation that would be necessary to achieve any artificial "Desired" canopy cover reduction. The Forest "Desired Condition Range" for Low sagebrush (what about black sagebrush (*Artemisia nova* as well???) is to have 90% of this plat community critical to sage grouse have a much-reduced canopy cover of 0 to 10% across a full 90% of the area! The Forest would impose 25-30% of an area having 0-10% canopy cover of Wyoming big sagebrush. The Forest seeks to artificially impose a 0 to 10% canopy cover of mountain big sagebrush over a full 30 to 40% of the "Area". If this is done, it will represent a drastic reduction loss, and extensive further fragmentation of sagebrush habitats (along with opening up watersheds to increased desertification, erosion into streams and accelerated runoff).

Opening up sagebrush communities typically results in increased and intensified livestock use. Reducing sagebrush canopy through manipulation has long been practiced to eke out more unsustainable AUMs on degraded ranges. Such "desired conditions" are woefully outdated, and represent the "Kill sagebrush to provide cow forage" mindset of the past.

RESPONSE: Desired conditions for low sagebrush, which includes black sagebrush is described on page A-26 of Sawtooth Forest Plan. The desired condition development for low sagebrush is described on FEIS 3-482. The clay, hardpan soils naturally dictate canopies that are generally open and desired conditions are based on historic fire regimes and production of native herbaceous understories, a crucial component for sage grouse and other species. Desired conditions for Wyoming Big Sagebrush, of which only small amounts occur on the Sawtooth National Forest (which is also the case for black sagebrush), is described on page 3-481 of FEIS and is based on the high risk of disrupted fire cycles and cheatgrass invasions. We are unaware of any information about Wyoming Big Sagebrush not occurring historically at some proportions in the low canopy cover class, but that sagebrush communities generally occurred in a patch mosaic of structural diversity. Desired conditions for Wyoming Big Sagebrush

stressed maintaining larger amounts in denser canopy covers than may have occurred historically, to minimize any risks associated with management disturbance.

The three Forest Plans do not recommend treatment of sagebrush communities, or any other vegetation type for the purpose of increasing livestock forage. Rather, treatments in sagebrush communities are recommended for the purpose of restoring these community types to historic conditions to increase vegetative diversity and support sagebrush dependent wildlife species. For example, one of the desired conditions listed in the Forest Plan for wildlife is: “For Region 4 Sensitive Species and Forest Management Indicator Species, management actions maintain habitat conditions that are properly functioning, or restore those conditions that are degraded.” The “Forest Plan Direction Addressing Restoration of Lands in Less Than Satisfactory Condition” section of the MIS supplement provides a more detailed list of the Forest Plan direction specifically addressing restoration of sagebrush communities and sage grouse habitat.

COMMENT 2c: The Forest's anti-sagebrush canopy zeal continues with the Desired Condition for mountain big sagebrush being only 5% of the area with a canopy of > 31 %. This would, effectively, doom pygmy rabbit occurrence over 95% or more of the Forest. See Attached Pygmy Rabbit petition describing habitat use and requirements of this native species that is likely even more imperiled than sage grouse. The inverted candelabra growth form of mountain big sagebrush results in greater canopy coverage naturally occurring with this sub-species of big sagebrush.

RESPONSE: See the response to the previous comment concerning desired conditions. Patch dynamics and fine-scale micro site features are important to providing for pygmy rabbits; restoring vegetative conditions gets us headed in the right direction but was never intended to be specifically responsive to individual species' needs.

COMMENT 2d: There is no accounting in the Desired Condition model for the complex dispersion and interdigitation of sagebrush communities commonly found across the Forest landscape. Example: Mountain big sagebrush may occur on deeper soils, with low sagebrush on shallow-soil ridges and Douglas fir on north and east facing slopes. Thus, there may be complexly interspersed plant communities that do not fit idealized models of big blocks of habitat. Within any sagebrush communities, there may be significant variation in density and canopy cover -depending on slope, aspect, disturbance history, etc. Nor is there any analysis of the critical habitat components for a host of native species, including sage grouse, that may be lost if the desired conditions are imposed through disturbance of exiting intact sagebrush communities.

RESPONSE: The Forest Plan or companion analysis does not negate the variation in vegetative communities depending upon slope, aspect, disturbance history etc. The Potential Vegetation concept used in the Forest Plan is the backbone of understanding the range of natural variability that occurs in

vegetation types, which incorporates those elements as part of the concept. Forest Plan Direction (Vegetation Goal VEGO07) includes spatial patterns etc. as elements to maintain or restore. Similarly, the variability in the sagebrush communities and the types of patch dynamics that may occur is addressed in Appendix A where fire regimes (lethal, non-lethal, mixed 1, mixed 2) are correlated with non-forest communities.

COMMENT 2e: Critical to understanding habitat condition and connectivity is an understanding of the various species and sub-species of sagebrush, and their differing growth forms and density that may occur across the Forest. The Forest may set "desired conditions" aimed at thinning mountain big sagebrush -when in reality a complex mosaic of sagebrush communities commonly exists across the landscape – of varying canopy cover and openings, and mountain big sagebrush NA TURALL Y grows with denser canopy coverage than Wyoming big sagebrush. See Welch and Criddle 2003.

RESPONSE: Welch and Criddle (2003) was not available at the time of Forest Plan revision. However, this paper has generated much controversy. Our desired conditions provide for the varied structural stages of the sub-species of big sagebrush to provide habitat for the multitude of native plants and animals that utilized these ecosystems. As we summarized on pages 3-417 through 3-418 of the FEIS, patchiness at small scales is essential to maintaining biodiversity at larger landscape scales. The 5th order watershed is the analysis unit for evaluating desired conditions and their contribution to the Forest-wide condition, together with the Forest Plan Direction (Vegetation Goal VEGO07) that includes spatial patterns etc. as elements to maintain or restore, which would be evaluated at project scale. By providing for multi-scale analysis, we are taking into account the complex mosaic of sagebrush communities, both with regards to structural stages and species/sub-species (i.e. mosaics of big and low sagebrush).

In the sage grouse guidelines (Connelly et al. 2000) optimal nesting habitat calls for 15-25% sagebrush canopy cover and for other uses a range between 10-30%. Welch and Criddle (2003) state that “factors other than sagebrush canopy cover are involved in determining the amount of bare ground in a given area”. However, one cannot compare across ecological sites or habitat types as this paper does, to make the argument there is no overstory/understory relationship, due to habitat type differences in soils and climate. Mueggler’s (1980) habitat type work in Montana reported mean total shrub cover in sagebrush habitats were 15% in Wyoming big sagebrush-mountain big sagebrush/bluebunch wheatgrass, 22% in mountain big sagebrush/rough fescue, and 24% in mountain big sagebrush/Idaho fescue. All of these have a range around them which can go as low as 4% and as high as 41%. The reality is that there is considerable variation in sagebrush cover in space and time within and across habitat types throughout the west, and our desired conditions are meant to capture this. There is no direction that says “thinning” is necessary for desired conditions. The Welch and Criddle (2003) paper has been critical in motivating scientists to re-examine existing information and to work on publishing newer information, as we try to

piece together historical sagebrush communities.

COMMENT 2f: Forest analysis may overlook the importance of old growth and mature sagebrush communities across the Forest. Please see Welch and Criddle (2003) to understand the various myths and axioms aimed at promoting manipulation and reduction of sagebrush that have long pervaded especially U. S. Forest Service management of sagebrush communities and sagebrush habitats.

RESPONSE: Refer to the answer to the previous comment.

COMMENT 2g: A very important consideration overlooked by the Forest in claims that sagebrush or other vegetation may be too thick is that sagebrush communities are commonly complexly interspersed - and have greatly varying canopy cover/density.

RESPONSE: Source habitat was modeled by watershed but we did look at the actual pixelated data to determine the arrangement of cover types and their canopy covers on the landscape (juxtaposition, patch size, distribution) and compare that with what we expect to see historically.

Issue 3: Restoration Activities

COMMENT 3a: According to one of the purposes of the Draft Supplement, the analysis is to include "...additional direction needed for restoration of those lands." Though current plan direction concerning restoration of MIS capable habitat is given, no additional direction is given. The Draft supplement needs to make plainly evident where any new direction is given or state that the current Forest Plan gives sufficient direction for restoration of MIS capable habitat.

RESPONSE: The actual citation from the Draft supplement is "...identify existing Forest Plan direction **and/or** additional direction needed for restoration of those lands." As described in the Abstract for the Draft Supplement, based on review of information in the Supplement, the Regional Forester will determine if the July 2003 RODs implementing the 2003 Forest Plans for the Boise, Payette and Sawtooth National Forests should be modified or if the original decisions are to remain in tact.

COMMENT 3b: We agree with the watershed restoration prioritization schemes depicted in Figures 5 and 6. Implementation of habitat improvement projects in the areas depicted should benefit sage grouse and other shrub-steppe wildlife species.

RESPONSE: Thank you for your comment.

COMMENT 3c: In addition to the site-specificity of the planning direction for restoration of sagebrush communities and sage-grouse habitats, we also encourage the

Forest to consider improving plant species diversity (particularly forbs and grasses) as an additional objective for these areas.

RESPONSE: Improving plant species diversity is one of the objectives of the overall Forest Plan restoration goals. During analysis processes where sage-grouse habitat recovery is identified as an issue, opportunities for improving plant species diversity will be reviewed.

COMMENT 3d: The direct, indirect and cumulative impacts of sagebrush loss and reduction on surrounding lands must be fully examined when considering vegetation manipulation/restoration projects. The Forest must thoroughly examine, and conduct necessary analysis to determine if it is really suitable to graze lands where manipulation occurs or where such significant habitat losses exist in the surrounding area.

RESPONSE: Prior to implementation of any vegetation treatments, site-specific NEPA 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 3e: On BLM lands, range personnel have long promoted killing woody vegetation to grow more livestock forage grass. We hope the Forest is not going to follow the same path. A full assessment of risk of loss of erodible soils, microbiotic crust, native vegetation communities, and essential habitat components for all of the MIS species must be examined in relation to any vegetation treatments that have already occurred - or that may be foreseeable across the Forest lands. For example, how will the Forest handle a several thousand acre burn area that burned pileated woodpecker habitat and opened up the canopy and understory so that sheep or cattle can now move through the area and some forage may exist. Will the Forest, under the Plans, allow grazing use to be expanded into such areas? Will this result in foreseeable stocking rate increases in watersheds? If so, how will water quality, aquatic species, and any recovery of forested habitat essential in the long-term for pileated woodpecker be affected?

RESPONSE: Analysis of specific vegetation treatments as well as burns would occur at the site-specific/project level as specific projects are proposed.

COMMENT 3f: It is really difficult to understand what the Forest means by FEIS 3-23. Here, the DEIS states: "the key factor used in determination of lands in less than satisfactory condition from historic". Does this mean overall presence of the dominant woody species on the site? Or does this mean the carefully assessed ecological condition - which includes an examination of the presence and health of the necessary components of native system including soils, microbiotic crusts, and a full and healthy complement of native grasses, forbs, shrubs, etc.? Or is the key factor large-scale conversions - through fire, logging, whatever - of habitats from sagebrush to forest, and vice versa?

RESPONSE: The actual citation from the DEIS is “The key factor used in determination of lands in less than satisfactory condition for this supplement is MIS capable habitat with 20% or greater decline in habitat condition from historic.” This section has been reworded to better define how lands in less than satisfactory condition were identified.

COMMENT 3g: We are concerned that the Forest has included a much-too-limited range of criteria for restoration. First, the Forest should look at ALL MIS species (including an expanded range for these lands) or other important and sensitive species habitats, and determine where populations are in the most trouble and where the highest degree of loss has occur and populations may be most threatened with extirpation, and take all necessary management measures to enhance and restore habitats here.

RESPONSE: While the MIS supplement focuses on capable MIS habitat, restoration activities noted in the MIS supplement, *Forest Plan Direction Addressing Restoration of Lands in Less Than Satisfactory Condition*, addresses restoration needs beyond just those associated with livestock grazing. As also described in the MIS supplement, *2007 Updated Analysis Implementing WIOB03*, the SWIEG recently completed an updated multi-scale analysis of habitat for wildlife species of concern to address Forest Plan Wildlife Management Objective WIOB03. The SWIEG is currently in the process of taking the results of that analysis to develop a coordinated multi-scale habitat conservation and restoration strategy for habitat families of species of concern. Through this process all sagebrush habitats that occur within the Forests are considered.

COMMENT 3h: We are very concerned about the Forest using watersheds with > 50% acres as MIS habitats to prioritize actions. Habitats for mobile sage grouse span watersheds.

RESPONSE: Priorities need to have rationale behind them and this is the rationale chosen by the Forest. Selecting watersheds with >50% of the acres as MIS capable source habitat provides emphasis in those areas that appear to have the most remnant habitat allowing the Forest to focus efforts on retaining and building upon what could be the biggest patches. Without a rule set like this, 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’.

COMMENT 3i: We are puzzled by Figure 4, and just what is meant by "the relationship to suitable rangelands".

RESPONSE: The description of this figure has been clarified in the final supplement to the EIS.

