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Bitterroot National Forest

1801 North First Street

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April 19, 2021

RE: Comments on Mud Creek Project Draft Environmental Assessment

Purpose and Need

[ldquo]Fire suppression efforts since the early 20th century have caused a departure from historic fire regimes in the project area, resulting in forest stands characterized by high stem densities, hazardous fuels build up, and stressed tree condition.[rdquo] (DEA p3) Indiscriminate fire suppression continues unabated in the project area. The first rule of ecological restoration is to remove impediments to natural recovery. In this case quit causing the problem by allowing natural fire in many/most situations, including wilderness and non-wilderness.

Historic conditions in the area have been highly variable. Prior to FS management the project area sustained a wider diversity of wildlife and vegetation mix, vastly more old growth, generally cleaner water, and a more resilient ecosystem. FS management has damaged the present condition of many forest facets. The effect of selecting any one arbitrary point in time leads to arbitrary conclusions. It is not surprising the arbitrarily chosen historic condition is used to justify more logging

The BNF seems to be chasing its tail, identifying problems caused by their previous actions and proposing to continue those actions to supposedly remedy the situation.

The first purpose listed is: [ldquo]Improve landscape resilience to disturbances (such as insects, diseases, and

fire) by modifying forest structure and composition and fuels;[rdquo] (DEA, p4) This basically says that logging is the purpose of the project. This stated purpose is constrained to fit a preconceived desired action, ie: get the cut out. Excessive logging, especially of old growth has caused much loss of resilience on the BNF.

NEPA

Thank you for consulting with the public owners of the Bitterroot National Forest, as NEPA requires, prior to taking the management actions you are proposing. One big problem is that you have not described your proposal with enough information to elicit meaningful specific comments. You are essentially bypassing NEPA and asking the public owners to buy a pig-in-a-poke with taxpayer funds and risking destruction of public resources with barely a peek at the pig. This newly designed attempt at an end run around NEPA process violates the spirit and letter of that law. NEPA requires analysis and disclosure of information sufficient for the public and decision maker to make the best possible, fully informed decision. A [ldquo]hard look[rdquo] is essential to avoiding avoidable damage, which is a key concept behind the wisdom of a genuine and effective NEPA process.

This project is proposed to last for twenty years. Even if you chose to analyze and disclose enough relevant information now, before leaping blindly, such information would likely be antiquated before twenty years, especially in this age of climate chaos. You may argue that monitoring will provide a basis for adaptive management, however, your record of monitoring is abysmal. Also, due to turnover, institutional memory is completely absent. Landscape amnesia erases the past from memory but not from the forest.

Trust in the FS would be necessary to accept this type of approach. I understand your wish for virtually unlimited discretion, but I have seen the damage the BNF is capable of doing to get the cut out, even with Forest Plan standards in place and with full NEPA disclosure.

A project of this size, 48,523 acres, and the twenty-year duration in unsettled times requires an EIS, not simply an EA. The scientific controversies involved, especially regarding fire science and climate change effects, also require that an EIS be prepared.

You scoping letter suggests [ldquo]Comments specific to the proposed action that identify a cause-effect relationship are most helpful.[rdquo] We need specific information. Each acre, even individual trees, of the BNF is unique, not just a fungible [ldquo]resource[rdquo] or commodity to be exploited to the maximum possible.

Above is an example, from the BNF Lick creek [ldquo]experimental forest[rdquo], of a unique old growth stand that should not have been [ldquo]treated[rdquo] as just another fungible acre of old growth. This cathedral has

been reduced to boards and sawdust. I don[rsquo]t believe we will ever see such a stand here again.. The spiritual and emotional values lost are irreplaceable. The experiment has and is failing.

