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Comments: October 30, 2023

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Submitted electronically via the project webpage: http://www.fs.usda.gov/goto/gmug/forestplan_objections

Notice of Objection to the Grand Mesa, Uncompahgre, and Gunnison National Forests Plan

OBJECTOR CONTACT INFORMATION

Pursuant to 36 C.F.R. [sect] 219.54 (c)(3), the Board of County Commissioners of the County of San Miguel, State of Colorado ([ldquo]San Miguel County[rdquo] or [ldquo]County[rdquo]) is designated as the objector.

Board of County Commissioners of the County of San Miguel, State of Colorado Lance Waring

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San Miguel County files this objection to the Final Land and Management Plan ([ldquo]LMP[rdquo]) for Grand Mesa, Uncompahgre, and Gunnison National Forests ([ldquo]GMUG[rdquo]) under the process identified in 36 C.F.R. [sect] 219 Subpart B. Notice of availability of the Record of Decision

([ldquo]ROD[rdquo]), Final Environmental Impact Statement ([ldquo]FEIS[rdquo]), and the Final Land Management Plan ([ldquo]LMP[rdquo], [ldquo]Forest Plan[rdquo] or [ldquo]Plan[rdquo]) was published in a newspaper of record on August 30, 2023. Accordingly, this objection is timely.

ELIGIBILITY TO OBJECT

San Miguel County has participated in the planning process for the FEIS and LMP since their inception. The County submitted comments to the United States Forest Service regarding the draft on August 20, 2019, July 16, 2021,November 25, 2021, and November 26, 2021. Further, USFS entered into a Memorandum of Understanding 18-MU-11020400-050 on August 24, 2018, and 23-MU-11020400-086 on September 7, 2023, designating San Miguel County as a Cooperating Agency for the planning process. The issues raised in this Objection were either raised in the aforementioned comments or were unavailable at the Draft Environmental Impact Statement ([ldquo]DEIS[rdquo]) stage.

STATEMENT OF REASONS FOR OBJECTION

San Miguel County submitted comments to the GMUG DEIS independently on August 20, 2019, and November 26, 2021, and in collaboration with Gunnison and Ouray Counties on July 16, 2021, and November 25, 2021. The USFS has requested [ldquo]A statement that demonstrates the link between the objector[rsquo]s prior substantive formal comments and the content of the objection unless the objection concerns an issue that arose after the opportunities for formal comment;[rdquo] therefore, we have indicated with dates which submitted comments to link our objection to.

OBJECTIONS

1. WE OBJECT TO THE AREA OF BEAVER PARK IDENTIFIED AS SEMI- PRIMITIVE MOTORIZED.
2. WE OBJECT TO BEAR CREEK, BRIDAL VEIL, AND NORTH OPHIR AS SEMI-PRIMITIVE MOTORIZED
3. THE ANALYSIS OF FENS IS INSUFFICIENT, AND THE BEST AVAILABLE SCIENCE WAS NOT USED TO

DETERMINE FEN MANAGEMENT.
4. THE 100[rsquo] BUFFER IS NOT SUITABLE FOR FEN PROTECTION.
5. WE OBJECT TO THE LACK OF CONSIDERATION OF RECREATION FOCUS AREAS.
6. WE OBJECT THAT THE BEST AVAILABLE SCIENCE WAS USED FOR WILDLIFE MANAGEMENT AREAS.
7. WE OBJECT TO THE NEW TRAIL DENSITY MODEL OF 1 MILE PER SQUARE MILE AS A SINGLE MANAGEMENT APPROACH TO WILDLIFE MANAGEMENT AREAS.
8. WE OBJECT TO THE GENERAL FOREST POLYGON AND SUGGEST IT BE ANALYZED AS A WILDLIFE MANAGEMENT AREA - LONE CONE BEAVER PARK.

We support the following Timber Suitability Objections made by Gunnison County and have included San Miguel County-specific data.

1. THE FEIS AND ROD IMPROPERLY ANALYZE THE IMPACTS OF INCREASED TIMBER HARVESTING.

1. THE FEIS OVERSIMPLIFIES AND OVERSTATES THE PURPORTED ECONOMIC BENEFITS OF INCREASED TIMBER HARVESTING AS COMPARED TO RECREATION.

1. The FEIS[rsquo]s Conclusions Regarding the Technological Feasibility of Timber Harvesting on Steep Slopes is Misleading.
2. The FEIS Fails to Robustly Analyze the Climate Impacts of Increased Timber Harvesting

2. WE REQUEST PRIORITIZING COMMUNITY AND LANDSCAPE-SCALE WUI TREATMENTS FOR TIMBER SUITABILITY.
3. ADD LANGUAGE IN FIRE AND FUELS MANAGEMENT, MANAGEMENT ACTION TO ADDRESS PUBLIC HEALTH AND SAFETY AND GREENHOUSE GAS EMISSIONS
4. THE FINAL PLAN MUST PROTECT LEGISLATIVELY PROPOSED SPECIAL MANAGEMENT AREA (SMA) IN THE SAN JUAN MOUNTAINS- LIBERTY BELL EAST SMA

I. ROS

1.
1. Summer ROS

1. WE OBJECT TO THE AREA OF BEAVER PARK IDENTIFIED AS SEMI- PRIMITIVE MOTORIZED.

2021 Comment: We recommend this area be re-analyzed and potentially reduced in size due to wetland fens in the area.

As noted in Fen Wetlands, FW-STND-RMGD-07 from Appendix 12, [ldquo]With respect to hydrologic alteration, the impact of forest harvest on groundwater sources as well as the effectiveness of buffers (100-foot aquatic management zones) in protecting groundwater sources are largely unknown (Dwire 2021). Given the scientific uncertainty regarding appropriate fen protection, there is a current study by the Rocky Mountain Research Station and the Forest Service Groundwater Program in the Taylor Park and Grand Mesa, Uncompahgre, and

Gunnison National Forests Revised Land Management Plan

A12-9 Mesa areas of the GMUG.[rdquo]

We are concerned that the Lone Cone Area Fens will not be protected under the semi- primitive motorized designation. According to Chimner, Lemly and Cooper in their research paper Mountain Fen Distribution, Types and Restoration Priorities, San Juan Mountains, Colorado, USA,

Mountain fens have long been altered by human activities, but little information exists on the types of impacts that have occurred and the proportion of fens in need of restoration. Disturbances may reverse the 10,000+ year old process of peat accumulation (Chimner and Cooper 2002) and lead to peatland destruction in many areas (Cooper et al. 1998; Chimner and Cooper 2003a; b; Patterson and Cooper 2007). Common anthropogenic disturbances that have been noted in western North American fens include hard rock and gravel mining, water reservoir construction, irrigation diversions for agricultural water use, trans-basin water diversions, road construction, timber and energy development, livestock grazing, housing and ski area development, and recreation (Cooper and Wolf 2006; Patterson and Cooper 2007; Zier and Baker 2006). Despite the ecological and hydrologic importance of mountain fens, there is little comprehensive information on their distribution, abundance, aerial extent, and type in any region of North America. Because many fens lack navigable waters, they may have little or no federal, state, or local protection and are often overlooked in largescale wetland and watershed protection programs (Tiner et al. 2002).1

Suggestion: Semi Primitive non-motorized designation for this area should be considered. We understand the uncertainty of buffers and protection but recreation, timber harvest, and grazing have shown to cause disturbance to fens.