COMMENT 3j: The Forest must integrate new information into any assessments of suitability of habitats for grazing. For example, in the wake of the Black Pine fire, and the

recent fires across much of northern Nevada, Utah and southern Idaho, ALL remaining sagebrush habitats should receive elevated priority. With large fires such as the Black Pine now increasingly common - the Forest should examine the suitability of continued grazing on unburned sagebrush lands in the vicinity of these large fires. ALL remaining intact habitats may be critical to persistence of populations here. There is little to no discussion of the disturbance associated with management of livestock - everything from swamping sage grouse nesting and brood rearing areas with large numbers of cattle during nesting season to disturbance of wintering birds.

RESPONSE: As previously described, the three SWIEG forests are in the process of “refreshing” the exiting vegetation data to include changes that have occurred as a result of fire and insect and disease. This new data is expected to be available some time in late 2008. It is important to note that the area where some of the recent disturbance events have occurred (at least as it relates to sage grouse) also seem to be the same areas where we have already identified large decreases in sagebrush communities and are identified as active, high priorities in the short and long term restoration strategy.

COMMENT 3k: We fear the Forest may be on a path of abandoning sage grouse restoration needs in all of the northern portion of the Sawtooth, completely and totally in the Boise and Payette, as well as abandoning the northern Sublett Range, the southern Black Pine Range, and all of the Raft River mountain area.

RESPONSE: While the MIS supplement focuses on capable MIS habitat, restoration activities noted in the MIS supplement, *Forest Plan Direction Addressing Restoration of Lands in Less Than Satisfactory Condition*, addresses restoration needs beyond just those associated with livestock grazing. As also described in the MIS supplement, *2007 Updated Analysis Implementing WIOB03*, the SWIEG recently completed an updated multi-scale analysis of habitat for wildlife species of concern to address Forest Plan Wildlife Management Objective WIOB03. The SWIEG is currently in the process of taking the results of that analysis to develop a coordinated multi-scale habitat conservation and restoration strategy for habitat families of species of concern. Through this process all sagebrush habitats that occur within the Forests are considered.

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’.

COMMENT 3l: We strongly support restoring developed springs or other water sources. How much has livestock grazing reduced the areal extent of riparian areas and wet meadows across the Forest? How many springs have been developed? How many springs exist, and where? How many are in PFC? Which springs no longer have surface flows?

RESPONSE: Forest Plan direction supports restoration of springs, riparian areas and wet meadows, for example Forest Plan goal SWGO03 states: “Maintain surface and ground water in streams, lakes, wetlands, and meadows to support healthy riparian and aquatic habitats; the stability and effective function of stream channels; and downstream uses.” SWGO04 states: Restore and maintain flow regimes sufficient to create and sustain soil-hydrologic and water quality conditions, and riparian, aquatic and wetland habitats, and to achieve patterns of sediment, and nutrient and large woody debris routing within their inherent range of capability. As to the concerns over flows and aerial extent of springs, seeps and riparian areas, analysis at the Forest Plan scale is not appropriate. Finer scale analyses than that used at the programmatic, Forest Plan level using data sets with more detail are necessary to identify these site features. This level of analysis is best conducted during site-specific project level analyses.

COMMENT 3m: We are concerned that the Forest will be successful in reducing cheatgrass by restoring native perennial grass/forb composition of plant communities. How can this possibly occur with continued livestock disturbance?

We are concerned that some of the restoration actions target old growth or mature pinyon and juniper communities - and will have serious adverse effects and cause irreversible harm and loss to these communities and native biota dependent on them. Sacrificing these areas to try to grow sagebrush at higher elevations because livestock grazing has so degraded and impacted lower elevation sagebrush sites should not occur. A full assessment of the serious and adverse impacts of many of the supposed "restoration" actions has not been done.

RESPONSE: No specific restoration projects have been proposed for pinyon and juniper communities at this time. If and when such projects are proposed, a site-specific analysis NEPA analysis will be conducted.

COMMENT 3n: We are very concerned that the Forest identifies many areas (as in Figure 6) for ACTIVE restoration - which typically means extensive new expensive disturbance and manipulation of vegetation communities - rather than much less expensive and much less risky passive methods of restoration. Passive restoration includes such things as removal of fences or other spring developments or other harmful facilities, removal or reduction in livestock or other disturbance to sites, obliteration of roads, etc. Nowhere has the Forest examined the serious risks of active manipulation of livestock-affected and altered big sagebrush, low sagebrush, juniper, pinyon-juniper or lower elevation forested sites now prone to cheatgrass and other weed problems resulting from disturbance.

RESPONSE: Active restoration does not preclude the use of “passive” restoration activities. Prior to any restoration activity occurring on the ground, site-specific NEPA must be completed and risks associated with restoration activities considered.

COMMENT 3o: The Forest has also failed to define exactly what it means by "restoration". Does restoration here mean the use of native cultivars - that are often very dissimilar to the local ecotype of native species.

RESPONSE: The use of native cultivars is beyond the scope of this analysis. However, Forest Plan Objective BTOB14 provides for the collection of native plants to be used in restoration activities and guideline BTGU03 requires the use of genetically local sources of native species when they are available and not cost prohibitive.

Issue 4: Determination of Capable MIS Habitat

COMMENT 4a: We are confused as to how the Forest determined Capable MIS habitat, and ask that a much more detailed and clear explanation be provided.

RESPONSE: The description of capable MIS habitat has been reworded in the MIS supplement to better explain how capable MIS habitat was determined.

COMMENT 4b: In mapping, such as Figure 2, we are VERY concerned that the Forest does not show much more and areas as being MIS capable habitat, especially in the northern portion of the Sawtooth and in the other Forests. SDEIS Figure 3 shows the Forest has wrongly cast aside significant areas of Historic MIS capable habitat for sage grouse in the northern areas of the Sawtooth Forest. What is the reason for this?

RESPONSE: As previously described, the scope of the supplemental EIS analysis is to address the requirements of 219.20 Rangeland Resources relative to terrestrial MIS. We feel that the supplement satisfies this objective. As described in the Determination of Capable MIS Habitat section of the MIS supplement, only MIS habitat within active grazing allotments is defined as capable MIS habitat. As such, not all MIS habitat that may occur on the Forest is necessarily displayed, only that which falls within active allotments.

Generally historic source habitat is macrovegetation that exhibited the structural characteristics necessary for the continued existence of the species when functioning under historic disturbance regimes. Since it is a quantity estimate we are comparing by watershed what quantity was expected under historic disturbance regimes versus what quantity is occurring today. Corridors and connectivity are considered by looking at 'existing' source habitat pixellated data to get a feel for patch sizes, distribution and juxtaposition relative to what we think it should have been and incorporating that into the sustainability call.

Issue5: Rangeland Capability/Suitability Determinations

COMMENT 5a: As part of a determination of both the capability and suitability of

lower elevation sagebrush communities for livestock grazing, and the effects on MIS species, the Forest must assess the risk of continued weed invasion and foreseeable site dominance by cheatgrass, medusahead or other weeds in the wake of this continued disturbance as part of its capability and suitability analysis.

RESPONSE: As described in the 2003 FEIS and the MIS supplement, weed susceptibility was a consideration in determination of range suitability and MIS capable lands in less than satisfactory condition.

COMMENT 5b: Maps of "capable" lands show only small pockets and patches of capable habitat - with large land areas not capable of supporting livestock use due to steep slopes, low productivity, extensive patches of forest or mountain shrubs that do not produce "forage and other factors. Livestock use year after year is confined to the same degraded small patches and pockets of largely sagebrush or meadow openings. These areas suffer unrelenting repeated grazing and trampling disturbance, and continue to be further degraded by use. The Forest must factor in the effects of this chronic disturbance to soils, vegetation (composition, function, structure, microbiotic crusts, waters, watersheds, native vegetation communities and all other components of MIS species habitats, or it will not have a valid capability and suitability analysis, nor will it be able to assess risks of continued use.

Does the Forest have any threshold criteria for determining when "capable" lands are too separated, disconnected, small, and poorly linked -that the lack of continuity would cause it to find lands not capable, or not suitable, for livestock use?

RESPONSE: The analysis and decision supporting capable rangelands was completed as part of the original FEIS and is outside the scope of this analysis. Forest Plan capability data is reviewed and validated at the allotment level during site-specific range allotment NEPA.

COMMENT 5c: A critical concern for sage grouse and other sagebrush, mountain shrub, juniper and aspen species is the shifted and altered patterns of livestock use that have resulted from "mitigation" measures for aquatic species in the face of continued livestock use. Instead of conducting a careful examination of how any supposed "mitigation" measures such as stringer fencing may affect the whole watershed - and particularly upland areas and species dependent on them - the Forest ignores adverse effects of such shifted or altered use. Such actions should trigger as part of their planning process, an analysis of the capability and suitability of lands for grazing if such projects shifting and intensifying use in remaining lands are built.

RESPONSE: The analysis and decision supporting capable rangelands was completed as part of the 2003 FEIS and is beyond the scope of this analysis. Relative to mitigations measures for aquatic species, prior to implementation of any such measures, site-specific analysis of the project must occur. During this analysis, the affects of implementing specific mitigation measures will be considered.

COMMENT 5d: The Forest makes blanket statements (as in page 3-5) where it claims that threats associated with livestock grazing causing less than satisfactory condition may be limited to *small areas*. Well, those small areas may be critical resources like springs, seeps and riparian areas and narrow bands of flatter terrain adjacent to them. Such areas may be critical for both sage grouse brood rearing as well as provide essential habitat for a host of important, sensitive or T &E species. PLUS, the "limited" areas of disturbance and adverse effects may in reality be occurring in nearly ALL of the lands that are actually able to be used by any class of livestock in an allotment. If an allotment is 20% sagebrush, and the rest dense timber, and 75% of the sagebrush habitat is in wretched condition (such as lacking forbs for insect production or necessary structural complexity for nesting), or all riparian areas within or bordered by sagebrush communities are in poor condition, then livestock in reality would be having an adverse and deleterious effect on 75% of the CAPABLE lands. Under such circumstances, the lands should clearly be determined to be not suitable for continued grazing use, as risk of continued degradation is too great.

RESPONSE: The supplement does acknowledge that because of inherent habitat requirements for the individual MIS species that threats associated with livestock grazing contributing to less than satisfactory conditions may be limited to isolated areas within the watershed rather than occurring across a watershed as a whole. As described in the supplement, a description of the threats associated with livestock grazing that contribute to lands in less than satisfactory condition by individual MIS is included in the species specific assessments located in the project record.

Relative to the comment concerning an allotment that is 20% sagebrush, as described in the *Lands in Less than Satisfactory Condition* section of the MIS supplement, the determination of lands in less than satisfactory condition took into consideration this exact type of scenario in determination of percentage of the allotment that historically and currently provided sage-grouse habitat, and in the determination of the degree of change in habitat. As to the concerns over springs, seeps and riparian areas, the Forest Plan scale is not appropriate. This analysis is incapable of defining springs, seeps, and riparian areas using Landsat imagery. Finer scale analyses using data sets with more detail are necessary to identify these site features. This level of analysis is more site-specific in nature and will occur as part of project NEPA analysis.

COMMENT 5e: Please identify all areas (pastures, and allotments and watersheds) where grazing is currently authorized that contain < 20%, < 50%, or < 75% capable areas. How do these compare to lands identified, for example, for recovery/restoration - or how do they correspond to lands where use conflicts are heightened - such as conflicts with ESA species? How many acres, of these "capable" lands are actually historic -or even recent forested lands that have been altered through tree removal? Please provide mapping that shows this as well.

RESPONSE: The analysis displayed in the draft supplement and project record is adequate to determine the current relationship between livestock grazing and habitat conditions for pileated and white-headed woodpeckers. Information relative to the percent of capable areas, potential conflicts with ESA species, forested lands that have been altered through tree removal is addressed at the site-specific allotment level.

COMMENT 5f: Why does the livestock suitability analysis not include risk of cheatgrass or other exotic annual grass species - which are actually greater threat to large areas of ecosystems and wildlife populations - as well as detrimental to many continued recreational uses (bird watching, hunting, photography) of the public lands, compared to limited acres affected by many noxious weeds? The Forest must include many more elements related to habitat disturbance and loss of species and populations in its suitability determination considerations. The degree and severity of fragmentation of habitats - with fragmentation effects including everything from mazes of fences to weed infestations precluding establishment of forbs necessary for sage grouse chick survival to dense forested habitats and step canyon slopes avoided by sage grouse - must also be carefully examined here.

RESPONSE: The analysis and decision supporting capable rangelands and lands identified as suitable for livestock grazing was completed as part of the original FEIS and is outside the scope of this analysis. As described in the NOI and the supplemental EIS, the scope of the supplemental EIS analysis is to address the requirements of 219.20 Rangeland Resources relative to terrestrial MIS.

COMMENT 5g: The Forest must identify all areas that are at risk of increased conifer densities under continued livestock grazing pressures. It must also examine the effects of various stocking rates on promoting such effects. These must then be examined in a Suitability Determination that finds lands where risks of conifer densities being too high and/or weed invasions may be significant and thus unsuitable for livestock use.

