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BY E-MAIL AND REGULAR MAIL

Mr. Brian Amme
Project Manager
National Vegetation EIS
Bureau of Land Management
P.O. Box 12000
Reno, NV 89520-0006

See EMC-0640

Dear Mr. Amme:

The Animal Welfare Institute (AWI) submits the following comments on the Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement (PEIS). Because of the failure of the Bureau of Land Management (BLM) to provide for a sufficient opportunity for public comments on its proposed vegetation management program, the length of the documents prepared to evaluate the impacts of the program, and because of the complexity of the issues under analysis, these comments are largely limited to the PEIS. While there may be reference to the Vegetation Treatments on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Report (PER) and Draft Biological Assessment in these comments, the BLM did not provide sufficient time to allow for a comprehensive analysis of these documents or the other documents (i.e. human and ecological risk assessment reports) relevant to this issue.

The issue under review in the PEIS is extraordinarily controversial and involves a management dilemma for which there are few easy solutions. There is no question that exotic species, including exotic plants and weeds, have altered native ecosystems in the United States. It is also indisputable that fire suppression activities have also altered ecosystem dynamics and processes to varying degrees in many of the affected ecoregions. Determining the extent of such impacts and the most effective means, if any, to slow, prevent, or stop the spread of invasive exotic species is difficult. While each method of control (i.e. mechanical, biological, manual) will impact soils, air quality, water quality, vegetation, wildlife, and other resources, the proposed use or significant expansion in the use of herbicides or poisons to control invasive exotic species is both controversial and problematic given the potential direct, indirect, and cumulative impacts

on a number of faunal and floral species. Such impacts are magnified by the fact that we simply do not know precisely the nature of the impacts or how other factors (i.e. changes in environmental conditions, changes in species immune functions caused by disease or environmental factors, the presence of various organic and inorganic elements in the soil, presence of pollutants in the atmosphere or in precipitation) may affect the impact of herbicides to soil, vegetation, or living organisms.

Because so little is known about the potential impact of the proposed poisons on the environment and wildlife, AWI believes that the no-herbicide use alternative (Alternative C) is the most appropriate alternative from an environmental perspective. If selected, however, the BLM must increase the use of other invasive exotic species control tools and techniques to slow, stop, or prevent the spread of such species in the United States.

While the no-herbicide use alternative may represent the smallest direct risk to fish, amphibians, and wildlife, it may, admittedly, increase the challenge of controlling invasive exotic species. For that reason, though AWI believes the available toxicity testing data are not sufficient to understand the full range of impacts on wild species,[1] it would support the alternative (Alternative E) proposed by the American Lands Alliance with the following suggested modifications (which are in addition to the criteria already contained in Alternative E):

- The BLM's use of those herbicides permitted under Alternative E be done only with extreme caution and in limited circumstances where no other control technique is feasible or advisable;
- The BLM only use those herbicides that have no, low, or medium potential adverse impacts on non-target species, including vegetation, fish, amphibians, and terrestrial wildlife.
- Such herbicides should only be used on species or under circumstances for which they are registered by the United States Environmental Protection Agency (EPA).
- Herbicide application methods must be limited to those techniques that minimize to the fullest extent possible potential impacts to non-target species.
- Herbicides should only be used when absolutely necessary on invasive exotic species to reduce the threat of a catastrophic wild fire or to improve degraded fish or wildlife habitat but should not be used on native non-desirable species and should not be used for the primary purpose of altering natural succession to create a desired landscape condition or appearance.

[1] The use of cruel and archaic herbicide toxicity tests involving various laboratory animals (LD50, dermal, eye, and others) are unnecessary due to the existence of non-animal toxicity tests and may not provide accurate data on the impact of such toxins on a wide range of wild species. While the BLM is not responsible for the use of these outmoded toxicity testing practices, in developing protocols for assessing the efficacy of new chemicals that become available for invasive exotic species control, it must request that the Environmental Protection Agency allow for the use of non-animal tests to determine the toxicity of any new chemicals of potential interest to the BLM.

