

December 8, 2025

Madison Ranger District
Attn: Josh Connors
5 Forest Service Road
Ennis, MT 59729.

Re: Greenhorns Vegetation Project Supplemental
Environmental Assessment And Finding of No Significant
Impact

Dear Mr. Connors,

Thank you for this opportunity to comment on the
Greenhorns Vegetation Project Supplemental
Environmental Assessment And Finding of No Significant
Impact. Please accept these additional comments from me
on behalf of the Alliance for the Wild Rockies, Native
Ecosystems Council, Council on Wildlife and Fish, Gallatin
Wildlife Association, Nancy Schultz and
Glenn Monahan.

The Alliance for the Wild Rockies, Council on Wildlife and
Fish, Native Ecosystems Council, Gallatin Wildlife
Association, Nancy Schultz and Glenn Monahan
(collectively “Alliance”) submit the following comments to

guide the development of the environmental analysis for the proposal.

The Forest Service's failure to take a hard look at lynx presence and the Forest Plan's potential impacts on lynx, using the best available science, including the agency's failure to assess the Forest Plan's impacts on lynx travel/linkage corridors, violates NEPA. See *Pacific Rivers Council v. U.S. Forest Service*, --- F.3d ----, 2012 WL 336133 (9th Cir. 2012).

The Forest Service's failure to include binding legal standards aimed at conserving and recovering ESA-listed lynx on the Forest in the Forest Plan violates NFMA and the ESA.

The FS approval and implementation of the Lynx Management Direction is arbitrary and capricious, violates NEPA's hard look requirement and scientific integrity mandate and fails to apply the best available science necessary to conserve lynx. The Lynx Direction contains no protection or standard for conservation of winter lynx habitat (old growth forests). This project allows the logging of thousands of acres of old growth without any analysis of whether that forest is necessary for conservation as winter lynx habitat. Please take a hard look at this factor.

By failing to include a provision to protect winter lynx habitat, the Lynx Direction fails to apply the best available science and implement the measures necessary for lynx conservation, as required by the ESA. The Lynx

Direction also arbitrarily exempts WUI lands from lynx habitat protection. If this exemption did not exist, the project could not proceed because the logging authorized by the projects violates at least one of the protections for lynx habitat.

The Lynx Amendment and its Biological Opinion/Incidental Take Statement allow unrestricted logging in the wildland urban interface, which the agencies estimate to compose approximately 6% of the lynx habitat on National Forests. The scoping notice does not explain where the WUI is in relation to the projects and the LAUs but merely state that the entire project lies within the WUI boundary. The failure to comply with logging restrictions outside the WUI violates NFMA. The failure to adequately address this issue and demonstrate compliance with the Lynx Amendment violates NEPA, NFMA, the APA, and the ESA.

The scoping notice does not clearly demonstrate that the project uses a legal definition of the Wildland Urban Interface (WUI) in violation of NEPA, NFMA, the Healthy Forest Restoration Act and the APA. Please demonstrate that the project complies with the plain language of the Healthy Forest Restoration Act which defines an at-risk community as “a group of homes and other structures with basic infrastructure and services (such as utilities and collectively maintained transportation routes) within or adjacent to Federal land;”

It also states:

(16) Wildland-urban interface

The term "wildland-urban interface" means—

(A) an area within or adjacent to an at-risk community that is identified in recommendations to the Secretary in a community wildfire protection plan; or

(B) in the case of any area for which a community wildfire protection plan is not in effect—

(i) an area extending ½-mile from the boundary of an at-risk community;

(ii) an area within 1½ miles of the boundary of an at-risk community, including any land that—

(I) has a sustained steep slope that creates the potential for wildfire behavior endangering the at-risk community;

(II) has a geographic feature that aids in creating an effective fire break, such as a road or ridge top; or

(III) is in condition class 3, as documented by the Secretary in the project-specific environmental analysis; and

(iii) an area that is adjacent to an evacuation route for an at-risk community that the Secretary determines, in cooperation with the at-risk community, requires hazardous fuel reduction to provide safer evacuation from the at-risk community.

(*Pub. L. 108–148, title I, §101, Dec. 3, 2003, 117 Stat. 1889; Pub. L. 115–141, div. O, title II, §203, Mar. 23, 2018, 132 Stat. 1064.*)

The Greenhorn project purpose and need is based on false assumptions in violation of NEPA, NFMA and the APA. Please include a map of the Wildland Urban Interface which shows all homes in the project area.

Please identify the amount of non or low cover areas that will be created from the project. Please use the best available science in regard to lynx habitat. The best available science is now Kosterman's Masters Thesis, "Correlates of Canada Lynx Reproductive Success in Northwestern Montana" and Holbrook 2019.

These studies find that 50% of lynx habitat must be mature undisturbed forest for it to be optimal lynx habitat where lynx can have reproductive success and no more than 15% of lynx habitat should be young clearcuts, i.e. trees under 4 inched dbh. This contradicts the agency's assumption in the Lynx Amendment that 30% of lynx habitat can be clearcut, and that no specific amount of mature forest needs to be conserved. It is now the best available science out there that describes lynx habitat in the Northern Rockies related to lynx viability and recovery. Kosterman's study demonstrates that the Lynx Amendment standards are not adequate for lynx viability and recovery, as assumed by the Forest Service.