Suggestion: If the semi-primitive motorized ROS designation is maintained, this polygon should be reduced in size to protect fens, or the entire polygon should become a Wildlife Management Area (see WMA objections) where road and trail density, grazing, timber harvesting are analyzed to prevent fen disturbance.

FEIS at 201 states: fen, wetland, and riparian species are especially vulnerable to increased sedimentation or hydrologic alteration that can be associated with improper grazing or uncharacteristically high use by wild ungulates. Species that occur on highly erodible soils may also be impacted by high levels of ungulate use and associated atypical rates of erosion

If the location and extent of groundwater-dependent systems are currently well understood, it is difficult to understand where practices such as grazing and timber harvesting, which are both known to cause erosion, can safely be implemented.

[Figure 1: Fens within San Miguel County have been identified in the Cones area, according to the Inventory of Fens in a Large Landscape of West Central Colorado2.]

[Figure 2:Colorado Wetland Inventory Mapping. Colorado Wetland Information Center. https://csurams.maps.arcgis.com/apps/webappviewer/index.html?id=a8e43760cb934a5084e89e4

6922580cc]

[Figure 3: Semi Primitive Motorized- Orange polygon]

B. Winter ROS

1. WE OBJECT TO BEAR CREEK, BRIDAL VEIL, NORTH OPHIR AS SEMI PRIMITIVE MOTORIZED.

2021 Comment: We have recognized discrepancies between the ROS and San Miguel County[rsquo]s Comprehensive Development Plan in the Telluride/Ophir High Country area. To align with The San Miguel County Comprehensive Plan, we recommend semi- primitive non-motorized in Bridal Veil Falls, Upper Bear Creek (next to the Telluride Ski Resort) and the North Side of Ophir. These areas have high alpine-sensitive ecosystems and provide quality backcountry skiing experiences from the Town of Ophir and side country access from the ski area that deserve protection.

The Town of Ophir provides winter parking across from Town Hall for Ophir Pass Road recreationists. There is limited parking space due to snow plowing and private residences at the proper winter trailhead for the pass. Additionally, snow machines are prohibited from the Town of Ophir; therefore, they cannot park trailers and unload and ride through the Town to access the Ophir Pass Road.

Finally, safety is a significant concern when accessing these areas, the narrow, steep canyon corridors entering Bridal Veil Falls and Bear Creek. This use would be inappropriate and conflicting with backcountry/side country uses in these areas.

Additionally, avalanche potential from well above these access roads and communities in Bridal Veil, Bear Creek and Ophir create a significant safety concern.

[Figure 4: The current preferred alternative is labeled Semi-Primitive Non-Motorized.]

Suggestion: We are requesting the designation be changed to Semi-Primitive Non- Motorized while allowing the local district Ranger to manage the zone for permitted motorized uses

II. Fens

A. THE ANALYSIS OF FENS IS INSUFFICIENT, AND THE BEST AVAILABLE SCIENCE WAS NOT USED TO DETERMINE FEN MANAGEMENT

2021 Comment: The location of fens within San Miguel County raises concerns due to the proximity of motorized and mechanized trails, ski area operations, logging, wildfire mitigation, future development, and human activity. Active restoration needs and protective measures to reduce the risk of impacts should be considered, for example, relocating dispersed campsites, managing motorized and mechanized recreation (such as ATVs and snowmobiles), or addressing user-created routes.2

According to the fen research in 2009-2010, additional research is needed to improve accuracy. The search image applied during the photo-interpretation step identified wetlands reasonably well (81%accuracy) but less so for fens (36%). The characterization of fens could be improved with an initial field season focused solely on developing and refining a fen search image. Improved photo interpretation could facilitate a more efficient and intensive field season with more specific objectives and a highly skilled crew.

We would like to request a Fen Management Zone, which will not allow their hydrology to be altered or degraded. Develop a standard that requires no disturbance, dewatering, degradation, ditching, damming, flooding or sediment deposition to a fen on the GMUG.

Fens are rare, complex, and little-understood peat-forming wetlands that require vegetation and groundwater hydrology protection. A simple surficial buffer does not protect fens and their groundwater hydrology.

The Final Plan needs to address groundwater-dependent systems systematically. First, per FW-OBJ-RMGD-6. a, the inventory of fens within the GMUG is actively underway. The USFS failed to acknowledge the fen research

conducted by Rod A. Chimner, Joanna M. Lemly, and David J. Cooper in San Miguel and Ouray Counties. Nor does it acknowledge its own research, which identifies and studies fens in San Miguel County (this footnote was provided in the 2021 comments)3

A map of the currently inventoried fens (from Dwire, 2012 inventory, Chimney and Cooper) was not provided or used to determine the effects of Summer and Winter ROS, cattle grazing, timber suitability, etc. While continuing research is essential to better understand these riparian and groundwater-dependent ecosystems, the lack of current information about fens[rsquo] locations, sizes, and nearby land use indicates a current lack of knowledge regarding the presence and functionality of fens throughout the GMUG.

GMUG FEIS Vol 1. Chapter 3 states, [ldquo]Fen, wetland, and riparian species are especially vulnerable to increased sedimentation or hydrologic alteration that can be associated with improper grazing or uncharacteristically high use by wild ungulates. Species that occur on highly erodible soils may also be impacted by high levels of ungulate use and associated atypical rates of erosion.[rdquo]

If the location and extent of groundwater-dependent systems are currently well understood, it is difficult to understand where practices such as grazing and timber harvesting, which are both known to cause erosion, can safely be implemented.

As defined by FW-STND-RMGD-07, [ldquo]fen and non-fen wetlands, lakes, ponds, seeps/springs and reservoirs[rdquo] must possess one of the following characteristics: 1) the body of water or wetland to the outer edges of the riparian/wetland vegetation; 2) the extent of the seasonally saturated soil; or 3) 100-foot slope distance from the edge of the wetland/water feature OR, for constructed ponds and reservoirs with shorelines composed of riparian vegetation, the maximum pool elevation. These criteria are sufficiently broad and must be utilized to identify fens across the GMUG landscape correctly.

Suggestion: Review and analyze additional scientific research in San Miguel and Ouray Counties: Mountain Fen Distribution, Types and Restoration Priorities, San Juan Mountains, Colorado, USA4

Suggestion: Per FW-OBJ-RMGD-6. a, an analysis of Fen locations in the GMUG will be underway for the next three years. As such, FW-OBJ-RMGD-6. a should specify that new logging activity and livestock grazing should not occur near groundwater-dependent systems and fen study areas.