AWI does not support the proposed alternative (Alternative B) because the BLM has not provided compelling evidence that the proposed poisoning of nearly 1 million acres of public lands is necessary and/or that other management techniques and tools would not be effective in treating the invasive exotic species in some portion of these lands. Moreover, considering the concession that the use of herbicides (depending on the poison used, the method of application, accidents, the time of application, and the non-target species in the application area) may adversely impact a host of organisms, the fact that the BLM lumped amphibians in with fish in assessing the potential impact of herbicide use is problematic, especially given the fact that amphibians are known to be particularly sensitive to toxins. Using surrogate species (mice, rats, dogs, and others) to assess herbicide impacts on a variety of wild species as well as the proposed widespread use of herbicides may result in unknown or unexpected impacts of potential significance. Consequently, the BLM should employ the precautionary principle and avoid, to the maximum extent possible, the use of herbicides and only use herbicides where there is compelling and valid scientific evidence that the potential for adverse impacts are none to small. Furthermore, the BLM must employ comprehensive monitoring strategies both pre and post treatment (including immediately post treatment) to track herbicide impacts and to use such data to alter or terminate the area-specific herbicide application program. Ultimately, it is the responsibility of the BLM to ensure that the "cure is not worse than the cold" and that there are not alternative means to achieve similar or the same results in addressing the issue of invasive exotic species without the use of poisons.

The remainder of this comment letter will address both broad scale and specific concerns with the proposed vegetation treatment program, including herbicide use, in the western United States.

1. The BLM has failed to provide sufficient opportunity for public comment. While AWI appreciates the BLM's decision to extend the comment deadline on the PEIS by 30 days from January 9, 2006 to February 10, 2006,[2] a total of approximately 90 days to review, analyze, and prepare substantive comments on the PEIS, PER, and other documents is wholly inadequate. This lack of opportunity for the public to participate in this important decision-making process is particularly troubling considering that the PEIS, PER, and other relevant documents consist of well over 1500 pages of text, analysis, and information. In addition, given the complexity of the subject matter, including highly technical information about a variety of herbicides, their potential impacts to human health, wildlife health, and the environment, and the complicated human health and ecological risk assessment reviews, a 90-day comment period is simply insufficient to expect the public to have a legitimate opportunity to participate in this process. As public participation is a cornerstone of the National Environmental Policy Act (NEPA) process, the

[2] AWI, in its letter of January 6, 2006, requested a 60-day extension in the comment deadline. If granted, though a total of 120 days to review, evaluate, and prepare informed comment on the proposed program would have been better than the current 90 day period, given the length of the documents and the technical nature of the subject matter, it still would have been insufficient.

BLM erred in not providing a minimum of 180 days for the public to comment on this proposed program.

The complexity of the subject matter is sufficient reason for the BLM to have offered a longer period for public comment or to now reopen the comment period. One purpose of NEPA is to allow the public to be involved in the decision-making process. There is no way that an average concerned citizen could have had sufficient time during the 90-day comment period to have reviewed, evaluated, and prepared substantive comments in response to the PEIS and associated documents. Indeed, even scientists employed by interest groups would have found it extraordinarily difficult to prepare an in-depth analysis of the PEIS, PER, and other documents by the close of the 90-day comment period. A team of scientists, including chemists, risk assessment experts, range science specialists, and land managers could have critically evaluated the PEIS and associated documents in the 90 day period if it were their only responsibility during that time frame. While the BLM may want to expedite the completion of this decision-making process for undisclosed reasons, the opportunity for concerned citizens, interest groups, and scientists to participate in the process – participation that will aid the BLM in making a more informed final decision – should not be impaired or hindered by any internal BLM deadlines or steadfast bureaucratic timetables. Moreover, public participation in this process should not require the hiring of a cadre of experts to provide substantive and informed public comment. Few interest groups or concerned citizens have the financial resources to pay for such an expert review and, frankly, should not have to do so if the BLM complied with NEPA and based its comment deadline on the complexity of the subject matter and the length of the documents prepared to assess the environmental impacts of the proposed action.

Considering that the BLM already has the authority to proceed with all methods of invasive exotic species control, including the use of 20 herbicide products and formulations, there is no compelling reason why the BLM did not provide for a 180-day comment period or why it could not reopen the comment period at this time to afford greater public involvement in this decision-making process. If the BLM elects – as it should -- to reopen the comment period for, at least, another 90 days, it should also schedule public hearings or information sessions throughout the western United States to explain its proposals to concerned citizens, to provide opportunity for the public to question various experts to clarify certain issues or impacts associated with the proposals, and to collect public testimony in regard to the impact of the proposed action.

