UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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REGIONAL
ADMINISTRATOR'S
DIVISON

February 8, 2021

Mel Bolling, Forest Supervisor
Caribou-Targhee National Forest
Attn.: Invasive Weeds Project
1405 Hollipark Drive
Idaho Falls, Idaho 83401

Dear Mr. Bolling:

The U. S. Environmental Protection Agency has reviewed the U.S. Forest Service Draft Environmental Impact Statement (DEIS) for the proposed Invasive Plant Management Project on the Caribou-Targhee National Forest and Curlew National Grassland including the Jedidiah Smith Wilderness Area and the Winegar Hole Wilderness Area, Idaho (EPA Region 10 Project Number 19-0069-AFS; CEQ # 20200262). The EPA comments are provided pursuant to our responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act.

The DEIS analyzes the potential environmental impacts associated with a proposal to use an Integrated Weed Management (IWM) approach to control the invasive and noxious weeds in the planning area. The analysis area is nearly 3 million acres, of which less than 2 percent is currently identified as being infested with invasive, non-native, and/or state-listed noxious weeds. Within the Jedediah Smith Wilderness (123,451 acres) and the Winegar Hole Wilderness (10,721 acres), four primary strategies would be used to achieve the overall purpose of this project: prevention, adaptive management, IWM, and minimum tool requirements necessary for the administration of the Wilderness. The control and management aspect of the IWM strategy is the focus of the analysis in the EIS.

In our December 23, 2019 Scoping comments, EPA raised concerns about impacts to environmental resources from the use of some of the proposed tools to treat invasive plants in the planning area and offered recommendations to minimize impacts. Proposed treatment methods include biological and herbicide (chemical) controls, manual and mechanical methods, and rehabilitation and restoration methods. We appreciate the efforts made within the DEIS to address our expressed concerns.

We agree that the proposed action (Alternative 2) is the environmentally preferred action to control invasive species. Alternative 2 (Proposed Action) brings forward all the treatment actions presently available under the Alternative 1-Current Action, as well as providing for the use of one additional herbicide. EPA generally supports the control of invasive plants across the landscape. However, we have additional recommendations to address other concerns within the EIS.

The DEIS discloses that, due to a deficiency of direct information on environmental effect of herbicides, uncertainties are associated with the following factors: (1) the fate of herbicides in streams; (2) the resiliency and recovery of aquatic communities; (3) the site-specific foraging habits of salmonids and the vulnerability of key prey taxa; (4) the effects of pesticide mixtures that include adjuvants or other ingredients that may affect species differently than the active ingredient; and (5) the mitigating or

exacerbating effects of local environmental conditions.

Potential impacts on water resources
EPA remains concerned about potential impacts to aquatic resources such as fish, wetlands, surface and groundwater. The DEIS discloses (3.3.3.3.1.6 Exposure of Aquatic Life to Contaminants in Water) that the Proposed Alternative could negatively affect the aquatic food chain and that the risks of the action alternatives from potential changes in the integrity of the food web and other aspects of the biological community are only partially understood (page 126). EPA supports and recommends the Operator post-application surveillance and reporting of any toxic or adverse incidents required under the NPDES permit Pesticides General Permit. Acquisition of this data may help to monitor short- and long-term exposure impacts to aquatic resources.

The DEIS states that in-stream water sampling has limitations for the following reasons: (1) it is expensive, (2) should be sterile and automated to avoid contamination, (3) indicates only whether herbicide reached a waterway in detectable quantities, (4) does not indicate how close herbicide may have come to the sensitive resource, and (5) is subject to dilution depending on stream volume and velocity. EPA recommends the FEIS include a discussion on relevant water quality sampling that will be implemented and how sampling results will be shared and used to make impact determinations from control applications.

The DEIS discloses that because Picloram is persistent in the soil and is very mobile in water, it can move through permeable soils into groundwater (page 195). The DEIS discloses that Triclopyr is also considered highly mobile in water and that label directions recommend caution when considering Triclopyr applications in areas with permeable soils and shallow water tables (page 198). EPA recommends the FEIS identify added precautions that will be used when applying chemical controls near streams and ditches that drain into streams to minimize or avoid drift impacts.

