

January 4, 2006

Bureau of Land Management  
Nevada State Office  
Attn: Brian Amme, EIS Project Manager  
1340 Financial Blvd.  
P.O. Box 12000  
Reno, NV 89520

Dear Brian:

1 Thanks for the opportunity to comment on the Draft *Vegetation Treatments on Bureau of Land Management Lands in 17 Western States* and the Draft *Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States*.

2 I have well over 30 years of experience attempting to address the invasive weed problem in the Western United States. As such, I have become intimately knowledgeable of BLM, US Forest Service, and US Fish & Wildlife Service efforts to address the invasive weed problem on public lands throughout this area. For the most part, the vegetation management effort has not been successful. Simply, as many have, placing the blame on past overgrazing is not a productive way of addressing future management. Ecology is much more complex than that. There are a number of reasons for why the vegetation management program has not worked well, but this EIS appears to be an attempt by the BLM to start to address the problem in a more proactive manner than has been possible in the past. For this I applaud the effort. As such I fully support alternative B, but the EIS is lacking in some critical areas that still need to be addressed before the final document is published.

3 As a whole, the document does not adequately (1) describe the ecological impacts that are certain to occur if all the federal, state, and private landowners in the Western U.S. do not do a better job of addressing the problem that we are all facing. (2) Nor does it look at solutions as part of an ecological process. Instead, the approach seems to be to simply reflect the removal of undesirable species and does not reflect much thought into what happens after that. By addressing vegetation management in terms of ecological or biological sequences that look into the future achieves a much more comprehensive and sustainable result. An approach outlined by Dr. Roger Sheley and described by him as Ecologically-Based Rangeland Weed Management is one science based approach to

ecological manipulation<sup>1</sup>. This concept touches on numerous areas of vegetation manipulation, and is the basis for much of the newer science about invasive weed management in all the areas addressed by this EIS.

4 Another area not well addressed within this document is the need for collaboration between landowners. In my experience, this is the major effort that most managers miss, and is the most essential for a successful vegetation management effort. CWMA's (Cooperative Weed Management Areas) and the documented success of the demonstration weed management program that I initiated in east/central Nevada both show the difference from the status quo of most invasive weed programs. That collaboration needs to be an emphasis of this EIS.

5 The last point that needs to be better emphasized is to use all the tools available. While herbicides are a focus of one of these draft publications, the draft publication on Vegetation Treatments should have emphasized much more thoroughly how the various tools work together to achieve the goal of making native plant communities much more resilient and better able to resist domination by invasive plant species. Where we do not have complete knowledge, the document should reflect that and allow for incorporation of new knowledge as it becomes available.

6 Given the points that I made above, I strongly oppose all the other alternatives. Alternative A is no different than the current addressing of the invasive weed problem by the BLM. Except for some very noted exceptions, it is not working in most of the areas of the west. If it were, we would not have the vast acreages dominated by cheatgrass, red brome, or perennial invasive species that we are currently experiencing. Alternatives C, D, and E make it even much more difficult to address the invasive weed problem. Why make it much more difficult when the problem is getting worse daily as it is currently?

7 There is one last issue that needs to be addressed. Individuals who are opposed to the use of herbicides should study the science behind the drastic environmental changes that are occurring as a result of domination by a few non-native plant species. The wholesale homogenization of large areas of the west put at risk the sustainability of most of our ecological systems. It is readily apparent that the risks associated with herbicide use are significantly less than the risks of wholesale change in our ecology. While herbicide risks are real, and should be minimized wherever possible, they are a tool necessary to address a much more significant impact. We cannot ignore the dominate risk because of the fear of another much smaller risk.

8 In that vein, it is important that the agency be allowed as much flexibility as possible when newer tools become available. Where they are most appropriate, new tools – including new herbicides – should be used where science indicates that it is appropriate in the battle to combat invasive weed species domination.

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<sup>1</sup> Roger L. Sheley, Tony J. Svejcar, Bruce D. Maxwell, and James S. Jacobs. 2004. Healthy Plant Communities: Ecologically-based Rangeland Weed Management. Montana State University Extension Service. Montguide MT 199909AG.

I would like to address specific comments about the publications separately.

