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Comments: [ATTACHMENT FOLLOWS]

Thank you for considering the following feedback from Outdoor Alliance regarding the Grand Mesa, Uncompahgre, and Gunnison (GMUG) Draft Revised Land Management Plan. We recognize and genuinely appreciate the effort that the GMUG Plan Revision Team has dedicated to the GMUG Draft Revised Land Management Plan and are grateful for the opportunity to provide feedback.

The GMUG Working Group is a collaborative partnership that is composed of local, regional, and national groups that include American Whitewater, Backcountry Snowsports Initiative, Colorado Mountain Bike Association, Colorado Mountain Club, Colorado Plateau Mountain Bike Trail Association, Crested Butte Mountain Bike Association, Silent Tracks, Telluride Mountain Club, and Uncompahgre Watershed Partnership. These groups were instrumental in developing the Outdoor Alliance GMUG Vision proposal and envision a revised forest plan that provides thoughtful management for the future of our public lands by supporting sustainable recreation opportunities, while preserving the health and integrity of the surrounding cultural and natural resources.

In August of 2020, in an effort to advance consensus among community stakeholders and partners, Outdoor Alliance (OA) submitted an updated forest plan proposal to the GMUG Plan Revision Team. The Outdoor Alliance GMUG Vision (OAGV) v21 [Outdoor Alliance GMUG Forest Planning webpage, <https://www.outdooralliance.org/gmugnational-forests>] includes changes based on feedback from the GMUG Plan Revision Team, GMUG Working Group members, community stakeholders, and conservation partners, and incorporates feedback we submitted on the Working Draft Plan. Through a collaborative process, the OAGV identifies nineteen forest-wide policy recommendations, ten new designated areas and site-specific management unique to the OAGV, and it endorses three outside citizens' proposals and seven additional designated area recommendations from separate coalitions. Outdoor Alliance offers these community-sourced recommendations as a comprehensive vision for sustainable outdoor recreation in the GMUG National Forests.

How to use and interpret our feedback. Throughout this document we have used a combination of terminology (e.g. Add, Change, Revise) and editing symbology (e.g. strikethrough, and colored text) to convey our feedback on forest plan components.

- * Add, this is a new plan component that should be added to improve the Draft Revised Forest Plan.
- * Change, recommendation that this plan component be changed (e.g. guideline to standard) to better guide future projects and activities.
- * Revise, this plan component is revised using strikethrough where text should be eliminated and purple text where new language should be added.
- * Question, specific questions that reference plan components or language in the Draft Revised Forest Plan.

The following comments include feedback and recommendations on the GMUG Draft Revised Land Management Plan and are organized by sections in the table below.

GMUG Draft Revised Land Management Plan Comment Sections

Topline Feedback

- * We recognize and genuinely appreciate the effort that the GMUG Plan Revision Team has dedicated to the GMUG Draft Revised Land Management Plan. There has been extensive public engagement and participation

opportunities and the GMUG Planning Team has been available to discuss topics and matters in more detail when asked.

* Comparatively, in our experience working on the revision of other forest plans (e.g. Custer-Gallatin, Inyo, Manti-La Sal, Nantahala & Pisgah, Sierra, and Sequoia), the GMUG Draft Revised Forest Plan is light on plan components and we believe that there is room for improvement. Plan components for Forestwide Direction are particularly important, as the Planning Team has communicated that the Forest Supervisor prefers using Forestwide Direction versus implementing restrictions through Management Area Direction (e.g. Special Management Areas). We see an opportunity to strengthen the Draft Revised Forest Plan with additional plan components to better guide future projects and activities, and to meet the desired conditions of specific social, economic, and ecological characteristics of the GMUG.

* The recreation opportunity spectrum (ROS) modeling data is incomplete and needs to be thoroughly reviewed and evaluated. We've highlighted several errors and omissions in our comments and other stakeholders have also identified errors that should be rectified in the release of the Final Environmental Impact Statement. Additionally, it is essential that winter ROS reflects future desired conditions and sets the stage for future travel management planning.