The BLM may attempt to brush off the inadequacy of the existing comment period by claiming that this is a programmatic document and that the public will have sufficient opportunities to comment on regional, state, local, or site-

specific NEPA documents in the future.[3] While such additional comment opportunities should be welcomed by concerned citizens, they do not excuse the BLM for failing to provide additional time to comment on the PEIS, PER, and associated documents now. The PEIS and its associated documents are, for all intents and purposes, the foundation of a new vegetation treatment plan to be implemented by the BLM across 17 western states. The BLM intends to rely on the PEIS, PER, and other documents as it prepares regional, statewide, local, and site-specific invasive exotic species treatment plans to achieve its purported objectives. As a consequence, it is crucial that the foundation of the planning process – the PEIS and associated documents – be strong and stable. To achieve that foundational strength, the public should have been provided additional time to critically evaluate the facts, figures, and analyses contained in the PEIS, PER and other documents.

2. The purpose and need of the PEIS is unclear and the scope of the analysis in the PEIS, PER and associated documents is confusing. The PEIS claims that its purpose and need are to lessen the potential for catastrophic wildfires by reducing hazardous fuels, restore fire damaged land, and improve ecosystem health by controlling weeds and invasive species and manipulating vegetation to benefit fish and wildlife habitat. Though the introductory section of the PEIS seems to emphasize various presidential directives and orders intended to address the risk of catastrophic wildfires, this carefully crafted purpose statement clearly goes beyond controlling or manipulating vegetation to reduce the potential for catastrophic wildfires and goes beyond controlling the spread of invasive exotic species to effectively cover all aspects of vegetation management of relevance to the BLM.

   To achieve this intentionally bloated purpose and need statement, the PEIS, PER, and other documents disclose and purport to evaluate the environmental impacts of a smorgasbord of management tools and techniques, including biological, mechanical, manual, and chemical control options. Yet, apparently the sole decision to be made at the conclusion of this decision-making process is in regard to the proposed expansion of the use of herbicides to achieve management objectives on nearly 1 million acres of western public lands. More specifically, as the BLM claims that several of the herbicide products and formulations have already been approved for use, this entire decision-making process seems to be limited to the potential use of a handful of new products/formulations and some old products/formulations requiring additional analysis. In fact, the BLM clearly states that no decision will be made in regard to the information in the PER as that information was only

[3] To facilitate public participation in regional, state, local, and site-specific planning processes that will be tiered off of this programmatic process, the BLM should ask those who participated in any stage of the PEIS process whether they want to be included on various BLM mailing lists to receive notice of such future planning processes. Those responding in the affirmative should be placed on the relevant mailing lists to receive such plans. This will ensure continued public involvement in more localized BLM plans tiering off of the PEIS without requiring the interested public to write to every BLM field office requesting to be added to the relevant mailing lists for such documents.

provided to facilitate the analysis of cumulative impacts in the PEIS and because the BLM already has approved the use of mechanical, manual, fire, and biological techniques through previous NEPA processes.

There is a clear disconnect in the content of the purpose and need statement versus the decision to be made. The BLM cannot claim that it needs to engage in vegetation management to address a whole range of issues (i.e. reduction in hazardous fuels, improve wildlife habitat, control weeds and invasive species) but then make a decision that is limited to the expansion of herbicide use on western public lands. Regardless of the existence of previous NEPA documents on herbicidal and non-herbicidal techniques, the BLM erred and violated federal law by failing to subject the entire program to review as part of this decision-making process. Indeed, many of those previous NEPA documents are, as the BLM concedes, either old or regional/local in scope and, therefore, do not provide a programmatic level of review for such a wide-ranging program that is clearly required under NEPA. Strangely, in this case, the BLM spent the time and effort to prepare a programmatic review of its entire vegetation management program but has limited its decision to a single component of the program. That decision simply makes no sense.

