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Via US mail and email: comments-northern-clearwater-north-fork@usda.gov

Re: DEAD LAUNDRY SCOPING

Dear Forest Service,

Enclosed are comments from Friends of the Clearwater and Alliance for the Wild Rockies ("we," "us," "our,") on the Dead Laundry Project proposed action, which is the scoping project period.

The undersigned request notice by mail of anything related to this project per 40 C.F.R. [sect] 1506.6(b). Additionally, please add katie@friendsoftheclearwater.org and gary@friendsoftheclearwater.org for any email announcements pertaining to this project. Finally, for any future projects that involve collaborative opportunities where the proposed-action letter provides an already-developed project (and it is too late to participate in project development), please add us to your mailing list. This includes notifying us by mail of anything related to the project before you issue the proposed-action letter. We also request notification by mail of the public meetings that you announce with news releases as well as mail notification of upcoming field trips you have planned.

We have provided what we think is the best available science. Not all of the scientific articles provided are specifically discussed because of our time constraints imposed by three Forest Service deadlines at this time (the revised forest plan comments, the Section 16 project comments, and this one). Additionally, please note that some science could inform two particular analyses, such as Hutto's various articles on fire and the species that rely on fire. If the Forest Service relies upon science other than what is cited below, please provide an explanation as to why that science is more appropriate than the science we have referenced. We expect this project to comply with the forest plan, as required by law (the National Forest Management Act, incorporated by reference), which includes fisheries standards, old-growth standards, and wildlife standards, among others. If the Forest Service uses models to support conclusions, we would like the Forest Service to introduce evidence of how the Forest

Service has validated those models. We expect appropriate analyses in the EA that relate to the stated purposes and need for the project, supported with appropriate information. 2

This project as scoped should not proceed at all, and we encourage the Forest Service to simply withdraw it. It is curious that, in your legal notice on Dead Laundry, the Forest Service suggests that this might be the only opportunity to comment on this project, and yet you have provided the public vague information on your proposed action, have no environmental analysis, and cite no scientific source for some of the ecological assumptions you make. The Forest Service has constructively frustrated the public from providing meaningful opportunities on this project without a comment period on the EA, compounded by the logistics of societies with many resources closed or hard to access, like libraries, because of the ongoing pandemic. For the reasons below, we strongly, strongly encourage the Forest Service to withdraw this project. Alternatively, because of the environment impacted, an EIS must be prepared. Region 1's directive that the Forest Service in its region cannot do an EIS without the regional office's permission is a political directive that runs afoul of the National Environmental Policy Act. The purpose of an environmental assessment is to ascertain whether it is necessary to prepare an environmental impact statement. 40 C.F.R. [sect] 1508.9

NEPA ISSUES

Agencies must "[m]ake diligent efforts to involve the public in preparing and implementing their NEPA procedures." 40 C.F.R. [sect] 1506.6. The legal notice suggests that this is the only comment period, which undermines the spirit and intent of NEPA[mdash]one of the points of involving the public is to ensure information is disclosed to the public before decisions are made and actions are taken. 40 C.F.R. [sect] 1500.1. Public scrutiny is "essential to implementing NEPA." 40 C.F.R. [sect] 1500.1. This scoping letter provides minimal information. For example, the proposed action contains not one citation to a scientific article[mdash]the undersigned has no idea about the science upon which the Forest Service is basing its assumptions. There are also vague parts; for example, on creating openings larger than 40 acres, the Proposed Action stated, "Currently these acreage estimates do not account for all sensitive areas and/or streams that would be removed from proposed treatment areas." The public is solicited for one comment when the specifications of the project are not set[mdash]neither the public nor the agency can take a hard look at this time. Without an open comment period on the environmental assessment, the public cannot see any of the science or more detailed specifications of the project until the objection period. This prejudices public comment because the public is prevented from introducing more meaningful, on-point comments. Should the Forest Service decide to move forward with this project, please have an open EA comment period with a draft EA the public can see and review.

An open EA comment period would also give the public a much fairer opportunity to comment than the timing of this comment period. The Forest Service chose to make this project due five days before the comments on the forest-plan revision and on the same day as scoping comments are due on the Section 16 Project. The forest-plan will direct how the Forest Service governs our forests for the next few decades, so in these last days of that comment period, FOC, its members, and the public will likely be focused on that. The Forest Service has released about nine projects over the course of the revised plan's comment period since its release December 20, 2019. On top of this workload the Forest Service has given the public, there is an ongoing pandemic that is impacting lives across the United States. Many families are working and schooling from home, and resources like libraries are not open. We have already asked the Forest Service to pause public comment on all projects, which, as of April 15, 2020, it has not done. In fact, the legal notice for this project invites hand-deliveries to an office that is no longer open to the public because of COVID-19. The Forest Service's actions in light of these factors have done little to diligently involve the public. The point of NEPA is to take a hard look at potential effects before decisions are made and actions are taken. The NEPA process benefits the Forest Service just as much as it does the public. While the public can ensure that the Forest Service complies with the level of analysis that our environmental laws require, the Forest Service benefits from a chance to correct errors and consider the previously unconsidered before the public is forced into the last resort of litigation. The commenting process exists for good reason. 3

For the above reasons, if the Forest Service chooses not to withdraw this project, we encourage the Forest Service to have an open public comment period on more specific analysis in a draft environmental assessment before moving to an objection period. Anything less prejudices meaningful public comment on this project.

ALTERNATIVES

If the Forest Service chooses to continue with a project based on several problematic assumptions (below), we request the Forest Service to request a more robust set of alternatives that could meet the stated purpose and need with less environmental impact. Forest Service should examine alternatives that builds no new roads, constructs no or far fewer temporary roads, does not log in old growth, and does not do "fuel treatments" or timber harvest of any kind in Idaho Roadless Areas. There are too many roads in the National Forest System and the Forest Service cannot keep up maintenance on what exists.

