



Via Web

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RE: Invasive Plant Control Project

This letter responds to the February 2014 Draft Supplemental Environmental Impact Statement for the Invasive Plant Control Project (“DSEIS”). Legal notice of the 45-day comment period was published in the *Federal Register* on March 21, 2014, making this comment timely.

The Center for Biological Diversity (“the Center”) is a non-profit public service organization with more than 775,000 members and online activists dedicated to conservation and recovery of at-risk fauna and flora, including those occurring on the Carson and Santa Fe National Forests. It has long-standing interests in management of forest lands throughout the Southwest, especially as that management affects wildlife species and habitat.

Alternative C is the best alternative based on the purpose and need for this project

The stated purpose and need for this project is “to maintain or improve the diversity, function and sustainability of desired native plant communities on the Forests.” DSEIS at iii. Alternative C would allow the use of biological, grazing, manual, mechanical, and prescribed fire methods for eradication of invasive plants from the Forests’ land. In contrast, Alternative B would also allow the use of herbicides and Alternative D would require the use of herbicides only. The Center supports the removal of invasive plants from National Forest lands. However, the Center also believes that such removal can be accomplished without the use of herbicides except in rare and limited circumstances.

The DSEIS states that “[m]ost infestations [of invasive plants] (more than 75 percent) are less than 1 acre” DSEIS at 6. This fact makes it clear that the invasive plant problem on the Carson and Santa Fe forests is still at a point where it can be managed without widespread herbicide use. However, as currently proposed, Alternative B and Alternative D would allow the use of herbicide application on **every acre** needing treatment, either alone or in conjunction with other treatment methods. DSEIS at 47-50. Due to the functionality of herbicides, it is likely that treating over 15,000 acres with a variety of herbicides will result in decreased viability and death of some native plants within both the Carson and Santa Fe National Forests. The Forest Service recognizes those threats in the DSEIS: “Effects [of herbicide use] would be a change in composition of forbs, grasses, and shrubs in treatment areas. Nontarget plants could be damaged by unintentional application, drift, or residual soil activity of herbicides.” DSEIS at 60. In contrast, Alternative C would not create this risk to native plant species.

The Forest Service also touts the “flexibility” of Alternative B, stating that “[b]ecause of the diversity of treatment methods available, weeds are the most likely to be successfully controlled under alternative B.” DSEIS at 58. However, Alternative B includes just one more tool than Alternative C for controlling invasive plants, a tool with uncertain and potentially harmful effects on native plant and animal species. Alternative C

provides the Forest Service with a range of eradication tools, none of which present the risks associated with widespread herbicide use.

The Forest Service relies on the fact that due to funding levels “the acres treated would logically be fewer in alternative C than alternative B,” therefore under Alternative C “it is likely that the rate of weed spread would exceed the rate of weed control.” DSEIS at 51. However, the Forest Service does not discuss the fact that volunteers and community members would be available to assist in execution of this project, especially if the project does not require the application of herbicides requiring special training. The Forest Service should more seriously consider the potential availability of volunteers and how this may facilitate faster and more effective treatment under Alternative C.

Additionally, even though Alternative C “would cause more ground disturbance and associated impacts to soils” than the other proposed alternatives, the Forest Service has stated that “all alternatives would remain with soil erosion levels needed to protect long-term soil productivity.” DSEIS at xii. Moreover, “minor, short-term increases in sediment,” DSEIS at xi, due to Alternative C present significantly less risk to species and habitat than “herbicide delivery to streams,” *id.*, under Alternative B and D.

Finally, the following statement contained within the DSEIS is misleading and arbitrary and should be removed:

By controlling the spread of weeds and protecting native plant communities, habitats and watershed conditions on the two national forests, alternatives B and D would maintain or enhance social or economic conditions, particularly for local rural communities in northern New Mexico who typically rely on the two national forests’ natural resources for their livelihood, traditional culture and quality of life.

DSEIS at xii, 29. Alternative C would also maintain social and economic conditions by achieving the same result, albeit through different means. By abstaining from including Alternative C in this paragraph, the Forest Service suggests to readers that it would negatively impact social or economic conditions, which is unsupported by any evidence presented by the Forest Service.

The Carson and Santa Fe National Forests should adopt a precautionary approach to minimize negative impacts on wildlife and forest resources

The Forest Service relies on the fact that “risk assessments concluded that potential risks of harm to most wildlife species are low for herbicide formulations proposed for use at the rates and application methods proposed” for the conclusion that “herbicides, when used at the application rates and concentrations listed on the labels, would have a very low risk of causing harm (short or long term) to wildlife species.” DSEIS at 60. However, a risk remains and there is no information available at this time as to the effects on wildlife species from exposure to the combination of herbicides that could potentially be used in this project.

