Sept. 12, 2025

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Re: Tyler's Kitchen Fuels Reduction and Forest Health Project #66344

On behalf of WildEarth Guardians, please accept the following comments regarding the environmental assessment (EA) and Finding of No Significant Impact for the Tyler's Kitchen Fuels Reduction and Forest Health Project (project). We also incorporate comments submitted by the Flathead-Lolo-Bitterroot Citizen Task Force attached herein (see Exhibit #1). To supplement these comments, we include a number of supporting documents and scientific publications.

We are particularly concerned about the road activities proposed as the Forest Service states, "The project proposes the construction of 14 miles of temporary road, and the adoption of 97 miles of undetermined roads to the National Forest System to address immediate and long-term access needs." Draft DN at 5. Expanding an already overburdened road system at a time the Lolo NF is experiencing significant budget and staffing shortfalls, and an undisclosed deferred maintenance backlog suggest the agency should be finding ways to reduce the presence of both system and non-system roads within the project area. We recognize the Forest Service proposes to decommission 63 miles of roads (4 miles of system and 59 miles of unauthorized roads), but this will still result in a net expansion of 34 miles, and the agency failed to take a hard look at how such an expansion, in conjunction with its lack of road maintenance funding and reduced agency staff, will affect grizzly bear and bull trout recovery as explained in the Task Force comments incorporated herein. We also note, that much of the decommissioning occurs without any physical removal of the road prism denoted by 3DN label, which leaves these roads in place to continue causing sedimentation and wildlife habitat fragmentation, particularly if these roads experience future wildfires that expose soils and remove vegetation. This issue was not considered in the analysis. We also note that the agency did not disclose how many of the 63 miles of decommissioned roads would receive a 3-DN, 3-D, 4 or 5 closure (e.g. treatment) level.

Further, the agency states that "Long-term road maintenance costs on roads added to NFS are estimated to be $4,750 annually." EA Transportation Report at 7. Yet, the agency fails to disclose its current or projected capacity to maintain the expanded road system, and simply states that "Large deferred maintenance activities may be funded by Federal capital investment funds." *Id.* at 5. This fails to acknowledge or disclose the current deferred maintenance backlog on the Lolo NF and how much the additional maintenance costs will increase it. Given the unauthorized roads will be closed to the public, it is likely they will not receive routine maintenance or meet their road management objectives.

Particularly concerning is the failure to disclose potential sedimentation from unauthorized roads being added to the transportation system as the agency explains, "The project's hydrologist modeled sediment delivery from the entire transportation system using the GRAIP lite sediment model. The effects to aquatics and fisheries of adding these roads to the NFS were considered, but not analyzed as activities with the greatest impact on the resource." *Id.* at 6. It is unclear how much unauthorized road sediment is leaving the road prisms or being delivered to streams in comparison to system roads, and how that will change under the proposed action as the agency did not separate system and non-system roads in its sedimentation analysis. EA Hydrology Report at 17, Table 14. What is clear is that stream sedimentation will significantly increase during project implementation by 323 tons/yr, and decrease by 92 tons/yr post-project implementation, which represents approximately a 21% decrease. *Id.* However, that benefit may be short-lived since the reduced rates come largely from the BMPs performed on haul routes, and does not address ongoing sedimentation from the total road network (both system and non-system) as the Forest Service explains, "After implementing the Tylers Kitchen project, BMPs that were implemented for haul activities (primarily additional drainage) would stay in place and remain effective for approximately 3-5 years, unless additional maintenance is performed." *Id.* at 18.

This is especially concerning given the project area's high road densities: "The GRAIP-Lite model was used to estimate the amount of sediment being delivered to stream channels from unpaved forest roads. As shown in Table 8, the Ryan Creek watershed receives the most sediment from roads. This is a large amount of sediment modelled for this drainage. This is not surprising though because this drainage has an extremely high road density." *Id* at 13. It is unclear what time period was used for post-implementation sediment modeling, and if it extended beyond 3-5 years. Further, without the adequate funding to maintain the road system and remove unauthorized roads, sedimentation will continue to impact water quality and the high road densities will persist in fragmenting wildlife habitat, and harm grizzly bear connectivity.