INHERENT CONTRADICTIONS IN THE PROPOSED ACTION DOCUMENT

There are several statements in the PA that seem to contradict each other. First, the Forest Service describes this area as remote and references private inholdings. The Forest Service stated "[d]ue to the remoteness, steep slopes, and sensitive soils in these areas, hand and mechanical treatments are not a viable treatment option." PA p. 5. Yet, the Legal notice states that the project would "reduce the risk of wildfire to local communities" among other things. Are those remote inholdings what the Forest Service is counting as the Wild Urban Interface and communities?

The project as proposed not only fails to meet the purpose and need, but would move the forest into conditions at odds with the purpose and need. The PA states that this area has a "homogenous age class and species composition." p. 3. But, the Forest Service states, "The project area is dominated by western red cedar habitat types with smaller inclusions of grand fir, mountain hemlock, and sub-alpine fir." p. 3. That there is one predominant habitat with inclusions of others does not seem homogenous. We refer you to Cooper et al. 1991 for forest habitat types of northern Idaho, because this PA's description in terms of the tree composition appears on par with the forest habitat types found in this part of the Clearwater. We question the Forest Service's conclusion that this area is really "homogenous." Also, a big component of this project is going to create a homogenous age class of trees. The Clearwater Forest Plan defines even-aged management, and it is the "the creation of stands in which trees of essentially the same age grow together." Clearwater Forest Plan VI-9. Clearcutting, shelterwood cutting, and seed tree cutting are all considered even-aged management, and the PA states that 28 units would create openings greater than 40 acres each. So, by proposing a project to eliminate a "homogenous age class," the Forest Service has proposed timber harvests that will create large openings to be replaced with a homogenous age class.

PURPOSE AND NEED

There are many controversial issues with the scientific assumptions underlying the Forest Service's purpose and need as they pertain to wildfire, insects, disease, and old growth, and we discuss those below. However, it is not clear to us that there is an economic purpose or need for this project, either. The Forest Service has been overly prolific with providing economic benefits to logging companies by selling off timber from our national forests. On an annual basis, the Forest Service has sold some of the most timber in the last five years than the last twenty, and this year, sales in the first quarter were so much that if the Forest Service continues at this rate, the timber program is growing to the unsustainable rate that it was in the early 1980s. 4

Also, how are you figuring in the loss of logging jobs to mechanization? Does mechanization and the need for less workers mean that the Forest Service is increasing logging to compensate for the economic loss that mechanization inflicts?

Also, when you figure the economic need, how does this relate to the economics gained from outdoor recreation?

Please provide more information about what you claim is an economic need.

Are E1 areas the only type of management area in the project? We are writing these comments based on the Forest Service's representation that they are because this is the only management area disclosed. If there are other management areas, please disclose them.

Even in areas where the proposal might offer specific information, there are notes that it is subject to change, which will be after this only chance for open comment. Because the project is so large, this may procedurally violate the National Environmental Policy Act and prejudice us from preparing meaningful comments and raising specific issues had we known more.

The most meaningful comments that we can provide at this stage of the process before any environmental analysis is available relate to PA assumptions that are not supported by the best science. We don't know what science the Forest Service relied upon because no science was proposed in the scoping action[mdash]there were only unsupported, conclusory assertions. Assuming that the agency has science to support the assumptions made, the below discussion demonstrates that, at minimum, those assumptions are scientifically controversial. Please review the science provided with this comment.

SCIENTIFIC CONTROVERSY WITH ASSUMPTIONS UPON WHICH THE PURPOSE AND NEED FOR THIS PROJECT IS BASED

FS assumption: Severe Fire is bad for the Clearwater National Forest

In the PA, the agency states, "Most of the project area has been absent of fire since the event of 1910 or shows no fire history at all. This results in decades of surface fuel buildup within stands in both roadless and roaded areas." PA notes that a purpose of this project is to "Reduce hazardous fuel loading and potential fire severity." These representations suggest that the FS assumes that severe forest fire is both unnatural and bad for the Clearwater National Forest. Science does not support this assumption. Whitlock et al. 2015 discusses constructing fire baselines are best done with a very long-term perspective of time regimes because it can "describe fire and consequences over a wide range of climate conditions, land-use activities, and vegetation types[hellip][F]ire history should be viewed not as irrelevant storytelling, but rather as vital information that describes the range of possible fire conditions under a broader array of spatial and temporal scales than we can observe at present." Whitlock et al. 2015, p. 267. Fire baselines in this region have very long-term intervals.

High-severity wildfire is part of this ecosystem. The Forest Service references the fires of 1910 and 1934, and those fires were before the Forest Service started its policy of suppressing all fires. Stand-replacing wildfires on the order of centuries is the fire regime of the Northern Rockies¹; that is the natural ecological process governing this area. Also, the Forest Service, in other analyses like the revised

1 Westerling et al. 2006. Warmer and Earlier Spring Increase Western U.S. Forest Wildfire Activity. *Science* 313: 940-43; Brunelle and Whitlock 2003. Postglacial fire, vegetation, and climate history in the Clearwater Range, Northern Idaho, USA. *Quaternary Research* 60: 307-318; Odion et al. 2014. Examining Historical and Current Mixed-Severity Fire Regimes in Ponderosa Pine and Mixed-Conifer Forests of Western North America. *PLOS One* 9(2): pp. 1-14, e878852. 5

forest plan's draft environmental impact statement, recognizes that the fire regime includes large, stand-replacement fires.