RESPONSE: The analysis and decision supporting capable rangelands and lands identified as suitable for livestock grazing was completed as part of the original FEIS and is outside the scope of this analysis. As described in the NOI and the supplemental EIS, the scope of the supplemental EIS analysis is to address the requirements of 219.20 Rangeland Resources relative to terrestrial MIS.

The analysis displayed in the draft supplement and project record is adequate to determine the current relationship between livestock grazing and habitat conditions for pileated and white-headed woodpeckers. Where localized or site-specific issues are identified, they may be addressed during project level analyses.

COMMENT 5h: Given the recent large-scale losses of habitat, we ask that the Forest reframe it's examination of suitability for continued grain disturbance- especially of areas facing likely cheatgrass invasion with continued trampling disturbance, or important nesting or brood rearing areas suffering degradation from livestock use or management

actions.

RESPONSE: The major source of type conversion from native rangelands to annual cheatgrass plant communities with subsequent loss of sage grouse habitat is associated with wildfire events. This along with impacts on sage grouse habitat from grazing and other activities are discussed in the Idaho State Conservation Strategy for the Greater Sage Grouse (2006). This document along with additional analysis of effects of non-native invasive plant species are used in this Supplement to identify MIS habitat capability and recovery needs at a scale sufficient for Forest level analysis. Additional analysis of these issues may be warranted during project level NEPA analyses.

Issue 6: Livestock Effects on Sagebrush Communities

COMMENT 6a: The Draft supplement at page 18 describes big sage brush cover types as being within the historical range. If sagebrush cover is currently within the historic range, what accounts for the changes in MIS capable habitat?

RESPONSE: Big sage brush represents only one component of sage grouse habitat. As further described on page 18, low sagebrush is outside the Forest Plan desired condition range. Also, as described on page 19, patch dynamics of non-forest habitats across the Forest generally appear to be in larger patches than expected for low canopy cover classes, while medium and high canopy cover classes are in smaller patches than expected.

COMMENT 6b: The Draft Supplement states "...as cattle graze sagebrush steppe, they first select grasses and forbs and avoid browsing on sagebrush, which can eventually tip the balance in favor of shrubs (Paige and Ritter, 1999)". This is an oversimplification of a complex issue that involves many factors, not to mention that the reference cited is not peer reviewed. ISDA suggests deleting this statement or clarifying it using peer reviewed literature.

RESPONSE: Comment noted.

COMMENT 6c: Utilization standards of 40 percent use for early season or season long pastures and 50 percent use for vegetative slow growth, after seed ripe conditions or late season pastures will not alleviate degraded sagebrush conditions, but instead will perpetuate the presence of degraded sagebrush steppe communities on Sawtooth National Forest lands.

RESPONSE: This concern was addressed in response to comments in the 2003 FEIS Appendix A, Concern Statements 640.01, 640.07 and 290.13 and Rangeland Resources Technical Report No 3 for the Boise, Payette, and Sawtooth National Forests Plan Revisions. Tech. Report No. 3 identifies information and publications used to establish these Forest-wide standards.

COMMENT 6d: Literature review of 25 grazing intensity research studies suggests that utilization levels on most rangelands should not exceed 35 percent if the objective is to improve rangeland vegetation (Holechek et al. 1999). This review also found that when all stocking rate studies were averaged, a 32 percent utilization level was defined as light grazing, while 43 percent use was defined as moderate grazing. Klipple and Bement (1961) defined moderate grazing as a degree of herbage utilization that allows the palatable species to maintain themselves but usually does not permit them to improve in herbage producing ability. We recommend adopting a management direction that emphasizes grazing strategies (<35 percent utilization) that provide for rangelands with characteristics of productive sage-grouse habitats (Connelly et al. 2000).

We believe the Maximum Utilization Standards for both riparian and upland cover types promulgated in this document are too high to facilitate improvement of impaired plant communities on Sawtooth National Forest lands. We recommend utilization levels in upland cover types not exceed 35 percent and the timing of livestock grazing be controlled to allow for development of diverse herbaceous understories. Stream reaches assessed at properly functioning condition where herbaceous vegetation is the primary source of bank stabilization should be subject to herbaceous utilization levels of < 30 percent and maintain herbaceous stubble heights of at least 6 inches (Clary and Webster 1990, Idaho Partners in Flight 1998).

RESPONSE: Holechek et al. 1999 did not define heavy, moderate, and light grazing as 57%, 43%, and 32% utilization reflectively. They stated that these were the average utilization levels for the studies they reviewed that used these categories of grazing intensities to evaluate responses to grazing intensities, etc. Literature used in setting the Forest-wide utilization standards are displayed in the Forest Plan Revision project record (Rangeland Resources Technical Report No. 3 for the Boise, Payette, and Sawtooth National Forests Plan Revisions). Clary and Webster 1990 pp. 2-3, recommend “Streamside utilization of herbaceous forage in summer-grazed pastures should not exceed 40 to 50 percent of the current growth. . . . Fall use of streamside vegetations should not exceed about 30 percent, and the herbaceous stubble remaining at the end of the grazing period should meet the 4- to 6- inch criterion. . . . Habitats where threatened, endangered, or sensitive species occur . . . may need to be increased to greater than 6 inches.” The threshold values established in the Forest Plan Revisions establish limits for grazing management.

COMMENT 6e: We suggest that Guideline RAGU09 (*Season-long grazing practices should be discontinued where they preclude restoration of upland or riparian vegetation communities*) is insufficient to assure successful restoration of upland or riparian vegetation communities within the Forest. The Guideline should be expanded to include the potential to discontinue seasonal grazing practices (spring and early-summer, late-summer and fall, and winter) where these practices preclude restoration of upland or riparian vegetation communities. As noted above, seasonal livestock grazing also can

preclude successful restoration.

RESPONSE: Rangeland Guideline RAGU09 is only one of several Forest Plan guidelines that address restoration activities. For example, Rangeland Guideline RAGU02 includes direction stating “where riparian area restoration is an objective . . . provide residual vegetative cover (at least 6 inches of hydric vegetation) either through regrowth or rest treatments 75 percent of the years in a rotation cycle.” In addition to the Forest Plan direction, additional or more restrictive direction may be evaluated during site-specific analyses at the grazing allotment level where sage-grouse habitat recovery is identified as an analysis issue.

COMMENT 6f: Livestock return (and the return of other land uses) after wildfire should be based on vegetation standards, not simple time limits. There is a need to evaluate allotments from a vegetation recovery standpoint to determine whether additional rest beyond the two season minimum is needed. Recommend development of quantitative standards that provide predetermined thresholds of perennial plant (shrub, grass, and forb) establishment that must be met before resource uses can return to an allotment.

RESPONSE: Determination of when livestock should be allowed to return to an allotment after a wildfire is outside the scope of this supplement. However, quantitative standards and thresholds are defined specifically for areas affected by wildfire after the effects of the wildfire, including fire intensity and severity, on area resources have been evaluated. This occurs during the Burned Area Emergency Rehabilitation (BAER) analysis.

COMMENT 6g: We suggest that rest from livestock grazing (and other land uses with potential to adversely affect vegetation) should also be considered when vegetation standards are compromised due to land use-related impacts. Many land uses, including livestock grazing and recreational activities such as camping, OHV riding, horseback riding, and mountain bike riding, have potential to adversely affect native plant communities. We recommend VEGU05 and VEGU06 be expanded to provide for the ability to limit such land uses when they compromise the quality and quantity of the shrub-steppe vegetation that provides habitats for sage-grouse and other wildlife.

RESPONSE: The need for modification of livestock grazing activities in areas identified in this supplement for recovery of sagebrush habitat will be evaluated during allotment level NEPA analysis. This recommendation as it applies to activities other than livestock grazing is outside the scope of this supplement. However, these considerations may be evaluated during NEPA project development and review for projects associated with these activities where sage-grouse habitat recovery is identified as a management issue.

COMMENT 6h: The Forest has avoided inclusion of a wide range of current ecological science that demonstrates the many adverse effects of domestic livestock grazing on arid western lands - especially in relation to effects on sagebrush habitats and sagebrush

dependent species ranging from Sage Grouse to Brewer's sparrow to ferruginous hawk. These include Connelly et al. 2004, Fleischner 1994, Dobkin and Sauder 2004, Beltsy and Gelbard 2000, Belsky and Blumenthal 1998, Freilich et al. 2003, Knick et al. 2003, Billings 1994.

RESPONSE: The majority of the literature citations noted above were considered in the 2006 Conservation Plan for the Greater Sage-grouse in Idaho (2006 Conservation Plan). As stated throughout the MIS supplement, the 2006 Conservation Plan was used extensively in both the analysis portrayed in the MIS supplement and in the development of restoration priorities. Of the citations listed, only two, Belsky and Blumenthal 1998 and Freilich et al. 2003, were not used in the 2003 Forest Plan FEIS, the MIS supplement, and development of the Wildlife Conservation Strategy or the 2006 Conservation Plan. The Forest did consider the Belsky, A. Joy and Dana M. Blumenthal, 1997, Effects of Livestock Grazing on Stand Dynamics and Soils in Upland Forests of the Interior West, but is unaware of a Belsky and Blumenthal 1998 publication. The Forest did review Freilich et al 2003 and used many of the citations listed in this publication in its analysis.

COMMENT 6i: The Forest should incorporate current ecological data regarding the imperilment of sagebrush biota and amend elements of aggressive active "restoration"/extensive manipulation provisions of the Land Use Plans. We do not support manipulation to thin, reduce or alter canopy covers as found in Forest Appendix A artificial "Desired Conditions" SDEIS at 3-34 and 3-35. Not only will manipulation disturbance such as thinning sagebrush have adverse consequences for other sagebrush dependent species (reduce and fragment important canopy cover and structural diversity)- it may also ultimately reduce and fragment remaining sage grouse habitat (disturbance especially with continued livestock use will lead to cheatgrass or other weed invasion, further declines in native grasses and forbs under intensified livestock use of understories of thinned sagebrush), and habitats used by sage grouse at various times of the year. Plus thinning activity itself (use of harmful and persistent and water-polluting chemicals such as Tebuthiuron, mechanical equipment collapses burrows, reduces microbiotic crusts).

RESPONSE: Pages 3-480 through 3-484 of the FEIS and the project record for the FEIS describe how desired conditions for sagebrush were derived. This was based on USDA Forest Service 1996 which was one of the few sources we could find at that time with any recommendations for distributions of canopy covers. We also worked with information such as Winward (2000) which discusses the influence of canopy covers on composition of understory forbs and grass. Forest Plan desired conditions and Direction regarding native herbaceous understory (Vegetation Objective VEOB01 and Vegetation Goals) were developed with the best information at that time regarding not only sage grouse habitat needs, but the needs of all components of sagebrush communities.

Various management activities, such as fire, mechanical, thinning, chemical are available tools, but there is no recommendation for use of any of these. The

Direct and Indirect Effects on non-forest vegetation regarding some of these tools are discussed on FEIS pages 3-515 through 3-517. Pages 3-417 through 3-420 also discuss influences in shaping non-forest vegetation structure.

COMMENT6j: The Post-Fire "Guidelines" found at VEG05 and VEG 06, Appendix A "Desired Conditions" provide insufficient post-fire rest and management actions. The Forest should consider alternative actions that provide at a minimum 5 to 10 years of rest from livestock grazing post-fire, and seeding of sagebrush on all burned lands. We ask the Forest analyze alternatives that provide the following post-fire management actions:

ALL native areas or Sage Grouse habitat and recovery/restoration areas should be rested from livestock grazing for 10 years following fire or "active" restoration treatment disturbance. In addition, the following measurable recovery criteria should be met before any grazing can again resume:

- Recovery of microbiotic crusts to at a minimum of 70% of PNC condition crust coverage. While specific species of lichen may take decades to recover, lichens should be present in readily noticeable amounts.
- Native shrubs (big sagebrush, rabbitbrush; bitterbrush) is established to a minimum height of 2 feet in all big sagebrush sites, and present at a density that provides 10% or greater canopy coverage. In any low sagebrush or other short-statured shrub sites, native shrubs should be present at height of 1 foot, and present at a density that provides 10% or greater canopy coverage.
- Perennial native bunchgrasses and forbs should be present at densities that provide areal coverage of the ground surface that is found in plant communities at 80% or better of PNC condition.

RESPONSE: Determination of when livestock should be allowed to return to an allotment after a wildfire is outside the scope of this supplement. However, the SWEIG does feel that VEGU05 and VEGU06 provide for adequate protection after fires. These guidelines require that where wildfire has burned within an allotment, burned areas should be evaluated to determine if rest from livestock grazing is necessary for recovery of desired vegetation conditions and related biophysical resources (VEGU05). VEGU06 states that areas should be rested for a **minimum** of two growing seasons after wildfire. After the initial two growing season rest period, burned areas are to be evaluated to determine if additional rest is needed based on:

- a) The ecological status of the sagebrush community prior to the wildfire,
- b) How long the sagebrush community had a density or canopy closure greater than 15 percent prior to the wildfire,
- c) The severity and intensity of the fire,
- d) The amount, diversity, and recovery of forbs, grasses and palatable shrubs that are present after 2 years of rest in relation to desired conditions.

In addition to VEGU05 and VEGU06, quantitative standards and thresholds are defined specifically for areas affected by wildfire after the effects of the wildfire,

including fire intensity and severity, on area resources have been evaluated. This occurs during the Burned Area Emergency Rehabilitation (BAER) analysis.