The Forest Service failed to consider the increased risk of human-caused wildfire ignitions resulting from the current road system or from the addition of 97 miles. The agency explains the added roads would be closed to the public, but fails to consider unauthorized motorized use or provide monitoring results demonstrating the efficacy of existing road closures. The risk of human-caused wildfire ignitions was not considered, particularly in the context of road access. Both the 2015 Lolo Travel Analysis Report and the Tyler's Kitchen Travel Analysis Process failed to identify human-caused wildfire ignition as risk. Yet, the best available scientific information is unequivocal

that human-caused fires dominate natural-caused ones and that roads increase fire ignitions.[1] Human-ignited wildfires are estimated to represent 84% of all fires, 44% of total area burned, and have tripled the length of the fire season.[2] These human-ignited fires are spatially correlated with infrastructure, including roads, railroads, and powerlines.[3]

Ultimately, we urge the Forest Service to reexamine its purpose and need regarding the transportation system, which states: "Maintain a suitable transportation system to support long-term land management and public uses and reduce adverse environmental effects." EA at 3. Rather the agency should strive for a transportation system that is more than just "suitable" to one that is environmentally and fiscally sustainable, and not to merely "reduce adverse environmental effects," but to achieve fully functional watershed conditions according to the Watershed Condition Framework and the associated technical guide. *See* Exhibits 2 & 3. Within this context, the Forest Service must consider and disclose the direct, indirect, and cumulative impacts of the proposed action to water quality, water quantity and overall watershed conditions. In order to take a hard look at the potential environmental consequences to watershed conditions from the proposed actions, the Forest Service must provide a more detailed analysis utilizing the Watershed Condition Framework (WCF) in a manner that addresses each applicable indicator and attribute. *See* Figure 1 below.

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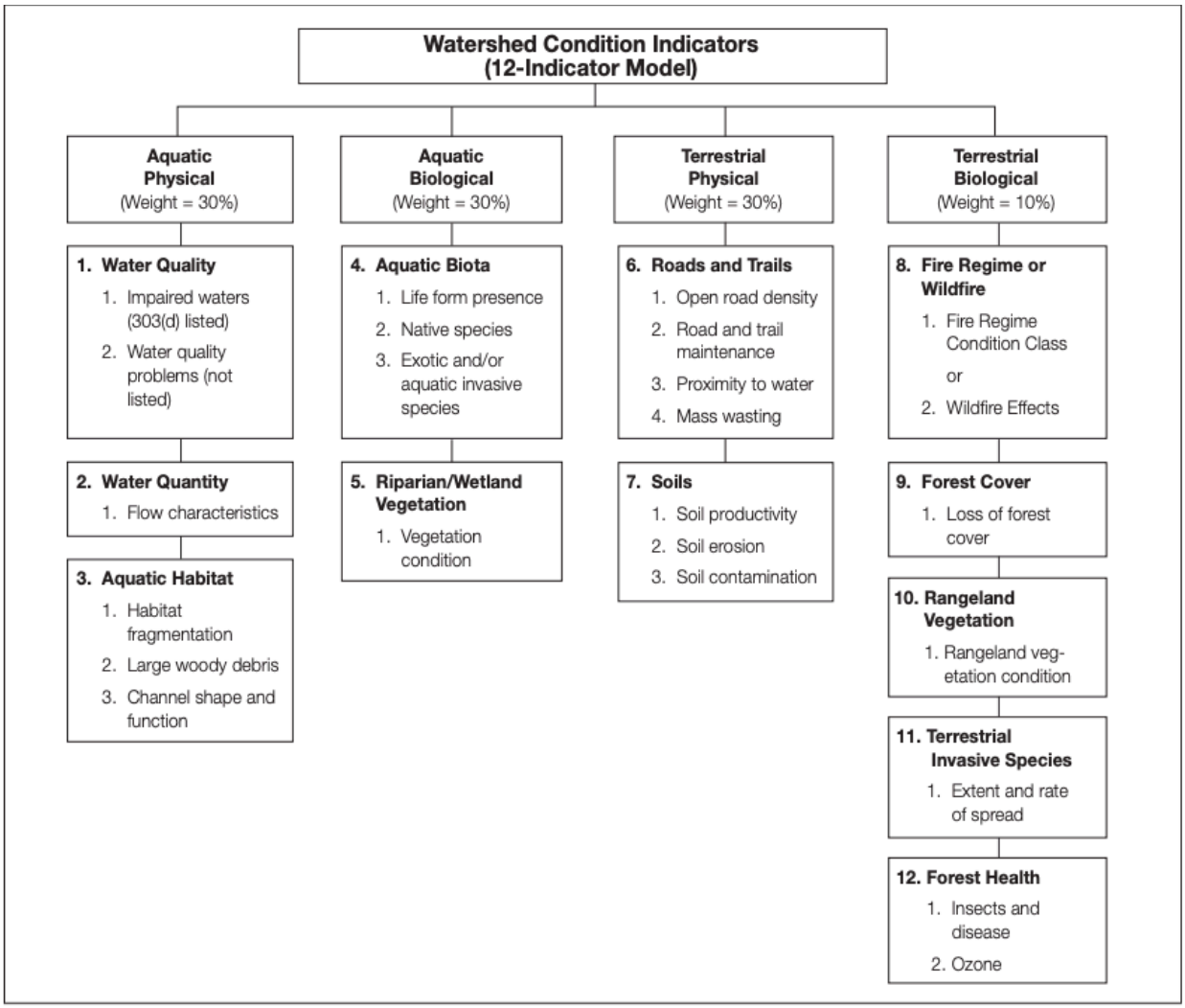
[1] Aplet G. et al. "Three-decade record of contiguous-U.S. national forest wildfires indicates increased density of ignitions near roads." *Fire Ecology* (In Review); Balch J.K. et al., "Human-started wildfires expand the fire niche across the United States." *Proceedings of the National Academy of Sciences*. (2017) 11(114): 2946–2951. https://doi.org/10.1073/pnas.1617394114; Johnston J.D. et al. "Does conserving roadless wildland increase wildfire activity in western US national forests?" *Environmental Research Letters*. (2021) 16(8): 084040. https://doi.org/10.1088/1748-9326/ac13ee; Ricotta C. et al. "Assessing the influence of roads on fire ignition: Does land cover matter?" *Fire*. (2018) 1(2): 24. https://doi.org/10.3390/fire1020024; Romero-Calcerrada R. et al. "GIS analysis of spatial patterns of human-caused wildfire ignition risk in the SW of Madrid (Central Spain)" *Landscape Ecology*. (2008) 23(3): 341–354. https://doi.org/10.1007/s10980-008-9190-2; Syphard A.D. et al. "Predicting spatial patterns of fire on a southern California landscape" *International Journal of Wildland Fire*. (2008) 17(5): 602–613. https://doi.org/10.1071/WF07087.