Appendix B- Implementation Process describes what looks like a Rube Goldberg cartoon with obscure and intricate involutions of contingent cause and effect, [ldquo]activity cards[rdquo], and [ldquo]design features[rdquo], all designed to get the cut out behind a curtain of confusion and unidentified schedules without troublesome public involvement after the initial extremely vague disclosure and the Record of Decision is signed. It is an enigma to the public but is clearly a blueprint for unaccountability and maximum discretion by an agency that has squandered any public trust.

If there are any NEPA requirements left that what is proposed needs to be reasonably accessible to public understanding, this DEA and approach would not meet them. Where is the range of [ldquo]reasonable[rdquo] alternatives required by NEPA?

Appendix B, p.1 says, [ldquo]The implementation process is designed to be consistent with the 1987 Bitterroot National Forest Plan.[rdquo], and yet elsewhere you state that this project will need several project specific FP amendments because it will not be consistent with the 1987 FP. Such overtly contradictory disclosures offer a preview of coming problems.

Although the public may identify concerns and issues at the future unscheduled meetings where you say you will reveal specific actions in specific places, there is no requirement for the Forest Service to address such, since the period for public participation ends when a Decision for the project is signed. So, the agency is proposing to implement a massive, 20-year logging and road construction project without ever evaluating and disclosing impacts to resources. This is a clear violation of the NEPA. The public owners (as well as Decision Maker) are to be informed as to likely environmental impacts prior to the implementation of a decision, not afterwards.

If this implementation approach is allowed NEPA will become merely an historic relic and a charade of meaningful public involvement.

Please disclose to the public in the Final EA how this process will work regarding the timing of where in the process our final administrative remedy will be exhausted.

ESA

Bull trout, lynx, grizzly bears, wolverine and N Rockies fisher may inhabit the project area. Please disclose: How will the USFWS [ldquo]consult[rdquo] on yet undisclosed Mud Creek [ldquo]treatments[rdquo] re: ESA species impacted? Would the FAA certify a plane with a brand-new design that is being built while flying? I would hope

not.

How can the USFWS adequately address the need for consultation when they are required to analyze the full scope of the agency action including all foreseeable activities of this multi-stage project and yet the foreseeable activities have not been disclosed? See the [ldquo]unlawful segmentation[rdquo] section, starting p.11, from the Rock Creek mine ruling attached.

NFMA

The BNF Forest Plan is essentially the management contract between BNF managers and the public owners of the BNF. The BNF Forest Plan now looks like a scrap book with all the [ldquo]project specific[rdquo] amendments pasted on and holes where old, abandoned standards have been cut out. This has been done [ldquo]site/project specifically[rdquo] across a significant percentage of the BNF. Such self-serving edits need to be reviewed and approved by the public owners. We do not have to passively accept the conditions-based chef[rsquo]s stew of unidentified scraps, unlimited by FP Standards. We are not merely [ldquo]customers[rdquo] as the latest FS rhetoric says we are. However, use of that term does make clear that the BNF sees the forest as a warehouse of commodities and the public owners simply as consumers.

Project Specific Forest Plan Amendments

The Forest Service proposes project-specific Forest Plan amendments related to elk habitat effectiveness (EHE), thermal, and hiding cover as well as old growth and coarse-woody debris (CWD).

As the BNF has been doing routinely for years this project proposes several project specific amendments to allow for moving the sidelines, legal limits to damage, defined in the Forest Plan. Meanwhile, the BNF is concurrently engaged (if public information is true) in analyzing and proposing forest-wide Forest Plan amendments regarding EHE and old growth. This project should wait until those efforts are complete. What[rsquo]s the rush for this 20-year project? The continuously expanding patchwork of various [ldquo]project specific[rdquo] amendments has not been subjected to any cumulative impacts analysis.

One ongoing problem with project specific FP amendments is that sideline legal limitations are removed without replacement limitations. This leaves the field wide-open, even erasing the field itself. Such unlimited discretion can not responsibly be given to an agency with an historic condition so rife with illegal and corrupt behavior.

The implementation process and 20-year lifespan of this project makes the lack of legal limitations even more problematic due to the increased probability that natural negative impacts will add to the planned exceedance of limits caused by project implementation.