Impacts of climate change
In our scoping comments, EPA recommended that the EIS include a discussion of reasonably foreseeable effects that changes in the climate may have on the proposed action and the planning area. The DEIS discloses that herbicide movement in soil depends on a number of factors, including properties of the herbicide selected for use, site-specific conditions (e.g., topography, soil type, and depth to the water table), and the climatic regime (e.g., annual precipitation and season of highest precipitation). Climate change (e.g., precipitation events, drying conditions that concentrate dosages) may affect the mobility and transport of chemical controls in the planning area. We recommend the EIS clarify risks associated with chemicals and biological controls under a variety of climate change scenarios (i.e., precipitation events). If projected changes could notably exacerbate the environmental impacts of the program, the EPA recommends these impacts also be considered as part of the NEPA analysis.

Adjuvants and related risks
EPA appreciates that Appendix J of the DEIS includes information on adjuvant treatments. Adjuvants are specially designed chemicals that are added to an herbicide solution to modify the performance of the total spray mixture. Adjuvants perform various functions, including enhanced plant uptake of the herbicide; better mixing of otherwise incompatible herbicides; increased adhesion of the spray to plant surfaces; and reduced spray drift. In many herbicide products, adjuvants are included as part of the pre- mixed formulation as purchased. Applicators can also

add adjuvants to spray mixtures prior to application. EPA recommends that the FEIS include risk assessment data for the adjuvants proposed for use in the planning area.

Invasive plants in buffer zones
The DEIS Appendix F (Table F-2, page F7) states that 100-foot buffers on all streams would be maintained when applying herbicides aerially. The DEIS (Appendix I) states that, "The purpose of buffers is to protect the resource that is at the end of the buffer area, so detection within the buffer areas may be acceptable as long as the sensitive area itself is protected." EPA recommends the FEIS include a discussion to clarify how invasive plants within buffer zones would be treated and measures to prevent deterioration of water quality within nearby waters.

Potential impacts to fisheries resources
A Fisheries Resource Specialist Report (Report) referenced in the DEIS was developed to support the Environmental Impact Statement for the Caribou-Targhee National Forest and Curlew National Grassland Invasive Species Project**.** The planning area supports three sensitive fish species (Yellowstone Cutthroat Trout, Northern Leatherside Chub, and Bonneville Cutthroat Trout). EPA recommends that the EIS specify data or relevant references to support and clarify unsubstantiated claims under 9.2.2 Biological Controls (page 42) of this Report regarding the Overall Direct and Indirect Effects of Alternative 2:

- 9.2.2.1 Direct and Indirect Effects, the Proposed Action's future use of new biological agents is not anticipated to lead to unintended ecological concerns, specifically, no adverse effects to sensitive fish.

- Effects to Forest Service Region 4 Sensitive Fish Species, Design criteria include the use of only those biological control agents approved by APHIS, State of Idaho, or State of Utah, used with appropriate Forest Service protocols for documenting releases and monitoring of biological control agents. With these design criteria in place for all current and future use of new biological agents, it is not anticipated to lead to unintended ecological concerns.

- 9.2.2.2. Irreversible/Irretrievable Effects, Biological control treatments implemented under Alternative 2 would not result in any irreversible or irretrievable commitments of aquatic resources. Irreversible loss of fisheries resources would only occur where an action was implemented that caused permanent loss of some level of fisheries production. Biological control releases would not impact fisheries resources or aquatic habitat integrity in any watershed containing R4-sensitive species to an extent that measurable loss of production would occur.

- 9.2.2.3. Cumulative Effects, in addition to the use of biological control agents and site-specific grazing on NFS lands, other federal, state, county, and private entities also implement active biological control in their IWM programs. Cumulatively, multiple releases by different entities have the effect of distributing biological control agents over a broader area. Some beneficial effects could occur for fish in the form of an incidental food source where releases occur near stream channels. No adverse cumulative effects are anticipated to occur.

Thank you for the opportunity to provide recommendations towards improving the NEPA environmental document. We look forward to continued involvement during the NEPA process. If you have questions about our comments, please contact me at (206) 552-1778 or by email at pepple.karl@epa.gov, or Betsy McCracken of my staff at (907) 271-1206 or by electronic mail at mccracken.betsy@epa.gov.

Sincerely,

KARL PEPPLE Digitally signed by KARL PEPPLE
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Karl Pepple, Acting Chief
Policy and Environmental Review Branch