

Data Submitted (UTC 11): 10/12/2021 11:00:00 AM

First name: Rebecca

Last name: Briesmoore

Organization:

Title:

Comments: The United States is exceptionally blessed with wilderness spaces in the west and lucky that before these places were destroyed by human exploitation, people enacted the Wilderness Act of 1964 and presidents have continued to add land to this vital preservation. However, in the United States and globally, these areas are under threat. Excluding Antarctica, only 23.2% of global terrestrial area can be considered wilderness, and that number is shrinking (Watson, n.d.). In the United States, approximately 5% of our land is designated wilderness, with most of it in Alaska. As we continue to understand the causes and impacts of climate change, as well as the benefits of wilderness for ecosystems, humans, and the climate, maintaining and increasing wilderness areas should be a management priority.

Preserving existing wilderness areas and continuing to add more is essential for the environment, especially with the effects of climate change. Preserving these areas is necessary for biodiversity, combating climate change, and preserving ecosystems. Although we are facing mass extinction at a global and a local level, wilderness areas are the only areas that still have natural levels of species biodiversity (Allan et al., 2020) and can halve the risk of extinction (Di Marco et al., 2019)[Di Marco, M., Ferrier, S., Harwood, T. D., Hoskins, A. J., & Watson, J. E. M. (2019). Wilderness areas halve the extinction risk of terrestrial biodiversity. *Nature*, 573(7775), 582-585. <https://doi.org/10.1038/s41586-019-1567-7>]

. In the GMUG National Forest, where we have several species of concern, preserving and increasing wilderness areas is essential for their survival. Additionally, wilderness provides ecosystem services important for both humans and animals, by regulating climate. In forested areas, this can include generating rainfall and creating a cooling effect (Allan et al., 2020)[Allan, J. R., Possingham, H. P., Venter, O., Biggs, D., & Watson, J. E. M. (2020). The extraordinary value of wilderness areas in the anthropocene. In *Encyclopedia of the World's Biomes* (pp. 158-168). Elsevier. <https://doi.org/10.1016/B978-0-12-409548-9.12427-3>]

. At the headwaters of important watersheds, sustaining this moisture and rainfall is vital for our region, and cooling effects will be even more valuable as we continue to see unprecedented frequent heat waves in the summer.

In the U.S., we are fortunate to have these wilderness areas. However, with the increased threats of mass extinction and climate change, maintain existing wilderness areas is not enough, we must augment them. Acknowledging the global depletion of wilderness and the numerous benefits it provides, I encourage the GMUG Forest Service to implement Alternative D, which increases the existing wilderness area by 261,000 acres. While significant, this will be only a quarter of the overall area, and I believe a worthwhile allotment.

Allan, J. R., Possingham, H. P., Venter, O., Biggs, D., & Watson, J. E. M. (2020). The extraordinary value of wilderness areas in the anthropocene. In *Encyclopedia of the World's Biomes* (pp. 158-168). Elsevier. <https://doi.org/10.1016/B978-0-12-409548-9.12427-3>

Di Marco, M., Ferrier, S., Harwood, T. D., Hoskins, A. J., & Watson, J. E. M. (2019). Wilderness areas halve the extinction risk of terrestrial biodiversity. *Nature*, 573(7775), 582-585. <https://doi.org/10.1038/s41586-019-1567-7>

Watson, J. E. M. (n.d.). Catastrophic declines in wilderness areas undermine global environment targets. 7.