B. THE 100[rsquo] BUFFER IS NOT SUITABLE FOR FEN PROTECTION

Fens are rare, complex and little-understood peat-forming wetlands that require protection of both vegetation and groundwater hydrology. Fens and their groundwater hydrology are not protected by a simple surficial buffer.

FEIS Vol 1 states that fen, wetland, and riparian species are especially vulnerable to increased sedimentation or hydrologic alteration that can be associated with improper grazing or uncharacteristically high use by wild ungulates. Species that occur on highly erodible soils may also be impacted by high levels of ungulate use and associated atypical rates of erosion.

Suggestion: David Cooper states, [ldquo]adapting a buffer around fens, based on what is suitable for streams/riparian zones, is not a good idea. When sediment or nutrients from a forest enter a riparian zone of stream, they can be flushed away by future flows.

However, fens are sumps. All sediment that enters the fen is there pretty much forever. The keys for fen protection, which we implemented in Prospect Basin, were no excavations that could affect groundwater flow in any way. Ground disturbance should be minimized to reduce or eliminate any possible sediment flux downgradient. All stream crossings should include sufficient culverts or permeable rock bases to allow water to

flow through unimpeded. Road construction should be minimized so sediment from the road surface is not mobilized down the road surface and into receiving waters, including fens. If the area around a fen is relatively flat, a smaller buffer would be suitable, but if the fen is adjacent to a steeper flow, a much larger buffer is needed as disturbances far up the slope could influence the fen. One size will not fit all.[rdquo]5

III. Wildlife Management Areas (WMA)

November 25, 2021 comments: We support the prioritization of wildlife habitat core and corridor areas through Wildlife Management Areas, additional Wilderness and Colorado Roadless areas and recognize that the protection of wildlife habitat needs to happen across jurisdictions. At the same time, we are all experiencing increased demand for recreational opportunities. We would like to see the Draft Plan more adequately identify areas where increased recreational opportunities can be responsibly prioritized.

1.
1. WE OBJECT THAT THE BEST AVAILABLE SCIENCE WAS NOT USED FOR WILDLIFE MANAGEMENT AREAS

The 2012 Planning Rule directs the Forest Service to use the best available scientific information when revising a plan and must publish what information was used, why it was used, and how the information was applied to the issue (36 CFR [sect]219.3).

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1. The Final Plan failed to justify how peer-reviewed science on route density standards for roads can be applied in the same manner to human-powered recreational trails. Multiple papers cited in the Draft and Final Plans indicated that more research is needed to determine the effects of trail-based recreation on wildlife, including the following cited papers in the plan: Wisdom et al. (2015) and Rogala et al. (2011).

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1. Only one paper provided in the Draft Plan (Canfield et al., 1999) and one paper provided in the Final Plan Response to Comments document (Lyon, 1983) made recommendations for limiting route density to the 1 mi./1 mi., and both of these studies were explicit regarding roads, not trails. Additionally, CPW[rsquo]s own recommendation for 1 mi./1 mi. in the Route Density Primer is within the section on roads. It does not specify trails in their recommendation in the first paragraph under Route Density. CPW later refers to [ldquo]route densities[rdquo] that they claim include trails.

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1. The USFS failed to include reference to or publish which trail and road shapefiles were used in the route

density analysis. This makes it impossible to review the route density analysis done in ArcGIS. The data used by the Forest may omit specific trails, leading to inaccurate results published in Table 98 of the Final EIS.

B. WE OBJECT TO THE NEW TRAIL DENSITY MODEL OF 1 MILE PER SQUARE MILE AS A SINGLE MANAGEMENT APPROACH TO WILDLIFE MANAGEMENT AREAS.

2021 Comment: San Miguel County supports the inclusion of the WMA polygons into the County as requested in our 2019 comments. We recognize it is a delicate balance to manage for Recreation and Wildlife. San Miguel County is facing increased pressure to build more recreational trails, but we have limited suitable landscapes. We are surrounded by steep slopes and Wilderness, which allow fewer options for trail development.

The new Trail Density model of 1 mile per square mile should be analyzed more thoroughly using trail and road data per County, including use type and visitor number and not a one-size-fits-all approach. Strategies should be applied based on current conditions, route densities, development, etc.

2021 Comments: San Miguel County recognizes an increased demand for more recreational opportunities across the Forests, especially trail development. Trail advocates need better direction on areas that are suitable for the development of loop trail systems, trailhead infrastructure and existing trail connections. Outdoor Alliance has identified several recreation emphasis areas where different recreational uses are concentrated and receive more visitors than other areas of the GMUG and have identified areas that may see increasing use in the future. The Planning Team should review Outdoor Alliance[rsquo]s proposed [ldquo]Recreation Focus Areas[rdquo].

This Plan needs to better identify appropriate recreation areas to address the growing demand while preserving the health and integrity of the surrounding natural and cultural resources. In the Outdoor Alliance, GMUG Vision 26 recommended multiple areas as Recreation Focus Areas and Backcountry Areas that now conflict with Wildlife Management Areas in the Final Plan. These conflicts can be viewed in Outdoor Alliance[rsquo]s online GIS map under the OAGV vs. GMUG Final Plan tab. 3

The Wildlife Management Area route density maximum is overly restrictive for human- powered trail-based recreation, does not consider site-specific needs, and is not informed by the best available science. The 1 mi./1 mi. route density limit would apply to 28% of the entire GMUG landscape, limiting the development of trail-based recreation on almost a third of the entire Forest, while less than 1% of the Forest is proposed as Recreation Emphasis Areas. Additionally, the USFS will need tools for the uncertainty of e-bike use and a significant trail user increase to disperse users on our public lands over the lifetime of this plan.

Suggestion: When reviewing Colorado[rsquo]s Guide to Planning Trails with Wildlife in Mind7 (Guide), minimization strategies were suggested rather than a blanket trail density model. Additionally, the Guide states that instead of using a single management approach for WMAs, each should be considered singularly based on the sensitivity of the disturbed habitat, current routes that exist, and restrictions / seasonal closures that could mitigate the wildlife impacts. Per the same document, there are complications with route density as topography has an influence that is not accounted for in the calculation and route density does not account for spatial distribution.

A trail density model of 1 mile per square mile is a blanket approach that has not been tested or reviewed on any forest. WMAs should be evaluated singularly based on the various factors present in that specific area.

The Guide also suggests considering minimization strategies. [ldquo]When reviewing potential trail alignments, strive to minimize habitat fragmentation by maintaining large blocks of undisturbed core habitat in the project area. One way is to redirect trails around, rather than through, areas of intact habitat. Three strategies can be considered to minimize habitat fragmentation:

* Consolidate high-density trail networks and recreation facilities in less sensitive or already disturbed habitats.
* Limit route densities within high-priority habitats to an average of 1 linear mile of road or trail per total square mile for the species indicated in the best management practices table.
* Restrictions, such as seasonal trail closures or dog limitations, may also be needed.