Weed colonization can alter fire behavior by increasing flammability: for example, cheatgrass, a widespread noxious weed on the Forest, cures early and leads to

Weed colonization can also deplete soil nutrients and change the physical structure of soils. The Forest Service's own management activities are largely responsible for noxious weed infestations; in particular, logging, prescribed burns, and road construction and use create a risk of weed infestations.

How much logging will you do before you burn? The introduction of logging equipment into the Forest creates and exacerbates noxious weed infestations. Are roadsides throughout the project area are infested with noxious

weeds? Once established along roadsides, invasive plants will likely spread into adjacent grasslands and forest openings.

Will prescribed burning activities within the analysis area cumulatively contribute to increases to noxious weed distribution and populations?

As a disturbance process, fire has the potential to greatly exacerbate infestations of certain noxious weed species, depending on burn severity and habitat type (Fire Effects Information System 2004).

Dry site vegetation types and road corridors are extremely vulnerable, especially where recent ground disturbance has occurred.

Please provide an alternative that eliminates units that have noxious weeds present on roads within units from fire management proposals.

Please address the ecological, social and ascetic impact of current noxious weed infestations within the project area. Include an analysis of the impact of the actions proposed by this project on the long and short term spread of current and new noxious weed infestations. What treatment methods will be used to address growing noxious weed problems?

What noxious weeds are currently and historically found within the project area? Please include a map of current noxious weed infestations which includes knapweed, Saint Johnswort, cheat grass, bull thistle, Canada thistle, hawkweed, hound's-tongue, oxeye daisy and all other Category 1, Category 2 and Category 3 weeds classified as noxious in the MONTANA COUNTY NOXIOUS WEED LIST. 1975).

Are yellow and orange hawkweeds present within the project area?

Please address the cumulative, direct and indirect effects of the proposed project on weed introduction, spread and persistence that includes how weed infestations have been and will be influenced by the following management actions: burning and cutting of trees and shrubs

Noxious weeds are not eradicated with single herbicide treatments. A onetime application may kill an individual plant but dormant seeds in the ground can still sprout after

herbicide treatment. Thus, herbicides must be used on consistent, repetitive schedules to be effective.

What commitment to a long-term, consistent strategy of application is being proposed for each weed infested area within the proposed action area? What long term monitoring of weed populations is proposed?

When areas treated with herbicides are reseeded on national forest land, they are usually reseeded with exotic grasses, not native plant species. What native plant restoration activities will be implemented in areas disturbed by the actions proposed in this project? Will disturbed areas including burn units be planted or reseeded with native plant species?

The scientific and managerial consensus is that prevention is the most effective way to manage noxious weeds. The Forest Service concedes that preventing the introduction of weeds into uninfested areas is “the most critical component of a weed management program.” The Forest Service’s national management strategy for noxious weeds also recommends “develop[ing] and implement[ing] forest plan standards . . .

.” and recognizes that the cheapest and most effective solution is prevention. Which units within the project area currently have no noxious weed populations within their

boundaries? What minimum standards are in the Caribou-Targhee Forest Plan to address noxious weed infestations? Please include an alternative in the that includes land management standards that will prevent new weed

infestations by addressing the causes of weed infestation. The failure to include preventive standards violates NFMA because the Forest Service is not ensuring the protection of soils and native plant communities.

The common way the Forest Service has been treating cheatgrass is spraying millions of acres with Indaziflam. Please analyze the effects of using herbicides to treat noxious weeds in the project area.

Please analyze the effects of spraying herbicides like Indaziflam on lynx, grizzly bears, sage grouse, and whitebark pine. The BDNF did not do this in its noxious weed NEPA documents because lynx and grizzly bears were not thought to be in the BDNF at the time and whitebark pine were not listed as threatened under the ESA at the time.

What is Indaziflam?

https://peer.org/wp-content/uploads/2025/04/PEER_factsheet_Indaziflam.pdf

Indaziflam, sold under the brand name “Rejuvra”, is a pre-emergent herbicide used to control invasive annual grasses, most notably cheatgrass (*Bromus tectorum*), on rangelands.¹ Developed by Bayer and now promoted widely across the American West, it is being considered for large-scale application across millions of acres of Bureau of Land Management and U.S. Forest Service public lands. The chemical works by preventing seed germination and is touted as having a long-lasting

residual effect — persisting in soil for up to three years. While its use is intended to improve rangeland health and reduce wildfire risk by suppressing cheatgrass, a growing body of scientific evidence suggests that Indaziflam poses serious risks to human health, soil ecosystems, native biodiversity, and wildlife forage resources.

The widespread use of Indaziflam on public lands poses substantial and underacknowledged risks to human health, soil health, native biodiversity, wildlife, aquatic ecosystems — and now, potentially, through per-and polyfluoroalkyl substance (PFAS) contamination.

