



Western Watersheds Project

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March 13, 2025

Boise National Forest
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(Submitted via <https://cara.fs2c.usda.gov/Public/CommentInput?Project=67425>)

Re: Lava Restoration Project (#67425)

Dear Forest Planner Lawatch,

Thank you for this opportunity to provide scoping comments relating to the U.S. Forest Service's (USFS) proposal to conduct the Lava Restoration Project on the Boise National Forest in response to the 2024 Lava Fire. I write on behalf of Western Watersheds Project (WWP), a non-profit organization with more than 14,000 members and supporters, headquartered in Hailey, Idaho. Our mission is to protect and restore western watersheds and wildlife through education, public policy initiatives, and legal advocacy. WWP and its members, supporters, and staff use and enjoy America's lands and their wildlife, cultural, and natural resources for health, recreational, scientific, spiritual, educational, aesthetic, and other purposes, including areas throughout the Boise National Forest and areas specifically affected by the Lava Fire.

As an initial matter, after reviewing the summary of the need for action, we are overall supportive of USFS's desire to restore and stabilize areas affected by the Lava Fire. Specifically, we are pleased to see that USFS plans to:

- Reestablish native, forested conditions in the burn area;
- Protect the fire-damaged landscape from unauthorized access; and
- Rest affected grazing allotments from livestock grazing for a minimum of two years.

Yet, despite our support for this effort broadly, we hope that USFS can prudently design its proposed activities by better tailoring its proposal during the National Environmental Policy Act (NEPA) review process and closely considering the effects of livestock grazing in these post-fire landscapes, as set out in more detail below.

I. USFS Must Comply with the National Environmental Policy Act

The National Environmental Policy Act (NEPA) requires, among other things, that USFS describe its purpose and need for the proposed action; consider a range of reasonable alternatives, including an alternative that minimizes environmental impacts; conduct environmental analysis of the direct, indirect, and cumulative effects of proposed actions, including mitigation measures; and solicit and respond to public comments.

WWP requests that USFS consider voluntarily relying on the Council on Environmental Quality (CEQ) regulations in completing this ongoing NEPA review, in addition to the agency's own regulations. The CEQ regulations remain highly persuasive authority based upon their long track record and the reliance of the courts upon them for nearly a half century. We request, as well, that USFS set forth in any NEPA document prepared pursuant to this review the laws, regulations, and guidance the agency is applying and the basis for the decisions made in that document.

A. Purpose and Need

CEQ regulations state that an agency's environmental analysis "shall include a statement that briefly summarizes the underlying purpose and need for the proposed agency action." 40 C.F.R. § 1502.13. It is important to note that the "stated goal of a project necessarily dictates the range of 'reasonable' alternatives and an agency cannot define its objectives in unreasonably narrow terms." *City of Carmel-By-The-Sea v. U.S. Dept. of Transp.*, 123 F.3d 1142, 1155 (9th Cir. 1997); *see also* 36 C.F.R. § 220.5(e) ("The EIS shall document the examination of reasonable alternatives to the proposed action. An alternative should meet the purpose and need and address one or more significant issues related to the proposed action.").

For the Lava Restoration Project, USFS's stated purpose and need is to address and mitigate the impacts of the 2024 Lava Fire, including stabilizing and rehabilitating affected areas, revegetation and reforestation, and removing hazard trees. However, USFS should be cautious not to define the purpose and need for the proposed project so narrowly. Rather than describing the purpose and need for the project using the project activities themselves, USFS should better describe the desired *outcomes* from whatever activities the agency hopes to undertake. This way, USFS is better able to analyze what specific project activities may lead to these desired outcomes (stabilization, recovery of native vegetation, healthy forest objectives, etc.) even if they are not the immediate actions proposed. USFS can thus analyze if specific project goals and purposes have already been met. *See also infra* Sec. B. "Range of Reasonable Alternatives."