Depending on the existing levels of disturbance, habitat type, wildlife sensitivity, and intended trail use(s), one strategy may be more applicable than the others.[rdquo]

The Guide also states, [ldquo]For example, higher route densities may be appropriate in areas already impacted by development or located outside of high priority habitats; whereas low route density may be appropriate, or required, to maintain the effectiveness of large blocks of unfragmented or sensitive habitat areas.[rdquo]

For example, the San Bernardo and Yellow Mountain WMAs are surrounded by multiple HOAs, USFS-designated and dispersed camping (Matterhorn Campground, which will soon be expanded), and current and future deed-restricted housing (the

County recently purchased the Pathfinder property for affordable housing), Trout Lake (a popular recreation area) and access to Lizard Head Pass, Hope Lake, and other existing trails in a densely populated area as a stand-alone trail through an already disturbed area, serving the residents and visitors of San Miguel County. These WMAs are excellent examples of how each polygon should be managed site-specific.

This area would be an ideal location for additional trails to serve residents and visitors while also considering climate impacts; nearby trails and campgrounds reduce vehicle miles traveled to access trailheads, thus reducing greenhouse gas emissions. When trails can be accessed from homes and campgrounds, this also means fewer facilities, such as parking lots and restrooms, need to be provided by the agency.

Suggestion: With all of these items in mind, a future non-motorized trail loop originating from the campground would be an excellent addition to this area when the infrastructure is in place and NEPA has been analyzed. However, because of the blanket trail density model, the best alignment and trail plan for this polygon would likely not be possible.

The need for trails in this specific area is obvious and can be seen by way of user-created trails. The USFS can eliminate future user-created trails and provide more opportunities in these already-established heavily used recreation areas.

[Figure 5: San Bernardo and Yellow Mountain WMAs]

C. WE OBJECT TO THE GENERAL FOREST POLYGON AND SUGGEST IT BE ANALYZED AS A WILDLIFE MANAGEMENT AREA- LONE CONE BEAVER PARK

Colorado's Guide to Planning Trails with Wildlife in Mind suggests considering minimization strategies. [ldquo]When reviewing potential trail alignments, strive to minimize habitat fragmentation by maintaining large blocks of undisturbed core habitat in the project area. One way is to redirect trails around, rather than through, areas of intact habitat. For example, higher route densities may be appropriate in areas already impacted by development or located outside of high-priority habitats, whereas

[Figure 6: General Forest Polygon]

, whereas

[Figure 6. General Forest Polygon]

low route density may be appropriate or required to maintain the effectiveness of large blocks of unfragmented or sensitive habitat areas.[rdquo]

The Beaver Park area, as proposed, is fragmenting the landscape, and the Summer ROS of semi-primitive motorized is also a concern. We request that this area be reduced in size to consider the fens in the southern portion of the polygon. The Forest Plan states,

Wildlife Management Areas (MA 3.2): MA-STND-WLDF-02 The best available science documents a relationship between big game hunting opportunities and management and the emphasis in wildlife management areas on unfragmented habitat, including migration corridors. As summarized in Canfield et al. (1999: 6.13):

Suggestion: Create a Wildlife Management Area to replace the General Forest designation.

IV. Suitable Timber

November 26, 2021 Comment: We continue to oppose the substantial increase of suitable timber proposed in this Draft Plan. The implementation of SBEADMR has made it clear that even with a ten-year programmatic NEPA decision, the industry cannot support a significant increase in timber production. During negotiations for the designations of the CORE Act, the Suitable Timber overlay was used as an effective delay. Even with broad stakeholder support from surrounding communities and the recognition of the low probability for timber production, a single industry was able to impede the progress of the widely supported and economically beneficial protective designations proposed. As stated in the 2012 Planning Rule: [ldquo]This final planning rule requires that land management plans provide for ecological sustainability and contribute to social and economic sustainability, using public input and the best available scientific information to inform plan decisions. The rule contains a strong emphasis on protecting and enhancing water resources, restoring land and water ecosystems, and providing ecological conditions to support the diversity of plant and animal communities while providing for ecosystem services and multiple uses[rdquo].1 Following this direction, any increase in timber suitability and production must be adequately balanced with increased protections of ecological systems, wildlife, and recreation opportunities that are a growing economic benefit for surrounding communities.

The primary objective of any timber harvest should be to promote resiliency for future forests and the ecosystem services they provide. We also ask that the GMUG prioritize wildfire mitigation that protects communities and critical infrastructure, including watersheds. We agree that timber production technology has improved since the last forest plan was completed. However, the addition of steeper slopes should only be considered if the natural resources can be protected to enhance the opportunity for resiliency of the forests.

November 25, 2021 comments: According to a report commissioned by the Outdoor Alliance 2 [ldquo]human-powered outdoor recreation is a major economic engine on the GMUG contributing $392 million annually, $112 million in wages and 5802 jobs. The Draft Plan and preferred alternative must offer a more comprehensive socioeconomic analysis which recognizes the benefits to our communities from the outdoor recreation economy. Our forests must be managed for multiple uses and many if not all of our communities are facing increasing demands for a wide spectrum of recreational opportunities. Human-powered outdoor recreation is a major

economic engine on the Grand Mesa, Uncompahgre, and Gunnison National Forests (GMUG) and should be recognized as such in the Plan[rsquo]s socioeconomic analysis.

Between outdoor recreation, ecosystems services and wildlife-related tourism, which all have quantifiable values, it is safe to assume that these uses of the GMUG far outweigh the socioeconomic benefits of the timber industry and yet the Draft Plan continues to only measure the socioeconomic benefits of that single industry, and appears to prioritize timber production over all other uses. We would like to suggest that if recreational uses need an [ldquo]opportunity spectrum[rdquo] or ROS to identify appropriate uses, that timber should also be regulated by a [ldquo]Timber Opportunity Spectrum[rdquo] or TOS.

Again, we recognize that timber harvest techniques have come a long way from the destructive methods of the past and we support the implementation of responsible timber production. We also recognize that we need Montrose Forest Products and its contractors and subsidiaries in order to support our increasing wildfire mitigation needs. At the same time, we would like to see a stronger balance of the other potentially more valuable uses and resources of the forest. Recreational visitor numbers have seen an upward trend for many decades and, especially the past two years, have seen a 40% to 50% sustained increase. These contributions and corresponding adequate management responses must be presented in further versions of the Draft Plan and DEIS.

San Miguel County supports the following Gunnison County[rsquo]s objections and has included our economic data.

1.
1. THE FEIS AND ROD IMPROPERLY ANALYZE THE IMPACTS OF INCREASED TIMBER HARVESTING

The ROD selects a modified version of [ldquo]Alternative B,[rdquo] now labeled the [ldquo]Preferred Alternative,[rdquo] which dramatically increases the designation of areas in the GMUG suitable for timber production, without the robust, objective and good faith analysis required by NEPA. As the FEIS reveals, the Preferred Alternative designates 772,000 acres as suitable for timber production, which, as the ROD confesses, is a [ldquo]significant 66% increase (300,000 acres)[rdquo] compared to the 1983 plan. See ROD at 20; FEIS Vol. 1 at 77, Table 7, 143, Table 28 (projecting close to double projected timber sales over 1983).