The PEIS, PER, and associated documents also fail to delineate what method of treatment (herbicidal or non-herbicidal) will be used in each identified ecoregion to address the specific management needs identified in the purpose and needs statement. For example, while the BLM estimates the number or percentage of acres that may be treated with herbicides in each ecoregion if the proposed action is implemented, it fails to disclose what percentage of the ecoregion-specific area will be treated to address the reduction in hazardous fuels, restoration of fire damaged land, control of weeds and invasive species, and the manipulation of vegetation to benefit fish and wildlife habitat. Similarly, though reducing hazardous fuels in the wildland-urban interface is deemed to be of great importance to the BLM in its introductory information, there is no explanation of what management technique will be used and where it will be used to address this concern. While such specifics may be part of a regional or more localized plan, incorporating such data in programmatic documents – even if the data could only be presented as estimates – would be valuable to the public to better understand for what purpose each treatment technique will be used within the various ecoregions.

Furthermore, to make matters worse, the BLM explicitly excluded from its analysis any discussion of livestock grazing, off-road vehicle use, logging activities, oil and gas development, or other human uses of BLM managed lands that contribute to the introduction and spread of invasive exotic species on public lands in the west. It simply makes no sense to engage in a concerted effort to control, eliminate, or manage invasive exotic species using techniques, including the use of poisonous chemicals, that will adversely impact, temporarily or long-term, soils, air and water quality, non-target

vegetation, fish, invertebrates, amphibians/reptiles, birds, and mammals without taking proactive steps to reduce some of the primary pathways or mechanisms that caused the invasive exotic species to take hold in the first place.

Again, if the BLM had properly defined the scope of its analysis it should have provided a more complete strategy to address the threat of the spread of invasive exotic species on western public lands by encompassing both the causes of the problem and a full array of potential solutions. Such solutions could include, but would not be limited to, vegetation management (as discussed in the PEIS and PER), closure of grazing allotments, restriction in ORV recreational access to BLM lands, closure and reclamation/restoration of illegal and unnecessary roads, restrictions on oil and gas development, and other limitations or restrictions on human use intended to minimize the chance of the introduction or spread of invasive exotic species. The Restore Native Ecosystems alternative proposed by American Lands Alliance provides such a comprehensive strategy to address such threats and should be adopted by the BLM as a framework for the preparation of a new programmatic document to address its management issues of concern.

To address such deficiencies and, in particular, to both properly define the scope of the PEIS and to clarify the decision to be made, the BLM should broaden the parameters of its analysis to include both causes and potential treatments for the management issues of concern (i.e. hazardous fuel reduction, improving ecosystem health, controlling weeds and invasive species, restoring fire damaged lands, and manipulating vegetation to improve wildlife habitat), comprehensively address the environmental impacts of all such activities in relationship to the issues of concern, and reissue the PEIS, PER and associated documents for public review. Such a holistic approach to this issue will not only result in a more informed and ecologically responsible decision, but it will also be consistent with both the plain language and intent of NEPA.

3. The use of herbicidal and non-herbicidal vegetation treatments should be limited to the direct control of invasive exotic species that represent a potential fuel source for a catastrophic wildlife fire, to reduce the potential for a catastrophic wildfire to destroy property within the wildland-urban interface where there is documented evidence that such species have degraded wildlife (including fish) habitat, or where vegetation manipulation is deemed crucial to facilitating the recovery potential of protected species (state, federal, and special status species). These limitations would be in addition to the restrictions suggested above (see page 2 of this comment letter).

Though the sole decision in this process is whether to expand the use of herbicides for various purposes on western public lands, it is important that the BLM impose restrictions on all vegetation management techniques to

prevent the misuse of such techniques to intentionally alter natural regimes to create what may be a more desirable condition. In other words, using any of the vegetation management techniques discussed in the PEIS or PER should not be permitted simply to alter, set back, or change natural successional patterns to create or maintain a particular habitat condition that may be considered by some to be more desirable than a later successional state. For example, using such techniques primarily to improve habitat for timber production or livestock grazing should not be permitted as such efforts would be to the principal benefit of private commercial interests and may adversely affect native wildlife using such areas. More specifically, employing any of the vegetation management techniques to remove or kill native shrub or tree species to facilitate the expansion of grassland habitat should not be allowed as it would represent an interruption in natural succession and would benefit some native species while harming others.