Yet, the PA implies that this natural process is somehow unnatural. We would like an explanation on this. Especially since the Forest Service cites Westerling et al. 2006 in the forest-plan revision process, indicating that the agency has accepted this science in other, concurrent environmental analysis. This scientific article states that high-severity wildfires are the ecosystem feature of the Northern Rockies, thus fire suppression would have had little impact on the fire regime. Also, Westerling et al. 2006 discusses the potential for more wildfire because of a warming climate. If that is indeed the case and we are to expect more wildfires, why can't the agency let them happen naturally? Wouldn't the agency be adding onto the cumulative effects by igniting fires? Please also analyze these emissions with the global warming section below.

2 Westerling et al. 2006. Warmer and Earlier Spring Increase Western U.S. Forest Wildfire Activity. *Science* 313: 940-43.

Mixed severity fire, which includes patches of natural high-severity fire, creates biological diversity in this region, and wildlife rely on it. When we discuss high-intensity fire, we mean stands with over 75 percent tree mortality. Snag forest habitat "is one of the most ecologically important and biodiverse forest habitat types in western U.S. conifer forests (Lindenmayer and Franklin 2002, Noss et al. 2006, Hutto 2008)." Hanson 2010. "Many plant and animal species are adapted to post-fire conditions, and populations of some (eg many bird species; Figure 1) decline after fire exclusion or post-fire logging." Noss et al. 2006. Hutto 2008 found that the black-backed woodpecker is a specialized species on severely burned forests. Hutto found a distribution of black-backed woodpeckers, which "suggests that conditions created by severe fires probably represent the historical backdrop against which this species evolved." And, "[t]he desire to rid our forests of severe fire beyond the urban interface is, for many forest types, not well grounded in ecological science." Hutto 2008. Please also see LeQuire 2009, Odion et al. 2014, Hutto 1995, and Hutto 2006.

FS assumption: Logging and burning across 40,565 acres will help protect 20 structures

Part of the purpose and need of this project is to "provide protection" for private inholdings. The Forest Service has implied, without citations to any study, that logging miles away from inholdings, across the area, and even performing treatments to roadless areas will protect structures. Science demonstrates that the most that can be done for buildings exists with what the buildings are made of and the first 40 meters. Cohen 2000 quantifies the ignition zone as 40 meters and states,

Because home ignitability is limited to a home and its immediate surroundings, fire managers can separate the W-UI structure fire loss problem from other landscape-scale fire management issues. The home and its surrounding 40 meters determine home ignitability, home ignitions depend on home ignitability, and fire losses depend on home ignitions. Thus, the W-UI fire loss problem can be defined as a home ignitability issue largely independent of wildland fuel management issues. This conclusion has significant implications for the actions and responsibilities of homeowners and fire agencies, such as defining and locating potential W-UI fire problems (for example, hazard assessment and mapping), identifying appropriate mitigating actions, and determining who must take responsibility for home ignitability.

(emphasis added). Cohen 2000 also states, "[T]he wildland fire threat to home is not a function of where it happens related to wildlands, but rather to how it happens in terms of home ignitability." These are simply issues that belong to the homeowners and not the Forest Service. This purpose and need are not based on any science. In fact, science suggests that such a big logging project might actually increase wildfire severity (see next). 6

FS assumption: Logging will reduce wildfire severity

Fire severity is not greater where fire has been absent. Odion et al. 2004 found "three times more high-severity fire in areas last burned since 1920 (recently burned landscape). The amount of high-severity fire in all areas

previously burned in 1920 or earlier (long-unburned landscape)." Bradley et al. 2016 has found this, too.

Bradley et al. 2016 studied the fundamental premise that mechanical fuel reduction will reduce fire risk. This study "found forests with higher levels of protection had lower severity values even though they are generally identified as having the highest overall levels of biomass and fuel loading." In fact, this study found the opposite to be true: "burn severity tended to be higher in areas with lower levels of protection status (more intense management), after accounting for topographic and climatic conditions in all three model runs. Thus, we rejected the prevailing forest management view that areas with higher protection levels burn most severely during wildfires." The study goes on to discuss why this might be:

Some of these researchers have hypothesized that as forests mature, the overstory canopy results in cooling shade that allows surface fuels to stay moister longer into fire season (Odion and Hanson 2006, 2008). This effect may also lead to a reduction in pyrogenic native shrubs and other understory vegetation that can carry fire, due to insufficient sunlight reaching the understory (Odion et al. 2004, 2010).

Zald and Dunn, 2018 state, "intensive plantation forestry characterized by young forests and spatially homogenized fuels, rather than pre-fire biomass, were significant drivers of wildfire severity."

In his testimony before Congress, DellaSala, 2017 discusses "[hellip]how proposals that call for increased logging and decreased environmental review in response to wildfires and insect outbreaks are not science driven, in many cases may make problems worse, and will not stem rising wildfire suppression costs" and "what we know about forest fires and beetle outbreaks in relation to climate change, limitations of thinning and other forms of logging in relation to wildfire and insect management" and makes "recommendations for moving forward based on best available science."

Research has found high carbon losses associated with "fuel treatment" and only modest differences associated with the high-severity fire and low severity fire that fuel treatment is meant to encourage. Campbell et al. 2012.

Finally, please also see Lesmeister et al. 2018.

FS assumption: insects and disease will impact trees which will then lead to high severity fire

The PA mentions that the area is "highly susceptible" to "insect and disease agents." PA p. 3. While there were apparently some insect and disease surveys conducted in August 2019 (PA p. 3), that wasn't posted with the proposed action or released to the public, so we don't know anything which insects and disease the Forest Service considers the area to be highly susceptible to or why.