Also, removal of Standards has direct environmental effects on resources that have been protected, however unintentionally, by those Standards. These effects are real and are directly related to the action of waiving the Standards. You are required to analyze and disclose such effects in proper NEPA documents.

Damage caused to these issues by FS logging and roadbuilding are not easily remedied. Road ripping does not simply erase the impacts. Elk do replicate but elk habitat loss lasts for generations. Loss of old growth is essentially forever in this day of climate change regeneration failures and chain saw forestry.

Project-specific amendments are meant to address unique characteristics of a particular forest area, not conditions that are common throughout an entire forest or region. For example, in League of Wilderness Defenders, et. al. v. Connaughton, et al., plaintiffs challenged that the Snow Basin project area did not have distinguishing characteristics, and therefore a site-specific amendment was not justified. No. 3:12-cv-02271-HZ (D. Or. Dec. 9 2014). The court agreed with the plaintiffs, holding the agency[rsquo]s decision to make site-specific amendments was arbitrary and capricious because the Forest Service failed to explain what conditions within the project area supported selection of a site-specific amendment over a forest-wide amendment. Id. at 54-55. The court explained that a site-specific amendment [ldquo]must be based on unusual or unique aspects of the site itself when compared to the forest generally.[rdquo] Id.

Here, the Forest Service must explain the unusual or unique aspects of the project area itself that necessitate the proposed site-specific amendment over a forest-wide amendment. It must show how the site-specific amendment is based on unusual or unique aspects of the site itself when compared to the forest generally. The BNF has used EHE site specific amendments on 226,119 acres of BNF[rsquo]s total of 389,820 acres suitable timberland (FP, p. III-2) in the last 12 years. Now you would add 48,523 acres to the land base summarily exempted from legal constraints.

Elk

It is noted that the West Fork elk herd is currently below MFWP objectives (Appendix D-6). This and the low number of elk tags indicate that hunter opportunity is damaged and will be further diminished due to waiving EHE and thermal cover FP Standards. Contrary to Forest Plan requirements hunter opportunity is not being maintained. MTFWP has had to limit elk tags in Hunting District 250.

Roads

Where is your minimum road system analysis?

The Forest Service proposes project-specific Forest Plan amendments related to elk habitat effectiveness (EHE), thermal, and hiding cover as well as old growth and coarse-woody debris (CWD).

[ldquo]The project area currently has one of the highest road densities found on the Bitterroot National Forest. Field surveys have identified some road segments in need of maintenance and repair to address resource concerns (e.g., watershed health). Some third order drainages currently exceed Bitterroot Forest Plan road density standards for elk habitat effectiveness.[rdquo] (DEA, p 4)

[ldquo]Current open road densities range from 0.6 miles / sq. mile in the Little West Fork watershed (for the portion of watershed within the project area) to 4.9 miles / sq. mile in the Lower Blue Joint watershed.[rdquo] (BNF scoping letter)

Constraining discussion to [ldquo]open[rdquo] road density does not reflect the many impacts of closed, undetermined, temporary, tracked line machine and other road nomenclatures. A road is a road is a road, and a road by any other name has many of the same stinky impacts, often permanent in practical terms. Disclosure of total road acreage compared to total area acreage at various scales from project area to cutting units should be analyzed and disclosed to allow a rough estimate of various cumulative impacts to soil productivity, water quantity and timing and wildlife, etc.

According to the Forest Plan Standard for soils you must, [ldquo]Utilize equivalent road area or similar concept to evaluate cumulative effects of projects involving significant vegetation removal, prior to including them on implementation schedules.[rdquo] (FP, pII-23) Please disclose the total acreage of all existing as well as planned roads, of whatever nomenclature, within the project area so we can assess total soil compaction within the project area.