COMMENT 6k: The Forest fails to provide any assessment of how livestock grazing is currently affecting the composition, function and structure of the sagebrush communities (see Fleischner 1994) - including any artificial Desired Condition or its attainment. There is no analysis or assessment of how use levels, trampling impacts, stocking rates, management schemes such as rest rotation, number or presence of livestock facilities, past veg manipulation conducted for livestock purposes, and other ramifications of livestock use may be affecting ecological conditions and sagebrush-dependent species habitat components.

The Forest fails to discuss the very significant role that livestock use may have in alteration of the structure and structural integrity of sagebrush communities - including reduction and simplification of canopy cover through physical breakage, and at times consumption of sagebrush.

RESPONSE: The effects of current and historic livestock grazing on herbaceous and shrub communities, which include sagebrush, is described in the 2003 FEIS (2003 FEIS, pg 3-674 – 675; 3-417 – 420, 3-494 – 496; 3-509 – 511; 3-515 – 519). The effects of stocking rates, management schemes such as rest-rotation, livestock facilities, etc. is best addressed at the site-specific, allotment level. This is done as part of the NEPA process associated with decisions to approve allotment management plans.

COMMENT 6l: Natural processes may rapidly and unpredictably reduce sagebrush density. One-time rodent girdling under snow events, or *Aroga* moth defoliation can quickly alter any supposedly too-thick stand. Please see Welch and Criddle 2003, and carefully examine each and every of the axioms and agency management fallacies that are described herein relation to SDEIS analysis. Not only may such sagebrush losses have adverse effects on sage grouse populations, they may also be exacerbated by livestock grazing effects that may alter sagebrush and understory structure and composition, increase site aridity, etc.

RESPONSE: This analysis is at the watershed-scale and above, any actual actions implementing the Forest Plan is planned and implemented at a finer scale using data from the site. This kind of consideration (local events such as rodent girdling or moth defoliation) would be addressed when planning or determining whether to implement an action.

COMMENT 6m: Extraordinary recent habitat losses for sagebrush biota have occurred across the sagebrush biome, ranging from calamitous Oil and Gas development in Wyoming and other areas to large-scale weed invasions and fire losses, of habitats. Under these circumstances, the Forest must elevate management of ALL sagebrush habitats for a full range of sagebrush species in ALL Ranger Districts and areas.

RESPONSE: As previously described, the scope of the supplemental EIS is to address the requirements of 219.20 Rangeland Resources relative to terrestrial MIS for the three Southwest Idaho Forests. The effect of fire loss, large scale-weed invasions, etc. on sagebrush habitats is beyond the scope of this analysis. However, as described in the MIS supplement, 2007 Updated Analysis Implementing WIOB03, the SWIEG recently completed an updated multi-scale analysis of habitat for wildlife species of concern to address Forest Plan Wildlife Management Objective WIOB03. The SWIEG is currently in the process of taking the results of that analysis to develop a coordinated multi-scale habitat conservation and restoration strategy for habitat families of species of concern. Through this process all sagebrush habitats that occur within the Forests are considered.

COMMENT 6n: The Forest claims, without any substantiation, that grazing can alter vegetation positively. Please provide references and analysis of where that has occurred, and please detail any adverse effects of such "positive" use. Please also provide some analysis of the acres positively affected by grazing on the forest compared to those negatively affected. How many riparian areas essential for brood rearing are positively affected?

RESPONSE: This statement has been changed in the final supplement.

Issue 7: Sage-grouse/Sage-grouse Habitat

COMMENT 7a: Generally livestock grazing and sage grouse (or any other grouse) are compatible in the use of vegetation.

RESPONSE: We agree. As described in the Draft SEIS and the Final SEIS, livestock grazing practices that promote the sustainability of desired native perennial grasses and forbs should sustain Greater sage-grouse habitat.

COMMENT 7b: We appreciate the fact that the Sawtooth National Forest has completed a suitability study for sage grouse habitat. However, to be useful, suitable habitat needs to be subdivided into the various types of sage-grouse habitat including breeding, summer-late brood-rearing, fall and winter habitat. We believe that this level of habitat classification provides more useful management direction than "suitable" does.

RESPONSE: The analysis documented in the MIS supplement is not a suitability study for sage grouse habitat. Rather, the intent of the analysis is to address the requirements of 36 CFR 219.20 Grazing Resources, as they apply to MIS. This includes identification of lands suitable for livestock grazing, and the capability of those lands to produce food and cover for MIS. As described in the Supplement, Determination of Capable MIS Habitat, a spatial assessment of acres of source habitat for each MIS, was completed using models developed by Nutt et al. For sage grouse, source habitat capacity was depicted by mapping non-forested cover

types identified in the models that were capable of developing the structural conditions necessary to meet the source habitat definition. Information specific to, breeding, summer-late brood-rearing, fall and winter habitat nesting habitats was not included in the MIS supplement as the supplement used vegetation data to identify capable MIS habitat regardless of the type of habitat provided.

Source habitat used to define capable MIS habitat are those characteristics of macrovegetation that contribute to stationary or positive population growth for a species in a specified area and time. By definition source habitat characteristics include leks sites, nesting habitat, wintering habitat, brood rearing habitat and movement corridors. Information specific to the types of source habitat can be found in the various documents in the project record including the Species Account papers, the Conservation Plan for the Greater Sage Grouse in Idaho, Comprehensive Wildlife Conservation Strategies for the State of Idaho and Utah, etc.

COMMENT 7c: The draft supplement should acknowledge that livestock grazing also contributes positively to MIS habitat. ISDA suggests that the Forest Service add language similar to that in the 2006 Idaho Sage-grouse Conservation Plan (pg. IV-54) to the Draft Supplement to make it clear that livestock grazing may have a positive or negative affect on sage-grouse depending on management and location.

RESPONSE: Comment noted. The Supplement does cite to the exact page referenced in the comment. This citation adequately addresses the concern about the potential for livestock grazing to positively contribute to MIS habitat.

COMMENT 7d: The draft supplement outlines the primary risks to sage-grouse in the western portion of its range but makes no mention of the statewide threats ranked in the 2006 Idaho Sage-grouse Conservation Plan. ISDA suggests listing those instead of the general threats as some of them are not applicable to Idaho. For example, strip/coal mining is probably not t threat to sage-grouse in Idaho.

RESPONSE: As noted in the comment, the 2006 Conservation Plan does rank statewide threats in Idaho and these threats are discussed on page 13 of the Supplement. The 2006 Conservation Plan does note that the statewide ranking is intended to serve as a tool for Local Working Groups to consider as they identify and prioritize threats at the local Sage Grouse Planning Area level. As described in the 2006 Conservation Plan, it is important to note that the statewide rankings reflect the collective, expert opinion of sage-grouse science panel, based on a scoring process, and are not intended to imply unanimous agreement among the panelists. Because of the statewide focus, their rankings in many cases may not mirror threats or rankings at the finer scale SGPA/ LWG level (2006 Conservation Plan, page 4-2). Given the programmatic nature of the MIS supplement and the intended use of the statewide rankings at the more site-specific level, we identified the range-wide risks. However, it should be noted that

impacts associated with wildfire, invasive species and livestock grazing were included in the top five in both rankings.

COMMENT 7e. The Draft supplement mentions that damage to sage-grouse habitat does not occur on a range-wide basis, however localized areas of habitat damage still occur. ISDA suggests the Forest Service outline what kind and how localized areas of habitat damage occurs.

RESPONSE: We are not sure what section this comment is referring to as the Supplement does not describe damage to sage-grouse habitat on a range-wide basis. The Supplement does describe that impacts from historic levels of livestock grazing have been substantially reduced under current management but that livestock grazing can still result in localized areas of damage to physical resources and vegetation. As described in the Supplement, these impacts can include changes in vegetation composition and abundance and increased risk for new infestations of invasive species where excessive grazing use contributes to reduced ground cover and early plant successional stages and where livestock pass through infested areas.

COMMENT 7f. We also support the analysis depicted in Figure 3 depicting historical and current Sage-grouse capable source habitats and percent change in capable source habitats within the Sawtooth National Forest.

RESPONSE: Thank you for your comment.

COMMENT 7g. Given the importance of native forbs and bunchgrasses to breeding and brood rearing sage-grouse, native ungulates, and other sagebrush obligate wildlife, we recommend rotating spring/early summer livestock grazing in areas where the goal is to retain or improve herbaceous understory vegetation in sagebrush communities. Shifting the season of use would also reduce the potential for livestock to disturb nesting sagebrush obligate birds and improve spring forage availability for mule deer and other native ungulates.

RESPONSE: Rotational grazing is a general practice followed on sagebrush dominated rangelands in the Boise, Payette and Sawtooth National Forests. The Forest-wide direction cited in the Draft Supplement, Range Guideline RAGU09, states “Season-long grazing practices should be discontinued where they preclude restoration of upland or riparian vegetation communities. This and other management direction identified in this Supplement and the Forest Plan Revisions needed to promote sage-grouse habitat recovery are evaluated during allotment-level analysis. Additional or more restrictive direction may be evaluated during that analysis process where sage-grouse habitat recovery is identified as an analysis issue.

COMMENT 7h. What are the characteristics of all populations of sage grouse on all portions of the Boise, Payette, and Sawtooth Forests? Please provide details on which

populations are migratory, which are sedentary, and the distances birds may move over the course of the year. What are numbers of birds currently in each population? Counted on each lek that has been monitored over time? How have these numbers changed since records have been kept? The Forest must include specific information for neighboring BLM lands also. Often, leks may be on lower elevation BLM lands, but birds move onto Forest lands for nesting, brood rearing or other habitat uses.

RESPONSE: The information known about sage grouse on the Forests is included in the Species Account paper found in the project record. All other information is kept by Idaho Department of Fish and Game. Also see the Idaho State Conservation Strategy for the Greater Sage Grouse (2006). Source habitat by definition includes those macrovegetation characteristics that contribute to stationary or positive population growth for species in a specified area and time which means habitat on Forest Service lands used for nesting, brood rearing, or other uses is included in the mapping of source habitat. Just because the leks are on BLM land does not mean BLM provides source habitat it means together on the landscape the extent of habitat providing leks, nesting, brood-rearing and over-wintering habitat irrespective of ownership is needed to provide for stationary or positive population growth. We don't map on BLM but we map on Forest Service.

COMMENT 7i. Please provide much more details on the Utah and Nevada populations and habitat conditions - including large-scale current habitat loss from fire or weed invasion - in lands that are used by sage grouse populations inhabiting the Forest.

RESPONSE: As previously described, the scope of the supplemental EIS analysis is to address the requirements of 219.20 Rangeland Resources relative to terrestrial MIS for the three Southwest Idaho Forests. With the exception of the Raft River Division on the Sawtooth NF, populations and habitat conditions in Utah and Nevada are outside the scope of this analysis.

COMMENT 7j. Where are all historic and current active leks located? Where is all nesting habitat? Wintering habitat? Brood rearing habitat? Movement corridors to brood rearing habitat? Is the information in the DEIS based on comprehensive current sage grouse lek inventories across all Forest and neighboring BLM or other lands? Please identify all areas that have had recent lek surveys conducted?

Have there been other systematic surveys for sage grouse use, including wintering areas on windswept ridges, and brood rearing use, across the forest?

RESPONSE: The state (Idaho Department of Fish and Game and Utah Division of Wildlife Resources) manages the sage grouse data, including lek data. Forest information relative to lek surveys and sage grouse survey protocols can be found in the Annual Forest Monitoring Report available on the Forest web page. Information specific to historic and active lek sites, nesting and brood rearing habitats was not included in the MIS supplement as the supplement used

vegetation data to identify capable MIS habitat regardless of the type of habitat provided. However, source habitat are those characteristics of macrovegetation that contribute to stationary or positive population growth for a species in a specified area and time and therefore by definition include leks sites, nesting habitat, wintering habitat, brood rearing habitat and movement corridors. This information is however found in the various documents in the project record including the Species Account papers, the Conservation Plan for the Greater Sage Grouse in Idaho, Comprehensive Wildlife Conservation Strategies for the State of Idaho and Utah, etc.

Issue 8: White-headed and Pileated Woodpeckers

COMMENT 8a. We agree that factors other than livestock grazing are primarily contributing to the less than satisfactory condition of capable habitats for the White-headed Woodpecker and Pileated Woodpecker within the SWIEG. We also agree that, in most situations, it is unlikely that livestock grazing measurably threatens the ability to restore capable habitats for these species.

RESPONSE: Thank you for your comment.

COMMENT 8b. The Forest fails to provide current mapping, data and analysis related to the actual amount of currently suitable/viable habitat for both MIS woodpeckers. The supplement includes no valid analysis of the effects of logging, forest health treatments and manipulation, wildfire and other activities that have altered, reduced, destroyed or fragmented habitats and reduced population size and viability for these MIS species across the Forest.

RESPONSE The scope of the supplemental EIS is to address the requirements of 219.20 Rangeland Resources relative to terrestrial MIS. The effects of logging, forest health treatments, wildfire and other activities on populations and population viability of MIS woodpeckers is outside the scope of this analysis. However, this is discussed in the Terrestrial Wildlife Habitat and Species section of the 2003 FEIS.