We therefore provide the following articles and cannot introduce more specific science until we have more details: DellaSala (undated), Hart et al. 2015, Hart et al. 2015a, Kulakowski and Veblen 2007, Kulakowski and Veblen 2015, Harvey et al. 2013, Donato et al. 2013.

FS assumption: a healthy and "resilient" forest means minimizing or eliminating fire, insects, and disease 7

Resiliency should not mean forests free from fire, insects, and disease. Trees that die from insects, disease, or fire are bad for the ecosystem. If left unlogged, trees might die from insects, disease, or fire. While not stated outright, the implied assumption is that these disturbance processes are undesirable, and that the FS prefers to log trees before they die naturally.

Contrary to the way tree death the Forest Service has framed tree death (i.e., undesirable and a departure from natural conditions), tree death is a normal, ecological process[mdash]dead trees serve ecological functions in the forest,³ which the Forest Service ignores with the implication that dead trees are "creating undesirable conditions

for existing vegetation and wildlife." Franklin et al. 1987 recognizes that

3 Please read Franklin et al. 1987. Tree Death as an Ecological Process. BioScience 37(8): 550-56.

The function of dead trees in the ecosystem has rarely received the consideration that it deserves. At the time a tree dies, it has only partially fulfilled its potential ecological function. In its dead form, a tree continues to play numerous roles as it influences surrounding organisms. Of course, the impact of the individual tree gradually fades as it is decomposed and its resources dispersed, but the woody structure may remain for centuries and influence habitat conditions for millenia.

Franklin et al. 1987 p. 550. For example, tree death does the following:

- * [bull] Increases light, nutrients, water, and energy available to other organisms
- * [bull] Attracts decomposer organisms, which bring with them nutrient resources
- * [bull] Creates woody debris on the forest floor that serve as erosion barriers on steeper hillsides or stepped stream profiles in forest streams
- * [bull] The uprooting of trees mixes soils

Franklin et al. 1987.

Additionally, contrary to the implication expressed in the PA's description of the existing condition, "surface fuels," or woody debris on the forest floor isn't a bad thing. It's one of the characteristics that indicates an area is old growth, a "vital component of the vegetative diversity of the Clearwater Forest" and "vital to the perpetuation of old-growth dependent species of wildlife." Clearwater Forest Plan, Appendix H. Appendix H states that "Old-growth Forest is defined as 'a stand that is past full maturity and showing decay; the later stages of forest succession'" and one of the following requirements to be considered old growth is "With significant coarse woody debris, including snags (>10/AC over than 20 feet) and downed logs (>20 ton/AC and snag and logs) (minimum 4/AC) that are large (> 21dbh) and >50 feet long. Are these the features that the Forest Service is categorizing as "surface fuels buildup"?

FS assumption: Old growth can be "enhanced" with logging

We are concerned about the "old-growth enhancement" component of this project and are not aware of science that can support it. Both the Clearwater Forest Plan and science recognize that old growth is not simply large, healthy trees. As discussed in Franklin et al.'s 1987 article about tree death, forest health and resiliency does not mean an absence of fire, insects and disease. Fire, insect, and disease over a long period of time are exactly the processes that develop old growth. Old growth exists not merely for large, old, healthy trees[mdash]it exists precisely for the wildlife that need the decaying living trees in which to nest, and the logs on the ground in which some of that wildlife can forage for food. The Forest Service created old-growth management guidelines in the Clearwater National Forest because this type of habitat "is vital to the perpetuation of old-growth dependent species of wildlife." Appendix H. 8

Our science and previous agency analysis on the old-growth-dependent wildlife suggest that logging is going to eliminate the characteristics that this wildlife needs, such as future snag recruitment, decaying trees that are alive, and the opening of canopies. Also note that this action[mdash]logging old growth[mdash]violates earlier Forest Service directives, like the 2006 Reilly memo. And, logging will eliminate heart rot, stand decadence, canopy closure, shrub-sapling layer, overall canopy closure, and coarse woody debris. Please provide and discuss science that supports your assumption that logging old growth can improve it and how this won't run afoul of the Clearwater Forest Plan old-growth and snag guidelines. Or withdraw these 300 acres of "enhancement" from this project if the agency refuses to withdraw the project in its entirety.

OTHER CONCERNS

Desired conditions

The PA describes a "general purpose" of the project to move towards "desired future conditions." In fact, for an over 3,000-acre project, the Forest Service neglected to disclose exactly what desired conditions and objectives in the forest plan are at issue. The Clearwater Forest Plan does not have "desired conditions," so we are unclear as to what you mean by that.

Old growth

We object to any activities in old growth since the agency cannot show that it is meeting its forest plan standard of ten percent old growth forest-wide and five percent old growth in each watershed. Old growth "enhancement" activities are going to further impact old growth.

The Clearwater still seems to be at a deficit of old-growth in violation of the governing forest plan. Any environmental analysis for this project should provide the public a list of the stands identified and included in old growth inventory and a topographic map of where these stands are. Also, verify on-the-ground that these stands are still there. In other projects, the Forest Service has found that when it went out on the ground, some stands found were no longer old-growth. Also, the forest plan requires a certain percentage to be old growth and a certain percentage to be replacement old growth. When FIA data suggested there was less than 10 percent in the Clearwater, the Forest Service issued a memo prohibiting logging in old growth (Reilly 2006) and old-growth recruitment to get to the 10 percent. If the Forest Service finds a total of old-growth and old-growth recruitment more than 10 percent, then the Forest Service needs to figure out what areas are old growth now and not log those. Follow the guidelines in Appendix H.