The current condition of some of our ecosystems may have been created as a result of fire suppression efforts. Assuming such areas are not in the wildland-urban interface, do not pose a risk of fueling a catastrophic wildfire because of an abundance of invasive exotic species, have not been degraded as wildlife habitat (including protected species habitat) due to the presence of invasive exotic species, and do not require manipulation to benefit a protected species, natural processes should be allowed to continue unabated. In time, natural factors such as naturally-caused fires, blowdowns, disease, or age will cause the system to return to an early successional stage. While such criteria may appear to be unnecessarily restrictive, they are intended to allow natural processes to predominate and for species assemblages to change over time as succession proceeds except when vegetation manipulation is needed to protect property, native vegetation, native species, and protected species. Such criteria, if adopted, would also prevent the BLM from using such treatments to primarily benefit commercial interests at the expense of native wildlife. This is not to say that no manipulation or control is permitted. Indeed, as suggested, this plan would allow for vegetation manipulation to achieve specific results consistent with many of the management concerns identified by the BLM in the PEIS and PER. While the use of vegetation management techniques under these circumstances would impact the natural successional stage, such impacts would be deemed beneficial overall because of the circumstances or species involved.

Such restrictions are also intended to prevent the overuse or misuse of certain vegetation management techniques. For instance, while there is ample evidence that many ecosystems in the western United States have evolved with fire and that the suppression of fires have altered these ecosystems, it is not as clear that we are able to accurately emulate the intensity, frequency, or geographic range of the natural fire paradigm through the use of prescribed burning. We may be able to estimate the frequency of natural fires in a particular ecosystem pre-European colonization (i.e. average of 1 fire ever 25

years, 50 years, 100 years), but it may be impossible to determine the specific frequency, duration, and intensity of such fires using our existing techniques. Moreover, even if we can obtain such information, are we using prescribed burning to emulate those conditions or are we overusing prescribed burning to achieve a desirable habitat condition that benefits a particular interests or maximizes biodiversity at the expense of natural processes? Moreover, can we legitimately strive to return ecosystems to the conditions that existed pre-European colonization considering that we don't have a solid understanding of what those ecosystems looked like or how they were structured? Modern day threats to ecosystems are different than those of the past, and environmental conditions of today may be different than those of the past. The suggested criteria won't prevent the use of prescribed burning, disking, plowing, or even herbicide use, but they will promote the role of natural factors in driving ecosystem processes wherever and whenever possible regardless of the current condition of the area except when certain conditions prevail.

An approach that emphasizes allowing natural factors to control ecosystem processes where and when applicable is entirely consistent with the legal framework under which the BLM operates. Specifically, BLM's multiple use mandate only requires the agency to allow for appropriate multiple use of its land. It does not mandate that the BLM facilitate such use by manipulating nature or natural processes in ways that would adversely affected native species of fauna or flora.

4. The BLM must clearly delineate, using the best available science, the impacts of invasive exotic species on wildlife (including protected species) and wildlife habitat before implementing management treatments to resolve the problem. These suggested evidentiary needs are not intended to hinder BLM management efforts or to promote the continued expansion of invasive exotic species across the western United States. Rather, they are intended to ensure that the invasive exotic species are indeed harming wildlife, to ensure that the BLM remains accountable for its actions, to focus BLM resources on areas where there is a specific and resolvable problem, and to ensure BLM considers the impact of its actions on native species who may have adapted to living with the invasive exotic species before implementing its proposed treatments. It should be emphasized that these suggested criteria in no way, shape, or form should be interpreted as AWI endorsing or supporting the spread of invasive species throughout the United States as it recognizes and respects the threat of such species to the health and well being of wildlife and wildlife habitat in affected areas. Though some of this evidence was presented in the PEIS and PER, we suspect the BLM would present more site-specific evidence in various regional, state, local, or site-specific plans.