COMMENT 8c. While the SDEIS contains information on post-fire management actions for sagebrush habitats, it provides no specific criteria for protection and enhancement of MIS woodpecker habitats post-fire. We are particularly concerned about the effects of salvage logging practices on remaining unburned trees and snags, and the lack of criteria and guidelines and objectives to protect habitats from additional losses through salvage logging or excessive thinning or manipulation.

RESPONSE: The scope of the supplemental EIS is to address the requirements of 219.20 Rangeland Resources relative to terrestrial MIS. The effect of salvage logging on MIS woodpeckers is outside the scope of this analysis.

COMMENT 8d. We are very concerned that the Forest views the pileated woodpecker as relatively "secure" in Idaho, but fails to examine just how "secure" this species may be on these particular Forests. We ask that the Forest re-examine any claims of security here, and provide a science-based analysis of just how "secure" this species is across all of the Forest areas.

RESPONSE: The pileated woodpecker Species Account paper found in the project record addresses these questions. It gathers all known information at the time of the writing and then analyzes the information to conclude a sustainability rating.

COMMENT 8f. Livestock grazing may result in spread of invasive species into understories of forested habitats occupied by pileated woodpecker - with invasive species promoting greater and uncharacteristic fire frequencies or intensities, and loss of habitats through altered fire regimes. Livestock trampling disturbance and degradation of understories and ground surface cover may increase tree density, or lead to forest health problems due to compaction of soils and other adverse effects. Thus, grazing disturbance may indeed indirectly affect this species and its habitat and populations in significant ways. Plus, livestock grazing compaction of soils may result in heightened tree mortality due to soil compaction or erosion, and weakening of tress resulting in increased susceptibility to drought, diseases or insects, or have other adverse effects.

RESPONSE: We do not disagree with the comment that the structure and composition of ponderosa pine and to some extent at least dryer mixed-conifer forests at lower to mid-elevations have changed significantly since the advent of Euro Americans to the western interior United States. The cited Belsky and Blumenthal (1995) paper discusses the potential contribution of livestock grazing to these observed conditions. It is probable that historical levels of livestock grazing, especially sheep grazing has been one of many factors that have contributed to these conditions as stated in their conclusion: “. . . livestock, as well as fire suppression, logging and other anthropogenic activities, have contributed to altered ponderosa pine and mixed conifer forests . . .” Their review of the literature is extensive and cites case studies which attempt to define the magnitude of grazing effects on stand structure and composition. While some of these studies were able to reduce the variables other than grazing in an attempt to isolate the role of grazing in changing stand structure and composition, they did not reflect the significance of the historical changes in the intensity of livestock grazing or the effects of variations in climate on tree recruitment and changing stand conditions. In fact, the case studies may show more correlation to periods of high rainfall and other climactic factors than to livestock grazing alone. Probably the best that can be stated is that livestock grazing at some intensity and duration along with a multitude of other factors have affected fire frequency and tree recruitment. However, Nature Serve 2005 does not recognize livestock grazing as one of the major threats to pileated woodpecker habitat.

In addition to the analysis included in the MIS supplement, it should be noted that

the Idaho Department of Fish and Game, in their comments on the MIS supplement, concurs with the conclusions in this supplement: “First, we agree that factors other than livestock grazing are primarily contributing to the less than satisfactory condition of capable habitats for the White-headed Woodpecker and Pileated Woodpecker within the SWIEG. We also agree that, in most situations, it is unlikely that livestock grazing measurably threatens the ability to restore capable habitats for these species. (Idaho Department of Fish and Game, 2007. Comment letter to “Draft Supplement to Forest Plan FEIS - MIS Supplement”, by David Parrish, Magic Valley Regional Supervisor.)

COMMENT 8i. White-headed woodpeckers are described in the DEIS as year-round residents of open ponderosa pine with low canopy cover. We note that the DEIS at 3-9 describes some pileated and white-headed woodpecker source habitats as not capable of providing sufficient forage (200 lbs per acre). However, just because the forage is not there does not mean that livestock will not be herded through or use such areas for shade or impact them significantly - especially in fragmented habitats or lands with little capable habitat, or if supposedly "capable" areas do not have palatable vegetation left, and thus cause adverse impacts to native vegetation communities that may be present, and stripping residual vegetative cover and fostering soil erosion.

RESPONSE: It is warranted to state that some minor affects from livestock grazing may occur in these situations. We continue to assert that current livestock grazing does not contribute measurably to impact habitat for pileated or white-headed woodpecker. We believe these affects are overstated in your comments and that as stated by the IDF&G (Parrish 2007) “it is unlikely that livestock grazing measurably threatens the ability to restore capable habitats for these species.”

COMMENT 8j. It is incorrect to claim that livestock grazing has no measurable effect on habitats for white-headed or pileated woodpeckers. Livestock grazing may fundamentally alter understory composition and structure, and open sites to unnatural densities of small trees - with the end result being frequent, large, intense or "catastrophic" fires. Such fires may fundamentally alter forest structure and type. Following fires, livestock grazing use may purposefully or incidentally be increased on opened burned lands - exacerbating processes of understory loss, weed invasion (including highly flammable annuals) and other adverse effects. Across the Forest - from the Payette to the Sawtooth country, livestock congregating in especially south and west-facing slope areas are fostering cheatgrass spread in open slopes and in understories of forested areas. Presence of cheatgrass may affect the ability to restore source habitat for MIS woodpeckers as well as sage grouse.

RESPONSE: Management of livestock grazing is addressed as part of planning and analysis for prescribed fire treatments and for recovery activities associated with wildfire occurrences. The analysis and conclusions in this MIS supplement support that current levels of livestock grazing occurring within forested

rangelands on the three Forests are not having a measurable effect on pileated and white-headed woodpecker habitat. Research cited in the supplement does not identify livestock grazing as a major threat to either pileated or white-headed woodpecker habitat. As stated earlier, this is also consistent with the stated position of the Idaho Department of Fish and Game.

The potential invasion of cheatgrass and other non-native invasive plant species into dryer forest types at lower elevations does have the potential to alter fire frequency. These issues are addressed in the 2003 FEIS starting at page 3-613. The FEIS notes that the expansion of noxious weeds, the presence of previously established exotics, and the introduction of non-native vegetative species within the three Forests, has placed ecosystem structure, composition, and function at risk. The Forest Plans do include an Integrated Weed Management strategy that includes annual monitoring and development of long-term treatment strategies. This issue may also be addressed during project level analyses for prescribed fire activities, for fire recovery actions associated with wildfire events in all areas grazed or ungrazed and during project level actions associated with livestock grazing where it is identified as an issue.

Issue 9: Management Indicator Species

COMMENT 9a. The species selected as MIS species do not represent the full range of habitat types across the Forest. The Forest only examines white-headed woodpecker, pileated woodpecker and greater sage grouse. Moreover, the Forest casts aside any analysis of sage grouse habitat in two of the three Forest areas, leaving a gaping void in management considerations for any non-forested species.

We request that the Forest provide new MIS species for aquatic habitats as well. Large portions of the Forest have NO aquatic indicator or MIS species.

The Forest must use this EIS process to correct the failure to include aspen, important aquatic species, sagebrush-dependent species on the Boise and Payette and correct several other MIS species deficiencies, and must fully comply with NFMA.

We ask that as part of this EIS process, the Forest employ sage grouse as well as Brewer's sparrow and an aspen-dependent species such as red-naped or Williamson sapsucker or warbling vireo for an aspen MIS species.

RESPONSE: As described in the NOI for the supplement to the EIS as well as the supplement itself, the scope of the supplemental EIS is to address the requirements of 219.20 Rangeland Resources relative to terrestrial MIS. The determination of which species should be selected as MIS is outside the scope of this analysis. However, Appendix F of the 2003 FEIS provides a detailed description of which species were considered and selected as MIS. The Appendix also describes why other species considered were not selected. As described in the

supplement, sage grouse habitat was not considered on the Boise and Payette as sage grouse was not selected as an MIS on these Forests.

COMMENT 9b. The DEIS does not provide information on current numbers and health and viability of populations of MIS species and other important native aquatic and terrestrial species across the Forest and region. It also does not examine the effects of livestock grazing on viability of any populations.

RESPONSE: The scope of the supplemental EIS is to address the requirements of 219.20 Rangeland Resources relative to terrestrial MIS habitat. An analysis to meet the requirements of 36 CFR 219.19 was conducted as part of the revision process and is discussed in the Terrestrial Wildlife Habitat and Species section of the 2003 FEIS. Additionally, the species accounts found in the project record describe known information about populations, trends, status and risks.

COMMENT 9c. Full examination of cattle allotment conversions from sheep use must be provided. In many areas of the Forest, previous sheep allotments had been converted to cattle use, and the realities of the terrain limitations and lack of forage on areas available for cattle use were not adequately factored into processes. Please provide an allotment-by-allotment catalogue of any such conversions, and all AUM changes or adjustments that have occurred on these lands. By understanding where lands have continued to be drastically overstocked (resulting in grazing unsustainable numbers of livestock in a much-reduced "capable" area if terrain is steep), the Forest may best understand the current depletion and poor condition of many upland and riparian habitats that we have observed across the Forest.

RESPONSE: Conversion of cattle allotments to sheep allotments is analyzed at the site-specific, allotment level and is beyond the scope of this analysis.

Issue 10: Invasive Species

COMMENT 10a. Figure 2 displays capable MIS habitat...habitat where weed susceptibility is greater than or equal to 50 percent. The Draft supplement needs to define what "weed susceptibility" of 50% means.

RESPONSE: A description of weed susceptibility has been added to the FEIS.

COMMENT 10b. We agree that relying solely on changes to grazing management practices may not improve the condition of some areas where invasive plant species have become a problem. However, we do not believe this statement should be used to take changes in grazing management "off the table" when developing plans to restore areas degraded by invasive plant species. An integrated approach is more effective in long-term control of invasive species.

RESPONSE: This statement was not intended to be used to take changes in grazing management “off the table”. To the contrary, Forest Plan management direction repeatedly describes using changes in grazing management practices to address resource concerns. For example, rangeland resources guideline RAGU05 specifically states: “Where rangeland facilities or practices have been identified as potentially contributing to the degradation of water quality, aquatic species or occupied sensitive or watch plant habitat, facilities and practices causing degradation should be considered for relocation, closure, or changes in management strategy, alteration, or discontinuance.”

COMMENT 10c. Roading provides travel corridors for sage grouse predators (Connelly et al. 2004, Braun 1998), conduits for motorized spread of weed seeds than are then spread cross-country as a result of livestock grazing and trampling activity.

The full extent of livestock in weed dispersal and creating site disturbance, including especially through trampling activity that spreads invasive species - including both noxious and non-noxious species must be fully examined. Where there is limited "capable" land - livestock realistically can not be moved through such sites without causing further intensive disturbance and running right through weed patches. A suitability determination must be made that includes a finding that the serious risk of toadflax spread with continued sheep grazing in these lands where the only areas that are "capable" of grazing are the same areas where sheep are affecting spread of toadflax must be made.

RESPONSE: The baseline for and analysis of non-native invasive plants is included in the 2003 Southwest Idaho Ecogroup Land and Resource Management Plans FEIS (starting on page 3-613). Additional information related to susceptibility of Sage-grouse habitat to non-native invasive plants is discussed starting on page 16 in this supplement. (Note: maps showing overlap of current noxious weed infestations from NRIS Terra Invasives data base can be found in the project record) In addition, the Forest is in the process of updating its travel plan to address concerns such as user created routes and cross-country travel.

COMMENT 10d. In addition, as invasive species increase, sustainable forage decreases. Any analysis of 200 lbs. of acre "forage" must carefully examine specie composition actually present. How does any analysis of 200lbs, of forage take into account prolonged drought periods, as are increasingly occurring?

RESPONSE: The analysis and decision supporting capable rangelands was completed as part of the 2003 FEIS and is beyond the scope of this analysis. As described in the NOI and the supplemental EIS, the scope of the supplemental EIS analysis is to address the requirements of 219.20 Rangeland Resources relative to terrestrial MIS.

COMMENT 10e. As part of this process, the Forest must fully examine the practicality of grazing livestock in remote, rugged, steep lands increasing vulnerable to weed spread.

This must be incorporated as a significant risk factor that into any analysis of capability, suitability and risk of unsatisfactory conditions with continued livestock use across Forest allotments.

RESPONSE: The analysis and decision supporting capable rangelands was completed as part of the 2003 FEIS and is beyond the scope of this analysis. As described in the NOI and the supplemental EIS, the scope of the supplemental EIS analysis is to address the requirements of 219.20 Rangeland Resources relative to terrestrial MIS.

COMMENT 10f. The Forest must examine the very serious risks of calamitous changes -such as rush skeletonweed, cheatgrass, knapweed, toadflax or other species dominance with continued livestock use on such disturbed lands. There is no real baseline of exotic species presence provided in the SDEIS, and it is impossible to understand what analysis has occurred.

