Kevin McLaughlin Boulder Ranger District 2140 Yarmouth Ave. Boulder, CO 80301

Via web portal: <u>https://cara.fs2c.usda.gov/Public/CommentInput?Project=61372</u>

Comments on Saint Vrain Forest Health Project #61372

July 8, 2022

Dear Ranger McLaughlin and staff:

I support and sign on to the comments submitted by Rocky Smith et. al. on the proposed St. Vrain Forest Health Project (Rocky Smith et. al. comments are dated July 6, 2022).

Rocky Smith's detail analysis and resulting conclusion that "treatments should be concentrated in the home ignition zone and in lower-elevation ponderosa pine, where site-specific analysis shows that stands have significantly departed from historical conditions" is supported by a growing body of published literature, data, and observations. While the St. Vrain Project Purpose and Needs documents makes seemingly plausible arguments for the fire mitigation benefits of treatments proposed for areas other than lower-elevation (lower montane) ponderosa pine dominated landscapes, the observed reality is that forest treatments such as the ones proposed for the Saint Vrain Project for elevation above lower montane are ineffective or even counter-productive with regarding to reduction of fire severity.

Evidence at Multiple Scales

On the broad scale of the western United States, Curtis M Bradley et. al. (Does increased forest protection correspond to higher fire severity in frequent-fire forests of the western United States? Ecosphere, Volume 7(10), October 2016), using over three decades of fire severity data from relatively frequent-fire pine and mixed-conifer forests throughout the western United States, found that burn severity tended to be higher in areas with lower levels of protection status and therefore subject to more intense forest management practices, after accounting for topo-graphic and climatic conditions. This directly contradicts the widely held assumption among federal land management agencies and others that a lack of active forest management of some federal forestlands - especially within relatively frequent-fire forest types such as ponderosa pine (*Pinus*

ponderosa) and mixed conifers - is associated with higher levels of fire severity when wildland fires occur.

Nicholas Povak, a Research Ecologist at the US Forest Service Pacific Southwest Research Station, in a November 18, 2021, webinar reported the results of a recently completed study of landscape fuel treatment effectiveness within recent large wildfire events in north-central Washington State. Key results from the study show that clearcutting actually led to higher fire severity, while only thinning with under-burning and under-burning without thinning led to reduction of fire severity. Thinning alone, thinning in combination with pile burning, and thinning with piling and mastication all had negligible impact on fire severity. See key data reproduced below.



Camille Stevens-Rumann of Colorado State University reported similar findings at a December 14, 2021, webinar for the Front Range Roundtable, concluding that for 2020 Colorado fires the most effective treatments were generally thin and burn, larger prescribed fires, and previous wildfires.

Monte Williams, Forest Supervisor for the Arapaho and Roosevelt National Forests and Pawnee National Grasslands, on multiple public webinars following the 2020 fires, touted the effectiveness of large lower montane treatments and previously burned areas in containing the

spread of the Cameron Peak fire. However, he also admitted that treatments in higher elevations (higher than lower montane) where not effective in slowing or containing the fire.

On a smaller scale, the picture below shows the impact of the 2016 Cold Springs Fire near Nederland, Colorado on an untreated private mining claim (on the right) adjacent to previously treated USFS land (on the left). The line of green trees visible in this photo marks the exact line of the border between the USFS land and the mining claim. The untread mining claim did not burn. The treated USFS land burned completely. And private interviews with firefighters and firefighter commanders who worked the Cold Springs Fire confirmed that no specific firefighting interventions occurred along this line.



Conclusion

Outside of prescriptions for lower montane ponderosa pine ecosystems, the St. Vrain Project Purpose and Needs document proposes conventional forest treatment approaches that are badly disconnected from actual observed reality in the field. Given the many significant detrimental impacts to ecosystem and forest health associated with such treatments, as spelled out in detail in Rocky Smith's comments, these treatments will negatively impact forest health without providing meaningful protection against wildfires and will not reduce wildfire severity.

To make the Saint Vrain Forest Health Project a project that actually improves forest health instead of degrading forest health, follow the recommendations in Rocky Smith's comments and restrict treatments to lower-elevation (lower montane) ponderosa pine, where site-specific analysis shows that stands have significantly departed from historical conditions. In addition, focus attention to the proven benefits of concentration on home ignition zones.

Sincerely,

Alex Markevich, Ph.D. 5570 Magnolia Drive Nederland, CO 80466 (303) 442-4475 ajmarkevich@gmail.com

Christel Markevich 5570 Magnolia Drive Nederland, CO 80466 (303) 442-4475 christelmarkevich@gmail.com

Anyll Markevich 5570 Magnolia Drive Nederland, CO 80466 (303) 442-4475 anyllmarkevich@gmail.com