According to the 1993 settlement agreement on the Clearwater Forest Plan, "Field verification of old growth stands will occur for all timber harvest and new road construction projects." The agency must field-verify old growth to comply with the forest plan settlement agreement, and this must be shown in the EA to demonstrate compliance with the agreement.

For E1 management areas, the Clearwater Forest Plan requires the agency to "Identify and maintain suitable old-growth stands and replacement habitats for snag and old-growth dependent wildlife species in accordance with criteria in Appendix H." Additionally, the Clearwater Forest Plan lawsuit settlement agreement requires the Forest Service to prepare an environmental impact statement for proposed timber harvest or new road construction projects that will directly affect a field verified old growth stand of 100 acres or more, and field verification will occur for all timber harvest projects. We haven't seen satisfactory records by the FS that it has monitored or kept track of old-growth logging or old-growth percentages in the years since the Reilly memo. Compliance means the Forest Service will use the forest

plan's definition to identify potential old growth. And note that minimally these stands must be 25 acres, preferably 80 acres large.

We expect analysis to impacts on the old-growth-indicator species for the Clearwater National Forest. Additionally, please consider the following articles on old growth that we have provided: Habeck 1998, Lindenmayer and Franklin 2002, and USDA PNW Research Station Science Update 2003.

Fire refugia

Another concept the Forest Service should consider are the impacts to potential fire refugia. See Krawchuk et al. 2016, and Zimmer 2018. The term "fire refugia" focuses "on the idea of locations disturbed less frequently or less

severely by wildfire relative to the surrounding vegetation matrix. Fire refugia provide habitat for individuals or populations in which they can survive fire, in which they can persist in the postfire environment, and from which they can disperse into the higher-severity landscape." Meddens et al. 2018. Sometimes refugia can be forecasted, but sometimes these areas survive by happenstance. Zimmer 2018 and Krawchuck et al. 2016. The Forest Service ignores the likelihood that the more acreage it "treats" by trying to burn or log, the more likely the agency will eliminate what might have served as fire refugia. These islands provide pockets of shelter for animals, and they disperse seeds to burned areas. See Zimmer 2018. The agency needs to discuss the importance of fire refugia in its analysis. Has the agency ever tried to map out refugia? Or recognized that if an area is long-unburned, it might have potential to serve as a fire refugia?

Roadless areas

We object to any activities in the roadless areas and those should be dropped. The existing condition of the roadless areas stems from the "purpose and need" cited in the proposed action, which is not based on the best science.

Cutting trees and burning in roadless areas have the real potential to impact them. The Forest Service stated that it plans to use prescribed fire in roadless areas. Are mechanical methods also planned as part of the prescribed burning? It appears from the proposed action that fuels treatment includes burning and "mechanical hand." What is involved with "mechanical hand" treatments and can you provide pictures as to what an area looks like at the moment these treatments are concluded? How are you getting to these areas? Often times, hindsight reveals the Forest Service's rosy prediction that its action will not impact roadless characteristics is incorrect. We provide a report we wrote on that last year, and that report contains several examples.⁴

⁴ See Bilodeau and Macfarlane 2019. The Roadless Report: Analyzing the Impacts of Two Roadless Rules on Forested Wildlands.

⁵ USDA, Forest Service 2010. Our Approach to Roadless Area Analysis and Analysis of Unroaded Lands Contiguous to Roadless Areas.

Impacts to roadless areas should be judged from a layman's point of view.⁵ Also, there isn't a way to predict what might be fire refugia (see that section), so this project could eliminate the places that provide the diversity after fire.

The USFS Northern Region explains the concept of "Roadless Expanse" in a document entitled "Our Approach to Roadless Area Analysis of Unroaded Lands Contiguous to Roadless Areas" (12/2/10). In summary, this paper is FS interpretation of federal case law/judicial history regarding the Roadless Area Conservation Rule. It states that "projects on lands contiguous to roadless areas must analyze the environmental consequences, including irreversible and irretrievable commitment of resources on roadless area attributes, and the effects for potential designation as wilderness under the Wilderness Act of 1964. This analysis must consider the effects to the entire roadless expanse; that is both the 10

roadless area and the unroaded lands contiguous to the roadless area." (Emphasis added.) The map shows that some roads, ostensibly temporary, and cutting units would be right on the boundary of the Kelly Creek/Hoodoo/Great Burn and Moose Mountain IRAs. As such, a greater roadless expanse could be affected.

The Idaho Roadless Rule provides some definitions of roadless character that have implications for the analysis in this NEPA document:

Resources or features that are often present in and characterize Idaho Roadless Areas, including:

- (1) High quality or undisturbed soil, water, and air;
- (2) Sources of public drinking water;
- (3) Diversity of plant and animal communities;
- (4) Habitat for threatened, endangered, proposed, candidate, and sensitive species, and for those species dependent on large, undisturbed areas of land;
- (5) Primitive, semi-primitive nonmotorized, and semi-primitive motorized classes of dispersed recreation;
- (6) Reference landscapes;
- (7) Natural appearing landscapes with high scenic quality;
- (8) Traditional cultural properties and sacred sites; and
- (9) Other locally identified unique characteristics.

There is certainly a potential for impacts to roadless and wilderness character of the IRAs. For example, the proposal is not clear what is meant by "mechanical" or "hand" treatments in the scoping letter. Mechanical fuel reduction treatments usually means cutting down trees. When a future Forest Service looks at the work done in this area, the agency looks at the impacts left on the land, not the intent of the project at the time it was proposed. This is true in court cases that have involved the Forest Service and roadless areas⁶ as well as the Forest Service's own projected impacts versus hindsight perspectives, as noted in our Roadless Report.⁷

⁶ Kettle Range Conservation Group v. U.S. Forest Service, 971 F.Supp. 480 (D.Or. 1997)

⁷ Bilodeau and Macfarlane 2019.