* Recreation Emphasis Corridors are too narrowly defined and focus on dispersed camping versus high-use recreation areas. While we agree that the Forest Service should address the impacts of dispersed camping and properly manage dispersed camping activities, the Forest Service should also identify areas that receive high recreation use or provide outstanding recreational opportunities. Outdoor Alliance has identified several recreation emphasis areas where many different recreational uses are concentrated and receive more visitors than other areas of the GMUG, and we have identified areas that may see increasing use in the future. GIS data regarding these areas has been shared with the Planning Team. The Planning Team should review Outdoor Alliance's proposed Recreation Focus Areas and prioritize recreation areas that need to be managed for current and future use, so that recreation opportunities are sustainable, while preserving the health and integrity of the surrounding natural and cultural resources.

* The plan components for Wildlife Management Areas are concerning, as the science and research regarding the effects of non-motorized, trail-based recreation on the fitness of different wildlife species and taxa is inconsistent and inconclusive. This is discussed further in Wisdom et al. (2018), which is cited as an expert opinion in the Draft Revised Forest Plan. Wildlife Management Area acreage varies by alternative, Alt. B is 740,000 acres, Alt. C is 36,000 acres, and Alt. D is 621,000 acres, and within Wildlife Management Area boundaries, the Forest Service proposes that "there shall be no net gain in system routes, both motorized and non-motorized, where the system route density already exceeds 1 linear mile per square mile." While there is a growing body of literature on the recreation effects to wildlife, many studies fail to go beyond the disturbance effect on individual animals and to answer the question(s) of how populations or herds are impacted. All recreation activity affects wildlife to some degree, but the mixed findings from studies suggest that the story is more complicated, thus generalizations can be misleading and counterproductive. To this end, we believe that there is inconclusive evidence that warrants using a route density standard that includes non-motorized, trail-based recreation.

* Only four percent of GMUG's rivers are considered eligible for Wild and Scenic River designation and there are numerous rivers missing from eligibility that deserve protection, like the Taylor River, Uncompahgre River, and the East River. Previously, we have submitted extensive comments on Wild and River Scenic Eligibility, and while the Forest Service has added a few river segments, including Anthracite Creek, we believe that there are still many streams that are eligible for Wild and Scenic River protection. See the Appendix section for our recommendations.

* While the GMUG has not indicated a preferred alternative in the Draft Revised Forest Plan, and each alternative comes with its own set of tradeoffs, Alternative D includes many of the Recommended Wilderness Areas and Special Management Areas that were included in the Gunnison Public Lands Initiative proposal and the San Juan Wilderness proposal (included in the CORE Act), which Outdoor Alliance supports. Alternative D did not include any of the recreation emphasis areas or backcountry areas that Outdoor Alliance proposed, and in its current form, the Draft Revised Forest Plan lacks sufficient Forestwide Management direction to manage sustainable recreation opportunities. This puts the outdoor recreation community in an awkward position.

Notably, the GMUG has indicated that it would prefer using plan components through Forestwide Direction but the Draft Revised Forest Plan is deficient on plan components compared to other revised forest plans we have seen. Furthermore, our proposed special management area recommendations are not included in Alternative D (or any other alternative that we know of), so it makes it difficult to support this alternative out right. Therefore, we see Alternative D as a workable alternative to further refine, as the Planning Team works towards the next iteration of alternatives in the release of the Final Environmental Impact Statement.

Forestwide Direction

Partnerships and Coordination (PART)

Partnerships and coordination with local, State, Tribal governments, nongovernmental partners, and private land owners is essential to successfully managing our national forests. The GMUG should continue to maintain and expand partnering opportunities across the forest to meet the desired conditions outlined in the Draft Revised Forest Plan.

Objectives

* Add, FW-OBJ-PART-XX: Within two years of completing the revised forest plan, complete a strategic partner assessment across the GMUG National Forests to determine the scope and scale of partnered efforts, gaps in support, and identify the needs and issues related to Forest Service capacity.

* Add, FW-OBJ-PART-XX: If a dedicated "Partnership/Stewardship Coordinator" does not exist, develop a Partnership/Stewardship Coordinator position within two years of forest plan approval to work with partners and create opportunities for collaboration and stewardship.