[ldquo]Temporary roads would be constructed to a minimal standard to provide access for timber harvesting equipment and log trucks. These roads would be decommissioned following use for this project.[rdquo] (BNF scoping letter) The 20-year duration of this project means it could be 20 years before the [ldquo]temporary[rdquo] roads can even begin to recover productivity.

Road construction is an irreversible action because of the time it takes for a constructed road to revert to natural conditions, even with ripping or subsoiling. It is only the traffic that may be temporary. Results of monitoring recovery of past decommissioning of temp roads should be disclosed in this project NEPA documents.

Interception of groundwater by roads is easy to see. The impacts to water quantity and timing caused by roads and soils compacted by logging need full analysis and disclosure.. Sediment running down the creeks are permanent losses of groundwater storage capacity and permanent loss of soil. These impacts should be disclosed.

Please provide a map colored to represent road densities of each section of land within the project area. The project area has areas of extremely high road density. Until and unless all environmental impacts of old roads have returned to pre-road conditions, no new roads of any nomenclature should be built. Simply using the arithmetic of added road mileage and, supposedly, subtracted road mileage gives a false impression about the actual situation of environmental damage on the ground. Not only do the environmental impacts linger long after even genuine restoration, it is not uncommon that NEPA Decision commitments to road restoration go undone. Road impacts continue and accumulate 24/7 until they are treated and even for a long time after.

Soils

I read in the DEA, [ldquo]The Bitterroot National Forest has a long history of soil monitoring of commercial harvest activities to assure compliance with soil law and policies (PF-SOILS-006).[rdquo] (p.87) What I did not see disclosed is that much of that monitoring shows soil compaction to be widespread and very long-lasting on the BNF. Prior to about 2005 the BNF Soil Scientist[rsquo]s monitoring research design and documentation were extremely professional. Instrumentation was used to validate and calibrate the usual subjective soil compaction measurements. His work was thoroughly peer-reviewed. His credentials and ethic led to him being leader of a Region 1 Soil Monitoring Task Force. His findings regarding existing damage to the foundation of the BNF productivity - the soils, are swept under the rug, undisclosed, in the Mud Creek Project DEA, but the evidence is on the land and can[rsquo]t be just swept away.

Compare monitoring results prior to 2005 with results from recent years. BNF soils monitoring in preparation for recent timber sales have found remarkably less existing soil damage than was found up to about 2005. Please disclose if soils are naturally recovering more quickly than before. Have you validated the effectiveness of your overly optimistic estimates of subsoiling treatments?

The new, untested soil monitoring protocol described in the DEA Project File is the very definition of labyrinthian. In combination with the enigmatic conditions-based NEPA process it becomes meaningless to the public.

[ldquo]The Bitterroot National Forest has developed a Soil Risk Evaluation Framework (SREF) to aide in adaptive management of the Mud Creek Proposed Action (see PF-SOILS-001 pages 3-5). The SREF approach uses proxy measurements of soil-water retention to determine soil resiliency in the project area (PF-SOILS-008 this measure is combined with previous forest activity (FACTS) data and previous soil disturbance monitoring data to provide a communication and analysis tool for soil resources in a condition-based treatment approach.[rdquo] (p. 87) Please provide validation monitoring and science-based references to support your incredibly convoluted approach.

The SREF says, [ldquo]For example, if a proposed project activity occurs within an area with high soil resilience and has documented past activities, the soil risk category falls within level [ldquo]C,[rdquo] which requires a survey of existing soil DSD prior to implementation and application of appropriate design features.[rdquo] (PF-Soils-001, p3) In fact all cutting units must be surveyed on the ground before logging.