USFS acknowledges throughout the FEIS that its selection of the Preferred Alternative will have discernable, harmful effects on the environment. See, e.g., FEIS Vol. 1 at 158 (acknowledging significant timber harvest impacts on aquatic and riparian resources under Preferred Alternative); 424 (recognizing timber harvest impacts on [ldquo]erosion, displacement, compaction, and soil changes''); 441, 444 (same as to watershed and stream health). Although NEPA does not necessarily require USFS to forgo increased timber designations due to these negative environmental impacts, it does require USFS to properly and faithfully analyze these and other consequences. The agency has not done so.

In analyzing and selecting the timber-friendly Preferred Alternative, USFS commits at least four errors under NEPA and NFMA.

1.

1. THE FEIS OVERSIMPLIFIES AND OVERSTATES THE PURPORTED ECONOMIC BENEFITS OF INCREASED TIMBER HARVESTING AS COMPARED TO RECREATION.

In selecting the timber-friendly Preferred Alternative, the ROD makes much over the [ldquo]150 more jobs and $7.6 to $8.4 million more in labor income annually from the projected production and harvest of timber and other forest products.[rdquo] See ROD at 35. Yet, in this same section of the ROD, USFS hints at its failure to properly account for the much larger economic benefits other uses of the Forest, particularly recreation, generate. As the ROD and FEIS all but concede, the 150 jobs and $7.6-$8.4 million from timber harvesting pales in comparison to the $90 million and 2,940 jobs created by recreation, livestock grazing and other uses of GMUG.[1] See ROD at 35; FEIS Vol. 1 at 468.

Further, the FEIS acknowledges, as it must, that because the GMUG has [ldquo]received nearly 2.6 million annual visits and ranked eighteenth in the nation for total recreation visits[,][rdquo] see FEIS Vol. 1 at 536, timber harvest activity in these Forests pales in comparison to recreational uses. See id. at 559 (noting decline in timber harvest volume from the GMUG since 1980); FEIS Vol. 2 at 8-3; see also ROD at 2 (showcasing recreational opportunities within GMUG); LMP at 9 ([ldquo]Recreation is the GMUG[rsquo]s largest economic contributor[rdquo]).

However, the selection of the Preferred Alternative in favor of timber over recreation not only glosses over these differences but also fails to consider the non-timber-based economies of the counties within the GMUG and the recreation economic benefits of wilderness, all in violation of NEPA.

An agency fails to comply with NEPA when it over-inflates the economic benefits of a plan or when it relies on incomplete or misleading market data. See Nat. Res. Def.

Council v. U.S. Forest Serv., 421 F.3d 797, 811-12 (9th Cir. 2005) (internal citations omitted). As one court has explained,

Misleading economic assumptions can defeat the first function of an EIS by impairing the agency[rsquo]s consideration of the adverse environmental effects of a proposed project. NEPA requires agencies to balance a project's economic benefits against its adverse environmental effects. The use of inflated economic benefits in this balancing process may result in approval of a project that otherwise would not have been approved because of its adverse environmental effects. Similarly, misleading economic assumptions can also defeat the second function of an EIS by skewing the public[rsquo]s evaluation of a project. Because of the potential for misleading economic assumptions to defeat the functions of an EIS, we will engage in a narrowly focused review of the economic assumptions underlying a project to determine whether the economic assumptions were so distorted as to impair fair consideration of the project's adverse environmental effects.

Hughes River Watershed Conservancy v. Glickman, 81 F.3d 437, 446 (4th Cir. 1996) (internal citations and quotations omitted). Here, USFS has employed misleading assumptions regarding the economic benefits of increased timber harvesting, notwithstanding potential adverse environmental effects.

Relying upon the USFS-developed Economic Profile System-Human Dimensions Toolkit, USFS claims that [ldquo]timber harvest . . . will continue to play an important economic and social role[rdquo] in the counties constituting the GMUG, ignoring the fact that USFS[rsquo]s data demonstrates that none of the counties in the GMUG count timber extraction as a significant economic driver. See FEIS Vol. 1 at 465-66, 471-482. For example, although [ldquo]Delta County has the largest share of timber-related employment relative to other counties[rdquo] in the GMUG, its timber sector is only 0.4 percent of its economy. See FEIS Vol. I at 472. By

comparison, travel and tourism, in terms of percentage of employment, is over ten times that amount. Indeed, in San Miguel County, zero percent of the labor sector works in the timber industry.

[Figure 7: Headwaters Economics, National Forest Socioeconomic Indicators Rpt., comparison bet. San Miguel Cnty. and Delta County]

Despite this, rather than conclude that the Preferred Alternative[rsquo]s timber-based economic benefit is minimal, the FEIS and ROD promote this phantom benefit as one of the main reasons for selection of the Preferred Alternative. See ROD at 19-20, 35, 42; EIS Vol. 1 at 483; LMP at 10. USFS then commits a further error by 1) failing to robustly analyze the potential negative effects of increased timber harvesting on the recreation uses, see, e.g., FEIS Vol. 1 at 471, and 2) falsely assuming that wilderness designations preventing timber suitability designation constitutes a net negative for recreation economics.

Acknowledging that [ldquo]desired conditions for social, economic, and ecological sustainability are achieved through varying degrees of more active conservation management or more restrictive preservation [,][rdquo] see FEIS Vol. 1 at 45, the Preferred Alternative downgrades priorities for active recreation management in favor of focusing on timber and fuels-related activities, to the detriment of the GMUG and the economics of affected communities. By way of example, the FEIS anticipates that Preferred Alternative[rsquo]s timber emphasis will result in 250,000 acres of fuels treatment in the next 20 years, compared to 90,500 acres under the No Action Alternative and 50,000 acres under Alternative D. See FEIS Vol. 1 at 81. By contrast, the Preferred Alternative intends to:

* Delay actions to minimize the harmful effects from off-road travel on at-risk plants [ndash] five years instead of one year as compared to Alternative D;
* Reduce by half the number of alpine acres restored through recreation management plans and road and trail decommissioning as compared to Alternative D (100 versus 200 acres);
* Downgrade the elimination of unauthorized travel routes from 4 to one per year as compared to Alternative D;
* de-emphasize actions to minimize harms to at-risk plants from off-road travel to a five-year rather than a one-year action horizon; and
* Decrease by half USFS actions to improve degraded day and overnight dispersed use areas as compared to Alternative D.

See FEIS Vol. 1 at 81-82, 144. This is notwithstanding the fact that the FEIS concludes that active recreation management is critical to protect against human-caused wildfires and negative impacts on native plant species and wildlife from unmanaged or mismanaged recreation uses. See id. at 316-318. Moreover, San Miguel County can uncover no robust analysis of the potential negative effects that increased timber operations could have on recreational users and, in turn, the recreation-based economy central to the many counties comprising the GMUG. In particular, San Miguel County cannot find a detailed analysis in the FEIS regarding the Preferred Alternative[rsquo]s de- emphasis of active recreation management in favor of timber industry promotion, which may sour outdoor recreation visitors to the Forests by creating negative backcountry experiences in the form of illegal off-roads uses, damaged natural areas and unsanitary or unsightly day and overnight dispersed use areas, which in term damages the GMUG counties[rsquo] recreation-based economies.