B. Range of Reasonable Alternatives

After developing a sufficient purpose and need for the proposed action, NEPA requires USFS to consider a range of reasonable alternatives. *See* 36 C.F.R. § 220.5(e). The range of alternatives is "the heart of the environmental impact statement." 40 C.F.R. § 1502.14. NEPA requires USFS to "rigorously explore and objectively evaluate" a range of

alternatives to proposed federal actions. See 40 C.F.R. §§ 1502.14(a); see also 36 C.F.R. § 220.4(c)(4) (“[T]he responsible official shall . . . [c]onsider[] the alternatives analyzed in environmental document(s) before rendering a decision on the proposal.”). “An agency must look at every reasonable alternative, with the range dictated by the nature and scope of the proposed action.” *Nw. Env'tl. Defense Center v. Bonneville Power Admin.*, 117 F.3d 1520, 1538 (9th Cir. 1997) (citation and quotation omitted). An agency violates NEPA by failing to “rigorously explore and objectively evaluate all reasonable alternatives” to the proposed action. *City of Tenakee Springs v. Clough*, 915 F.2d 1308, 1310 (9th Cir. 1990) (quoting 40 C.F.R. § 1502.14(a)). Reasonable alternatives include those that are more environmentally protective as well. Regarding the proposed project here, the consideration of more environmentally protective alternatives, such as greater limitations on salvage logging or livestock grazing, is also consistent with the National Forest Management Act’s (NFMA) requirement that USFS consider environmental aspects when managing resources and pursue biodiversity for both plants and animals on the lands that it manages. 16 U.S.C. § 1604(3)(A)-(B).

NEPA requires that an actual “range” of alternatives be considered, so as to “preclude agencies from defining the objectives of their actions in terms so unreasonably narrow that they can be accomplished by only one alternative (i.e. the applicant’s proposed project).” *Col. Env'tl. Coal v. Dombeck*, 185 F.3d 1162, 1174 (10th Cir. 1999) (citing *Simmons v. U.S. Corps of Eng'rs*, 120 F.3d 664, 669 (7th Cir. 1997)). This requirement prevents environmental reviews from becoming “a foreordained formality.” *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 196 (D.C. Cir. 1991). In addition, the “evaluation of alternatives mandated by [NEPA] is to be an evaluation of alternative means to accomplish the general goals of an action; it is not an evaluation of the alternative means by which a particular applicant can reach his goals.” *Colo. Env'tl. Coal v. Dombeck*, 185 F.3d 1162, 1174 (10th Cir. 1999) (citations and quotation omitted).

Accordingly, in USFS’s environmental review for this proposed project, it must consider a range of reasonable alternatives, including options that will be more protective of these post-fire landscapes and the fauna and flora they contain than the agency’s pre-fire management regime.

C. Hard Look

NEPA dictates that agencies take a “hard look” at the environmental consequences of a proposed action, and the requisite environmental analysis “must be appropriate to the action in question.” *Metcalf v. Daley*, 214 F.3d 1135, 1151 (9th Cir. 2000); *Kern v. U.S. Bureau of Land Mgmt.*, 284 F.3d 1062, 1072 (9th Cir. 2002); see also *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348 (1989). “NEPA ‘prescribes the necessary process’ by which federal agencies must ‘take a “hard look” at the environmental consequences’ of the proposed courses of action.” *Pennaco Energy, Inc. v. U.S. Dept. of the Interior*, 377 F.3d 1147, 1150 (10th Cir. 2004) (quoting *Utahns for Better Transp. v. U.S. Dept. of Transp.*, 305 F.3d 1152, 1162–63 (10th Cir. 2002)) (internal citation omitted). The fundamental objective of NEPA is to ensure that an “agency will not act on incomplete information only to regret its decision after it is too

late to correct.” *Marsh v. Or. Natural Resources Council*, 490 U.S. 360, 371 (1990). In order to take the “hard look” required by NEPA, USFS must assess impacts and effects that include: “ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, such as disproportionate and adverse effects on communities with environmental justice concerns, whether direct, indirect, or cumulative.” 40 C.F.R. § 1508.1(i)(3); *see also* 36 C.F.R. § 220.4(f) (requiring USFS to conduct cumulative effects analysis, including consideration of “the direct and indirect effects on the environment that are expected or likely to result” and the “present effects of past actions that are . . . relevant and useful”).