[2] Romero-Calcerrada R., "GIS analysis of spatial patterns of human-caused wildfire ignition risk in the SW of Madrid (Central Spain)"; Fusco E.J. et al. "Quantifying the human influence on fire ignition across the western USA" *Ecological Applications*. (2016) 26(8): 2388–2399. https://doi.org/10.1002/eap.1395.

[3] *Id.*

Figure 1. WCF Indicator and Attributes[4]



We are particularly interested in the Road and Trail indicator and attributes. Here it is important to note that for classification purposes, and thus analysis purposes under NEPA, the Watershed Condition Classification Guide (WCCG)[5] clarifies the meaning of its road attribute as follows:

> For the purposes of this reconnaissance-level assessment, the term "road" is broadly defined to include roads and all lineal features on the landscape that typically influence watershed processes and conditions in a manner similar to roads. Roads, therefore, include Forest Service system roads (paved or nonpaved) and any temporary roads (skid trails, legacy roads) not closed or decommissioned, including private roads in these categories. Other linear features that might be included based on their prevalence or impact in a local area are motorized (off-road vehicle, all-terrain vehicle) and nonmotorized (recreational) trails and linear features, such as railroads. Properly closed roads should be hydrologically disconnected from the stream network. If roads have a closure order but are still contributing to

[4] *Id.* at 6, Figure 2.
[5] https://www.fs.usda.gov/biology/resources/pubs/watershed/maps/watershed_classification_guide2011FS978.pdf

hydrological damage they should be considered open for the purposes of road density calculations.

WCCG at 26. Road densities, the proximity to water, maintenance and mass wasting are essential attributes to consider when determining potential watershed impacts. The Forest Service must consider these attributes, especially the effects of any necessary road-related actions such as construction, reconstruction, and road use. Further, when analyzing the impacts to water quality and water quantity, the FS must provide site-specific analysis of the location of riparian areas, water springs, fens, wetlands, etc., in the project area, and then disclose the foreseeable adverse impacts from the proposed action.