Instead, the FEIS makes the poorly supported and misleading assumption that [ldquo]economic contributions from the GMUG are a very small portion of total jobs in the analysis area; while local impacts may be greater, the overall impact of changes to the economy from the plan direction is minimal.[rdquo] See FEIS Vol. I at 483. The data urges a contrary conclusion. The National Forest Socioeconomic Indicators Report demonstrates that close

to 47 percent of private employment in San Miguel County directly relates to Forest use sectors, with a full 43.7 percent in travel and tourism. See Headwaters Economics, National Forest Socioeconomic Indicators Rpt., comparison bet. San Miguel County. and Delta County. (run October 26, 2023). This, of course, does not take into account the indirect benefits of Forest use for the local economy. For example, according to United States Department of Agriculture ([ldquo]USDA[rdquo]) National Visitor Use Monitoring Data relied upon by the FEIS, see FEIS Vol. 1 at 536, over 35 percent of GMUG visitors stayed overnight in hotels or short-term rentals when using the Forest, an obviously positive impact to the local economies where these lodging nights occurred. See USDA Forest Service Region 2, Visitor Use Rpt. Grand Mesa, Uncompahgre and Gunnison NF (June 26, 2023). Undoubtedly, those visitors also dined at local restaurants, hired local guides and outfitters, and shopped for supplies at local stores [ndash] data that USFS apparently took no time to collect and analyze as part of their obligations under NEPA.

USFS also appears to base its [ldquo]no impact on recreation[rdquo] conclusion on the misleading assumption that economically beneficial recreation visits to GMUG wilderness and wildlife areas are minimal compared to the supposed benefits of increased timber harvesting and because the Preferred Alternative de-emphasizes wilderness and wildlife management designations as compared to Alternative D, the Preferred Alternative will promote local economies to a greater degree. See FEIS Vol. 1 at 470. USFS bases this assumption that wildlife-related activities are the primary uses of wilderness, wildlife and special management areas. See id. Indeed, USFS goes so far as to conclude that [ldquo][c]ounties with tourism-driven economies may experience the greatest benefit from the preferred alternative because it proposes a balance between wildlife-related recreation and trail-based recreation.[rdquo] See FEIS Vol. 1 at 476. Had USFS taken the time to review and digest its own data, it would have learned that out of the top 5 Forest activity types visitors identified to USDA, three such activities [ndash] viewing natural features, hiking, and relaxing -- are not only permitted in wilderness areas but are also unrelated to wildlife and therefore properly classified as [ldquo]trail-based recreation.[rdquo] See Visitor Use Rpt. at 21.

To conclude, as USFS does, Alternative D[rsquo]s special management area emphasis is somehow more harmful to Western Slope economies than the [ldquo]timber first, recreation second.[rdquo] The Preferred Alternative is simply wrong and contrary to NEPA.

We support the following objections from Gunnison County.

1. The FEIS[rsquo]s Conclusions Regarding the Technological Feasibility of Timber Harvesting on Steep Slopes is Misleading.

The ROD makes clear that USFS made the [ldquo]deliberate decision[rdquo] to allocate significantly more areas of timber suitable than the No-Action Alternative, including production on steep slopes that could have negative impacts on soil and wetland resources. See ROD at 20. The dramatic inclusion of steep-slope timber harvesting relies heavily on USFS[rsquo]s misguided assumptions about the feasibility of steep-slope harvesting technology, in violation of NEPA and NFMA.

An agency cannot rely on unsupported assumptions about future technologies and remain in compliance with NEPA or NFMA. See, e.g., High Country Conservation Advocates v. United States Forest Serv., 52 F. Supp. 3d 1174, 1197 (D. Colo. 2014). Yet the LMP, FEIS and ROD do precisely that. The FEIS discloses that under the Preferred Alternative, a full 14 percent of areas identifies as suitable for timber production are on slopes of 40 percent grade or higher, constituting 112,000 acres of the GMUG. See FEIS Vol. 1 at 56; FEIS Vol. 2 at 8-10. The FEIS justifies this decision on the grounds that, supposedly, [ldquo][n]ew technology and approaches could

make timber harvest in areas with steep slopes (greater than 40 percent) economically feasible.[rdquo] See FEIS Vol. 2 at 8-12; see also LMP at 8-8. The only evidence that Gunnison County could locate in the

FEIS that purports to support this statement, however, relates to a pilot steep slope logging operation conducted by USFS around Monarch pass. See FEIS Vol. 1 at 566, 570. Absent from the discussion of this project is the fact that USFS is paying a contractor to perform this work for wildfire mitigation purposes; it is not, as the FEIS implies, a free-market commercial logging operation. See Jason Blevins, [ldquo]Monarch Pass Could Serve as A New Model for Wildfire Mitigation in Treacherous Areas,[rdquo] The Colorado Sun (October 6, 2021). This is, therefore, inadequate evidence of [ldquo]economically feasible[rdquo] steep slope timber operations and, in turn, improper under NEPA and NFMA.

1. The FEIS Fails to Robustly Analyze the Climate Impacts of Increased Timber Harvesting.

As the FEIS appears to concede, [ldquo][C]limate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct.[rdquo] See Ctr. for Biological Diversity v. Nat[rsquo]l Highway Traffic Safety Admin., 538 F.3d 1172, 1217 (9th Cir. 2008). Despite this, the FEIS improperly analyzes the full climate effects of increased timber production in the GMUG, in violation of NEPA and potentially other laws.[1]

The FEIS acknowledges the increased carbon emissions, decreased carbon stock, and dust that will be caused by the increased timber harvest operations under the Preferred Alternative as compared to the No-Action Alternative. See FEIS Vol I at 50, 351-356 (revealing that Preferred Alternative estimated emissions almost two times the amounts generated under No-Action Alternative and Alternative D); 360-61; 375; 392; ROD at 3; see also LMP at 10 (describing size and importance of GMUG[rsquo]s carbon storage). It further admits that, [ldquo][t]he greenhouse gas effects of projected vegetation management activities would be highest in the Preferred Alternative, followed by Alternative C, the No-Action, and least from Alternative D.[rdquo] See id. at 395. However, the FEIS characterizes the Preferred Alternative[rsquo]s impacts as [ldquo]minor,[rdquo] theorizes that such operations [ldquo]may reduce overall emissions from unplanned wildfires,[rdquo] and then claims that total emissions are an [ldquo]unknown[rdquo] and therefore unworthy of robust analysis. See FEIS Vol. I at 358, 363, 393. And, while arguing that increased wilderness allocations in alternatives other than the Preferred Alternative could reduce vegetation management that in turn would serve to reduce emission-producing wildfires, the FEIS admits that [ldquo][l]ong-term net greenhouse gas effects of the recommended wilderness allocation is uncertain and would be contingent upon contemporary environmental conditions and site- specific factors.[rdquo] See id. at 393; see also id. at 395. ([ldquo]The long-term net effect of implementation of the revised forest plan alternatives is therefore difficult to quantify.[rdquo]).