1. Human Health Risks

Although Indaziflam has been marketed as having low acute toxicity, emerging research suggests significant genotoxic effects on human cells, meaning it can damage DNA.² This concern is amplified by proposals to apply the herbicide over vast expanses of public land, including areas near tribal lands, rural towns, and recreation sites. Widespread exposure to a chemical with DNA-damaging potential — even at low concentrations — warrants much closer scrutiny and precautionary oversight, particularly when applied aerially or via ground broadcast across inhabited landscapes.

2. Disruption of Soil Microbiota

Recent studies show that Indaziflam is a potent amebicide, meaning it kills amoebae — key protozoa in soil ecosystems.^{3,4} Amoebae are among the most abundant microbial predators in healthy soils, playing

vital roles in nutrient cycling and promoting plant growth.⁵ By reducing these essential microbes, Indaziflam may inadvertently foster conditions that favor soil-borne pathogens, reduce plant nutrient uptake, plant growth, and impair soil resilience.

3. Harm to Native Annual Plants

Indaziflam is a non-selective herbicide that kills not only invasive grasses but also many native annual forbs and grasses—plants that are crucial to ecological recovery, pollinator support, and wildlife forage.⁶ Scientific research shows that some native annuals, such as fiddleneck, ragweed, and western tansy mustard, are effective natural competitors to cheatgrass, significantly reducing its seed production and biomass.^{7,8} Unfortunately, these beneficial plants are also eliminated by Indaziflam.

1. EPA Office of Pesticide Programs. Rejuvra Herbicide Label (EPA Reg. No 432-1613). Herbicide Branch, Registration Division. 2. Adiguze, S.K., The possible cytotoxicity and genotoxicity assessment of indaziflam on HepG2 cells. Human and Experimental Toxicology, 2023. 42: p. 1-8. 3. Mungroo, M.R., et al., Development of anti-acanthamoebic approaches. International Microbiology, 2021. 24: p. 363-371. 4. Siddiqui, R., et al., Antiamoebic Properties of Laboratory and Clinically Used Drugs against Naegleria fowleri and Balamuthia mandrillaris. Antibiotics, 2022. 11. 5. Wang, Z., et al., The neonicotinoid insecticide imidacloprid has unexpected effects on the growth and development of soil amoebae.

Science of the Total Environment, 2023. Vol. 869. 6. Meyer-Morey, J., et al., Indaziflam controls nonnative *Alyssum* spp. but negatively affects native forbs in sagebrush steppe. *Invasive Plant Science Management*, 2021. 14: p. 253-261. 7. Tilley, D., et al., When a weed is not a weed: succession management using early seral natives for Intermountain rangeland restoration. *Rangelands*, 2022. 44: p. 270-280. 8. Stube, C.J.K., Interactions between *Bromus tectorum* L. (cheatgrass) and native ruderal species in ecological restoration. Dissertation at Colorado State University, 2012.

The herbicide's long persistence in soil can delay or block the natural process of plant succession, creating bare ground prone to erosion and secondary invasions. A Boulder County sponsored study found 75% lower native species richness in sprayed areas compared to untreated zones, even a year after wildfire.⁹ Notably, the spray favored non-native perennial grasses while reducing native diversity — the opposite of its intended effect.¹⁰

4. Impact on Wildlife Forage

While cheatgrass is invasive, it also serves as a key forage resource for both domestic livestock and native wildlife like elk, pronghorn, and bighorn sheep, especially in late winter and early spring. Historical and modern data confirm its importance for early-season grazing.

Removing cheatgrass without providing alternative forage can create a forage gap in critical seasons. Eradicating it without replacing its function could lead to nutritional

stress for wildlife, particularly in peripheral and degraded habitats.

5. Risk to Aquatic Ecosystems

Rejuvra's product label warns that it has a high potential to contaminate surface waters via runoff, and states that it is toxic to fish, aquatic invertebrates, and aquatic plants. Despite instructions not to apply it near water bodies, the scale of proposed use across public lands — many of which include streams, wetlands, and riparian corridors — raises serious concerns about contamination during storm events.

Many of the aquatic species at risk are targets of federal and nonprofit conservation efforts, making this chemical's runoff risks particularly troubling.

6. Other Issues

A growing concern in pesticide regulation is the presence of PFAS — also known as “forever chemicals” — which are persistent, toxic, and can accumulate in human and animal tissues.¹² PFAS can enter pesticides in the following ways:

- Inert ingredients: Up to 80% of Rejuvra's formulation consists of undisclosed inert ingredients;*
- Fluorinated containers: The U.S. Environmental Protection Agency has confirmed that pesticides stored in fluorinated plastic*

barrels have leached PFAS into the formulation.¹³

There is currently no publicly available data confirming whether Rejuvra contains PFAS, either through the inert ingredients or via packaging or the manufacturing process. Independent testing of Indaziflam should occur to determine whether it contains PFAS.

Additionally, the omission of an EIS alternative that includes preventive measures would violate NEPA because the Forest Service would fail to consider a reasonable alternative.

Thank you for your consideration of our concerns.

Sincerely yours,

Mike Garrity

/s/

Executive Director

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