These roadless areas, like the ones in the East Saddle Integrated Restoration Project proposal and the Dead Laundry proposal, are some of the wildest remaining undesignated country left in the lower 48 states. The more intense the human impact, the more it will denigrate the roadless character. For these reasons, there is a high chance to impact roadless areas.

Douglas fir

Any environmental analysis must discuss the role that Douglas-fir plays in our forest, especially as it pertains to the natural fire regimes. A Douglas-fir old-growth article is even cited in Appendix H of the forest plan. The agency must assess the environmental impact of eliminating Douglas-fir; the agency concludes, without citing science, that reducing Douglas-fir creates more resilient forests. The Forest Service must recognize that, in part because Douglas-fir has coevolved with fire in this region, that it has been a naturally occurring tree well before the Forest Service started logging in the Nez Perce-Clearwater National Forests. "This conifer has evolved with fire and displays several life-history traits that allow it to persist across a wide range of fire frequencies and severities (Tepley et al., 2013)." Whitlock 2015, p. 273. (Studies from the western side of the Pacific Northwest are informative for the Clearwater Basin because of the comparative phylogeography. See Brunsfeld et al. 2001.) Additionally, Odion et al. 2014 noted that in the Northern Rockies, FIA plots in areas protected from logging showed a majority of plots where Douglas-fir was the dominant overstory tree. 11

Fisher

It is unclear that the Forest Service would comply with the Clearwater Forest Plan for old growth or a hard-look at impacts as they pertain to fisher, which is a sensitive species for this forest.

From Ruggiero et al. 1994b:

(T)he fisher is unique to North America and is valued by native and nonnative people as an important member of the complex natural communities that comprise the continent's northern forests. Fishers are an important component of the diversity of organisms found in North America, and the mere knowledge of the fisher's existence in natural forest communities is valued by many Americans.

Research suggest that fishers are heavily associated with older forests throughout the year. (Aubry et al. 2013, 8 Olsen et al. 2014, 9 Raley et al. 2012, 10 Sauder 2014, Sauder and Rachlow 2014, Weir and Corbould 2010.) The Forest Service hasn't disclosed whether the area of this PA is old growth, but because there are downed trees and downed woody debris is an old-growth characteristic, this is possible.

8 Aubry et al. 2013. Meta-Analysis of Habitat Selection by Fishers at Resting Sites in the Pacific Coastal Region. *The J. of Wildlife Management* 77(5): 965-974.

9 Olson et al. 2014. Modeling the effects of dispersal and patch size on predicted fisher (*Pekania* [Martes] pennanti) distribution in the U.S. Rocky Mountains. *Biological Conservation* 169:89-98.

10 Raley et al. 2012. Habitat Ecology of Fishers in Western North America, in *Biology and conservation of Martens, Sables, and Fishers* (Eds. Aubry et al. Comstock Publishing Associates).

Most studies have found that fishers are reluctant to stray from forest cover and that they prefer more mesic forests (Olson et al. 2014, Sauder 2014, Sauder and Rachlow 2014, Weir and Corbould 2010). Both Sauder and Rachlow (2014) and Weir and Corbould (2010) predicted the influence of openings on fisher habitat occupancy based on their data. For example, Weir and Corbould predicted that a 5% increase in forest openings would decrease the likelihood of fisher occupancy by 50%. Sauder and Rachlow (2014) suggested that an "increase of open area from 5% to 10% reduces the probability of occupation by fishers by 39%. Sauder and Rachlow (2014) reported that the median amount of open area within fisher home ranges was 5.4%. This was consistent with "results from California where fisher home ranges, on average, contained <5.0% open areas" (Raley et al. 2012).

Sauder and Rachlow (2014) report the average home range size is approximately 12,200 acres and for a female fisher and approximately 24,300 acres for a male fisher. Home ranges generally do not overlap greatly for the individual sexes (21.3% for females and 15.3% for males), but male home ranges can overlap female home ranges. Preferred habitat would likely occur in upland areas and stands composed of cedar and grand fir forests (Schwartz et al. 2013).

Also Jones, (undated) recognizes:

Roads are directly correlated with trapper access, and consequently, fisher vulnerability. Even in areas where fishers cannot be legally trapped, trapping pressure for other furbearers (i.e., marten) may contribute significantly to fisher mortality. Roads bisecting or adjacent to preferred habitats (i.e., drainage bottoms) have the greatest potential of increasing a trapper's probability of encountering fishers."

And Witmer et al., 1998 state, "The range and population levels of the fisher have declined substantially in the past century, primarily the result of trapping pressure and habitat alteration through logging (Powell and Zielinski

1994)."

Heinemeyer and Jones, 1994 stated: 12

Fishers are susceptible to trapping, and are frequently caught in sets for other furbearers. Additionally, populations are vulnerable to trapping, as even light pressure may cause local extinction. Western fisher populations may have lower natality and higher natural mortality rates as compared to eastern populations. Consequently, western populations may be more susceptible to over-trapping. It has been suggested that incidental captures may limit population growth in some areas.

Sauder (2014) suggests that five National Forests (Clearwater, Nez Perce, Coeur d'Alene, Kaniksu, and Kootenai) hold the key to recovery of the species in the Northern Region. As with most of the Sensitive wildlife, fishers receive little habitat protection emphasis in the Forest Plan. There needs to be an environmental analysis that analyzes and discloses the direct, indirect or cumulative impacts on important habitat components, such as snags, logs, foraging habitat configuration, connectivity, cover, prey species impacts, etc. The FS simply has no conservation strategy for this species.