With regard to impacts, the PEIS and PER failed to comprehensively articulate the potential impacts of both herbicidal and non-herbicidal treatment programs and to include and describe a comprehensive monitoring program

to assess the impact of such programs both pre and post-treatment. This failure is particularly egregious considering that the BLM has been using herbicidal and non-herbicidal treatment programs for years, yet the PEIS did not include any description of impact data collected, lessons learned, mistakes made, or adjustments implemented based on past practices. Though the BLM attempts to disregard this critical omission by claiming that past monitoring efforts (pre and post treatment) were not sufficient or sufficiently standardized, it is incomprehensible that data on the field application of various herbicides, for example, and their impact on non-target vegetation, fish, wildlife, soil bacteria, and invertebrates are not available in a form that could have been incorporated into the PEIS. Even if the BLM could have only provided summaries of impacts previously encountered with the use of herbicidal or non-herbicidal vegetation treatments, such summaries would have provided the public with a better understanding of the potential impacts, or lack of impacts, expected under the proposed action. If the BLM does have actual monitoring data documenting adverse impacts of such treatments on wildlife (including fish and amphibians), wildlife habitat, protected species, and/or other important habitat characteristics and chose not to disclose such impacts in fear of turning public opinion against its proposed action, such a failure is both unethical and illegal.

Even if such data are, in fact, not available, the BLM, at a minimum, should have attempted to construct models to assess the impact of its proposed program by vegetation treatment method used and by ecoregion to help those commenting on the PEIS and associated documents quantify the potential impact to species or other ecosystem components. As currently written, all the PEIS provides to facilitate an evaluation of the quantitative impact of herbicidal and non-herbicidal treatments on wildlife are scores of no effect, low effect, moderate effect, high effect, or not evaluated. While such scores may be accurate, it would be more valuable to those reviewing the PEIS and associated documents to be able to quantify the meaning of, for example, a high effect of a particular herbicide in a particular environment.

Finally, if the BLM implements the proposed action, it is crucial that its plan be based on adaptive management and that it establish stringent criteria for pre and post treatment monitoring to assess the impact of its treatment options on wildlife, fish, amphibians, protected wildlife, invertebrates, air and water quality, soils, human safety, and other ecosystem components. The pre-monitoring effort must evaluate the condition of the proposed treatment area including species (flora and fauna) composition, abundance, and density data so that the impact of the treatment can be quantitatively measured. Post-treatment monitoring must be initiated immediately after treatment (not 1 to 2 years after treatment) to measure how the treatment affected various ecosystem components. Prior to treatment the BLM should establish treatment specific criteria, which, if exceeded as determined by post-treatment

monitoring, would result in either a cessation or alteration to the treatment program to prevent any future violation of the criteria.

5. The BLM's assessment of the potential impact of the proposed herbicides on wildlife (including fish, amphibians, invertebrates, and protected species) is insufficient and likely does not represent a full and fair evaluation of such impacts. These assessment data are the product primarily of toxicity tests apparently required by the EPA to register herbicidal products for use in the field, to determine application rates, and to determine impacts to both target and non-target species.

   In addition to the significant cruelty and suffering associated with these live animal tests (including lethal dose, dermal, eye, and other tests) and the fact that there are non-animal tests available that could and should be used to test such poisons, the test results themselves provide no indication of the potential impact of the herbicide on wildlife or the environment when applied in the field. First, testing a herbicide in a laboratory environment on mice, rats, guinea pigs, rabbits, or dogs provides no evidence of how the herbicide will react in a field environment given the potential for the herbicide to be altered by environmental conditions (i.e. sunlight, heat, cold, naturally occurring elements in the soil, natural toxins).

   Second, for the same reasons, the amount of herbicide determined to be toxic to a rat or a dog in a laboratory environment may not accurately predict the amount of toxin fatal to a wild animals as the physical condition of wild animals (i.e. immune function, body condition, presence or absence of injury or disease, stress level, etc.) may be very different than the condition of laboratory animals. For example, while a certain amount of herbicide may kill 50 percent of laboratory mice, the amount necessary to kill one or more wild mice may be much lower because the physical condition of the wild mouse because he/she lives in the wild may be compromised compared to a mouse living in a laboratory environment. Similarly, a wild fox that has to engage in a day-to-day struggle to find food and avoid predators to survive in the wild may have a very different reaction to a direct or indirect exposure to a herbicide compared to a dog forced to consume the poison in a laboratory environment.

