Data Submitted (UTC 11): 8/12/2022 8:12:17 PM First name: Laura Last name: Jackson Organization: Title: Comments: Forest Plan Amendment - Elk, Old Growth, Coarse Woody Debris and Snag Forest Plan Components #57302 Scoping phase comments by Laura Jackson

In the general paragraphs at the beginning of the proposal the Forest Supervisor states: Plan amendments may be broad or narrow, depending on the need for change, and are used to help Forests adapt to new information or changing conditions. I have the discretion to determine whether and how to amend the plan and to determine the scope and scale of any amendment.

1. Documentation is not given as to where the Forest supervisor has such authority. More importantly, this statement ignores the many overall parameters and regulated criteria within which this authority could be asserted, specifically the details for wildlife values, habitat protection, etc. (the multiple uses) that proposed amendments will likely greatly impact over time. One might feel comfortable and trust the values of a particular individual in authority, but it is the nature of institutions that an individual may retire or transfer but the amendments will be the framework in which many others will be operating.

2. This statement points very properly to the need for proper Forest management over time as research and conditions change. The amendments that follow however appear to completely ignore: a. the impacts of climate change already happening and modeled for the upcoming decades and b. several decades of research now generally accepted about interconnective and interactive natural forest structures that are at the heart of what "old growth" is now understood to mean and how it functions to benefit many interconnected life systems and how these structures (fungal soil structures, etc.) suffer long term, if not irreparable damage, from mechanical disturbance.

3.Basically all the justifications for the amendments that follow are about administrative convenience. While careful accounting of spending of funds is commendable, this is not the main goal of the USFS. To justify such sweeping amendments, details on expected impacts across all authorized management areas need to be provided: wildlife, native flora, recreation, visual quality, watershed quality (rapidity of snow melt with changing climate included) and stream sedimentation, wood products, carbon sequestration etc. These details should include regulations on implementation methodologies-- horse logging team and hand thinning have very different impacts from those caused by industrial logging equipment and the road building to support it.

Old Growth Amendments (and coarse woody debris and snags)

1.How exactly will the proposed BNF amendments specifically affect the inventorying of "old growth" and mature forests recently mandated by Executive Order 14072. How is the statement compatible with this order: Due to the dynamic nature of stand progression, a forest-wide stand delineation of old growth will not be provided. Old growth is not a static state; natural disturbances such as windstorms, wildfire, insects and diseases can move a stand from one successional stage to another (Oliver and Larson 1996). Highly managed forest areas, logged, planted, etc. are also subject to these successional dynamic processes, but they are regularly inventoried.
2.A forest wide "old growth" inventory is simply essential to understanding the impacts of the proposed amendments on the BNF and needs to be in place before the amendments can reasonably be considered. How else can we even model if the proposed changes will increase or reduce carbon sequestration, improve habitat diversity and support of specific species, etc., much less monitor and adjust to the results?
3.Plan amendments keying management decisions to habitat type do make sense. But particularly in the lower elevation Ponderosa dominated habitat, the established standards of Green et al. apparently need adjustment. Recent research has pointed to the fact that many early photographs used to establish the "natural" norms for this eco type show logging stumps and were taken decades after homesteading in the valley had been altered the almost certainly altered this habitat (including by my own family who certainly took logs from the

research/demonstration forest area between Lick Cr. and Rock Cr. above where they homesteaded before 1900.) Getting past given assumptions of what was "normal" for the BNF may land us in unknown territory, but we can safely state that: a. a century of timber harvest activity has reduced the amount and distribution of old-growth forest on the BNF and b. Many areas of the forest have recently lost significant amounts of "old growth" to wildfires. We now know an increase in frequency, size and intensity of the wildfires has resulted from anthropogenic changes in forest conditions (fire suppression included) and climate following European settlement. To balance out the loss of "old growth" we have caused, particular management strategies may be needed to protect remaining old-growth, develop new and expand existing old-growth stands, particularly on the more arid low elevation ponderosa pine sites where it has been suggested regeneration with changing climate may be a challenge. How will the proposed Forest Plan amendment protect remaining old growth and physically expand existing old growth stands (not simply redefine "old growth" to increase acres of what is old growth in name only)?

4. The last line above brings up a central concern that the current proposal fails to honestly address, a concern which the site shown to demonstrate managed "old growth" on the recent July field day highlighted. To repeat, defaulting to Green et al. as an improvement on the problems of the existing Forest Plan is not shown here to be a positive direction for anything I could understand as genuine "old growth." But a main problem is the lack of a fair definition of "old growth." Such a definition would surely have to include some measure of understory structure being maintained and minimal disturbance of the nourishing structures of soil and coarse woody debris (at the Lick Cr. demonstration site both were missing and the cwd was absent in the distance where no firewood collection could be blamed) as well as more age variety and density of "mature" trees (increasing moisture and slowing winds).

5.Nor, it appears, would this be likely to increase fire risks. The latest research suggests that this more varied version of the "Ponderosa Park" would slow fire speed of spread in the high risk situations of aridity and wind that climate change appears to be exacerbating. Wide open grass fires may be less intense, but their speed generally makes direct initial attack too late to give structural even when it is possible. Contrary to what was asserted by the FMO on the recent field trip, a recent article

(https://www.nytimes.com/2022/07/30/opinion/california-wildfires-oak-fire-yosemite-

sequoias.html?campaign_id=2&emc=edit_th_20220731&instance_id=68093&nl=todaysheadlines ®i_id=59904115&segment_id=100067&user_id=ecbb303f670299141a74bb57ddb963a4) underscores: a large and growing body of scientific research and evidence shows that these logging practices are making things worse. Last fall over 200 scientists and ecologists, including us, warned the Biden administration and Congress that logging activities such as commercial thinning reduce the cooling shade of the forest canopy and change a forest's microclimate in ways that tend to increase wildfire intensity. Logging emits three times as much carbon dioxide into the atmosphere per acre as wildfire alone. Most of the tree parts unusable for lumber - the branches, tops, bark and sawdust from milling - are burned for energy, sending large amounts of carbon into the atmosphere. In contrast, wildfire releases a surprisingly small amount of the carbon in trees, less than 2 percent. Logging in U.S. forests is now responsible for as much annual greenhouse gas emissions as burning coal.

We may learn in time that "managed old growth" is a contradiction in terms causing as much negative consequence as the 10am fire policy did in its day. It is all too human to assume we know more than nature, especially in longer time frames. At the very least, especially in the current window where there is funding available independent of logging, a new understanding of old growth and its values to many natural systems seems a positive direction to be considered. It is worth noting that Green et al. apparently examined nearly 5000 old growth plots of ponderosa pine, Douglas fir, and western larch and found an average of 17 trees per acre that met old growth criteria. One has to wonder what pressure led them to set their minimum at half that number. At the least, we should in our greater wisdom only allow amendments with clear baseline data and standards and funded plans for evaluation of impacts across all Forest sectors.

Thank you for your time and attention considering the above.