Ruggiero et al., 1994b discuss fisher habitat disruption by human presence:

[hellip]The fisher's reaction to humans in all of these interactions is usually one of avoidance. Even though mustelids appear to be curious by nature and in some instances fishers may associate with humans (W. Zielinski, pers. obs.), they seldom linger when they become aware of the immediate presence of a human. In this regard, fishers generally are more common where the density of humans is low and human disturbance is reduced. Although perhaps not as associated with "wilderness" as the wolverine (V. Banci, Chapter 5), the fisher is usually characterized as a species that avoids humans (Douglas and Strickland 1987; Powell 1993).

We also introduce the IDFG's figures from 2013-2019 on non-wolf species caught in wolf traps. There have been large amounts of fisher caught, and because the Nez Perce and Clearwater are a lot of their home habitat in Idaho, it logically follows that a percentage of these would have been on this forest. The species existing population viability is lower than the Forest Service has likely figured. When you combine this with the lack of monitoring and the fisher habitat that has been eliminated by the increased logging levels, and the increase in the length of the wolf-trapping season impacts to fisher alone merit an EIS.

Lynx

Is this a lynx analysis area? Logging and burning will impact lynx. Have you consulted the FWS?

Lynx winter habitat in older, multi-storied forests, is critical for lynx preservation. (Squires et al. 2010.) They also reported that lynx winter habitat should be "abundant and spatially well-distributed across the landscape" (Squires et al. 2010; Squires 2009) and in heavily managed landscapes, retention and recruitment of lynx habitat should be a priority.

Prey availability for lynx is highest in the summer. (Squires et al., 2013.)

The Lynx Conservation Assessment and Strategy (Ruediger et al. 2000) noted that lynx prefer to move through continuous forest (1-4); lynx have been observed to avoid large openings, either natural or created (1-4); opening and open forest areas wider than 650 feet may restrict lynx movement (2-3); large patches with low stem densities may be functionally similar to openings, and therefore lynx movement may be disrupted (2-4). Squires et al. 2006a reported that lynx tend to avoid sparse, open forests and forest stands dominated by small-diameter trees during the winter.

Kosterman, 2014 found 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 inches dbh. Young regenerating forest should occur only on 10-15% 13

of a female lynx home range, i.e. 10-15% of an LAU. This renders inadequate the Forest Plan/NRLMD assumption in that 30% of lynx habitat can be open, and that no specific amount of mature forest needs to be conserved. Kosterman, 2014 demonstrates that Forest Plan/NRLMD standards are not adequate for lynx viability and recovery.

Other recent science also undermines the adequacy of the Forest Plan/NRLMD. Holbrook, et al., 2018 "used univariate analyses and hurdle regression models to evaluate the spatio-temporal factors influencing lynx use of treatments." Their analyses "indicated [hellip]there was a consistent cost in that lynx use was low up to [sim]10 years after all silvicultural actions." (Emphasis added.) From their conclusions:

First, we demonstrated that lynx clearly use silviculture treatments, but there is a [sim]10 year cost of implementing any treatment (thinning, selection cut, or regeneration cut) in terms of resource use by Canada lynx. This temporal cost is associated with lynx preferring advanced regenerating and mature structural stages (Squires et al., 2010; Holbrook et al., 2017a) and is consistent with previous work demonstrating a negative effect of precommercial thinning on snowshoe hare densities for [sim]10 years (Homyack et al., 2007). Second, if a treatment is implemented, Canada lynx used thinnings at a faster rate post-treatment (e.g., [sim]20 years posttreatment to reach 50% lynx use) than either selection or regeneration cuts (e.g., [sim]34-40 years post-treatment to reach 50% lynx use). Lynx appear to use regeneration and selection cuts similarly over time suggesting the difference in vegetation impact between these treatments made little difference concerning the potential impacts to lynx (Fig. 4c). Third, Canada lynx tend to avoid silvicultural treatments when a preferred structural stage (e.g., mature, multi-storied forest or advanced regeneration) is abundant in the surrounding landscape, which highlights the importance of considering landscape-level composition as well as recovery time. For instance, in an area with low amounts of mature forest in the neighborhood, lynx use of recovering silvicultural treatments would be higher versus treatments surrounded by an abundance of mature forest (e.g., Fig. 3b). This scenario captures the importance of post-treatment recovery for Canada lynx when the landscape context is generally composed of lower quality habitat. Overall, these three items emphasize that both the spatial arrangement and composition as well as recovery time are central to balancing silvicultural actions and Canada lynx conservation.

So Holbrook et al., 2018 suggests a potential adverse, long-term impact to lynx from logging.

Natural fire has the potential to impact lynx much less so. Vanbianchi et al., 2017, who found, "Lynx used burned areas as early as 1 year postfire, which is much earlier than the 2-4 decades postfire previously thought for this predator."

Kosterman, 2014, Vanbianchi et al., 2017 and Holbrook, et al., 2018 each demonstrate that there is a potential impact that must be analyzed outside of what the forest plan requires because the Forest Plan/NRLMD direction is not probably not adequate for lynx viability and recovery.

Squires et al. (2013) noted that long-term population recovery of lynx, as well as other species as the grizzly bear, require maintenance of short and long-distance connectivity. Lynx linkage zones for landscape habitat connectivity are necessary to allow for movement and dispersal of lynx. Lynx avoid forest openings at small scales, however effects on connectivity from project-created or cumulative openings were not analyzed in terms of this smaller landscape scale. And connectivity between project area LAUs and adjacent LAUs must be analyzed and disclosed.

We also refer you to Schwartz et al. 2013.

