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First name: Laura
Last name: Cunningham
Organization: Western Watersheds Project
Title: California Director
Comments: Please accept these comments on the Integrated Invasive Plant EIS on behalf of Western Watersheds Project. Thank you, Laura Cunningham

Dear Interdisciplinary Team Leader Winfrey:

On behalf of the staff and members of Western Watersheds Project (WWP),

please accept the following scoping comments as you prepare this EIS on Integrated

Invasive Plant Treatments.

WWP is a nonprofit organization dedicated to protecting and restoring

western watersheds and wildlife through education, public policy initiatives, and

legal advocacy. With over 5,000 members and supporters throughout the United

States, WWP actively works to protect and improve upland and riparian areas,

water quality, fisheries, wildlife, and other natural resources and ecological values

in the Great Basin of Nevada and California.

The Initial Proposed Action says, [ldquo]All herbicides or formulations registered

and approved by the Environmental Protection Agency would be applied according

to the label specifications.[rdquo] Relying on the Environmental Protection Agency does

not carry as much weight as it used to, since important regulations have been

weakened.

Section 9111 of the Farm Bill released this week in the House of

Representatives would allow the Environmental Protection Agency to approve

pesticides without analyzing harm to species or critical habitat. See relevant section

below:

SEC. 9111. REGISTRATION OF PESTICIDES.

[ldquo](6) in subparagraph (A), as amended, by adding at the end the

following new clause:

[lsquo][lsquo](v) when used in accordance with widespread and commonly recognized practice it is not likely to jeopardize the survival of a federally listed threatened or endangered species or directly or indirectly alter, in a manner that is likely to appreciably diminish its value, critical habitat or both the survival and recovery of such species.[rsquo][rsquo] 1 (
1 https://agriculture.house.gov/uploadedfiles/agriculture_and_nutrition_act_of_2018.pdf)

For every herbicide treatment we request an Environmental Assessment with 30-day comment period, and a public meeting for comment in the nearest town.

We also request that all Federally Threatened and Endangered species, and USFS sensitive species, be listed and impacts of herbicide use on these species analyzed.

Impacts to Greater sage grouse (Centrocercus urophasianus) and Bi-state sage grouse distinct population segment should be analyzed. Application of herbicides to sagebrush areas poses a hazard to sage-grouse populations (Klebanow 1969). Longterm studies in North Park, Colorado, revealed that applying 2,4-D resulted in reduced cover of sagebrush, fewer sagebrush plants and forbs, and lek abandonment (Braun 1982). 2,4 D should not be used where sagebrush habitat is found. Spraying of herbicides not only eliminates sagebrush, leading to increased habitat fragmentation, but also may poison insects and other invertebrates eaten by sage-grouse.

All lek sites and adjacent nesting habitat (to 18 km from the lek) should be protected from burning, spraying, and targeted grazing.

The use of off-highway vehicles for herbicide application should be very limited, as driving over delicate biological soil crusts can destroy them for decades.

We are opposed to aerial spraying of any kind, as this can potentially harm a wide variety of native plant species, native grasses and forbs that may not be surveyed for. How would drone application of herbicides be handled by the operator to prevent spills, accidents, and misfires?

The use of glyphosate, commonly sold as Roundup, should be carefully limited, as increasing studies show potential carcinogenic effects on humans, and harm to animals, including low-level toxicity to some fish larvae.2 (

2 https://www.the-scientist.com/?articles.view/articleNo/51574/title/How-Toxic-is-the-World-s-Most-Popular-Herbicide-Roundup-/)

The decline in the population of pollinators is a worrying phenomenon worldwide. In North America, the extensive use of herbicides in both agricultural and wildlands applications could have negative effects not only on honey bees, but on native bees and other pollinators as well in Great Basin ecosystems. One study by Helmer et al. (2015) found that glyphosate application can have negative effects on honey bee carotenoid[ndash]retinoid systems, that may be altered by sublethal fieldrealistic doses of herbicides.

We support manual treatments of invasive plants, and limited use of mechanical treatments as along roadsides.

We do not, however, support targeted grazing. DeLong et al. (1995) found that predation rates on sage grouse nests in Oregon were negatively related to percent cover of tall grass and medium-height shrubs, and suggested that livestock grazing results in the removal of grass cover that can negatively affect nesting sagegrouse. Healthy native herbaceous understories support insects and forbs that are important in diets of pre-laying hens and chicks. Livestock can trample sensitive resources such as sage-grouse nests and biological soil crusts.

