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First name: Michael

Last name: Hoyt

Organization:

Title:

Comments: Following are comments in response to the Mud Creek Scoping document, dated September 6, 2019. This proposed project, covering approximately 48,523 acres, is to be located on the West Fork Ranger District.

The Forest Service stated that the Purpose and Need for the project is to:

[middot] Improve landscape resilience to disturbance (such as insects, diseases, and fire) by modifying forest structure and composition, and fuels.

[middot] Design and implement a suitable transportation and trail system for long-term land management that is responsive to public interest and reduces adverse environmental effects.

[middot] Conduct a programmatic Forest Plan amendment related to elk habitat objectives.

The scoping document, dated September 6, 2019, suggests that, [ldquo]Comments expressing a general position statement, while welcome, do not necessarily provide the interdisciplinary team with specific concepts or features that can be incorporated into the proposed action.[rdquo] The document further states that, [ldquo]it is most helpful if comments [hellip], are specific to the proposed action and identify a cause-effect relationship.[rdquo]

Despite that [ldquo]suggested limitation,[rdquo] it is essential that the underlying Purpose and Need for the proposed project be directly addressed.

The extrapolation of data from the fire-history study performed by Arno (1976) on an extremely small portion of the Bitterroot Forest to the entire Forest is not logical or statistically sound. The assumption made, based on that extrapolation, that only ~4% of the Forest, which should have experienced multiple fires over the past 129 years, has even burned once, is simply irrational. Arno[rsquo]s sample is simply too small for such an assumption to be made.

The fact, that over the past 129 years only ~4% of the Forest burned one or more times, was determined by climatic conditions which existed during that period. Claiming that more of the Forest [ldquo]should have burned one or more times[rdquo] during that period is subjective, based upon a silviculturist-imagined [ldquo]perfect world[rdquo] Forest which supplies an endless supply of readily marketable timber.

As shown by numerable studies, the frequency and severity of wildfire is driven mostly by climate (high temperature, drought, and wind) and not by the availability of fuels.i

In fact, 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.ii

Given the overwhelming results of recent research which shows the opposite, it is disingenuous for the Forest Service to continue claiming that the size of large fires is increasing as a way to persuade the public that logging and thinning the Forest (even in the WUI) will reduce risk.iii

The Bitterroot Forest landscape is vast. Efforts to obtain funds (HFRA) and spend millions of dollars on thinning,

is unlikely to be effective and will not make anyone safer. It can't be predicted exactly where wildfire will occur and "thinned" forests will simply grow back (seldom, if ever, are "thinning projects revisited). As paradoxical as it may seem to some people, recent research has clearly shown that forests with the most active "management" produce the highest severity wildfires.iv

It is impossible to "manage" (log) our way out of wildfires. Instead, durable solutions such as home hardening should be encouraged and pursued.

Claiming that insects and disease contribute to high-risk fires is not based on fact. Risk assessment mapping provides a false sense of comfort that communities will be safer and the Forest more resilient. Overwhelming scientific evidence from multiple studies in the Pacific Northwest, Pacific Southwest, and the Rockies shows that forests which have recently experienced large insect outbreaks are less susceptible to subsequent fires due to the reduction of fuels in the canopy for crown fires.v

As stated on page 4 of the Mud Creek scoping document, "Natural disturbances, such as fire, insects, and disease, play a significant role in shaping the forest vegetation and each cover type responds differently to disturbance. Biological and physical conditions drive successional processes in forest vegetation communities that result in a mosaic pattern across the landscape made up of different age-classes, stand structure, and species composition."

While there are certain risks to people from wildfires, the vast majority of scientific studies show that forests most often benefit ecologically from mixed-severity wildfires.vi Using "catastrophic" rhetoric to describe wildfire, insect activity, and disease in order to gain support for management activities (logging) on the Forest is destructive in the long-term. Fires, insect activity, and disease are not ecologically destructive. It is logging and suppression before, during, and after such natural occurrences that have the biggest impact on water quality and quantity, wildlife, and natural processes.

The earth's climate is warming, substantially. Recent research indicates that, no matter what mitigation actions are initiated, human activity has already increased greenhouse gas enough to warm the planet by at least 2 [ndash] 2.5 degrees Celsius (3.6 [ndash] 4.5 Fahrenheit). But nowhere in the Mud Creek Project scoping document, is there any indication that the IDT has performed in-depth research into the impact a much warmer climate will have on the Bitterroot Forest. That is particularly disturbing given recent research which clearly shows that the total greenhouse gas emissions from logging is at least three times the levels produced during an average wildfire season.vii

To anyone paying close attention, it looks as if the stated Purpose and Need of the Mud Creek Project is not based upon the most recent scientific research and studies. Rather, it is clear that the P&N is based upon a politically motivated desire for an increase in logging activities. This Agency's continual use of the same Purpose and Need for every project is misleading and deceitful. Worse, executing the proposed activities contained in this project not only contribute to global warming and harm existing ecological stability but drastically reduce the Forest's capacity to reestablish the resilience needed to cope with scientifically projected future conditions.

