

Data Submitted (UTC 11): 9/20/2024 4:00:00 AM

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Comments: 09/20/2024

Hello, my name is Rowen Schell.

I am a sustainability student at the University of Nevada Reno at Lake Tahoe. I am writing to express the importance of the preservation and protection of old growth forests. The threat of climate change to these ecosystems needs to be recognized and faced. Climate change is increasing extreme weather events, diseases, invasives, and wildfires, which are all stressors of old growth forest. The occurrences and power of these events are only going to grow. A key part when combating climate change is our carbon footprint. Our future will rely on our ability to offset our impacts as humans. The north american west has the opportunity to have the highest carbon storage of anywhere else in the world. According to the international Journal of Wilderness "A study of 673,046 trees across six countries and 403 species found that at an extreme a large old growth tree may sequester as much carbon in one year as growing, an entire medium size tree" (Stephenson et al. 2014; figure 1). The efforts to save these lands has been an ongoing battle, and the conservation tactics that have been used have ultimately negatively affected our present, and if things continue to go in the current direction, they will only impact our future. Fire suppression, residential growth, and mismanagement of old-growth forests has heavily altered the quality of these habitats. Old-growth forests offer diverse plant, animal, and fungal species, the conditions of these forests are vital to the health of these different organisms and species. Old Growth forests aid us in our battle against climate change. Older trees have a larger biomass than younger forests, allowing them to store more carbon. Old-growth forests are one of the most effective natural phenomena for capturing carbon from the atmosphere. Climate change in the West will ultimately lead to longer drought periods. Luckily, old growth, forests and trees are adapted to changing climates and can stabilize root systems and reduce soil erosion. These trees' resiliency to fire, disease, and climate change makes it possible for diverse ecosystems to thrive. The importance of these trees can help us combat climate change and adapt to a changing world.