January 17, 2020

T0: Four Forest Restoration Initiative DEIS Team

1824 South Thompson St.

Flagstaff, AZ 86001

Subject: Comments on Four Forest Restoration Initiative - Rim Country Draft Environmental Impact Statement

Dear United State Forest Service (USFS),

The Nature Conservancy (TNC) in Arizona has a long-standing goal of conserving all lands and water on which all life depends. Increasing the pace and scale of forest restoration in Northern Arizona is one of our top priorities with relation to achieving success of this goal. We provide the comments below in the hope that the Rim Country Final Environmental Impact Statement (FEIS) will be a stronger document and will be based on the best available science, supported by a broad set of stakeholders through the collaborative process.

TNC has participated in the Stakeholder (SHG) process from the beginning of the Four Forest Restoration Initiative (4FRI) and have co-led the development and vetting of the most recent 4FRI-SHG comments for the Rim Country Draft Environmental Impact Statement (DEIS) delivered to the USFS. As such, the following comments do not cover those topics, but as a Stakeholder we fully support those comments and would like to reiterate their importance to guiding us to a final product.

We have identified three topics that we feel, in addition to overall stakeholder comments, would improve the FEIS and thus make a stronger and more defensible document.

The topics are as follows:

**Climate Change Effects on Resilience, Tree Growth, and Mortality**

Within the document we believe there is an opportunity to enhance the analysis, discussion, and integration of climate change effects at different scales with regards to tree growth, tree mortality, and overall resilience of forested systems. Much of what is in the current draft is brief and without detailed content. The existing discussion revolves around bark beetles, old-trees, mistletoe, and carbon stocks in the Silviculture Specialist report, with some references to specific wildlife habitat and species effects. This could be brought more into the language in Vol 1 and Vol 2 to summarize the overall risks associated with climate change, as well as the various outcomes of the alternatives, as much of this is only found in various specialist reports. Much is being learned regarding tree mortality and resilience (e.g., Breshears *et al.,* 2018) and this could be further incorporated and related to how treatments/alternatives (difference between 2 and 3) may or may not be effective in reducing the threat of climate change effects on forested communities in Rim Country. Specific concerns are that combined with the lack of detail there is mention of “concerns” around mistletoe, resilience, and climate change without scientific citations. In addition, the Silviculture Specialist Report focuses a fair bit on carbon stocks, recent literature (e.g., McCauley *et al.,* 2019) should be reviewed and included, particularly with relation to temporal carbon outcomes, as well as spatial scale and prioritization.

**Alternative 3 – Focused restoration**

The details of how this Alternative is being analyzed and how it would be implemented is lacking and could be enhanced. For example, how are areas that are more departed from NRV determined? This is unclear and with existing stand data combined with the flexible tool box this could easily be applied in a way that does not meet restoration needs/desired conditions at a landscape scale. If this Alternative were to be implemented it would need a much more sophisticated and well thought out approach to determining restoration needs on various acres as a foundation. In addition, the forest plan directions and desired conditions would not be met under this alternative, and it would potentially set up future NEPA needs requiring additional time and dedication. We support full landscape scale restoration (i.e., full suite of acres treated based on desired conditions needs) and would prefer that this alternative not be considered or “blended” into the preferred and final selected alternative.

**Dry mixed conifer and associated fine scale desired conditions.**

There is a lack of discussion and more importantly a lack of distinction of forest structure desired conditions at the fine scale. Particularly, the differentiation of dry mixed conifer from ponderosa pine forest cover types, also within ponderosa pine cover types of different productivity and tree densities. Scientific literature (e.g., Rodman *et al.,* 2016) is missing and the resulting discussion and analysis of clumpy, irregular structure at the fine scale is too broad and does not provide the nuanced ecological underpinnings that prescriptions should reflect.

TNC looks forward to continuing our involvement, collaborative partnership, and dialogue around these and other issues related to developing the Rim Country FEIS. If you have any further questions regarding these or other issues please contact Travis Woolley ([twoolley@tnc.org](mailto:twoolley@tnc.org), 928-774-0831).

Sincerely,

Travis Woolley