Norton, Michelle - FS, HAMILTON, MT

From: Eric Keeling [redacted]
Sent: Friday, May 20, 2022 6:07 PM
To: FS-comments-northern-bitterroot-stevensville
Subject: [External Email]Bitterroot Front Project
Attachments: Comments on Bitterroot Front Project, 2022.docx

Hi,
Please find the attached comment on the Bitterroot Front Project.
Thank you,
Eric Keeling

Comment on Bitterroot Front Project – Eric Keeling, May 20 2022

Dear Ranger Brown,

Thank you for the opportunity to comment on your proposed Bitterroot Front Project. The Keeling family owns 100 acres of forested and pasture land adjacent to the Bitterroot National Forest south of the Mill Creek trailhead. I'd like to bring to your attention some unique history and characteristics of the forest that spans our property and the National Forest lands in this area.

Our property is part of an original homestead owned by my great-grandfather in the late 1890's. There are two long-term research projects associated with the forest on our land and the adjacent FS land: 1) The Mill Creek Cooperative Airshed Research Site[1], initiated in 1988, by my father, Charles D. Keeling, which was acknowledged in two Forest Service Memoranda of Understanding, one in 1994 and one in 2002; and 2) A long-term study, including forest data back to 1998, of the effects of irrigation ditches on forest community composition, tree physiology, and bark-beetle mortality[2]. Both studies are set-up as long-term monitoring projects which have benefited from cooperative forest management with the Forest Service.

The Keeling land is protected from future development and commercial logging under a conservation easement with the Montana Land Reliance. The Keeling family has been managing our land in accordance with an approved Forest Stewardship Management Plan developed through the Montana Forest Stewardship Program (administered through MSU extension and Montana DNRC). We also completed a Bitterroot RC&D Fuels Reduction Treatment project in 2013 and have another application in currently. Our management plan emphasizes hand-thinning of ladder-fuels, retaining old-growth characteristics and tree species diversity, maintaining wildlife habitat, and the absence of roads.

The management history of the adjacent National Forest lands has been compatible with these goals. Also of note is a portion of the adjacent land was treated with a prescribed burn in 1997, which was explicitly studied in the 2018 research referenced above. The overall area has unique forest composition and structure with diverse size and age-classes of trees and a mixture of forest stands and openings. We have observed numerous wildlife species that depend on winter forage as well as visual and thermal cover. It is my hope that the Forest Service consider the management history and future potential of this area for research and conservation when planning forest actions in the coming project.

Sincerely,

Eric Keeling

References

[1] Pataki, D. E., Ehleringer, J. R., Flanagan, L. B., Yakir, D., Bowling, D. R., Still, C. J., ... & Berry, J. A. (2003). The application and interpretation of Keeling plots in terrestrial carbon cycle research. *Global biogeochemical cycles*, 17(1).

[2] Keeling, E. G. (2018). Plant community composition, tree physiology, and bark-beetle mortality in relation to open and enclosed irrigation channels: a case study within a wildland-urban interface forest in western Montana. *Ecoscience*, 25(2), 163-177.