Grizzly 14

Grizzly bears have been observed in the Clearwater, and the Fish and Wildlife Service have notified you that you should be consulting on projects. Have you done that? Such extensive roadwork, logging, and burning will impact grizzlies.

Monitoring

We raised this in Pete King and East Saddle (Integrated Restoration) proposed projects, and we have seen no movement or effort from the Forest Service in trying to correct this issue for this next project in the North Fork, so we raise this issue again.

There is no evidence of anything that approaches adequate monitoring of MI and TES as required by the forest plan on the relevant public webpages. How can this project comply with the Clearwater National Forest Plan if the agency has not conducted monitoring in decade? In the proposed action, the Forest Service refers to surveys, details about these surveys are unclear.

The point of monitoring, according to the forest plan, is to ascertain the impacts of management for various areas.¹¹ Yearly monitoring reports for the Clearwater Forest Plan ceased in 2009. The last monitoring report we have, which we had to obtain by email from the Forest Service for because it did not publish the document online, was a monitoring report for two years (2010-2012) that was only 13-pages long and relied on other broad surveys that other entities have done, which contains no discussion on whether the Forest Service verified this work. Even if the agency had verified anything, a thirteen-page document on two years of monitoring for approximately 36 monitoring items across approximately 17 management areas (some of which require annual reporting)¹² is absurd. In one of the last recent projects the Palouse Ranger District analyzed, the Forest Service told us that the 2013-2017 monitoring report was in the process of being "finalized." Where is that? It has not been publicly released on the Forest Service's webpage.

¹¹ Clearwater Forest Plan, Chapter IV, p. 8.

¹² Clearwater Forest Plan, Chapter IV, pp. 12-16

Information developed by entities other than the Forest Service must be independently validated by the Forest Service. The Forest Service has logged in E1 management areas for thirty years now, and that is one of the management areas up for logging now. What are the impacts[mdash]not projected impacts, but actual, measured impacts[mdash]to elk habitat, to moose, to woodpeckers and goshawk?

Please disclose the Nez Perce-Clearwater National Forests' record of compliance with the additional monitoring requirements set forth in other projects in this ranger district or on the forest. Please disclose how you plan to correct this monitoring deficiency.

Monitoring is especially important because in the past four of five years, the Forest Service has sold more timber than the previous years dating back to 2000. Logging frequency has increased over the past five years, and there is no monitoring to inform on those impacts. FOC graphed the annual timber sold based on Forest Service reporting. ¹⁵

When one looks at the board feet sold in 2012, there is a large difference between that and 2018. Only monitoring can inform these impacts. Monitoring that the Forest Service continues to neglect in violation of the Forest Plan.

What streams are near to the project area? What are their conditions now and will this proposed project violate any of those standards? There is no information on this in the PA.

In any event, the size of this project across such a large acreage warrants an EA minimally.

For every instance above where the agency hasn't disclosed the specifics of the project in the PA, especially since the Forest Service has suggested that this will be the only open public comment period, the Forest Service has failed to provide the public with high quality information.

Global warming

Please analyze the impacts of this project as they relate to global warming. This includes the emissions this project would add, the potential future sequestration that would be lost, and how global warming might influence the vegetation growing back. Please see the following provided with these scoping comments:

Harris et al. 2016

Campbell et al. 2012

Josephine County Democrats Webpage, Forest Defense is Climate Defense
(<https://josephinedemocrats.org/forest-defense-is-climate-defense/>)

McKinley et al. 2011

Hudiburg et al. 2019

John Muir 2018

Griscom et al. 2017

Erb et al. 2018

Law et al. 2018

Buotte et al. 2019

Johnson 2016 16

Soils

What is the condition of the soils in the area and how is the logging, burning, and roadwork planned are going to impact that condition? The alleged benefits of the project will probably not outweigh these impacts. Also, please review Achat 2015 for soils and global warming.

Cumulative impacts

This project is close to the East Saddle Integrated Restoration Project and its logging and burning. FOC has included the comments for that project. Much of the science is the same. There are many resources that have the potential to be impacted in that project, and this project will add cumulative effects. There is also the North Fork Ponderosa Pine Improvement Project, which proposed burning as well. Please assess these cumulative impacts in terms of the impacts to burning, logging, openings, vegetation, noxious weeds, soils, wildlife, fisheries,

old growth, roadless, and all points of concern discussed above, in East Saddle, and in North Fork Ponderosa Pine projects.

Watershed and aquatics

Are the streams listed the only streams impacted by this project? Do an impacts analysis at the stream level and not the 12th HUC level because that dilutes impacts. What are the current conditions for these watersheds and are they complying with the forest plan? What are the impacts to the streams and watershed listed? Are there sensitive or listed species in these watersheds? What kind of activities will be conducted here? What does "hand work" in RHCA's involve? We will expect a comprehensive analysis on this.

Roads

The intense and large amount of roadwork itself will potentially impact the environment, and require an EIS. What are the existing conditions of the roads now? Can we see pictures? If you are building temporary roads to access fuel treatments, does this mean you are building temporary roads in the roadless areas? What are your plans to decommission these roads? How can you ensure that they will happen by the date planned to decommission? Decommissioning by recontouring or by abandoning or making a template have vastly different impacts, and the miles of temporary road in this project is extensive. Without a topographic map with the plans for roads marked on it, it is impossible to tell if the Forest Service is meeting the visual quality standards in the forest plan.

Wildlife

The number of roads, clearing, and fire will all impact wildlife that thrives on cover and undisturbed areas. We expect an analysis on the potential impact to all listed species (aquatic and terrestrial) in the project area in addition to an analysis on all the potential sensitive species in the project area as well as impacts to elk and other wildlife that stands to be impacted. 17

Sincerely,

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