The law is clear that [ldquo][r]easonable forecasting and speculation is ... implicit in NEPA, and we must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as [lsquo]crystal ball inquiry.[rdquo] See High Country Conservation Advocates, 52 F. Supp. 3d 1174, 1196 (internal citations and quotations omitted); see also New York v.

Nuclear Regulatory Comm[rsquo]n, 681 F.3d 471, 482 (D.C. Cir. 2012) (agency conducting NEPA analysis [ldquo]generally must examine both the probability of a given harm occurring and the consequences of that harm if it does occur. Only if the harm in question is so [lsquo]remote and speculative[rsquo] as to reduce the effective probability of its occurrence to zero may the agency dispense with the consequences portion of the analysis.[rdquo]). Here, USFS appears to bypass a robust examination of climate impacts associated with increased timber harvesting by labeling such impacts [ldquo]to difficult to quantify.[rdquo] This is inconsistent with its obligations under NEPA.

C. WE RECOMMEND PRIORITIZING COMMUNITY AND LANDSCAPE-SCALE WUI TREATMENTS FOR

TIMBER SUITABILITY

FW-STND-TMBR-03: Timber shall not be harvested for the purpose of timber production on lands not suited for timber production (36 CFR 219.11(d)(1)). Timber harvest may occur on these lands as a tool to assist in achieving or maintaining one or more applicable desired conditions or objectives of the plan to protect other multiple-use values and for salvage, sanitation, public health, or safety. This standard is required by law and policy; see 36 CFR 219.11(c). Examples of using timber harvest as a tool to protect other multiple use values include, but are not limited to, ecological restoration, climate change adaptation, restoring meadows or savanna ecosystems, improving wildlife or fish habitat, and thinning to reduce fire risk. See plan appendix 8, Timber Suitability Analysis, and the Climate Change and Carbon section of the plan, for adaptive management approaches to climate change adaptation through vegetation management.

Suggestion: The objective of any timber harvest should be to promote resiliency for future forests and the ecosystem services they provide. We also ask that the GMUG prioritize wildfire mitigation that protects communities and critical infrastructure, including watersheds.

V. CORE ACT

A. THE FINAL PLAN MUST PROTECT LEGISLATIVELY PROPOSED SPECIAL MANAGEMENT AREAS (SMAs) IN THE SAN JUAN MOUNTAINS- LIBERTY BELL EAST SMA

November 25, 2021 Comment: We appreciate the inclusion of the Wilderness and Special Management Area designations of the CORE Act.

November 26, 2021 Comment: We appreciate the inclusion of the Special Management Areas from the CORE Act in Alternative D. SMA[rsquo]s are a key tool to help achieve the ecological integrity that is a central purpose of the 2012 Planning Rule, while allowing for the management of existing uses. Liberty Bell Corridor Special Management Area [ndash] This should be removed as a separate SMA in Table 21, as the [ldquo]corridor[rdquo] is encapsulated within the Liberty Bell East SMA. Liberty Bell East Special Management Area [ndash] [ldquo]None identified[rdquo] should be changed to [ldquo]Limited new[rdquo] to allow for mountain bike use in the [ldquo]corridor[rdquo] within Liberty Bell East.

The Liberty Bell East SMA, part of the Colorado Outdoor Recreation and Economy Act (CORE), has long-established business, public, and elected official support. The SMAs were carefully designed to protect these highly valued landscapes while allowing existing non-conforming uses such as heliskiing, a competitive long-distance running race and mountain biking. These proposed areas, both legislatively and through the GMUG plan revision process, are home to outstanding and unique landscapes home to recreational, wildlife, and ecological values. These proposals are the results of decades of advocacy and public process. The 2012 Planning Rule grants the Forest Service authority to designate and protect these areas as Special Management Areas (SMAs) in forest plans.8 Agency regulations make clear that the Forest Plan must [ldquo]reflect the unit[rsquo]s expected distinctive roles and contributions to the local area, region, and Nation, and the roles for which the plan area is best suited[hellip][rdquo] as well as [ldquo]the unit[rsquo]s unique capabilities, and the resources and management of other lands in the vicinity.[rdquo]9 The Forest Service should adopt the proposed SMA with specific plan components to ensure the final forest plan provides clear, concise management direction for the Forest Service and the public.

Protecting high-value public lands is also an important priority for the Biden-Harris Administration. President Biden has issued a call to action urging us to work together [ldquo]to conserve, connect, and restore 30 percent of our lands and waters by 2030 for the sake of our economy, our health, and our well-being.[rdquo]10

Agriculture Secretary Tom Vilsack also recently directed the Forest Service to protect our National Forests by restoring ecosystems, among other goals.11 The directive highlights important ecosystem services provided by protecting our national forests, including: [ldquo]sequestering carbon, providing clean drinking water, stabilizing soil, buffering floods, protecting biodiversity, providing sustainable forest resources, protecting cultural resources and places of tribal importance, and enabling access to the outdoors for hundreds of millions of visitors.[rdquo]12 Protecting these SMAs on the GMUG would support and further the Administration[rsquo]s conservation goals. San Miguel County has long been in support of the designation of the above SMAs both in DEIS comments and official communications with Colorado Senators.13

Suggestion: The Forest Service should designate the proposed SMA as reflected in the Colorado Outdoor Recreation and Economy Act (CORE) to reduce conflict and create a seamless management transition.

VI. Fire and Fuels Management

1.
1. ADD LANGUAGE IN FIRE AND FUELS MANAGEMENT, MANAGEMENT ACTION TO ADDRESS PUBLIC HEALTH AND SAFETY AND GREENHOUSE GAS EMISSIONS

December 2022 Ophir residents experienced extreme smoke from five 40[rsquo]x 40[rsquo] slash piles from the TriState Powerline Vegetation removal project, containing wet, green vegetation. The Town was notified on a Friday afternoon, and piles were lit on Monday. The Town clearly expressed concerns to the USFS and was working with San Miguel County on alternative solutions to burning the piles and were told the piles would not be burned until the following year.

Due to the topography of Ophir and its typical inversions and often windy winters, combined with green wet vegetation, these burning piles created poor air quality for residents and visitors over the Holidays and smoldered throughout the winter months. The County helped the Town install a Purple Air Monitor due to the severity of the smoke.