USFS cannot evaluate consequences to the environment or determine avoidable or excessive degradation without adequate data and analysis. NEPA’s hard look at environmental consequences must be based on “high quality,” “relevant” information that it discloses to the public “early in the process before decisions are made and before actions are taken.” 40 C.F.R. § 1500.1(b). Essentially, NEPA “ensures that the agency, in reaching its decision, will have available and will carefully consider detailed information concerning significant environmental impacts.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. at 349. The courts are clear that, with respect to an agency’s statements in its NEPA analysis, “[a] conclusory statement unsupported by empirical or experimental data, scientific authorities, or explanatory information of any kind not only fails to crystallize issues, but affords no basis for a comparison of the problems involved with the proposed project and the difficulties involved in the alternatives.” *Seattle Audubon Society v. Moseley*, 798 F. Supp. 1473, 1479 (W.D. Wash. 1992), *aff’d sub nom. Seattle Audubon Society v. Espy*, 998 F.2d 699 (9th Cir. 1993).

Further, both data and analyses must be disclosed to the public in order to permit the “public scrutiny” that is considered “essential to implementing NEPA.” 40 C.F.R. § 1500.1(b). USFS’s own guidelines reiterate that making data and methods available to the public permits independent reanalysis by qualified members of the public. *See* 16 U.S.C. § 1604(d); 36 C.F.R. § 219.4. In this regard, NEPA “guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. at 349. NEPA not only requires that USFS have detailed information on significant environmental impacts but also requires that the agency make this information available to the public for comment. *Inland Empire Public Lands Council v. U.S. Forest Service*, 88 F.3d 754, 757 (9th Cir. 1996).

Where there is scientific uncertainty, NEPA imposes three mandatory obligations on USFS: (1) a duty to disclose the scientific uncertainty; (2) a duty to complete independent research and gather information if no adequate information exists unless the costs are exorbitant or the means of obtaining the information are not known; and (3) a duty to evaluate the potential, reasonably foreseeable impacts in the absence of relevant information, using a four-step process. Unless the costs are exorbitant or the means of obtaining the information are not known, the agency must gather the information in studies or research. 40 C.F.R. § 1502.21. Courts have upheld these requirements, stating

that the detailed environmental analysis must “utiliz[e] public comment and the best available scientific information.” *Colorado Environmental Coalition v. Dombeck*, 185 F.3d 1162, 1171-72 (10th Cir. 1999) (citing *Robertson v. Methow Valley Citizens’ Council*, 490 U.S. at 350).

Regarding effects that USFS must disclose under NEPA, regulations define “indirect effects” as:

[Those effects that] are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

40 C.F.R. § 1508.1(i)(2); *see also* 36 C.F.R. § 220.3 (noting that the USFS NEPA regulations rely on the definitions from 40 CFR §§ 1500 to 1508).

NEPA regulations define “cumulative effects” as:

[Those] effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from actions with individually minor but collectively significant effects taking place over a period of time.

40 C.F.R. § 1508.1(i)(3); *see also* 36 C.F.R. § 220.4(f).

To satisfy NEPA’s hard look requirement for cumulative effects, USFS must do two things. First, USFS must catalog the past, present, and reasonably foreseeable uses and management actions in the area that might impact the environment. *Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 809-10 (9th Cir. 1999). Second, USFS must analyze these impacts in light of the proposed action. *Id.* If USFS determines that certain actions are not relevant to the cumulative effects analysis, it must “demonstrat[e] the scientific basis for this assertion.” *Sierra Club v. Bosworth*, 199 F.Supp.2d 971, 983 (N.D. Cal. 2002). A failure to include a cumulative effects analysis of actions within a larger region will render the NEPA analysis insufficient. *See, e.g., Kern v. U.S. Bureau of Land Mgmt.*, 284 F.3d at 1078 (finding that BLM failed to consider the impact of foreseeable future timber sales, within a larger geographic district than the proposed timber sale, on the spread of cedar root fungus).