Moreover, the herbicides proposed for use, as identified in the DSEIS at pg. 160, table S-64, have been found to have negative impacts on plant and animal species. *See* DSEIS at Appx. 3. Additionally, numerous other studies have identified negative impacts on plants and animals from these herbicides. Aminopyralid and picloram can negatively impact ponderosa pine. (Wallace et al. 2012). 2,4-D is an endocrine disrupting chemical that has been documented to harm wildlife species through hormone disruption. (Colborn et al. 1993). Dicamba, glyphosate, triclopyr, and 2,4-D can cause animal mortality and other adverse effects. (USDA 2007). While these impacts may be mitigated by the amount of herbicides used in project treatments and through other mitigation measures, it is likely that chemical application throughout forest lands will negatively impact wildlife in some way. Moreover, use of herbicides always involves a risk to human health and safety.

The Forest Service should take a precautionary approach to actions that have the potential to negatively impact plant and animal populations on National Forests, especially where the possible effects are uncertain. Due to the wide variety of other methods available to deal with the invasive plant problem on the Carson and Santa Fe National Forests, the Forest Service should avoid using herbicides for this project to minimize risk and prevent unintended or unforeseen negative impacts to plant and animal species.

Grazing by goats and sheep needs to be monitored and controlled to prevent further spread of invasive plants

One of the proposed methods for invasive plant removal through this project is “[c]ontrolled grazing using goats and sheep to intensively and repeatedly graze weeds.” DSEIS at vi. The treatment objectives for this project are eradication, control, and containment. DSEIS at vii. The DSEIS asserts that “[p]roperly managed, controlled livestock grazing can work in combination with other methods to reestablish healthy, resilient native plant communities.” DSEIS at 50. While targeted grazing by sheep and goats can successfully control some invasive plant populations, there is also a risk of spread of invasive plants by ungulates through seed dispersal, selective grazing, and soil disturbance. (Vavra et al. 2007). Therefore, this type of invasive control method should be carefully implemented and monitored.

However, the design features and monitoring requirements for this project do not include any instruction for monitoring for potential spread or introduction from controlled grazing operations. It is important to include direction for this specific project method in order to ensure that grazing is not inadvertently facilitating the spread of invasive plants to other forest lands or outside forest lands. We recommend including the following restrictions for sheep and goat grazing as part of this project:

- Sheep and goat grazing should be restricted to areas in which seasonal seeding has not yet occurred
- Keep sheep and goats that have grazed on invasive plants in a holding field for 24-48 hours before relocating them
- Maintain intensity and duration of grazing at a level that minimizes disturbance to native plants

If herbicides are used on Forest lands, they should be the treatment method of last resort

According to the Forest Service’s summary of treatments for Alternative B, herbicides could potentially be used on every single affected acre within the Forest. DSEIS at 17, tbl. S-7. As Alternative C demonstrates, herbicides are not necessary to eradicate or control invasive plants. Rather, if implemented properly using an adequate number of Forest Service personnel and volunteers, a variety of other methods can lead to the eradication and control of invasive plant species. Therefore, the Forest Service should use herbicides only in extreme situations where other methods are found to be ineffective. If the Forest Service makes a decision to retain herbicide use as an allowable action for this project, it should limit such use to areas in which no other methods would be effective, effectively making herbicide use a treatment of last resort.

Until consultation with Fish and Wildlife Service is complete, it is not possible to accurately assess potential impacts on fish and wildlife species

The Endangered Species Act (“ESA”) provides that each “Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any” agency action “is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification” of critical habitat. 16 U.S.C. § 1536 (a)(2). The National Environmental Policy Act (“NEPA”) requires environmental impact statements (“EIS”) to analyze potentially significant direct, indirect, and cumulative environmental

impacts from proposed actions. 42 U.S.C. § 4332(C); 40 C.F.R. § 1508.7. To meet the requirements of the ESA, the Forest Service must formally consult with the Fish and Wildlife Service (“FWS”) before a decision is issued for this project. Additionally, under NEPA, the Forest Service must analyze and disclose the potential impacts on threatened and endangered species from this project, including the potential impacts from herbicide use.