As it stands, the Forest Service analysis shows only short term improvements to water quality that may or may not actually improve watershed conditions or the road and trail indicator attributes, but such improvements are without context. What is clear is that road densities will remain extremely high within the project area and the proposed actions will only be a negligible improvement and only for a short period of time.

We urge the Forest Service to address these shortcomings in a supplemental environmental assessment, in addition to addressing the issues raised in the Task Force comments.

Cordially,

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ReWilding Manager
WildEarth Guardians.

Exhibits

1. Flathead-Lolo-Bitterroot Citizen Task Force Tyler's Kitchen EA Comments
2. Watershed Condition Framework, USDA Forest Service FS-977, May 2011
3. Watershed Condition Classification Technical Guide, USDA Forest Service FS-978, July 2011

Task Force EA Comments - Supporting Literature, Papers & Comments

- WildEarth Guardians et al. Comment on Grizzly Bear Proposed Rule_3.17.25
- Bader M, P Sieracki. 2022. Grizzly Bear Denning Habitat and Demographic Connectivity in Northern Idaho and Western Montana. Northwestern Naturalist 103(3):209‑225.
- Bader M, P Sieracki. 2022. Proposed Grizzly Bear Management Units on the Lolo, Bitterroot and Select Portions of the Beaverhead-Deerlodge National Forests, Montana, USA.
- Bader M, P Sieracki. 2024. Natural Grizzly Bear Repopulation in the Greater Bitterroot Ecosystem. Technical Report 01-24. WildEarth Guardians, Flathead-Lolo-Bitterroot Citizen Task Force. Missoula, MT. 22p.

- Bäder M, P Sieracki. 2024. Spatiotemporal Dimensions of Grizzly Bear Recovery. Technical Report 02-24. Missoula, MT. 37p.
- Boulanger J, GB Stenhouse. 2014. The Impact of Roads on the Demography of Grizzly Bears in Alberta. PLoS ONE 9(12): e115535.
- Bourbonnais, M. L., Nelson, T. A., Cattet, M. R., Darimont, C. T. and Stenhouse, G. B. 2013. Spatial analysis of factors influencing long-term stress in the grizzly bear (Ursus arctos) population of Alberta, Canada. PLoS One 8(12).
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- Mattson, D.J. (2023). Flawed Science: A Critique of Science Practices and Products by the Interagency Grizzly Bear Study Team 2006-2023. Grizzly Bear Recovery Project Report, BGRP-2023-1.
- Mattson, D. J. (2024). Roads, Residences, and Grizzly Bears: Effects on Human Infrastructure on Brown and Grizzly Bears. Grizzly Bear Recovery Project Report GBRP-2024-1.
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- McLellan, B.N. (2015), Some mechanisms underlying variation in vital rates of grizzly bears on a multiple use landscape. Jour. Wild. Mgmt., 79: 749-765. https://doi.org/10.1002/jwmg.896
- Peck, C. P., F. T. van Manen, C. M. Costello, M. A. Haroldson, L. A. Landenburger, L. L. Roberts, D. D. Bjornlie,and R. D. Mace. 2017. Potential paths for male-mediated geneflow to and from an isolated grizzly bear population.Ecosphere 8(10):e01969. 10.1002/ecs2.1969
- Proctor, MF, BN McLellan, GB Stenhouse, G Mowat, CT Lamb, MS Boyce. 2019. Effects of roads and motorized human access on Grizzly Bear populations in British Columbia and Alberta, Canada. Ursus (30e2):16-39.
- Proctor, M. F., Lamb, C. T., Boulanger, J., MacHutchon, A. G., Kasworm, W. F., Paetkau, D., ... & Servheen, C. (2023). Berries and bullets: influence of food and mortality risk on grizzly bears in British Columbia.
- Sells, Sarah & Costello, Cecily & Lukacs, Paul & Roberts, Lori & Vinks, Milan. (2023). Predicted connectivity pathways between grizzly bear ecosystems in Western Montana. Biological Conservation. 284. 10.1016/j.biocon.2023.110199.
- Turnock, M. F., Teisberg, J. E., Kasworm, W. F., Falcy, M. R., Proctor, M. F., & Waits, L. P. (2024). Gene flow prevents genetic diversity loss despite small effective population size in fragmented grizzly bear (Ursus arctos) populations. Conservation Genetics. https://doi.org/10.1007/s10592-024-01666-y