II. USFS Must Closely Examine and Evaluate the Effects of Livestock Grazing in the Post-fire Landscape.

A. Resumption of Grazing

USFS must take a hard look at the many and widespread effects from livestock grazing on the land affected by this fire. Recovery of vegetation, soils, and ecosystem function must be prioritized in deciding whether or when grazing can resume in the areas affected by the wildfire. The scoping notice states that these areas will be rested from grazing for a minimum of two growing seasons. Our understanding is that this would include the 2025 and 2026 growing seasons. We request that USFS make this understanding explicit for clarity in any environmental review. If USFS contends that grazing can continue in some pastures within grazing allotments that will be otherwise closed, any environmental review should specify what these pastures are for clarity and transparency. As well, any such environmental review must set out explicit and heightened monitoring requirements that will ensure that cattle do not drift from open pastures in the same allotment or from neighboring allotments onto areas closed due to the wildfire. If cattle will be permitted to utilize waters within the affected areas, we have strong concerns about the potential impacts on post-fire recovery and any environmental review must analyze how this use of the area will not impact recovery or violate the minimum two-year grazing rest period following wildfire.

Any environmental review must specifically describe how USFS will make a determination regarding resumption of grazing would occur, or what will be considered desirable vegetation levels. Any such review must also set out the standards and protocol that USFS will use to determine whether cattle may return to affected areas, whether seeded or otherwise restored or not, and when additional rest will be required if retreatment is needed or vegetation levels have not achieved the desired levels. We propose that USFS use an objective, quantitative measure to define desirable vegetation levels and make a determination regarding when grazing could resume. More specifically, we propose that USFS use the Similarity Index method from the Ecological Site Inventory approach as the relevant objective, quantitative measure and ask that USFS analyze this approach in any environmental review relating to this wildfire that encompasses an area where livestock grazing has occurred in the past or may occur in the future.

The Similarity Index measure is based on Ecological Site Descriptions (ESDs). According to the National Resources Conservation Service, multiple predominant ecological sites occur within the fire perimeter.¹ Ecological Site Descriptions contain detailed descriptions of several possible vegetation and ground cover constituents within the main ecological site, and each has a reference state that represents the trajectory of successional sequences of the biotic community under natural disturbance regimes. Because the reference state is self-sustaining and resistant to change due to high resistance to natural disturbances and high resilience following natural disturbances,

¹ See Natural Resources Conservation Service Web Soil Survey, <https://websoilsurvey.nrcs.usda.gov/app/>. Accessed March 11, 2025.

recovery objectives should be based on the reference state for each ecological site. We recognize that the information provided in ESDs is not necessarily complete and may need revision or supplementation, but ESDs provide an appropriate starting point for making determinations regarding recovery objectives and the resumption of livestock grazing.

Ecological Site Descriptions may contain ground cover percentages for plant species and ground cover categories based on the reference state. These can be used to construct a Similarity Index comparing current species and ground cover with what would be expected. We suggest that USFS calculate Similarity Indices in each of the predominant ESDs to objectively track recovery in comparison to the reference state. This method is particularly relevant post-fire when an area has the opportunity to reset post-disturbance and recover without grazing pressure. While we would like to see Similarity Indices approaching 100%, we recognize that that may be difficult to achieve for a variety of reasons. We propose that a Similarity Index of 77% be used as the objective, quantitative measure to determine when grazing could resume, which we believe to be achievable and reasonable. We propose 77% because this is the minimum Similarity Index for the production of an area to be characteristic of the potential natural community, as recognized by the U.S. Department of Agriculture.² An objective measure such as this is important to ensure proper ecological recovery before reintroducing grazing, and to provide transparency and objectivity to the variety of interested parties regarding USFS's determination of what exactly desirable vegetation levels are and consequently when grazing could resume.