Within the DSEIS the Forest Service repeatedly emphasizes that the action alternatives are not likely to adversely affect threatened or endangered plant or animal species. *See* DSEIS at 56 (“Not likely to adversely affect the Holy Ghost ipomopsis”), 72 (“may affect but is not likely to adversely affect, and may be beneficial to the Mexican spotted owl” and “may affect but not likely to adversely affect the Southwestern willow flycatcher”); *see* Table S-35. However, the Forest Service has not yet completed formal consultation with the FWS for this project. The most recent Biological Assessment (“BA”) completed by the Forest Service has not been reviewed by the FWS, so the information provided in the DSEIS concerning impacts to threatened and endangered species does not represent the most current findings of the FWS. Until such time as the FWS concurs with the Forest Service’s biological assessment or issues a biological opinion, the Forest Service cannot provide updated or accurate information as to the likely impact on threatened and endangered species from this project. The Forest Service needs to supplement this DSEIS once formal consultation with FWS has been completed in order to meet the requirements of the ESA and NEPA.

More information is needed to assess the effects on native plant and animal species for the herbicides proposed for this project

The BAs from 2005 (present in the project record) and the current Forest Service assessment of wildlife impacts, (presented in the DSEIS) fail to include specific information as to the potential impacts of the specific herbicides proposed for use on the specific types of plants and animals present within the project area. While the DSEIS provides “Specific Herbicide Characteristics and Environmental Effects” analysis for all the proposed herbicides within Appendix 3 of the DSEIS, these assessments are general in nature and do not address the potential impacts to viability and populations of the wildlife or plant species on the Carson and Santa Fe National Forests that are discussed within other sections of the DSEIS. The Forest Service should integrate the information related to specific pesticides with the discussions of the potential impacts to plant and wildlife species, focusing on how specific species’ viability and populations may be affected due to the unique characteristics of the various herbicides. As currently written, both the DSEIS and the BAs lack adequate information to fully understand the relevant impact of the specific herbicides proposed for use in this project. Merely stating that mitigation measures should prevent negative impacts is insufficient to meet NEPA requirements that all direct and indirect impacts are disclosed and discussed.

This project should require actions to prevent initial introduction of invasive plant species

The Forest Service clearly acknowledges the problem of continued introduction and spread of invasive plants, and concedes that “it appears the overall trend is towards the establishment of new weed populations.” DSEIS at 53.

For example, weeds could establish themselves in areas where activities disturb soil, such as thinning, firewood gathering, prescribed burning, dispersed recreation, grazing, road maintenance, road building, and decommissioning even with preventive measures in place. Ongoing, common activities in the Carson and Santa Fe National Forests by weekend recreationists, forest firefighting crews, grazing allotment permittees, or livestock all have the potential to unknowingly spread weeds from one location to another, bring them onto National Forest System lands, or spread them onto other lands.

Id. However, this proposed project does nothing to address those sources or reduce the continued introduction of

invasive plants. Without including a comprehensive strategy to address introduction and spread of invasive plants, it is impossible for the Forest Service to assert in good faith that carrying out any alternative will result in the eradication and containment of all invasive populations on these forests. *See* DSEIS at 42.

Thank you for the opportunity to comment on this project and for assistance in obtaining project documents. Please timely notify me at the addresses shown below of all further actions taken related to this projects and additional opportunities to provide comment.

Sincerely,



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REFERENCES

- Colborn, T., vom Saal, F. S., & Soto, A. M. (1993). Developmental effects of endocrine-disrupting chemicals in wildlife and humans. *Environmental health perspectives*, 101(5), 378, available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1519860/pdf/envhper00375-0020.pdf>.
- USDA. June 2007. *Meeting the Challenge: Invasive Plants in Pacific Northwest Ecosystems* (General Technical Report PNW-GTR-694). Forest Service Pacific Northwest Research Station, available at http://www.fs.fed.us/pnw/pubs/pnw_gtr694.pdf.
- Vavra, M., Parks, C. G., & Wisdom, M. J. (2007). Biodiversity, exotic plant species, and herbivory: the good, the bad, and the ungulate. *Forest Ecology and Management*, 246(1), 66-72, available at http://ckwri.tamuk.edu/fileadmin/user_upload/docs/WAGSO/Discussion_Topics/Introduction_of_Exotics/The_good_the_bad_and_the_ungulate.pdf.
- Wallace, J. M., Prather, T. S., & Peterson, V. (2012). Effects of Aminopyralid on Ponderosa Pine (*Pinus ponderosa*). *Invasive Plant Science and Management*, 5(2), 164-169, available at http://www.cals.uidaho.edu/weeds2/IWR/iwr-v6_website/files/Download/aminopyralidpinetolerance.pdf.