*Draft Vegetation Treatments on Bureau of Land Management Lands in 17 Western States*

- 9 Page 3-29 Fire Ecology – This section is an oversimplification, and in some cases an inaccurate description, of the ecological factors involved. Succession is a complex processes that we have not fully learned to appreciate. Overgrazing in the late 1800’s and fire suppression for the past 90 years have had more impact on most of the west than is indicated in this brief description of fire ecology. A reference to “State & Transition” succession models would be a much more defensible description than the section as it is currently written.
- 10 Page 3-30 2<sup>nd</sup> paragraph; emphasized that downy brome can be out-competed with adequate precipitation or by the 2<sup>nd</sup> year. This statement is usually inaccurate if sufficient downy brome is present to carry a fire in the second year or in subsequent years before perennial vegetation has had an opportunity to produce reproductive propogules. The 4<sup>th</sup> paragraph is inaccurate. “The major human influence on pinyon-juniper woodlands and fire’s role in these ecosystems has been ranching.” While the 1800’s overgrazing is accurate, most of the fire suppression of 1940-present has been management action by the agencies. Paragraph 7 is inaccurate in that it does not address PJ encroachment into grass/shrub rangelands. This encroachment has occurred primarily because of the fire suppression of the past 90 years and has allowed trees to proliferate on soils where the PJ woodlands are not sustainable. This omission is a MAJOR error to this discussion.
- 11 Page 3-40 Table 3-5. Where did these numbers originate from? Nevada has more than 3 million acres of land occupied by virtually pure bromus species. The figure for halogeton and medusahead are equally inaccurate. I could not find the source in the references at the end of the book.
- 12 Page 3-55 Table 3-6 is not really relevant unless the grazing AUM’s are compared over time. Changes happen slowly on much of the land managed by the BLM. What is the change in grazing pressure that has occurred?
- 13 Page 3-63 The effect of herbivory by bison and other grazing animals (including insects, rodents and rabbits) is part of this environment with subsequent effects from that use, especially when in concentrated numbers for longer periods of time.
- 14 Page 3-65 6<sup>th</sup> paragraph. The sentence: “However, no lands were withdrawn from public domain to form these public lands.” is incorrect.
- 15 Page 3-77 Last paragraph – This needed to be addressed also in other areas talking about changes that are occurring in vegetation composition elsewhere in the document.

16 Page 4-3 Practices to minimize herbicide treatment. This section needs to talk in depth about how the concepts of Integrated Invasive Weed Management can be incorporated into all other aspects of land management – especially the range and fire programs – of the BLM.

17 Page 4-35 The lack of information in Table 4-5 leads the reader to inaccurate or incomplete conclusions. For example: Why is a particular species enhanced by fire? This is key information needed to address how a manager will address weed infestations following fire. It is currently information I have not seen included in BARE team analysis.

*Draft Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States.*

18 Page 1 3<sup>rd</sup> paragraph is good.

19 Page 1 last paragraph leaves out the role of science in addressing the invasive weed problem. Where is the consultation and incorporation of new knowledge into changes in management practices as the knowledge is developed?

20 Page 2 Alternative A has been demonstrated that it is inadequate to address the scope of the invasive weed problem as it is currently being implemented. As such, the effect of increased infestations of invasive weeds on the environment needs to be included in this EIS.

21 Page 3 Alternatives C, D, & E greatly increase costs to the federal government and decrease the effectiveness of the invasive weed management program. As such, the effect of increased infestations of invasive weeds on the environment needs to be included in this EIS and the effects of those increased costs and decreased effectiveness need to be addressed in this EIS.

22 Page 3 Alternative E does not address how invasive mustard (Brassicaceae) species and some annual grasses will be addressed without this family of herbicides.

23 Page 2-13 Alternative E does not address effects on amphibians, but then none of the alternatives adequately address the effects of the invasive species on amphibian populations.

24 Page 2-14 Herbicide Treatment Standard Operating Procedures – need to incorporate Ecologically Based Invasive Weed Management as part of the standard operating procedure.

25 Page 2-16 Wilderness areas – The benign neglect of invasive species suggested in this section is inexcusable for a land management agency. Specifically because it is perceived by managers that motorized equipment cannot be used within wilderness areas then the agency has a responsibility to take a

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VERY aggressive stance toward control of invasive species before they have been allowed to dominate that “pristine” environment. At the very least, this EIS should analyze the effect of invasive weed domination if a less aggressive management effort is maintained over the long term.

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Page 2-21 The section of Coordination and Education needs to be strengthened substantially. As it currently is written, it will not accomplish the goal of proactive invasive plant management.

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Page 3-1 This section needs to focus on the effect of invasive weed expansion and domination over native plant communities. As it currently is written it only talks in a very general way about what are the current estimated acreages. This is only a very small part of the picture. It does not address the very rapid expansion of dominated acres and the wholesale environmental changes and consequences as a result of the domination by a very few species of plants that are forming expansive monocultures.

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Section 4-1 This section needs to specifically address the environmental consequences of invasive weed domination. It needs to discuss fully the environmental consequences of extensive monocultures of alien plant species and the resulting reduction of native flora and fauna that cannot survive in this newly forming environment. It also needs to address better the environmental consequences of herbicides on the plant communities where they are used. The consequences will be different for different classes of herbicides.

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Thanks again for the opportunity to comment on this draft document. If you have questions about my comments, please contact me.

Sincerely,



Robert E Wilson  
Extension Educator

Enc.