I do not agree with the stated Purpose and Need for this project which uses scare tactics related to wildfire, insects, and disease to garner public support for logging activities. If the Forest Service wants a logging project, it should say so in clear, unambiguous language which anyone can understand. Anything else is fraudulent.

Below are comments related to specifics contained in the Mud Creek Project document dated, September 6, 2019.

\* This project appears to limit input from those outside the Agency because it includes little or no specifics related

to the proposed activities on individual treatment units. The scoping comment period is requesting remarks (pre-approval ?) for activities for which no information is offered. The recent court injunction on a similar (condition-based analysis) project in Alaska's Tongass National Forest suggests that such a project format is likely to be ruled illegal. It would be sensible for the Bitterroot Forest to redesign this project to fall in line with the format of previous projects.

\* Given the large size of this project, over 45,000 acres, and the presence of ESA-listed species, it would be prudent to use an EIS analysis vs. EA.

\* Insistence on instituting an EHE Forest Plan Amendment as part of this project circumvents the review process. Any and all amendments to the Forest Plan should be performed individually. In the case of reworking the EHE, because species besides elk are affected, analysis beyond the effect on elk is needed.

\* Restrict commercial harvest to MA1 and the small portion of the Community Protection Zone (CPZ) close to homes (a distance of 1/4 mile or less). Perform all activities during the winter months to reduce the spread of invasive weeds. In spite of the current politically motivated mandate to produce timber, restrict commercial logging to areas designated for such activities and emphasize forest ecology (as opposed to silviculture) in all other areas. Fuel treatments more than 100 feet from structures have a negligible if any effect on the likelihood a structure will survive wildfire. A structure's chance of survival depends almost entirely upon its composition.viii

\* Because humans are unable to select the most genetically fit and adaptive trees, allow insect and disease infestations to run their natural course.ix This provides natural thinning, increased species diversity, and is much more likely to provide a Forest more adaptive to climate change than any possible Forest Service management activities.

\* Cease the practice of cherry-picking outdated science to support the pre-determined, desired treatments which are proposed as part of this project. The IDT should be using the most up-to-date research and studies to determine treatments on the Forest. Agency management should support the findings of the specialists, not politically motivated [ldquo]directives.[rdquo]

\* The project should be designed so that no new roads are required (this includes temporary roads, undetermined roads, and/or system roads). Roads have been repeatedly shown to have the most detrimental effect on forest ecology, wildlife, and water (both quality and quantity). If a management activity cannot be performed without the addition of roads, it should be deleted from the project.

\* No management activities should be implemented in old growth. Recent studies have shown that old growth ecological systems (not just the trees) are the most complex and important feature of a forest. Areas of old growth should not be disturbed.

\* Actually collaborate with the public. Based upon public comments (centered on science not politics), make meaningful changes to the project.

\* The project should budget (and include) the funds required for post-project monitoring. Without monitoring, it is impossible to know whether management activities actually accomplish project goals. Information gathered during monitoring can and should be used to help in the design of future projects.

\* The economic analysis of the project should include project preparation costs, post-project monitoring, and the costs associated with reclamation and future maintenance.

\* The project should include a thorough, in-depth analysis of its effects on the earth's climate. Management activities associated with this project will require large amounts of fossil fuel. Recent research indicates that, on an annual basis, logging and thinning emit far more carbon than wildfire.x Other research shows that logged forests sequester less carbon than untreated forests. Any and all management activities which exacerbate climate change should be removed from the project unless they can be completely offset by including other activities which have been scientifically shown to mitigate global warming.

It must be stated that, with this project, the Forest Service continues to perform [ldquo]business as usual,[rdquo] only more quickly and forcefully. This in spite of the fact that continuing to perform actions which are now understood to be detrimental to the forest and the ecology of the lands they oversee is not a prescription for positive, long-term results. The rapidly warming Earth is already causing injurious effects to all fauna and flora which inhabit the planet. All species, including humans, are already feeling the effects of ill-advised human

activities. All of us, especially governmental agencies like the Forest Service, must change, now. Global Warming has reached crisis stage and must be dealt with at every level to forestall a catastrophe of global proportions which will affect every one of us.

Sincerely,

Michael Hoyt

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9. Hadfield, J.S., Mathiason, R.L., and Hawksworth, F.G., 2000, Douglas Fir Dwarf Mistletoe: Forest Insect and Disease Leaflet 54, USDA-FS, 10 p. Your own USFS pamphlet states [i]t is a pest only where it interferes with management objectives, such as timber production. In other areas, it is important for wildlife habitat. It also states that spread rates are faster in open stands than dense stands.
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