According to the article, Emissions from prescribed burning of timber slash piles in Oregon Field sampling of eleven biomass pile burns determined emission factors for a wide range of pollutants. Comparison of piles that were naturally wetted versus those that were dry showed statistically higher emission factors for PM2.5, PAHs, VOCs, and PCDD/PCDF for the wet piles. Emission levels were negatively correlated with combustion quality, as represented by MCE. Variation of PE cover size and thickness showed no statistically significant difference in emission factor for any of the pollutants, suggesting that the PE was not contributing significantly to any of the measured pollutants. Time-resolved PM2.5 emissions were highest at the beginning of the burns; for the Dry pile tests, this startup period lasted for less than 4 min; for the Wet pile tests, it was four times longer, about 16 min. For the Wet pile tests, PM2.5 emission factors were higher than those of the Dry pile tests for at least half of the burn durations, after which they were similar. These tests suggest that use of PE as a biomass pile cover results in lower emission factors than those from piles exposed to moisture, reducing pollutant levels during slash pile burns. These emission factors, together with estimates of burn pile numbers, size, and fuel consumption, can be used by management and regulatory communities to minimize smoke impacts while limiting the potential hazard of biomass fuel loading.14

Suggestion: The USFS creates management direction to protect the Health and Safety of residents and visitors by taking responsibility for their actions and not rely on a State Agency that will not be on-site for the duration of the project. The EPA has pollution standards and installs air quality monitors at their project sites for public health and safety; this could be a management strategy for pile burning.

Suggestion: This project was an example of poor communication and timing. This management action, FW-MA-

FFM-10: Coordinate public education efforts regarding fire and fuels with local governments, Tribes, and partners, may need to be strengthened.

Suggestion: FW-MA-TMBR-13: Partner with local stakeholders and industry to innovate and support economically viable markets for both timber and nontimber forest products, including aspen, wood biomass, biochar, and small- diameter material (USDA Forest Service Climate Adaptation Plan 2022). Actively apply for agency funds dedicated to support emerging, alternative forest product markets (Resilience).

FW-MA-SOIL-08: Seek opportunities to support production of biochar (a charcoal soil amendment made from biomass) from waste woody biomass generated by fuel treatments and forest restoration. When applied as a soil amendment, biochar improves soils by reducing bulk density, increasing porosity, providing a substrate for microorganisms, improving water-holding capacity, retaining nutrients, and increasing organic matter,

among other benefits. Producing biochar helps to mitigate climate change by storing carbon in long-lived material that would otherwise be released more quickly into the atmosphere and has the added benefits of reducing smoke and burn scars from disposal by pile burning (Rodriguez Franco et al. 2022). (Resistance, Resilience).

We highly recommend these Management Actions and would like to work with the USFS to support biochar and woody biomass systems that support clean and local energy, such as the systems used at Mount Bachelor, created by Wisewood Energy.15

Suggestion: The following Management Actions and Guidelines should be strengthened/mandatory and considered for pile-burning projects.

FW-MA-AQ-07: An air quality analysis may be required for Forest Service approval of activities that would result in emissions. The appropriate complexity of the analysis is determined on a case- by-case basis at the project level, in consultation with air quality regulatory agencies and other federal land management agencies.

FW-MA-AQ-08: Provide early notification to the public about potential smoke from fire activities to promote awareness and protect human health and safety. Smoke from prescribed burning is managed per State of Colorado requirements via burn permits.

Thank you for your serious consideration of our objections. We look forward to working with you to find solutions.

Sincerely,

[Signature]

[Signature]

[Signature]

San Miguel County

Board of Commissioners

[Footnotes]

1Rod A. Chimner & Joanna M. Lemly & David J. Cooper, Mountain Fen Distribution, Types and

Restoration Priorities, San Juan Mountains, Colorado, USA. 25 April 2010. https://sites.warnercnr.colostate.edu/davidcooper/wp-content/uploads/sites/15/2017/02/ChimnerLemlyCooper2010-San-Juan-Fens-1.pdf

2 Barry C. Johnston, Benjamin T. Stratton, Warren R. Young, Liane L. Mattson, John M. Almy, Gay T. Austin. 2012. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5363703.pdf

3Barry C. Johnston, Benjamin T. Stratton, Warren R. Young, Liane L. Mattson, John M. Almy, Gay T. Austin. 2012. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5363703.pdf

4Rod A. Chimner & Joanna M. Lemly & David J. Cooper, Mountain Fen Distribution, Types and Restoration Priorities, San Juan Mountains, Colorado, USA https://sites.warnercnr.colostate.edu/davidcooper/wp-content/uploads/sites/15/2017/02/ChimnerLemlyCooper2010-San-Juan-Fens-1.pdf

5DAVID JONATHAN COOPER, (personal communication October 6, 2023) 2003-present. Senior Research Scientist/Professor, Department of Forest and Rangeland Stewardship, Colorado State University, Fort Collins, Colorado USA 80523 Phone: 970- 491-5430 David.Cooper@colostate.eduhttps://sites.warnercnr.colostate.edu/davidcooper/david-jonathan-cooper/

6OUTDOOR ALLIANCE GMUG VISION. A vision for world-class sustainable recreation in the Grand Mesa, Uncompahgre, and Gunnison National Forests. August 2020 (v2)

https://static1.squarespace.com/static/54aabb14e4b01142027654ee/t/5f4447cf4de0e201344c8034/1598310359489/Outdoor

+Alli ance+GMUG+Vision+v2+Aug+2020.pdf

7Colorado Parks and Wildlife, Colorado's Guide to Planning Trails with Wildlife in Mind,

https://cpw.state.co.us/Documents/Trails/Planning_Trails_with_Wildlife_in_Mind(without_appendices).p df

8The regulations specifically require that [ldquo][e]very plan must have management areas or geographic areas or both. The plan may identify designated or recommended designated areas as management areas or geographic areas.[rdquo] 36 CFR [sect] 219.7(d). The

responsible official with delegated authority may designate new areas or modify existing areas, when approving the plan, plan amendment, or plan revision. 36 CFR [sect] 219.7(c)(2)(vii). SMAs are managed to emphasize specific values (e.g., ecological, geological, scenic, recreation, or other specific values). Management activities and uses are permitted in these areas only to the extent that they are in harmony with the purpose for which an area is specially designated. The plan or decision designating each area is supposed to provide specific objectives, standards, and guidelines for management of each area.

9 36 C.F.R. [sect] 219.2(b)(1).

10See U.S. Dept. of Interior, [ldquo]America the Beautiful[rdquo] webpage, available at https://www.doi.gov/priorities/america- the-beautiful (last accessed 7/6/22).

11 U.S. Dept. of Agriculture, [ldquo]Climate Resilience and Carbon Stewardship of America[rsquo]s National Forests and Grasslands,[rdquo] Secretary[rsquo]s Memorandum 1077-004 (June 23, 2022).

12Id.

13https://legistarweb-production.s3.amazonaws.com/uploads/attachment/pdf/1555824/President_Biden_Core_Act_9.8.22.pdf

14Aurell J, Gullett BK, Tabor D, Yonker N. Emissions from prescribed burning of timber slash piles in Oregon. Atmos Environ (1994). 2017 Feb; 150:395-406. doi: 10.1016/j.atmosenv.2016.11.034. Epub 2016 Nov 12. PMID: 30713461;

PMCID: PMC6355151.