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February 4, 2006

Mr. Brian Amme
PEIS Program Manager
Nevada State Office
PO Box 12000
Reno, NV 80520-0006

EMC0562

RE: “Vegetation Treatments of Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Report”.

Dear Mr. Amme,

1 The Lands Council is a public interest, non-profit organization that is concerned about the use of herbicides treatments for control of invasive species on approximately 1 million acres of public lands in 17 western states. Herbicide spraying on public lands in Northwestern states is of particular concern to our members.

2 Many of The Lands Councils members enjoy activities on public lands. The Herbicide Program directly and significantly affects the members and volunteers of The Lands Council. We strongly disagree with the unnecessary and hazardous use of herbicide applications as part of the Draft Environmental Statements (DEIS) proposed actions. The following discussion outlines the issues that are of particular concern to our organization.

1. Preferred Alternative B

3 The Lands Council strongly opposes the preferred Alternative B, which allows herbicide use and also proposes the use of new herbicides. The range of alternatives should be developed based on the statutory goals and requirements of NEPA, NFMA, and the ESA. 40 C.F.R. § 1502.2(d) (analyses shall state how alternatives will or will not achieve the requirements of NEPA and other environmental laws and policies); *See Westlands Water District v. U.S. Dept. of Interior*, 376 F.3d 853, 872 (9th Cir. 2004). Instead, the BLM seems primarily focused on experimenting with new chemical treatments of invasive plants, to the exclusion of other alternatives.

4

The alternatives section of NEPA documents are the foundation and crux of the law and without providing an adequate range of feasible alternatives within the PEIS, its analysis is incomplete and violates NEPA requirements. The BLM fails to show preference for alternatives that consider the contributing causes of noxious weed infestation. The preferred alternative does not consider non-chemical treatments such as integrating a combination of goat grazing, mowing, prescribed burns, bio-controls, ground covers, etc.

5

NEPA requires that all feasible alternatives be objectively evaluated. By disregarding scientific literature (see citations later in this comment letter), the PEIS is not giving preference to reasonable and feasible alternatives that must be included as part of the possible effective treatment methods. Moreover, the Council on Environmental Quality (CEQ) advises

[i]n determining the scope of alternatives to be considered, the emphasis is on what is ‘reasonable’ rather than on whether the proponent or applicant likes or is itself capable of carrying out a particular alternative. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant. CEQ, *Forty Most Asked Questions Concerning CEQ’s NEPA Regulations*, § 2 (a).

6

First, the Lands Council supports implementation of reasonable alternatives that increase emphasis on reducing conditions that contribute to invasive plant introduction, establishment, and spread. Moreover, the Lands Council supports reasonable alternatives that do not include herbicide application for invasive species control. Our comments about these two core issues will be addressed below.

B. The Lands Council Proposes Addressing Underlying Causes of the Spread of Invasive Plants on Public Lands as a Preferred Alternative

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The National Environmental Policy Act (NEPA) and its implementing regulations require the Region to address the *causes* of invasive plants and to design alternatives around eliminating the introduction of them. 40 C.F.R. § 1508.25 (scope of the proposed project). The selected invasive plant management project focuses too much on herbicidal treatment of the spread of invasive plants e.g. the increasing number of populations of weeds – rather than preventing the underlying causes of these increases.

The BLM standards must adequately address prevention of the spread of invasives by other means. Logging, road building, off road vehicles and livestock grazing are causes for the introduction and establishment of non-native plant species on public lands. Invasive weeds “hitchhike” on the tires of logging trucks, ORV’s, and on livestock hooves. Noxious weeds such as Dalmatian Toad Flax and Knapweed are easily established when the ground has been disturbed by these activities.

8

Herbicide treatments fail because they are “treating” symptoms, not the causes, of weed invasion and undesirable vegetation. Passive restoration is a more potent management tool than the broad application of new toxic herbicides. This involves the cessation of all activities, including herbicide applications that cause or can exacerbate conditions conducive to the establishment and growth of invasive species. Instead, the BLM should close areas to grazing and exclude operators and users where a weed problem exists. This includes closing all roads that are weed vectors as well as requiring weed free feed on all BLM lands.

3. The BLM Should Implement Alternative C

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The Lands Council supports the application of Alternative C, which involves no use of herbicides for weed control. Herbicides should only be used as “tools of last resort”- if at all. Herbicide resistance may aggravate the problem of noxious non-native weeds rather than solve it. Seriously, considering alternatives to herbicide for curtailing the spread of invasive plants would meet the purpose and need of the proposed project, which is to control the spread of invasive plants across BLM administered public lands.

a. Non-Herbicide Treatments for Noxious Weed Species

10

The Lands Council is adamantly opposed to the use of Roundup. While the manufacturer Monsanto (the BLM’s source for Roundup toxicological and safety information) touts Roundup as relatively safe and nontoxic, glyphosate (the active ingredient in Roundup) and its formulations can cause serious health repercussions, most commonly respiratory or contact symptoms. A Swedish study has linked glyphosate exposure to the lymphatic cancer non-Hodgkins lymphoma. *See* Hardell & Eriksson (1999). Glyphosate is nitrosated “very readily” to the contaminant N-nitrosoglyphosate, a member of a chemical family of which approximately 75% are know carcinogens. *See* Sittig (1980); Young and Khan (1978); Lijinsky (1974). While the EPA thus far considers this contaminant to be “not toxicologically significant”, consideration of its carcinogenic potential has thus far relied exclusively on the results of unpublished studies conducted by Monsanto, hardly an unbiased source. *See* Rubin (1996); EPA (1993).