PF-Soils-001 language suggests cutting units may not be surveyed on the ground as indicated by the following language:

[ldquo]The proposed treatment units identified for field review within the SREF framework will utilize detrimental soil disturbance walkthrough surveys and traverses following the Forest Soil Disturbance Monitoring Protocol. Units will be surveyed based on the Soil Risk Category (SRC) guidance outlined in Table S3.[rdquo]

[ldquo]*Pre-project DSD or CWD soil surveys in units are only needed if the layout crew or other resource special survey identifies:

[bull] past disturbance (such as excavated skid trails, tree stumps or persistent fire consumed

CWD, high severity fire effects) covers greater than 15% of the unit; and/or

[bull] recent (< 10 years) high severity fire covers greater than 15% of the unit; and/or

[bull] lack of CWD.[rdquo]

[ldquo]Soil inventory of persisting detrimental soil disturbance may be required within these

project areas.[rdquo]

I am particularly alarmed by the following loophole: [ldquo]*If the layout crew or other resource specialist survey does not identify lack of CWD and/or evidence of past management (such as excavated skid trails, tree stumps or persistent fire consumed CWD, high severity fire effects), no soil inventory in units is needed.[rdquo] Layout crews are not trained observers of soil damage. Like the FS in general, they focus on trees.

Leaving the foundation of forest productivity uninspected prior to logging or burning is reckless.

Soil compaction is widespread across the BNF according to past monitoring, even discounting the soil compaction of the widespread road system, which is routinely discounted. The hydrologic effects of soil compaction, within the cutting unit as well as on roads, can accumulate downstream beyond the cutting unit causing a variety of issues including increases in high flows and advancement in timing of low flows. Too much increase in high flows can cause streambank instability. ECA, equivalent clearcut area, is one measurement that indicates when streambank instability threshold is being reached. What are the ECAs of the drainages within the project area and what will they be after the project? We can not tell what they will be afterwards because we don[rsquo]t know where what activity will be done.

As indicated above, the following statement in the DEA is misleading: [ldquo]Assessment of cumulative effects on soil quality and organic matter at scales larger than the specific treatment unit boundary (such as the watershed scale) Mud Creek Project Environmental Assessment misrepresents the effects of management

activities by diluting the site-specific effects across a larger area. As such, this analysis will apply the 15% DSD soil resource indicator at the same scale as it is traditionally used under [ldquo]unit-based[rdquo] NEPA analyses.[rdquo] (DEA, p 89,90) Such an approach is appropriate for cutting units but unnecessarily and carelessly misses the bigger picture regarding accumulating hydrologic impacts as well as overall forest productivity.

According to the Forest Plan Standard for soils you must, [ldquo]Utilize equivalent road area or similar concept to evaluate cumulative effects of projects involving significant vegetation removal, prior to including them on implementation schedules.[rdquo] (FP, pII-23) Please disclose the total acreage of all existing as well as planned roads, of whatever nomenclature, within the project area so we can assess total soil compaction within the project area.

The DEA discloses, [ldquo]Some soils in the project area have reduced soils quality due to DSD that occurred over 60 years ago.[rdquo]

Suggesting it may be time for additional soil damage the DEA cheerily announces, [ldquo]Based on existing field surveys in and around the project area, most soils in previously disturbed areas that were implemented during the 1960[rsquo]s are recovering.[rdquo] (p.89) It is an ecological truism that once damaging activity stops natural healing can begin.

[ldquo]Terraced plantations: The Mud Creek project area contains 79 terraces plantations ranging in size from 1 acre to 130 acres and totally approximately 1,645 acres.[rdquo] (Mud Creek scoping letter) On a field trip to the area I heard a BNF soil scientist say he thinks terraced plantations may be within the legal limit of detrimental soil damage. The former BNF soil scientist consistently measured detrimental soil damage in terraced plantations at 90% or greater, far above the 15% limit.

The implementation approach delays monitoring of existing soil damage until long after the Decision is final and there is nothing the public can do to protect the soils but to trust the accuracy, professionalism and transparency of the monitoring. I am dubious.

Appendix A Design Features, Sub Soiling; TRM-08, says subsoiling does not mix soil horizons. Please substantiate this with scientific reports and monitoring results.

What is the percentage effectiveness of subsoiling in terms of returning the soil to original function and productivity? Please disclose science and monitoring results. Subsoiling can not be expected to be 100% effective.