Because domestic sheep and goats pose a disease threat to bighorn sheep which

occupy parts of the Forest, the Forest should not to allow their use in the targeted grazing proposal. However, there is little literature that addresses the effectiveness of cattle for use in targeted grazing. Most of the literature regarding targeted grazing examines the impacts using sheep and goats. This is a major gap in the EIS and should be analyzed in detail.

There is evidence of the harmful impacts of livestock trampling on pygmy rabbit burrows, and the burrows of other small mammals. USFWS in 68 FR 43 states that cattle can directly damage pygmy rabbit burrow systems through trampling.

Often targeted livestock grazing is implemented well after cheatgrass (Bromus tectorum) has started to dry up and dropped its seeds. Then livestock trample the dried grass pushing seed into the soil, improving the seed germination of cheatgrass. On rangelands in good condition, the annual cheatgrass typically cannot outcompete the native grasses. One of the factors that protects native grasses are soil crusts. These crusts cover the soil surface in the spaces between the native bunchgrasses. They make it difficult for cheatgrass seeds to become established. However, when the soil crust is provides an empty niche for cheatgrass to become established.

To quote from one paper by Reisner et al. (2013): [ldquo]If the goal is to conserve and restore resistance of these (sagebrush ecosystem) systems, managers should consider maintaining or restoring: (i) high bunchgrass cover and structure characterized by spatially dispersed bunchgrasses and small gaps between them; (ii) a diverse assemblage of bunchgrass species to maximize competitive interactions with B. tectorum (cheatgrass) in time and space; and (iii) biological soil crusts to limit B. tectorum establishment. Passive restoration by reducing cumulative cattle grazing may be one of the most effective means of achieving these three goals.[rdquo]

Prescribed fire is a complex subject and should be carefully considered.

Although some studies have demonstrated neutral or positive effects on sage-grouse habitats from fire, other studies have documented population declines on sagegrouse and long-term habitat degradation. While some short-term benefits, such as increases in annual forbs, may result from prescribed burning, nesting cover may be reduced and thus become less suitable (Wrobleski 1999). Areas with a mosaic of sagebrush, tall native grasses, and fingers of burned habitat have had good use by Bi-state sage-grouse in Mono County CA, according to personal communications with California Department of Fish and Wildlife biologists tracking radiotelemetered sage-grouse in 2017.

We recommend no livestock grazing after prescribed burns for a period of 10 years to reduce the chances of continuing disturbance that can lead to cheatgrass invasion.

Restoration should only include the use of native grasses, forbs, and shrubs to the Great Basin, not Eurasian species such as crested wheatgrass (Agropyron cristatum) and Kochia (Kochia scoparia). If possible, native seed sources should be collected locally to the restoration project to preserve local genetic integrity.

Please list each invasive species and give details of its invasion history, life history, negative impacts, and best management for control. We had difficulty finding exactly which invasive species will be addressed in this EIS, looking through the various Forest Service national pans and strategic frameworks. Please include a chapter about each invasive species and the specific approach that will be proposed to control each plant.

Please do not include any native juniper (Juniperus spp.) or pinyon pine (Pinus monophylla) in this EIS document, as we do not consider these native species invasive nor in need of treatments.

All monitoring activities taking place during adaptive management phases

should be made available to the public on USFS websites, so that interested parties may participate in the adaptive management process and offer input.

We support the Forest[rsquo]s efforts to control certain invasive, noxious, nonnative species in Nevada and eastern California which harm native species and communities, and would like to work together towards reducing these species (in an ecological manner), such as cheatgrass, Whitetop (Lepidium draba), Russian knapweed (Acroptilon repens), Halogeton (Halogeton glomeratus), Russian thistle (Salsola tragus), bull thistle (Cirsium vulgar).

Will invasive tree species such as Russian olive (Eleagnus angustifolia) and tamarisk (Tamarix spp.) be included in this EIS?

Western Watersheds Project thanks you for this opportunity to comment on this EIS. Please keep Western Watersheds Project informed of all further substantive stages by contacting me at lcunningham@westernwatersheds.org.

Laura Cunningham

References:

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