11

The BLM has neglected to consider the use of non-toxic organic herbicides and other weed control methods utilized by organic farming practices. For example, St. Gabriel Laboratories produces an organic herbicide called Burn Out. It is advertised to work faster than Roundup and by meeting NOP Organic Farming Requirements is less likely to have adverse impacts to the environment or human health.

b. Manual Removal Methods and Integrated Methods

The Lands Council would like to see integrated manual and cultural treatments considered as a preferred alternative. Hand pulling, hoeing, and other manual removal methods are most effective for smaller infestations. They are an “important tool in steep or uneven terrain” and “typically cause minimal environmental impact”. DiTomaso (2001). The following excerpt was taken from the *Integrated Vegetation Management's Technical Bulletin, Bio-Integral Resource Center, Berkeley, Drlik et al (1998).*

12 “The Bradley method is an approach that was developed by the Bradley sisters in Sydney, Australia. It combines the strategies of containment and reduction and can be used most successfully in natural areas where weed stands are close to or intermingled with native vegetation. This approach uses carefully planned hand weeding to tip the ecological balance in favor of the native vegetation, which is then allowed to regenerate and fill the area where the weeds have been removed. The weeding is always done outward from the edge of the best stands of natives. The Bradley’s recommend choosing an area you can visit easily and often, where the native vegetation meets a mixture of natives and weeds not worse than 1 weed to 2 natives. Using this method, the two Bradley sisters (both over fifty) cleared a 40-acre woodland reserve so successfully that the area needed only slight attention once or twice a year (mainly in vulnerable spots such as roadsides and creek banks) to be maintained weed-free. To do this they expended only a minimum amount of time: an average of 45 minutes per day between the two of them. This low-cost, low-impact approach enables restoration to occur with minimal labor or equipment.”

13 Other management methods recommended by experts and ignored as a preferred alternative are tilling, mowing, and grazing. For instance mowing, a cost effective late season tool, is a popular treatment method. *See* DiTomaso (2001). Properly timed mowing (or weed whacking) can provide excellent control, and reduce seed banks and populations. The BLM should be favoring an integrated method alternative that combines mowing, grazing, and hand pulling with revegetation efforts.

c. Herbicide Effect on Native Plant Species

14 The Lands Council members are concerned about the effect of herbicides on biodiversity as well as the aesthetic value of native plant species. Evidence exists that herbicides may create conditions more hospitable to invasive species than those that were present before the chemicals were used.

15 Use of herbicides where non-native weed plants already occur frequently results in a reproductive advantage for non-native species, which then expand rapidly due to the lack

of competition. In a short period, this can result in an exponential increase in non-native plants. *See* Wooten and Renwyck 2001; www.kettlerange.org/weeds. Support for this is found in literature and is very relevant to the issue at hand.

15

For example in 1996, McDonald and Everest of the USFS Pacific Southwest Research Station, found that cheatgrass populations, not observed in the study plots at the beginning of a study, exploded in an herbicide-treated plot (at 743,667 plants per acre with 22% foliar cover) where it was 6 times greater in number of plants and more than 7 times greater in foliar cover than in the control plot (130,300 plants per acre, 3% foliar cover) two years after treatment.

A study done by the British Columbia Ministry of Forests Research Program in the Upper McKay Creek near Lillooet, B.C. found that the choice of herbicides can have a profound effect on the plant species content and diversity many years after treatment. *See* <http://www.for.gov.bc.ca/hfd/pubs/Docs/Lmh45.htm>. ("The abundance of several low shrub species (black twinberry, black gooseberry, thimbleberry, trailing raspberry, red raspberry, birch-leaved spirea, and black huckleberry) was reduced for nine years following application of glyphosate.") As this report further observes, "Plant communities naturally change over time, but sudden shifts in structure and composition may negatively affect the availability of food for wildlife." The BLM must take these comments into evidence in consideration of its range of preferred alternatives.

Conclusion

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The BLM proposal to resort to herbicides for control of noxious weeds demonstrates a generalized and inadequate approach to invasive species management. The Lands Council hopes the BLM can address the concerns of the public while administering the best land conservation management practices afforded by modern science. We strongly believe the use of toxic chemicals in BLM management lies outside of these defined characteristics. The BLM has a very real and unique opportunity to show foresight and leadership for other federal land management agencies in developing an insightful non-toxic long-term integrated management plan to successfully deal with invasive species and habitat restoration.

17

The Lands Council would like to thank the BLM in advance for regarding our comments. Please consider the issues discussed above prudently. We look forward to your responses to the public comment period.

Sincerely,

Mike Petersen, Executive Director