RESPONSE: The baseline for and analysis of non-native invasive plants is included in the 2003 Southwest Idaho Ecogroup Land and Resource Management Plans FEIS (starting on page 3-613). We agree that exotic/invasive species are a serious issue and can greatly influence habitat conditions and disturbance regimes. We addressed this at the Forest and watershed scale by looking at the overlap of source habitat with weed susceptible soils. By looking at areas of susceptibility, regardless of whether there are currently exotic/invasive species those acres show us where the risk for invasives is higher than those soils/habitats where it is tough for invasive plant species to get a toehold. By doing this, the analysis allows us to discern patterns and areas of high coincidence that indicate there may be a high risk to habitat from exotic/invasive species in certain watersheds. The spatial arrangement and extent of those watersheds with strong overlap gives us an idea of the relative risk we might expect across the Forest from this particular factor. This did not tell us where we currently have infestations, nor did it tell us what vectors of introduction or spread may be present. However, maps showing overlap of current noxious weed infestations from NRIS Terra Invasives data base were reviewed in relation to the overlap of source habitat with weed susceptible soils. These maps can be found in the project record. Additional information related to susceptibility of Sage-grouse habitat to non-native invasive plants is discussed starting on page 17 in this supplement.

COMMENT 10g. In the last paragraph on DEIS 3-16, is the Forest describing ONLY noxious weeds, and not exotics like cheatgrass or medusahead?

RESPONSE: While the weed susceptibility model does identify that there were three factors used to determine weed susceptible soils. These same three factors are applicable to invasive annual grasses as well. Invasive annual grasses were specifically considered in the 2003 Forest Plan as demonstrated in the Management Area characterizations in Chapter 3 of the Forest Plans. In

management areas where the threat of invasive annual grasses is being realized, it is noted in the Vegetation and Non-native Plants sections of the characterization. Management Area direction also includes management objectives specific to the containment and reduction of cheatgrass. For example, management objective 1221 for the Cottonwood Management Area specifically states: Contain and reduce infestations of cheatgrass in areas below 6000 feet in elevation.

COMMENT 10h. FEIS p.23 claiming analysis of invasive species effects - but in reality it only examined susceptibility to NOXIOUS species, and not invasive annual grasses that are dooming sagebrush habitats across the region. There is no baseline or other information on invasive species presence at time of the old Forest Plans, in 2003, at present, and no explanation of how livestock management has affected/continues to affect invasion processes.

RESPONSE: While the weed susceptibility model does identify that there were three factors used to determine weed susceptible soils. These same three factors are applicable to invasive annual grasses as well. Invasive annual grasses were specifically considered in the 2003 Forest Plan as demonstrated in the Management Area characterizations in Chapter 3 of the Forest Plans. In management areas where the threat of invasive annual grasses is being realized, it is noted in the Vegetation and Non-native Plants sections of the characterization. Management Area direction also includes management objectives specific to the containment and reduction of cheatgrass. For example, management objective 1221 for the Cottonwood Management Area specifically states: Contain and reduce infestations of cheatgrass in areas below 6000 feet in elevation.

Issue 11: Forested Habitats

COMMENT 11a. Plus, with continued depletion of native communities outside and bordering forested areas, livestock increasingly may use forested understory areas - especially as an escape from summer heat, or where forested areas border springs, seeps and streams.

RESPONSE: We do not believe that native plant communities outside and bordering forested areas are in a state of general continuing depletion as described in your blanket statement. While this may occur on specific sites within grazing allotments or areas affected by other resource uses, these sites may be evaluated and dealt with during project level analyses.

COMMENT 11b. The juxtaposition of various vegetative communities, the condition of all vegetation communities and the location of riparian areas may significantly affect the degree and severity of livestock effects on forested habitats. In areas with patchy forests interspersed with sagebrush or meadow openings used by livestock, or with clearcuts or other intensive harvest areas, forested areas may receive a significant amount of livestock

use that may affect forest processes and recovery from logging, fire, or other disturbance.

RESPONSE: The potential effects of logging, prescribed fire and other planned activities that create disturbances within pileated and white-headed woodpecker habitat are evaluated and mitigated during project level NEPA processes. Grazing issues associated with wildfire recovery are addressed during BAER analyses and at the allotment level as warranted.

COMMENT 11c. Please see Belsky and Blumenthal (1998) describing how livestock grazing and trampling activity that damages understory grasses, forbs and microbiotic crusts contributes to increased tree density and doghair thickets of small trees. Such overly dense forests may provide poor woodpecker habitat as well as have the effect of promoting burns and burn intensities that may be unnatural and alter the natural recovery processes of forested areas and woodpecker habitats. What land area of all allotments is comprised of forested lands?

RESPONSE: We do not disagree with the comment that livestock grazing can affect understory vegetation. The structure and composition of ponderosa pine and to some extent at least dryer mixed-conifer forests at lower to mid-elevations have changed significantly since the advent of Euro Americans to the western interior United States. The cited Belsky and Blumenthal paper discusses the potential contribution of livestock grazing to these observed conditions. It is probable that historical levels of livestock grazing, especially sheep grazing has been one of many factors that have contributed to these conditions as stated in their conclusion: “. . . livestock, as well as fire suppression, logging and other anthropogenic activities, have contributed to altered ponderosa pine and mixed conifer forests . . .” Their review of the literature cites case studies which attempt to define the magnitude of grazing effects on stand structure and composition. While some of these studies were able to reduce the variables other than grazing in an attempt to isolate the role of grazing in changing stand structure and composition, they do not reflect the significance of the historical changes in the intensity of livestock grazing or the effects of variations in climate on tree recruitment and changing stand conditions. In fact, the case studies may show more correlation to periods of high rainfall and other climactic factors than to livestock grazing alone. Probably the best that can be stated is that livestock grazing at some intensity and duration along with a multitude of other factors have affected fire frequency and tree recruitment. However, we continue to assert that the current levels of livestock grazing occurring within forested rangelands on the three Forests is not having a measurable effect on pileated and white-headed woodpecker habitat. As stated earlier, this is also consistent with the stated position of the Idaho Department of Fish and Game.

COMMENT 11d. The DEIS provides no systematic examination or analysis of the effects of such livestock grazing impacts on grazed areas of the Forest. Where have increased tree densities and doghair thickets of small fire-prone trees been promoted by livestock grazing? The Forest must examine the effects of small doghair thickets of trees

in promoting more intense fires that may result in significant loss of normally more fire-resistant ponderosa pine due in abnormally intense fires.

RESPONSE: We have no information available that suggests that small fire-prone trees and doghair thickets have been promoted specifically by livestock grazing. An analysis of the Little Smokey 5th field hydrologic unit conducted in 2005 on the Fairfield Ranger District (Decision Notice and FONSI for the Gooding C&H Allotment Revision, 2005) identified conditions in the Cool Dry Douglas-fir potential vegetation group (PVG) that are inconsistent with the premise stipulated in the Belsky and Blumenthal papers (1995 & 1997). In this analysis, mid-seral open canopy stands were similar to that expected under the historic fire regime and late-seral open canopy stands were more common than expected.

COMMENT 11e. The effects of livestock grazing and trampling alteration of vegetation communities, and desertification processes must be examined in relation to longer-term habitat effects on lower and middle elevation forested areas.

RESPONSE: The analysis displayed in the draft supplement and project record is adequate to determine the current relationship between livestock grazing and habitat conditions for pileated and white-headed woodpeckers. Where localized or site-specific issues are identified, they may be addressed during project level analyses.

COMMENT 11f. The SDEIS ignores analysis of the severe effects that livestock grazing may have to aspen stands and aspen recruitment. Work by Dr. Charles Kay in Nevada demonstrated that livestock grazing was a primary factor preventing successful regeneration of aspen clones. In mixed conifer forest-aspen areas, livestock consume aspen suckers, disturb understories, and promote conditions favorable for conifer invasion of aspen stands. There is no discussion whatsoever the effects of a variety of livestock use levels or grazing schemes on aspen communities - and no MIS species and habitats to be managed for here.

RESPONSE: Effects of livestock grazing on aspen stands and aspen recruitment is described in the Vegetation Diversity section of the 2003 FEIS beginning at page 3-515. In addition, the MIS Supplement also acknowledges that current livestock grazing across the range of white-headed woodpecker within SWIEG is believed to have some localized effects to the development of younger forests and aspen stands including incidental trampling of reproducing tree seedlings.

COMMENT 11g. FEIS at 3-14 mentions historic effects of livestock use, but avoids any detailed discussion whatsoever of the effects of ongoing and chronic livestock grazing disturbance to soils, microbiotic crusts, vegetation community composition, function and structure (see Fleischner 1004), and watershed integrity and functioning, and critical elements of habitat necessary for sage grouse brood rearing such as grazing -caused loss of permanent and reliable flows and areal extent of spring and seep or other riparian

areas. See Sada et al. (2003).

RESPONSE: The effects of current and historic livestock grazing on herbaceous and shrub communities, which include sagebrush, is described in the 2003 FEIS (2003 FEIS, pg 3-674 – 675; 3-417 – 420, 3-494 – 496; 3-509 – 511; 3-515 – 519). As to the concerns over flows and aerial extent of springs, seeps and riparian areas, analysis at the Forest Plan scale is not appropriate. Finer scale analyses than that used at the programmatic, Forest Plan level using data sets with more detail are necessary to identify these site features. This level of analysis is best conducted during site-specific project level analyses.

Issue 12: Consultation

COMMENT 12a. The Forest must conduct full consultation with USFWS Over the effects of this action on ESA-listed species. Are BA s available? If so, please provide any BAs to us.

RESPONSE: Consultation was completed on direction in the 2003 Forest Plans. Because no changes to management direction are being proposed as a result of this action, there is no need to re-initiate consultation.

Issue 13: Miscellaneous/Beyond the Scope

COMMENT 13a. We have reviewed both documents. It appears that you have searched hard for reasons to limit livestock grazing. We would like to see more balance in your reporting and decisions.

RESPONSE: As described in the Draft SEIS, the supplement was prepared to address an omission in the original Final Environmental Impact Statement for the Southwest Idaho Ecogroup Land and Resource Management Plans relative to the regulations at 36 CFR 219.20 Rangeland Resources. The intent of this supplement was not to try to find reasons to limit livestock grazing but rather to: 1) identify capable MIS habitat within the SWEIG in accordance with 36 CFR219.20, 2) to identify capable MIS habitat in less than satisfactory condition, and 3) identify existing Forest Plan direction and/or additional direction needed for the restoration of those lands. As disclosed in the supplement, it was determined that the use of best management practices and Forest-wide standard and guides in management of livestock grazing would provide for protection of sagebrush community conditions, therefore no deductions in suitable rangeland acres for livestock grazing were identified for Greater sage-grouse habitat. Similarly, it was determined that direction in the Forest Plan sufficiently provided for the restoration of capable MIS habitat in less than satisfactory condition.

COMMENT 13b. There are several citations in the Draft Supplement that are not in the “References” section. These include Nutt et al. 2006 (pg. 3), Miller 2003 (pg. 4), and Obrien 2006 (pg. 4). Please include these in the final version to give the reader better context as to the methods and support used in the Draft Supplement.

RESPONSE: The reference section has been updated to include all references.

COMMENT 13c. The Forest must fully take into account the effects of Global Warming processes that will be underway during the life of the Plan, and the many ways that livestock exacerbate these processes (see Steinfeld et al. 2006. Link is found in bibliography).

RESPONSE: The scope of the supplemental EIS is to address the requirements of 219.20 Rangeland Resources relative to terrestrial MIS. An assessment of the role of livestock grazing on promoting global warming is outside the scope of the analysis.

COMMENT 13d. We can find no map or information in the DSEIS on number of miles and locations of all fences, pipelines, water troughs, and other livestock facilities across the Forest and adjacent BLM or other lands. Livestock facilities are often linked with incidental creation or expansion of roading. New or expanded roading also develops from permittees placing salt and other livestock management actions.

Facilities associated with livestock grazing under all circumstances must be examined in any determination of risks associated with domestic livestock grazing, and in making any determination or conducting analysis of satisfactory or unsatisfactory habitat.

A full analysis of all Forest roads that have developed or are foreseeable or are being kept open only because of livestock use/facilities - must be provided here. All roading related to livestock facilities or management must also be conducted as part of an examination of risk and satisfactory vs. unsatisfactory condition and effects on habitat and viable populations here.

RESPONSE: As described in the NOI and the supplemental EIS, the scope of the supplemental EIS analysis is to address the requirements of 219.20 Rangeland Resources relative to terrestrial MIS at the Forest Plan level. Information relative to miles and locations of all fences, pipelines, water troughs etc. is more site-specific in nature. This site-specific information is available from individual Ranger Districts or the Forest Supervisor’s Office and is used when conducting site-specific allotment NEPA analysis. The Forest is also currently in the process of revising its travel management map. Through this process, roading, including that related to livestock facilities, is being examined.

COMMENT 13e. Information from new studies conducted in Wyoming related to the impacts of energy development on sage grouse and other sagebrush-dependent species must be fully incorporated into your analysis. Please also fully examine the effect of

livestock trampling and hoof prints and livestock facilities including stock ponds and troughs - on promoting West Nile virus, known to kill sage grouse in Idaho.

