Hello! My name is Peter Engh and I am a MEM Grad student at Western. Thank you for allowing the opportunity to comment on this draft of the forest plan. I have two comments for the proposed GMUG Draft.

 My first comment pertains to pollinators who make the Gunnison Valley and surrounding alpine areas flourish with wildflowers—the pollinators who continue to function as key species in the high alpine. In reference to the line in the GMUG: “The Forests shall not grant permits for requests for new apiaries,” I am glad to see that the Forest Service is halting new permits for apiaries in our national forests. Recently, I spoke with Dr. Ian Billick, Executive Director at RMBL, who noted that as the Gunnison Valley gets warmer, we will see more honeybees from local apiaries overwintering and with that, the potential for more feral bees. Honeybees can harbor diseases that native pollinators are not adept to protect themselves against. As Dr. Billick phrased it: “honeybees are the Europeans, and our native pollinators are like the Native Americans.” When talking to honeybee stakeholders they make it clear that current permitted apiaries hold value. One apiary owner in Montrose said that they “have noticed twofold production of acorns, chokecherries and wildflowers galore.” There is anecdotal evidence arguing in favor of having bee apiaries on the western slope. The Western Colorado Beekeepers Association care enough to offer a hotline for catching errant swarms of honeybees. However, I am fully in favor of declining to allocate new permits of apiaries on public lands. In the article “Ten Policies for Pollinators,” Dicks et. al (2016) argue for “regulated movement of managed pollinators,” and “long-term monitoring of pollinators and pollination” (Dicks et al. 2016 p. 975). RMBL has performed long-term monitoring of native pollinators in the Gothic area, but they have not monitored Honeybee apiaries in the Western Slope. Until we can manage those pollinators, the Forest Service shouldn’t hand out more permits for apiaries. Researchers have found that “there is increasing evidence that unnaturally high densities of honeybees, associated with beekeeping, can exacerbate declines in wild pollinators (7). This problem is particularly evident in areas where western honeybees have been introduced” (Geldmann and González-Varo 2018 p. 392). These studies show the risk of allowing more apiaries to be introduced into sensitive alpine areas like the Gunnison Valley. I hope the Forest Service upholds this ordinance.

Sources:

Dicks, Lynn V. et al. 2016. “Ten Policies for Pollinators.” *Science* 354(6315): 975–76.

Geldmann, Jonas, and Juan P. González-Varo. 2018. “Conserving Honey Bees Does Not Help Wildlife.” *Science* 359(6374): 392–93.

 I support the Alternative D plan included in the GMUG Draft Plan. I am reluctant to recommend alternative B because it is too logging friendly. If National Forests are for citizens, it seems right that we take the conservation approach to these forests, to conserve them for everyone. What concerns me, however, is that logging takes the forefront in Alternatives B, C, and even D. If the goal of allocating certain areas for logging to hamper beetle kill, studies find that salvaging timber and logging have little effect on beetle kill and create problems elsewhere. Dobor et al, in their study on salvage logging in Europe, found that “realistic rates of salvaging (<95% of disturbed trees detected and removed) had no significant effect on bark beetle dynamics and live tree C, and reduced the total ecosystem C stored in the landscape. Furthermore, the effect of reduced bark beetle disturbance under intensive salvaging was partly offset by increased wind disturbance” (Dobor et al. 2020 p. 67). Dober et. Al, also mention that salvaging timber to prevent beetle disturbances should be limited to areas where only small and concentrated beetle kill has happened (Dobor et al. 2020 p. 67). Beetle kill is worrisome but opening the forests to more logging could create even worse fire danger. Furthermore, the sheer amount of acreage allocated to logging in Alternative B (948,000) is staggering. This is vastly disproportionate to the new amount of wilderness being allocated (34,300). These logging areas are beautiful forests near Crested Butte, The West Elk Wilderness, and the Fossils Ridge Wilderness. National forests are invaluable to help combat climate change. Dr. Dominick A. DellaSala, Chief Scientist at Geos Institute, while researching the Tongass National Forest reported: “Globally, deforestation (8-15%) and forest degradation (6-13%) contribute more greenhouse gas pollution than the world’s entire transportation network” (DellaSala. 2016 p. 6). If we think of the carbon costs of deforesting areas near our wilderness, we must consider that the environmental cost of opening these forests up for logging is far greater than the initial boom of logging money. Scale down the logging and conserve more wilderness. Our future generations will thank us.

Sources:

Dobor, Laura et al. 2020. “Is Salvage Logging Effectively Dampening Bark Beetle Outbreaks and Preserving Forest Carbon Stocks?” ed. Joslin Moore. *Journal of Applied Ecology* 57(1): 67–76.

DellaSala, Dominick A. 2016. “THE TONGASS RAINFOREST AS ALASKA’S FIRST LINE OF CLIMATE CHANGE DEFENSE AND IMPORTANCE TO THE PARIS CLIMATE CHANGE AGREEMENTS.” : 14.