   Third, the use of surrogate species to predict the impact of herbicides on a wide-ranging variety of wild species is both scientifically invalid and doomed to significant errors in understanding the potential impact of herbicides in a natural environment. The toxicity studies referred to in the PEIS and Ecological Risk Assessment report used mice, rats, guinea pigs, rabbits, dogs, some fish species, some bird species, and perhaps a few addition common species. To suggest that these species can act as surrogates for the variety of wild species (i.e. deer, pronghorn, turkey, waterfowl, song birds, furbearers, raptors, bears, mountain lions, wild horses and burros) that may be exposed,

directly or indirectly, to herbicides applied for vegetation treatment in 17 western states is ridiculous. As a consequence, the BLM must admit that its assessment of the potential impacts of herbicides on wild species is completely speculative because it is based on no critical evidence or data.

Of particular concern is BLM's decision to use fish as a surrogate to understand the impact of herbicides on amphibians. Considering the documented sensitivity of amphibians to slight changes in environmental conditions, to natural toxins, and to human-produced toxins including products intentionally and unintentionally released into aquatic ecosystems, suggesting that the herbicidal impacts on fish will mimic the impacts to amphibians is blatantly wrong and scientifically reckless. Quite simply, it represents a pinnacle of arbitrary and capricious decision-making.

AWI is not advocating the expansion of toxicity testing to determine the impact of various herbicides on a wide variety of wild species. Indeed, should the BLM or EPA even suggest such tests, AWI and other animal protection organizations would strongly oppose such efforts and would take every necessary step to prevent such tests. AWI does believe, however, that the existing animal tests are insufficient to understand the true impact of pesticides on wild species. This lack of data, in turn, provides ample reason and evidence for the BLM to completely abandon its use of herbicides for vegetation management on its lands throughout the country. However, in the event that BLM believes limited herbicide use is needed, the agency must : 1) minimize such use to the extent possible; 2) only use herbicides that will not produce a high impact or effect on non-target species; 3) use only application methods that will minimize impacts to non-target species; 4) ensure that its vegetation management plans be based on adaptive management; and 5) engage in comprehensive pre and post monitoring work to immediately assess the impact of herbicides on wild species and cease or alter herbicide use if adverse impacts are identified. Moreover, to the extent that the BLM considers adding any new herbicides to its poison arsenal, it should mandate that any toxicity tests be conducted using non-animal testing methodologies and that any field applications would be preceded by focused and limited field studies to determine how the herbicide might impact wildlife and other natural features and functions under natural conditions.

Conclusion:

The foregoing information provides compelling evidence that the BLM must terminate this decision-making process and begin anew. While the existing documents can be used as the basis for a new process, the parameters must be expanded to address both the causes and potential treatments for vegetation management issues (i.e. hazardous fuel reduction, controlling weeds and invasive species, improving ecosystem health, restoring fire damaged lands, and manipulating vegetation to improve fish and wildlife habitat). Additionally, the purpose and need

statement must be broadened and clarified, and the public must be provided with at least 180 days to review, analyze, and prepare informed and substantive comment on the document.

In addition, both in the new environmental document and in its ongoing procedures and practices, the BLM must prohibit the use of vegetation manipulation techniques for the primary benefit of commercial interests with the exception of the circumstances identified in point 3 above, must clearly document the adverse impacts that its vegetation treatment proposal are intended to resolve, must establish comprehensive pre and post treatment monitoring standards, and must concede that its assessment of the potential impact of herbicides on wild species is speculative at best.

Ideally, the evidence presented above will compel the BLM to immediately cease its use of herbicides for vegetation management on its lands given the significant gap in our knowledge of how those poisons impact wild species and our environment. If, despite this evidence, it chooses to continue its use of herbicides, it must comply with the restrictions noted above (i.e. minimize use, use application methods to minimize impacts to non-target species). Ultimately, because of the potential adverse impact of using poisons in the environment, AWI supports Alternative C – the no herbicide alternative. However, as the BLM may choose to continue to use herbicides, we think such use should be only be allowed as part of a comprehensive vegetation management strategy as proposed by the American Lands Alliance (Alternative E) as modified by the suggestions delineated on page 2 of this comment letter.

Thank you in advance for considering these comments.

Sincerely,

D.J. Schubert
Wildlife Biologist