RESPONSE: As described in the 2006 Conservation Plan for the Greater Sage-grouse (Section 4.3.6 West Nile Virus, pages 4-73 to 4-75) the effects of land management activities on WNV and its vectors is largely unknown, and the role that natural and human constructed water sources play in the spread of WNV is unclear (Walker et al. 2004, Naugle et al. 2004b). The 2006 Conservation Plan did consider conservation measures to address West Nile virus and identified the need for continued surveillance for WNV and for better information concerning land management activities that reduce risk of transmission.

COMMENT 13f. Roading related to livestock grazing may result in serious adverse effects to native salmonid habitats. Livestock facilities may also be linked to adverse effects to native salmonids in other ways, as well. For example, facilities may concentrate livestock use and/or trailing into areas susceptible to erosion.

RESPONSE: As described in the NOI and the supplemental EIS, the scope of the supplemental EIS analysis is to address the requirements of 219.20 Rangeland Resources relative to terrestrial MIS. Information relative to the impacts of livestock facilities to native salmonids are beyond the scope of this analysis.

COMMENT 13g. The Forest must also examine - essentially - the reality ON THE GROUND of permittees even being able to comply with any Terms or Conditions on permits related to factors such as avoidance of weeds, avoidance of sensitive areas, limiting riparian area use, and other factors.

RESPONSE: Compliance with terms and conditions of range permits is considered in site-specific range allotment NEPA.

COMMENT 13h. DEIS at 16 makes the sweeping claim that livestock grazing has been substantially reduced under current practices. Yet, there is no data to show the actual use that has been occurring over the time period for which records have been kept, or the permitted levels of use and any use standards since records have been kept. Further, if allotments were converted from sheep to cattle AUMs, impacts have very likely been much intensified on all accessible riparian areas, flatter sites, and slopes under 30%. The Forest must provide specific data and information to substantiate its claims that all is now better, and 2007 use is somehow more benign.

RESPONSE: Current stocking levels and trends for livestock on the three Forests are discussed in the Southwest Idaho Ecogroup Land and Resource Management Plans FEIS starting at page 3-671. Trends and demands are discussed in the Rangeland Resources Technical Report No.3 for the Boise, Payette, and Sawtooth National Forests Plan Revisions. Changes in historical grazing levels throughout the Western United States have been well documented in research papers including the previously cited papers by Belsky and Blumenthal. Historical data

related to changes in grazing use on the three Forests have not been displayed. This data is generally displayed during project level analyses.

COMMENT 13i. Plus, heaping current stocking rates and use standards (what are these, and how do they affect risks to species???), results in a significant cumulative effect of ongoing livestock use. The cumulative effects must be thoroughly described.

RESPONSE: Current stocking levels, including the effects of those levels, are described in the 2003 Southwest Idaho Ecogroup Land and Resource Management Plans FEIS starting at page 3-671. Stocking levels on the three Forests since the 2003 are available in the Forest Service ISWEB Range data base and are used in NEPA process associated with decisions to approve allotment management plans. Use standards are described in this supplement (pp. 34-35). The cumulative effects of ongoing livestock use are described in the 2003 FEIS.

COMMENT 13j. All allotments with BOTH cattle and sheep grazing, including trailing, must be thoroughly examined for cumulative effects here.

RESPONSE: As described in the NOI and the supplemental EIS, the scope of the supplemental EIS analysis is to address the requirements of 219.20 Rangeland Resources relative to terrestrial MIS. The effects, including cumulative effects, of both cattle and sheep use on any given allotment is best addressed at the site-specific, allotment level. This is done as part of the NEPA process associated with decisions to approve allotment management plans.

COMMENT 13k. We again are concerned that the Forest does not provide the data, allotment-by-allotment to make this determination.

RESPONSE: As described in the NOI and the supplemental EIS, the scope of the supplemental EIS analysis is to address the requirements of 219.20 Rangeland Resources relative to terrestrial MIS at the Forest Plan level. The data requested here is more site-specific in nature and would be addressed when conducting site-specific allotment NEPA analysis.

COMMENT 13l. The Forest must provide a much more detailed analysis of the effects of No Grazing on all elements of the environment, and examine in detail the beneficial effects of passive restoration and reduction or removal of livestock on natural processes and integrity of sagebrush and other vegetation communities. Instead, as in DEIS at 3-19, the Forest provides only the most limited discussion, and casually dismisses the effects of removal of livestock grazing in promoting necessary habitat components for MIS species. There is no systematic examination of effects on viable populations.

RESPONSE: As previously described in the NOI and the supplemental EIS, the scope of the supplemental EIS analysis is to address the requirements of 219.20 Rangeland Resources relative to terrestrial MIS. The detailed analysis requested here was addressed in the original 2003 FEIS and is beyond the scope of this

analysis.

COMMENT 13m. Figure 3 provides a map with two near-identical colors of yellow that make it impossible to separate information portrayed.

RESPONSE: The colors on the maps have been adjusted to address this comment.

COMMENT 13n. Have there been current PFC or other condition inventories conducted on all stream, springs, and other riparian areas in all lands that provide sage grouse habitat on the Forest? On all lands shown as historic or capable habitat?

RESPONSE: Condition inventories and assessments have been done on numerous streams and riparian habitats across the majority of the Forest. There have not been site-specific analysis done on all streams, etc. Sufficient information is available to address the issue at the Forest-wide level. Additional site-specific information may be needed during project level NEPA analyses.

COMMENT 13o. Why has the Forest in this process not conducted an EIS analysis that examined a NEW Or expanded range of alternatives and mitigation actions related to much more conservative livestock use on sage grouse habitats, or removal of livestock use from lands where significant habitat problems are known and restoration or removal of livestock to prevent additional weed infestation is critical?

RESPONSE: The need for modification of livestock grazing activities or other management direction identified in this Supplement and the Forest Plan Revisions necessary to promote sage-grouse habitat recovery are evaluated during allotment-level analysis. Additional or more restrictive direction may be evaluated during allotment-level analysis where sage-grouse habitat recovery is identified as an analysis issue.

COMMENT 13p. Has the Forest conducted any recent allotment-level analyses - besides those of the Sawtooth and Payette sheep allotments? We have seen no full-fledged current NEPA processes - only efforts to use CEs to avoid necessary and detailed site-specific analysis and understanding of ecological conditions.

RESPONSE: Allotment level analysis is outside the scope of the MIS supplement.

COMMENT 13q. The Forest must apply specific measurable conservative standards of use to all springs and seeps to protect these often greatly degraded areas from livestock impacts.

RESPONSE: Several of the grazing standards and guidelines identified in the Forest Plan Revision (pp III-45 & 46) apply to these ecosystems. Where additional management requirements are needed, they may be addressed during

project level NEPA.

COMMENT 13r. In addition, to understand suitability, the Forest must also weigh and consider the severity of impacts allowed under the Plan standards. For example, right now the Forest is proposing a large-scale prescribed burn that will kill sagebrush and result in extensive cheatgrass infestation in the Cottonwood Creek watershed. Such actions are incompatible with any "recovery" of native species.

RESPONSE: The 2003 FEIS did analyze the impacts of implementing Forest Plan direction, including standards and guides, at the programmatic scale. As proposed projects are analyzed through the NEPA process, the effects of implementing Forest Plan direction through specific projects will be analyzed at the site-specific level. In addition to project NEPA analysis, annual monitoring of select projects occurs. Two of the questions reviewed as part of this process are: 1) were the effects of implementing the project within the range anticipated; and 2) was Forest Plan direction, including standards and guides, effective in providing the intended resource protection.



United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
500 NE Multnomah Street, Suite 356
Portland, Oregon 97232-2036



9043.1
IN REPLY REFER TO
ER07/488

Electronically Filed

August 30, 2007

Jack Troyer
Regional Forester
324 25th Street
Ogden, Utah 84401

Dear Mr. Troyer:

The Department of the Interior has reviewed the Draft Supplement to the Final Environmental Impact Statement for the Southwest Idaho Ecogroup Land and Resource Management Plans for the Boise National Forest, Payette National Forest, and Sawtooth National Forest in Valley, Boise, Elmore, Camas, Gooding, Jerome, Minidoka, Cassia and Oneida Counties, Idaho. The Department does not have any comments to offer.

We appreciate the opportunity to comment.

Sincerely,

Preston A. Sleeper
Regional Environmental Officer



STATE OF IDAHO

DEPARTMENT OF AGRICULTURE

C.L. "BUTCH" OTTER
Governor
CELIA R. GOULD
Director

August 30, 2007

Sharon LaBrecque
Planning Staff Officer
2647 Kimberly Rd
Twin Falls, ID 83301

Dear Ms. LeBrecque

The Idaho State Department of Agriculture (ISDA) appreciates this opportunity to comment on the Draft Supplement to the Final Environmental Impact Statement for the Southwest Idaho Ecogroup Land and Resource Management Plan (Draft Supplement). ISDA hopes the Forest Service finds these comments helpful in formulating a final draft of this supplement.

There are several citations in the Draft Supplement that are not in the "References" section of the document. These include Nutt et al. 2006 (pg. 3), Miller 2003 (pg. 4), and Obrien 2006 (pg. 4). Please include these in the final version to give the reader better context as to the methods and support used in the Draft Supplement.

On page 4, it is not clear what is meant by "historic MIS capable habitat." Is "historic" 50, 100, 150 years ago? To better assess the impacts and causes of changes to MIS capable habitat, ISDA requests the Forest Service to give a more detailed explanation of historic MIS capable habitat, its time frames, and characteristics.

On page 5, the Draft Supplement states, "The contribution of livestock grazing and its associated threats to lands in less than satisfactory condition varies considerably by MIS due to the inherent habitat requirements for the individual species." The Draft Supplement should acknowledge here that livestock grazing also contributes positively to MIS habitat. From the 2006 Idaho Sage-grouse Conservation Plan (page IV-54):

Connelly et al. (2004) suggested the impacts of livestock are spread unevenly across the landscape in space and time and may positively or negatively affect the structure and composition of sage-grouse habitat. In general, livestock management practices that promote the sustainability of desired native perennial grasses and forbs should maintain or minimally impact sage-grouse habitat.

2270 Old Penitentiary Road • P.O. Box 790 • Boise, Idaho 83701 • (208) 332-8500 • www.agri.idaho.gov



STATE OF IDAHO

DEPARTMENT OF AGRICULTURE

C.L. "BUTCH" OTTER
Governor
CELIA R. GOULD
Director

ISDA suggests the Forest Service add similar language to the Draft Supplement to make clear that livestock grazing may have a positive or negative affect on sage-grouse depending on management and local conditions.

The second paragraph on page 16 outlines the primary risk factors to sage-grouse in the western portion of its range. However, it makes no mention of the statewide threats ranked in the 2006 Idaho Sage-grouse Conservation Plan. ISDA suggests listing those instead of the general threats as some of them are not applicable to Idaho. For example, threat 8 as listed on page 16, strip/coal mining, is probably not a threat to sage-grouse in Idaho.

Also on page 16, the Draft Supplement states, "Figure 2 displays capable MIS...habitat where weed susceptibility is greater than or equal to 50 percent." The Draft Supplement needs to define what "weed susceptibility" of 50% means. What is it 50% of? How is this percentage determined?

Throughout the document, the Draft Supplement mentions that damage to sage-grouse habitat does not occur on a range wide basis, however, "localized areas of habitat damage still occur." (page 18) In order for the public to understand what this means, ISDA suggests the Forest Service outline what kind and how localized areas of habitat damage occurs. Are these localized areas in riparian areas or upland vegetation? Does the damage occur year after year or are these isolated incidents?

Page 18's final paragraph describes "big sagebrush cover types" as being "within the historical range." This is somewhat confusing given previous statements in the Draft Supplement that MIS capable habitat has declined. If sagebrush cover is currently within the historic range, what accounts for the changes in MIS capable habitat? This needs to be addressed in the final draft in order to clarify the meaning of this statement.

There are some broad generalizations made on page 19 of the Draft Supplement about livestock grazing and sagebrush. In the second full paragraph, the Draft Supplement states, "...as cattle graze sagebrush steppe, they first select grasses and forbs and avoid browsing on sagebrush, which can eventually tip the balance in favor of shrubs (Paige and Ritter, 1999)." This is an oversimplification of a complex issue that involves many factors, not to mention that the reference cited is not peer reviewed. Yes, cattle grazing can, in certain situations, cause an increase in sagebrush cover. This, however, all depends on the type of sagebrush, condition the system is in before grazing, climate, soil type, utilization level, season of use, etc. ISDA suggests deleting this statement or clarifying it using peer reviewed literature.



STATE OF IDAHO

DEPARTMENT OF AGRICULTURE

C.L. "BUTCH" OTTER
Governor
CELIA R. GOULD
Director

Finally, according to one of the purposes of the Draft Supplement, the analysis is to include "...additional direction needed for restoration of those lands." (page 1) Though current Forest Plan management concerning restoration of MIS capable habitat is given in the Draft Supplement, no additional direction is given. The Draft Supplement needs to make plainly evident where any new direction is given, or state that the current Forest Plan gives sufficient direction for restoration of MIS capable habitat.

Again, ISDA appreciates this opportunity to comment on this effort by the Southwest Idaho Ecogroup. If you have any further questions, feel free to contact me at (208) 736-3073.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Wright".

