Dear GMUG Forrest Planning Team,

I am a professor of Earth System Science at Stanford University and have conducted research on water and carbon cycling at RMBL for the last six years. I am also a part-time resident of Crested Butte and an avid mountain biker, fisherman, and hiker. My comments reflect my personal opinions and not those of any of the organizations above.

- 1. **Incorporate GPLI's wilderness and special management area recommendations into the revised Plan to the greatest possible extent.** Although Alternative D recognizes the components of several citizen conservation groups, the GPLI designations represent a larger array of interests and recommendations.
- 2. **Support current and future scientific research in the upper Gunnison Valley**. The revised plan should honor the research needs of the world-class scientific research conducted by the Rocky Mountain Biological Laboratory.
 - (a) Accordingly, the corridor from Mt. Crested Butte to Schofield Pass should be excluded as a scenic byway. Inclusion will create significant problems for research and education.
 - (b) I strongly support the special interest area around Gothic which would prioritize research and education activities. I have worked at RMBL for more than a decade as a scientist and feel the area provides unique value in terms of long-term research and training for the next generation of scientists. Given the increasing recreation impacts in the region, this designation will be critical for prioritizing these issues.
- 3. **Trails and Management Areas.** With deference to the above priorities, I support the comments provided by CBMBA. In particular, an increase in Recreation Emphasis Corridors/Areas (MA-4.2) and concentration on stacked trail systems with progressive, purpose-built trails and features, directional travel, specific identified uses, and decking/boardwalks in identified areas (FW-DC-TRLS-01/FW-OBJ-TRLS-02/MA-GDL-EMREC-04). Stacked trail systems greatly improve access and reduce vehicle miles associated with trail access. CBMBA has identified and proposed four specific areas that are ideal for stacked/looped trail systems. These proposed areas are close to population centers, are *all* identified as General Forest (5) or Mountain Resort (4.1) in the proposed Forestwide Management Area Maps, and are also *either* identified already as Roaded Natural, Rural, Semi-primitive Non-motorized, or Semi-primitive Motorized in the ROS alternatives.
- 4. The analysis of timber suitability is highly flawed. Every alternative in the draft plan proposes a significant increase in suitable timber, which is at odds with responsible management of the forests for uses other than timber production and is likely to cause irreversible harm to watersheds already suffering from drought and the impacts of climate change. The draft plan's analysis of timber suitability does not comply with the National Forest Management Act, the Planning Rule, or Forest Service policy. As noted above, the GMUG National Forest is much more valuable for conserving biological diversity and recreation. Issues include (1) too much suitable land, (2) areas designated as suitable are indeed unsuitable due to slope, habitat and riparian zones.
- 5. Stewardship of public lands should include an assessment of the carbon footprint of the uses and strategies to mitigate their impact. The revised plan should balance sustainability with technology and access through careful consideration of e-bikes, support for electric vehicles and public transportation, and an analysis of carbon emissions associated with various land use practices. The proposed plan does not prioritize a reduction in the carbon footprint of recreational and commercial use within GMUG. For example, 30% of carbon emissions in the transport sector are associated with recreational use. Given the threat of climate change to the vitality of the entirety of GMUG, there is an opportunity to demonstrate national leadership by establishing a framework for minimizing fossil fuel use on public lands. This includes:
 - a. Careful assessment of e-bike usage and balancing user pressure with the potential reduction of carbon emissions. I further agree with the comments of CBMBA for both stacked trial networks and special assessment of e-bikes.
 - b. For motorized trails, evaluate ways to decarbonize transportation, e.g., whether additional charging stations and "electric only" recreational vehicle access to reduce noise, pollution and carbon emissions is feasible.
 - c. Promote carbon neutral transportation in general, including public transportation in lieu of private vehicle access for highly visited regions (e.g., Gothic and Slate corridors) and support for the adoption of electric vehicles.

- d. Evaluate and require sustainable ranching and timber practices.
- e. Develop an ecosystem services framework that can aid in the above, as well as the establishment of watershed conservation and recreational priorities.

Sincerely,

Kate Maher