Coarse Woody Debris (CWD) is defined by the BNF as greater than 3 inches in diameter. The requirement to maintain various levels of CWD can be met by maintaining smaller pieces like branches while eliminating the longer-term supply of soil organic matter of larger material. There is far more ecological value and less fire danger from downed 3- foot logs than there is from branches.

Please disclose results of monitoring weed control after past projects have been completed. It is apparent that after every timber and road building project weeds follow and proliferate, essentially reducing forest productivity in perpetuity, contrary to NFMA.

Soil monitoring results from past NEPA analysis of former project areas within the Mud Creek project area should be disclosed in Mud Creek NEPA documents prior to a Record

of Decision

It is not clear how the DEA map of past harvest activities with existing soil impacts within the Mud Creek Project Area overlaps with the Mud Creek project because specific activity units have not been delineated.

Old Growth

The Mud Creek project should wait until the announced forest-wide Forest Plan amendment is completed rather than use a project-specific amendment to allow for continued overcutting of old growth.

Departure from existing conditions within the project area is glaringly evident in the realm of old growth trees and stands. The BNF has been high graded for large diameter trees for over a century, and it continues today. Even a total cessation of cutting old trees now would not allow the old growth component of the forest to restore itself for a century or more, even with the most optimistic future conditions scenarios. Regeneration failures are evident even now to the casual observer as well as to foresters.

Please prohibit harvesting of trees over 15 in diameter, at least until you have an accurate inventory of o.g. under whatever definition you finally decide to use.

Fire

The BNF is not using the best available science regarding fire effects attributed to logging. They are stuck in the past and are exacerbating fire danger by continuing old mistakes.

The fact, that during the past 129 years only ~4% of the Forest burned one or more times, was determined by climactic conditions which existed during that period. The claim that more of the Forest [ldquo]should have burned one or more times[rdquo] during that period is subjective and is used by the BNF to justify more logging. What that statistic suggests to me is that logging to supposedly protect homes has vanishingly small likelihood of being effective. The lack of effectiveness of logging to reduce fire effects has been scientifically demonstrated (see Jack Cohen studies). What are the chances of fire reaching any given cutting unit or any given home during the life of supposed benefits from logging, generally estimated at about 10 to 15 years?

Please provide a map showing where wildfires have intersected and been limited by a past timber sale on the BNF.

Climate Change

The BNF continues to ignore the best available science regarding climate change impacts from logging. Climate change is an existential threat to life on earth. Logging is a huge factor in exacerbating climate change. Your generic, bureaucratic, assessment is fatally flawed.

Comments incorporated by reference attached.

I hereby incorporate my scoping comments by reference. See appendix.

I have read and agree with comments submitted by Friends of the Bitterroot and hereby incorporate them by reference. I don[rsquo]t believe I need to supply them here because they will be part of the administrative record.

I hereby incorporate by reference the two attached comments submitted by NEC, AWR, WEG and FOB .

Thank you for consideration of my comments,

Larry Campbell

APPENDIX/ADDENDUM

Mud Creek scoping comments:

Larry Campbell

October 5, 2019

Bitterroot National Forest

Attn: Mud Creek Project

1801 N. First Street

Hamilton, MT 59840

https://cara.ecosystem-management.org/Public//CommentInput?Project=55744

Your letter ID is 55744-3014-20

Scoping Comments on Mud Creek Timber Sale

[ldquo]Scoping Process and How to Comment: Comments specific to the proposed action that identify a cause-effect relationship are most helpful. Additionally, comments expressing concern about or interest in treating a specific location within the project area will help the interdisciplinary team design a proposed action that incorporates these comments to the extent possible. Comments expressing a general position or statement, while welcome, do not necessarily provide the interdisciplinary team with specific concepts or features that can be incorporated into the proposed action.[rdquo] (BNF Scoping letter)

The BNF is proposing a very large project using very general purpose and need statements and providing no specifics while asking the public to be specific. To paraphrase your statement, from the perspective of the public this does not necessarily provide the public with specific concepts or features that can be incorporated into the proposed project scoping comments.