Guidelines

* Add, FW-GDL-PART-XX: Every year, host a discussion at the supervisor's office with interested local governments or their economic development offices to foster shared actions that support local jobs, attract tourism, and encourage coordination on public health and safety issues.

Educational and Interpretive Programs (EDU)

While we are supportive of the desired condition (FW-DC-EDU- 01), the Draft Revised Forest Plan should also provide direction on how the desired condition will be met.

Management Approaches

* Add, Campground concessionaires and other Forest Service field staff receive interpretive training in order to improve visitor education and foster a strong stewardship ethic among GMUG visitors.

Riparian Management Zones and Groundwater-Dependent Ecosystems (RMGD)

Providing clean water is an important ecosystem service that the GMUG National Forests provide and riparian management is critical to maintaining this ecosystem service. We appreciate the changes that were made to FW-GDL-RMGD-11. The revised guideline in how the GMUG approaches water diversions and impoundments will ensure smooth integration of recreation management with other riparian management and water uses. We have identified several forest plan components that should be revised to protect the health of riparian areas.

Standards

* Revise, FW-STND-RMGD-09: To maintain stream thermal cover and prevent windthrow within the riparian management zone, [SUGGESTED REPLACE "clearcut" WITH "timber"] harvest [SUGGESTED DELETION "of desired native riparian vegetation "] shall not occur in riparian management zones.

* Revise, FW-STND-RMGD-07:

* Category 2: Fens, wetlands [SUGGESTED DELETION "larger than one-quarter acre,"] lakes, springs and reservoirs: consist of the body of water or wetland and the area to the outer edges of the riparian vegetation; or to the extent of the seasonally saturated soil; or 100-foot slope distance from the edge of the wetland or the maximum pool elevation of constructed pond and reservoirs with shorelines composed of riparian vegetation, whichever is greatest (table 3).

* Revise, FW-RMGD-STND-08: In the riparian management zone, management activities [SUGGESTED NEW "and new structures"] must maintain or restore the connectivity, composition, function, and structure of riparian and wetland areas in the long-term, as consistent with the Watershed Conservation Practices Handbook and its exceptions (FSH 2509.25 and FS 990A or equivalent direction).

Guidelines

* Add, FW-GDL-RMGD-XX: Riparian habitats should be managed to be relatively free from alterations and promote connectivity for species movement, re-connect fragmented populations and support genetic exchange.

* Add, FW-GDL-RMGD-XX: Modifications, mitigations, or other measures should be incorporated to reduce negative impacts to riparian habitats to help provide for species needs. Project activities and special uses must be designed and implemented to maintain riparian refugia and critical life cycle needs of species, particularly for at-risk species.

Aquatic Ecosystems (AQTC)

On rivers and streams where recreational opportunities exist (e.g. paddling, fishing etc.), it is important that healthy aquatic ecosystems are maintained and recreational opportunities are managed in a way that does not negatively impact aquatic ecosystems.

Standards

* Revise, FW-STND-AQTC-05: New, replacement, and reconstructed crossings (culverts, bridges, and other stream crossings) and in-stream structures (impoundments, diversions, and weirs) on perennial streams and on intermittent streams known to be used by native fishes (bluehead sucker and flannelmouth sucker) for spawning, will accommodate flood flows and allow aquatic organism passage, unless the accommodation would increase non-native species encroachment on native fish and amphibian habitat. [SUGGESTED NEW "New, replacement, and reconstructed structures will also be considered as opportunities for improved river access on streams with existing or potential river recreation opportunities."] [SUGGESTED DELETION "Exceptions include temporary structures in place for less than one year"] See also the Forestwide guideline for connectivity, SPEC-06.

* Add, FW-STND-AQTC-XX: New, replacement, and reconstructed crossings (culverts, bridges, and other stream crossings) and in-stream structures (impoundments, diversions, and weirs) on perennial streams and on intermittent streams known to be used by recreationists, will accommodate flood flows and allow for safe boater passage.

* Change, FW-GDL-AQTC-06 to FW-STND-AQTC-06.

Guidelines

* Revise, FW-GDL-AQTC-08: To maintain beaver populations and the ecological functions that beavers provide, management actions should use techniques that sustain beavers (e.g., using pipes to reduce water levels, notching dams to restore streamflow). [SUGGESTED NEW "Historic beaver habitat should be identified and

restored or managed to preserve the conditions necessary for beaver to survive."]