In any event, USFS cannot allow grazing to resume within the fire's footprint until it is clear that the affected areas have recovered in terms of vegetation, soil stabilization, and other natural processes, particularly in light of the extraordinary scope of the restoration activities needed across the Boise National Forest. As the scoping letter recognizes, even permitted livestock grazing creates disturbances that are in addition to, and not part of, natural activities in the forest. USFS should take the current circumstances as an opportunity to assess the appropriateness of livestock grazing on affected allotments, the necessity of any and all range improvements, and whether lower levels of grazing or none at all are most appropriate for the post-fire landscape. Depending on conditions and the pace of recovery, USFS should evaluate a full range of options including facilitating willing permittee buyouts and pursuing permanent allotment retirement on affected grazing allotments and administratively closing allotments. Recognizing that recovery at this unprecedented scale may take a long time, USFS must institute a process that will allow for the compensation of the permittee and the permanent retirement of affected grazing allotments upon which the permittee cannot, or would prefer not to, delay a return until the land has recovered sufficiently to meet USFS's predefined objectives.

² See "Similarity Index," The Landscape Toolbox, United States Department of Agriculture, Agricultural Research Service, <https://www.landscapetoolbox.org/field-methods/similarity-index/>. Accessed March 11, 2025.

B. Exclosures and Research Areas

We advocate the inclusion of exclosures in the activities planned for any restoration effort. For instance, exclosures are excellent tools for studying recovery on the arid rangelands that fall within the fire perimeters (Wolf and Mitchell, 2021) and can inform USFS of the effects of both native grazers (Rhodes *et al.*, 2018) and non-native grazers (Retallack *et al.*, 2024) on vegetation recovery.³ Exclosures can also facilitate science on the impact of grazers on other organisms such as rodents and amphibians (Valone and Sauter, 2005; Castellano and Valone, 2006).⁴ This restoration effort is a valuable opportunity to improve our collective understanding of post-fire recovery, and exclosures can further that goal by shedding light on the success of various treatment methods and the role of grazing and browsing by both wild and domestic animals in post-fire recovery. We suggest that at least one exclosure be constructed in each of the primary ecological sites.

More broadly, USFS should designate meaningful portions of the restoration area within each burn footprint as permanent livestock-free reference areas in order to compare recovery of wildlife habitat in areas subject to continued grazing with ungrazed areas. Larger areas reduce the potential for edge effects, which can be especially important where invasive species like cheatgrass are species of interest. These areas would provide an accurate “control” to analyze the potential of the ecological sites following the fire. These control areas must be representative areas that have similar recovery potential and recovery methods used inside and outside so as not to prejudice analysis. For example, an area that does not receive seed and is likely to convert to cheatgrass or medusa head grass should not be chosen and compared to a non-similar area with higher recovery potential.

C. Grazing Infrastructure

USFS must analyze in any environmental reviews the effects of rebuilding fencing and building new fencing and other livestock infrastructure like corrals and cabins, and also must consider within its restoration alternatives the option of not rebuilding damaged or burned fencing and other infrastructure. Fencing and other infrastructure harms native wildlife and contributes to the introduction and spread of invasive plant species. USFS must not simply rush to restore the infrastructure that predated the fire but should rather consider what infrastructure, if any, is appropriate for this area over the next several decades and longer.

³ Ashlee Wolf and Rachel M. Mitchell, “Leveraging Historic Cattle Exclosures to Detect Evidence of State Change in an Arid Rangeland,” *Rangeland Ecology & Management* 78 (2021): 26-35; Aaron C. Rhodes, Randy T. Larsen, and Samuel B. St. Clair, “Differential Effects of Cattle, Mule Deer, and Elk Herbivory on Aspen Forest Regeneration and Recruitment,” *Forest Ecology and Management* 422 (2018): 273-80; Angus Retallack, Sami Rifai, Graeme Finlayson, Bertram Ostendorf, and Megan Lewis, “Remote Sensing for Rangeland Conservation Monitoring: Impacts of Livestock Removal After 15 Years,” *J. Applied Ecology* 61, no. 9 (2024): 2111-22.