Although I don[rsquo]t see any disclosure in the BNF scoping letter, I have heard statements from BNF staff that suggest a [ldquo]conditions based[rdquo] approach may be used, proposing specific treatments in identified units only after the Decision. That would be contrary to NEPA requirements. Also, how can we be specific if you are

not? I suppose we could presume the whole panoply of possible actions in any given specific area and then comment on each. That is a waste of the public[rsquo]s time. The procedures involved with this project need to be disclosed during the scoping phase, so the public can also comment on effects of procedures used. Effects of unknown procedures are unknown.

[ldquo]The Mud Creek project will have three main focal areas: 1) the departure from historic disturbance regimes and subsequent existing vegetation and fuel conditions, 2) conditions related to the current road network, and 3) a programmatic forest plan amendment related to elk habitat objectives.[rdquo] (BNF Scoping letter)

[ldquo]The departure from the desired historic conditions within the assessment area is especially pronounced within Fire Regimes I & II where, based on Arno[rsquo]s research, the mean fire free period was 19 years (Table 2). Over the past 129 years, only approximately 4% of the acres that should have experienced multiple fires have even burned once. This departure from natural disturbance patterns has led to major changes in fuels and vegetation composition.[rdquo] (BNF scoping letter)

Historic conditions in the area have been highly variable. Prior to FS management the project area sustained a wider diversity of wildlife and vegetation mix, vastly more old growth, generally cleaner water, and a more resilient ecosystem. FS management has damaged the present condition of many forest facets. The effect of selecting any one arbitrary point in time [lsquo]causes[rsquo] conclusions to be arbitrary. It is not surprising the chosen historic condition can be used to justify more logging.

Proposing logging to restore conditions damaged by supposedly widely effective fire suppression while continuing to carry on indiscriminate fire suppression seems like a perpetual budget funding scheme. The effect caused by this cognitive dissonance is loss of trust and continuing ill-conceived damage to the forest.

[ldquo]Current open road densities range from 0.6 miles / sq. mile in the Little West Fork watershed (for the portion of watershed within the project area) to 4.9 miles / sq. mile in the Lower Blue Joint watershed.[rdquo] (BNF scoping letter)

Constraining discussion to open road density does not reflect the many impacts of closed, undetermined, temporary, tracked line machine and other road nomenclatures. A road is a road is a road, and a road by any other name has many of the same impacts, often permanent in practical terms. Disclosure of total road acreage compared to total area acreage at various scales from project area to cutting units could allow a rough estimate of various impacts to soil productivity, water quantity and timing and wildlife, among other facets of a healthy forest.

[ldquo]Temporary roads would be constructed to a minimal standard to provide access for timber harvesting equipment and log trucks. These roads would be decommissioned following use for this project.[rdquo] (BNF scoping letter)

Road construction is an irreversible action because of the time it takes for a constructed road to revert to natural conditions. It is only the traffic that may be temporary. Results of monitoring the recovery of past decommissioning of temp roads should be disclosed.

[ldquo]Undetermined roads identified as not needed will be decommissioned, either administratively or physically depending on the conditions of each road segment.[rdquo]

Administrative decommissioning does not seem to be effective at managing environmental damage, but simply

managing terminology. Unneeded undetermined roads should be physically decommissioned. Results of monitoring the effects of past such administrative and physical decommissioning should be disclosed.

Interception of groundwater by roads is easy to see. The impacts to water quantity and timing caused by roads and soils compacted by logging need full analysis and disclosure. Also, the fact that sediment in streams impacts not only water quality but also water quantity and timing needs to be analyzed and disclosed. Sediment running down the creeks are permanent losses of groundwater storage capacity.