Kevin Wright
Range Management Specialist
Idaho State Department of Agriculture



IDAHO DEPARTMENT OF FISH AND GAME
MAGIC VALLEY REGION
319 South 417 East
Jerome, Idaho 83338

C.L. "Butch" Otter / Governor
Cal Groen / Director

August 28, 2007

Sharon LeBrecque
Planning Staff Officer
Sawtooth National Forest
2647 Kimberly Road East
Twin Falls, Idaho 83301

RE: Draft Supplement to Forest Plan FEIS – MIS Supplement

Dear Sharon:

Idaho Department of Fish and Game has reviewed the Draft Supplement to the 2003 Final Environmental Impact Statement for the Southwest Idaho Ecogroup (SWIEG) Land and Resource Management Plans (FEIS) (hereafter referred to as Draft Supplement). It is our understanding this document supplements the Rangeland Resources Section of the 2003 FEIS and was prepared in accordance with 36 CFR 219.20, which requires that lands identified as suitable for grazing and browsing by livestock be assessed to determine their capability for producing suitable food and cover for Management Indicator Species (MIS). Specifically, the Draft Supplement was prepared to: (1) identify watersheds within the SWIEG where MIS capable habitats are coincident with domestic livestock grazing allotments, (2) identify capable MIS habitats in less than satisfactory condition where risks associated with livestock grazing have contributed to the less than satisfactory condition, and (3) identify Forest Plan direction and/or additional direction needed for restoration of those lands. MIS selected for evaluation in the supplement are Pileated Woodpecker (Boise, Payette and Sawtooth National Forests), White-headed Woodpecker (Boise and Payette National Forests), and Greater Sage-grouse (Sawtooth National Forest). The following two criteria were established that must be met for a MIS to be addressed in the Draft Supplement:

- a. MIS source habitat must occur within open domestic grazing allotments, and
- b. Domestic livestock grazing must pose a direct or indirect effect that either is measurably contributing to the less than satisfactory condition of capable MIS habitat within an allotment and/or measurably threatens the ability to restore capable habitat.

The first criterion was met for all three MIS evaluated in the Draft Supplement. However, the analysis determined the second criteria only applied to Greater Sage-grouse and, therefore, only this species was fully assessed in the Draft Supplement.

This correspondence addresses specific issues and concerns regarding the Draft Supplement. Some of the concerns we express below were originally raised in our comment letter (March 2001) for the original draft EIS and remain applicable to the Draft Supplement.

Keeping Idaho's Wildlife Heritage

Equal Opportunity Employer • 208-324-4359 • Fax: 208-324-1160 • Idaho Relay (TDD) Service: 1-800-377-3529 • <http://fishandgame.idaho.gov>

First, we agree that factors other than livestock grazing are primarily contributing to the less than satisfactory condition of capable habitats for the White-headed Woodpecker and Pileated Woodpecker within the SWIEG. We also agree that, in most situations, it is unlikely that livestock grazing measurably threatens the ability to restore capable habitats for these species.

We concur with the decision to fully address the Greater Sage-grouse in the Draft Supplement. We also support the analysis depicted in Figure 3 depicting historical and current Sage-grouse capable source habitats and percent change in capable source habitats within the Sawtooth National Forest. In addition, we agree with the watershed restoration prioritization schemes depicted in Figures 5 and 6. Implementation of habitat improvement projects in the areas depicted should benefit sage-grouse and other shrub-steppe wildlife species.

Several portions of the Draft Supplement include a statement from the 2006 Conservation Plan for Greater Sage-grouse in Idaho. This statement indicates that “in some areas where successional pathways have been dominated by invasive species such as cheatgrass, changes in livestock grazing management strategies or even the complete removal of grazing will not result in the improvement of some ecological states.” We agree that relying solely on changes to grazing management practices may not improve the condition of some areas where invasive plant species have become a problem. However, we do not believe this statement should be used to take changes in grazing management “off the table” when developing plans to restore areas degraded by invasive plant species. The use of a single control technique is rarely effective for long-term control of invasive plant species and, as a result, most invasive species control programs follow an integrative approach to achieve desired results. An integrative approach to invasive species control in areas where livestock grazing occurs could include changes in grazing management practices along with implementation of other management actions such as native plant seeding, chemical or mechanical weed control, modification of other land-use practices, and others.

Page 19 of the Draft Supplement attributes the current condition of sagebrush steppe vegetation (described as often overly dense stands of sagebrush with little herbaceous understory) to past fire suppression, insufficient post-fire recovery periods prior to the resumption of livestock grazing, and livestock grazing practices that adversely affect understory vegetation. The Draft Supplement goes on to indicate that Livestock Utilization Standards established in the FEIS (i.e., 40 percent use for early season or season long pastures and 50 percent use for vegetative slow growth, after seed ripe conditions or late season pastures) were developed in part to address this concern. The Draft Supplement continues to promulgate these utilization standards as a way to move lands in “less than satisfactory condition” towards desired conditions. As previously stated in our March 2001 letter, we believe these utilization standards will not alleviate the aforementioned condition, but instead will perpetuate the presence of degraded sagebrush steppe communities on Sawtooth National Forest lands.

Literature review of 25 grazing intensity research studies suggests that utilization levels on most rangelands should not exceed 35 percent if the objective is to improve rangeland vegetation (Holechek et al. 1999). This review also found that when all stocking rate studies were averaged, a 32 percent utilization level was defined as light grazing, while 43 percent use was defined as moderate grazing. Klipple and Bement (1961) defined moderate grazing as a degree of herbage utilization that allows the palatable species to maintain themselves but usually does not permit them

Keeping Idaho's Wildlife Heritage

Equal Opportunity Employer • 208-324-4359 • Fax: 208-324-1160 • Idaho Relay (TDD) Service: 1-800-377-3529 • <http://fishandgame.idaho.gov>

to improve in herbage producing ability. They define light grazing as the degree of herbage utilization that allows palatable species to maximize their herbage producing ability. Based on the above, we recommend adopting a management direction that emphasizes grazing strategies (<35 percent utilization) that provide for rangelands with characteristics of productive sage-grouse habitats (Connelly et al. 2000 – see table below).

In addition, studies have shown a variety of forbs and grasses (including bluebunch wheatgrass) are grazing sensitive species and are highly susceptible to damage when plants are actively growing (April through June) (Anderson 1991, Danhoureyeh and Hartnett 2002). Bunchgrass survival and production can be significantly reduced for several seasons following defoliation during the active growing season (Anderson 1991, Danhoureyeh and Hartnett 2002). Given the importance of native forbs and bunchgrasses to breeding and brood rearing sage-grouse, native ungulates, and other sagebrush obligate wildlife, we recommend rotating spring/early summer livestock grazing in areas where the goal is to retain or improve herbaceous understory vegetation in sagebrush communities. Shifting the season of use would also reduce the potential for livestock to disturb nesting sagebrush obligate birds and improve spring forage availability for mule deer and other native ungulates.

The section of the Draft Supplement entitled *Forest Plan Direction Addressing Restoration of Lands in Less Than Satisfactory Condition*, lists specific management directions for Management Areas within the Sawtooth National Forest relative to restoration of sagebrush communities and sage-grouse habitats. We appreciate the site-specificity of this planning direction and the wide variety of sage-grouse habitats that could benefit by implementation of the management objectives. Although we approve of the objective to improve sagebrush canopy cover in areas where this feature is deficient, we also encourage the Forest to consider improving plant species diversity (particularly forbs and grasses) as an additional objective for these areas. Forbs and grasses are particularly important components of sage-grouse nesting and brood rearing habitats and are important habitat components of a variety of other shrub-steppe wildlife species.

A list of standards and guidelines to attain desired conditions for rangeland resources is provided in the section of the Draft Supplement entitled *Forest-wide Direction* (Pages 32 and 33). Again, we believe the Maximum Utilization Standards for both riparian and upland cover types promulgated in this document are too high to facilitate improvement of impaired plant communities on Sawtooth National Forest lands. We recommend utilization levels in upland cover types not exceed 35 percent and the timing of livestock grazing be controlled to allow for development of diverse herbaceous understories (see above). Stream reaches assessed at properly functioning condition where herbaceous vegetation is the primary source of bank stabilization should be subject to herbaceous utilization levels of < 30 percent and maintain herbaceous stubble heights of at least 6 inches (Clary and Webster 1990, Idaho Partners in Flight 1998). Further, we suggest that Guideline RAGU09 (*Season-long grazing practices should be discontinued where they preclude restoration of upland or riparian vegetation communities*) is insufficient to assure successful restoration of upland or riparian vegetation communities within the Forest. The Guideline should be expanded to include the potential to discontinue seasonal grazing practices (spring and early-summer, late-summer and fall, and winter) where these practices preclude restoration of upland or riparian vegetation communities. As noted above, seasonal livestock grazing also can preclude successful restoration.

We believe that livestock return (and the return of other land uses) after wildfire should be based on vegetation standards, not simple time limits. As a result, we agree allotments should be rested from

Keeping Idaho's Wildlife Heritage

Equal Opportunity Employer • 208-324-4359 • Fax: 208-324-1160 • Idaho Relay (TDD) Service: 1-800-377-3529 • <http://fishandgame.idaho.gov>

livestock grazing for a minimum of two growing seasons following wildfire and there is a need to evaluate allotments from a vegetation recovery standpoint to determine whether additional rest beyond the two season minimum is needed. However, the information provided on page 34 is insufficient to understand how the determining factors listed under VEGU06 would be used to judge whether post-fire recovery is sufficient to support renewed livestock grazing. We recommend development of quantitative standards that provide predetermined thresholds of perennial plant (shrub, grass, and forb) establishment that must be met before resource uses can return to an allotment. Further, we suggest that rest from livestock grazing (and other land uses with potential to adversely affect vegetation) should also be considered when vegetation standards are compromised due to land use-related impacts. Many land uses, including livestock grazing and recreational activities such as camping, OHV riding, horseback riding, and mountain bike riding, have potential to adversely affect native plant communities. We recommend VEGU05 and VEGU06 be expanded to provide for the ability to limit such land uses when they compromise the quality and quantity of the shrub-steppe vegetation that provides habitats for sage-grouse and other wildlife.

Thank you for the opportunity to provide comment. If you have any questions please contact Mike McDonald, Environmental Staff Biologist, or Scott Bailey, Regional Wildlife Habitat Biologist, at this office.

Sincerely,



David Parrish
Magic Valley Regional Supervisor

Cc: IDFG (NRPB)
ECc: IDFG (R4 staff)

Literature Cited

- Anderson, L.D. 1991. Bluebunch wheatgrass defoliation effects and vigor recovery a review. U.S.D.I., Bureau of Land Management. 21 pp.
- Clary, W.P. and B.F. Webster. 1989. Managing grazing of riparian areas in the intermountain region. Gen. Tech. Report INT-263. Ogden, Utah: USDA, Forest Service, Intermountain Research Station. 11 pp.
- Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage grouse populations and their habitats. *Wildlife Society Bull.* 28(4):967-985.
- Danhoureyeh, S.A. and D.C. Hartnett. 2002. Variation in grazing tolerance among three tallgrass prairie plant species. *J. Botany* 89:1634-1643.
- Ganskopp, D. and T. Bedell. 1981. An assessment of vigor and production of range grasses following drought. *Journal Range Management.* 34:137-141.

Keeping Idaho's Wildlife Heritage

Equal Opportunity Employer • 208-324-4359 • Fax: 208-324-1160 • Idaho Relay (TDD) Service: 1-800-377-3529 • <http://fishandgame.idaho.gov>

Holechek, J. L., H. Gomez, F. Molinar, and D. Galt. 1999. Grazing studies: what we've learned. *Rangelands*. 21:12-16.

Idaho Partners in Flight. 1998. Riparian riches: habitat management for birds in Idaho. 18 pp.

Klipple, G. E. and R. E. Bement. 1961. Light grazing – is it economically feasible as a range improvement practice? *J. Range Management*. 14:57-62.

From Connelly et al. 2000

Table 3. Characteristics of sagebrush rangeland needed for productive sage grouse habitat.

	Breeding		Brood-rearing		Winter ^e	
	Height (cm)	Canopy (%)	Height (cm)	Canopy (%)	Height (cm)	Canopy (%)
Mesic sites ^a						
Sagebrush	40-80	15-25	40-80	10-25	25-35	10-30
Grass-forb	>18 ^c	≥25 ^d	variable	>15	N/A	N/A
Arid sites ^a						
Sagebrush	30-80	15-25	40-80	10-25	25-35	10-30
Grass/forb	>18 ^c	≥15	variable	>15	N/A	N/A
Area ^b		>80		>40		>80

^a Mesic and arid sites should be defined on a local basis; annual precipitation, herbaceous understory, and soils should be considered (Tisdale and Hironaka 1981, Hironaka et al. 1983).

^b Percentage of seasonal habitat needed with indicated conditions.

^c Measured as "droop height"; the highest naturally growing portion of the plant.

^d Coverage should exceed 15% for perennial grasses and 10% for forbs; values should be substantially greater if most sagebrush has a growth form that provides little lateral cover (Schroeder 1995)

^e Values for height and canopy coverage are for shrubs exposed above snow.1