⁴ T.J. Valone and P. Sauter, “Effects of Long-Term Cattle Exclosure on Vegetation and Rodents at a Desertified Arid Grassland Site,” *J. Arid Environments* 61, no. 1 (2005): 161-70; M.J. Castellano and T.J. Valone, “Effects of Livestock Removal and Perennial Grass Recovery on the Lizards of a Desertified Arid Grassland,” *J. Arid Environments* 66, no. 1 (2006): 87-95.

D. Livestock Grazing Impacts on Vegetation Regeneration and Invasive Plant Spread

Livestock grazing has significant impacts to soils and vegetation even in the best of conditions. However, grazing also contributes to changes in vegetative compositions, including creating and perpetuating situations in which invasive species and noxious weeds can proliferate. Livestock graze and trample native plants which clears vegetation and destroys soil crusts; all contributing to weed invasion. This prepares weed seedbeds through hoof action. Additionally, livestock transport and disperse seeds on their coats and through their digestive tracks.⁵

Without disturbance to native plants, microbiotic crusts, and soils resulting from livestock grazing and trampling, and corresponding increases in light, water, and nutrients for the remaining weeds, it is doubtful that alien plants would have spread so far or become so dense. At least they would not be invading as rapidly, and certainly not over the vast area of western grasslands, shrublands, and woodlands as they are now.⁶ The Oregon-Washington Interagency Wildlife Committee, composed of biologists from several government agencies, concluded that grazing is the most important factor in degrading wildlife and fisheries habitat throughout the 11 western states.⁷

Indeed, it is quite likely that livestock grazing led to conditions that allowed this wildfire to burn the way it did. Now, USFS has a responsibility to Idaho's wildlife to take on the restoration of these lands with the utmost care. Livestock grazing is a significant ground disturbance and therefore should be avoided in areas that were recently burned. Livestock grazing too soon post-fire can result in further degradation of soils, and more widespread regeneration of invasive plants, one of which, cheatgrass, is of particular concern.

To this end, targeted grazing is also an inappropriate response to wildfires. Reisner *et al.* 2013 "found no evidence that cattle grazing . . . reduced [cheatgrass] cover." To the contrary, the study "found strong evidence that increasing cattle grazing intensity indirectly promotes an increase in the magnitude of [cheatgrass] dominance."⁸ Further, in order for livestock grazing to actually have an effect on fires, vegetation must be grazed to the point that it no longer provides adequate habitat for wildlife.

⁵ A.J. Belsky and J.L. Gelbard, *Livestock Grazing and Weed Invasions in the Arid West*, Portland: Oregon Natural Desert Association, 2000.

⁶ Ibid.

⁷ Ibid., citing: Oregon-Washington Interagency Wildlife Committee, *Managing Riparian Ecosystems for Fish and Wildlife in Eastern Oregon and Eastern Washington*. Oregon-Washington Interagency Wildlife Committee, available from Washington State Library, Olympia, Washington, 1979.

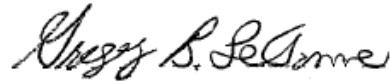
⁸ Michael D. Reisner, James B. Grace, David A. Pyke, and Paul S. Doescher, "Conditions Favouring *Bromus Tectorum* Dominance of Endangered Sagebrush Steppe Ecosystems," *J. Applied Ecology* 50, no. 4 (2013): 1039-49.

III. Conclusion

Thank you again for the opportunity to offer comments on this proposed project. We sincerely hope you will consider our recommendations for improving the environmental review and, ultimately, the proposed project in order to better protect native ecosystems, soil health, and other features of these landscapes. We intend to remain involved in all stages of the planning process as well as in monitoring, scientific study, and restoration efforts in this area well into the future, and we will supplement these comments as appropriate.

We respectfully request that WWP be notified of all future public comment opportunities relating to this proposed project and of USFS's decisions concerning it. Please send a copy of any environmental analyses produced as a result of these reviews, as well as any other relevant documents, to us at the email listed below. We look forward to continuing to work with USFS to protect public lands and to return them to a properly functioning ecological state.

Sincerely,



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