[ldquo]We anticipate some even-aged regeneration harvest openings greater than 40 acres.[rdquo] (BNF scoping letter)

Information disclosing BNF recent regeneration failures after logging and fires and the factors contributing to such need to be disclosed. Also, the time required to regenerate should be discussed in the context of the timing of increasing challenge to regen caused by increasing climate change impacts. Projected regen benefits may be precluded by climate change.

[ldquo]Terraced plantations: The Mud Creek project area contains 79 terraces plantations ranging in size from 1 acre to 130 acres and totally approximately 1,645 acres.[rdquo] (BNF scoping letter)

On a field trip to the area I heard a BNF soil scientist say he thinks some terraced plantations are within legal limits to detrimental soil damage. The former BNF soil scientist who headed Region-1 soil monitoring team consistently measured soil damage in terraced plantations at 90% or greater. The effect of this glaring discrepancy is to cause increased public distrust and potentially illegal contributions to further loss of forest productivity.

Monitoring: There needs to be more effort in monitoring impacts and outcomes to even be able to apply adaptive management. The public would appreciate summaries of Mud creek[rsquo]s recommended treatments having been applied to other specific areas on the BNF, and based on monitoring during and after these projects, how effective they were in achieving the desired outcomes.

Impacts to climate change from the proposed project need thorough analysis of best available science and disclosure within an EIS. Recent NEPA analysis of this issue within BNF NEPA docs has been woefully inadequate an antiquated. Given the existential nature of this issue and the impacts to all forest resources as well as human health and economies, this issue deserves much more attention and honest analysis. It is not legitimate or adequate to simply dismiss the impacts as being small relative to impacts of other human activities. This issue is the epitome of nature[rsquo]s reveal of cumulative small human impacts. It all adds up. In the well-known adage: A single straw eventually broke the camel[rsquo]s back. Logging burns the candle at both ends by adding CO2 to the atmosphere at the same time as interrupting C sequestration.

Use of fear of fire and mischaracterization of fire effects usually make BNF analysis of the No-action alternatives look worse than logging regarding climate change and is factually misleading. Fire does not release anywhere near as much CO2 as logging projects usually do. The effect of such misrepresentation is to increase mistrust in the FS analysis and intentions as well as increase the pace and scale of climate change as the pace and scale of

logging increases.

Activities such as logging, thinning, and road building (even temporary roads), each of which is being proposed as part of this project, have been shown to increase not reduce the severity of subsequent wildfires. Failure to address current best available science causes a misrepresentation of the actual impacts of the proposed project which would lead to effects much different from what the BNF claims.

The fact, that during the past 129 years only ~4% of the Forest burned one or more times, was determined by climactic conditions which existed during that period. The claim that more of the Forest [ldquo]should have burned one or more times[rdquo] during that period is subjective and is used by the BNF to justify more logging . What that statistic suggests to me is that logging to supposedly protect homes has vanishingly small likelihood of being effective, in addition to the scientifically demonstrated lack of effectiveness of logging to reduce fire effects. What are the chances of fire reaching any given cutting unit during the life of supposed benefits from logging, generally estimated at about 10 to 15 years?

3) A programmatic forest plan amendment related to elk habitat objectives should be done separately prior to the Mud Creek project. The proposed Amendment needs its own scoping and analysis. Given that the Amendment would apply forest-wide and require cumulative impacts analysis of wide-spread use of project specific EHE amendments an EIS should be used. Doing the Amendment first would allow the results to be used for the timber sale. Why jeopardize the timber sale project by combining it with the separable Forest Plan amendment portion? The limits to road density provided by elk habitat objectives benefit other forest resources, acting as a surrogate for protection of water quality, soils and other wildlife species. Nullifying the elk habitat objectives would cause environmental impacts to facets of the forest other than elk which should be analyzed and disclosed. It does not matter if that umbrella protection effect is intended by the Forest Plan or not, the environmental effects of removing protections will happen independently of intent.

Thank you for consideration of my comments.

Larry Campbell