Watersheds and Water Resources (WTR)

The rivers, streams, and water resources within the GMUG provide key ecosystem services, recreational opportunities, drinking water, and sustain wildlife and aquatic ecosystems. Maintaining healthy watersheds and improving watershed conditions should be prioritized, especially in watersheds that provide drinking water, recreational opportunities, and support sensitive species.

Desired Conditions

* Revise, FW-DC-WTR-02: The Forest Service and stakeholders actively coordinate in sustaining ecological and hydrologic processes to continue to provide critical water supplies[mdash]including water quality[mdash]to communities and water users. See also the multiple ecosystem sections and the Forestwide objective for infrastructure, INFR-03.

Objectives

* Revise, FW-OBJ-WTR-04: [SUGGESTED REPLACE "Over the life of the plan" WITH "Within 15 years,"] "trend at least 15 30 percent of subwatersheds toward improved watershed conditions, including their chemical, physical, and biological attributes, based upon the watershed condition framework or other accepted protocols. Actions to help accomplish this objective may include rehabilitating areas to reduce erosion and sedimentation delivery to waterbodies, improving 303(d)-listed streams, and/or other passive or active restoration efforts. See also the Forestwide objective for infrastructure, INFR-03.

Guidelines

- * Add, FW-GDL-WTR-XX: New and reauthorized management activities should not cause departure from desired conditions.
- * Add, FW-GDL-WTR-XX: To encourage natural channel morphology and human safety on perennial and intermittent streams, new or redesigned stream crossings (such as bridges and culverts) should be wide enough to successfully pass water, sediment, wood, aquatic organisms, and river recreationists.
- * Add, FW-GDL-WTR-XX: Where known, groundwater recharge areas should be protected or restored to maintain water quality and quantity (discharge).

Cultural and Historic Resources (CHR)

To achieve a comprehensive forest plan, it is important that this planning process proactively engage in effective and meaningful Tribal consultation. Empowering and drawing from Tribal knowledge will seek to gain a perspective on the overlap between traditional and modern Indigenous practices and other public uses on the GMUG National Forests, as well as adjacent areas. These efforts should involve collaboration from any and all interested Tribal representatives, government officials, and Tribal members. Additionally, efforts should consider geographic locations where overlaps exist between various user group activities and Indigenous sacred sites or traditional resources (e.g. hunting, medicine collection, wood gathering, ceremonial sites, etc.). Finally, efforts should seek to identify management strategies that respect current needs, as well as historical practices of Tribal communities.

Goals

* Add, FW-GO-CHR-XX: Identify, describe, and spatially convey (if approved by the Tribe(s)) existing conflicts and impacts in Heritage GIS. Identify where Tribal values and attachments may influence ROS classifications,

ROS subclass development, special area designations, and/or related management direction.

Objectives

* Change, From Management Approach to FW-OBJ-CHR-XX: [SUGGESTED NEW "Within three years of forest plan approval,"] collaborate with partners to identify priority cultural resources vulnerable to climate change and other stressors (increased recreation, vandalism, etc.). Identify the most vulnerable cultural and historic resources in Heritage GIS.

Standards

* Add, FW-STND-CHR-XX: When conducting management activities, the Forest Service shall accommodate, to the extent that the use is practicable and is consistent with the Forest Service essential functions, access to and ceremonial use of Indigenous sacred sites by native religious practitioners and shall maintain the confidentiality of sacred sites.

Guidelines

* Add, FW-GDL-CHR-XX: To reduce potential conflicts between recreation and cultural resources, partner with Tribes to identify areas where developed, dispersed, or future potential recreation may overlap with sacred sites, traditional cultural properties, plant communities, springs, and other areas of Tribal interest and cooperatively develop appropriate management strategies to maintain or improve their values.

* Add, To strengthen knowledge of and appreciation for Tribal resources, support opportunities for Tribal storytelling and assist in developing interpretive messages and educational materials that include tribes telling of their own stories.

Lands and Special Uses (LSU)

Throughout the GMUG National Forests, there are complex property boundaries between the Forest Service, Bureau of Land Management (BLM), National Park Service (NPS), State of Colorado, and private property owners. These property boundaries often exist in or near river corridors and trail systems, complicating access to rivers and trails in some areas. Where these boundaries intersect with both water-based and land-based recreation opportunities, the Forest Service should work closely with the BLM, NPS, State of Colorado, and private property owners to preserve and improve access to recreation opportunities, while respecting existing private property rights and grazing rights.

Lands

Objectives

* Add, FW-OBJ-LSU-XX: Within two years of plan approval, through mapping and collaboration with land owners, identify at least two opportunities for land acquisitions that would improve public access to Forest Service lands, wildlife habitat connectivity, and/or improve watershed health.

* Add, FW-OBJ-LSU-XX: Every decade acquire at least one new road or trail right-of-way that is needed as high priority access or would fill a gap in existing access to public lands.

Special Use Permits

The Recreational In-Channel Diversion (RICD) program was established in 2001 and there are 13 existing RICDs in Colorado. This is an important tool that should be considered in the context of water use.

Management Approaches

* Revise, When considering authorizations for water developments and uses, use the State of Colorado's instream flow [SUGGESTED NEW "and/or Recreational In-Channel Diversion"] process to coordinate with stakeholders and provide for balanced management of environmental flows. See also the Watersheds and Water Resources - Management Approaches section.

Rangelands, Forage, and Grazing (RNG)

There are some areas on the GMUG that were historically popular for hiking, particularly in wilderness areas, that are now heavily impacted by sheep. Impacts to recreationists include livestock fences and unsafe interactions with herding dogs. We also recognize that recreationists may have adverse impacts on grazing, including frightening livestock or leaving gates open. The agency should help manage these conflicts where possible.

Desired Conditions

* Add, FW-DC-RNG-XX: Potential conflicts between grazing and recreation should be identified and mitigated through planning and/or education of users.

Objectives

* Add, FW-OBJ-RNG-XX: Within three years of plan approval, use mapping and other tools to assess the overlap between grazing allotments and recreational infrastructure (e.g. trails, campgrounds, dispersed camping areas, recreational rivers) to identify potential conflicts and mitigation strategies.

* Add, FW-OBJ-RNG-XX: Within five years of plan approval, to mitigate recreational river hazards and avoid unauthorized cutting of private landowner fences, work with landowners and recreationists to replace hazardous fencing with boater-friendly fencing on recreational rivers.

Recreation (REC)

The Draft Revised Forest Plan should describe the different recreation opportunity spectrum (ROS) classes, as well as the characteristics of different ROS settings and associated plan components to achieve the desired ROS settings. While we appreciate Tables 10-15, these tables should be translated more clearly into plan components. The GMUG Planning Team should create a new section in the Draft Revised Forest Plan that focuses solely on ROS, and follow the example set by the Custer Gallatin National Forest, which clearly identifies the plan components for each ROS setting.

Additionally, we have identified several errors and omissions in the ROS data that should be rectified in the release of the Final Environmental Impact Statement, including:

* The recreation opportunity spectrum (ROS) modeling data is incomplete and needs to be thoroughly reviewed and evaluated.

* The Summer ROS has not been fully modeled and Summer pristine allocations are missing from the Draft Revised Forest Plan.

* There are several attribution errors in the Winter ROS data:

* Pristine Wilderness settings should be Pristine.

* Pristine settings should be Primitive.

Tables 10-15 should be translated into plan components. The Custer Gallatin Draft Revised Forest Plan² [2 Custer Gallatin Draft Revised Forest Plan,

<https://www.fs.usda.gov/detail/custergallatin/landmanagement/planning/?cid=fseprd601607>] is a good example of how ROS settings can be translated into plan components.

* Placed-Based Winter ROS Recommendations

* Alpine Plateau - The boundary on the east side of the plateau between semi-primitive non-motorized and semi-primitive motorized appears arbitrary. We recommend reviewing this boundary more closely and aligning the semi-primitive motorized boundary more closely to Long Draw road.

* Cimarron Area - Alternative B proposes a semi-primitive motorized winter recreation setting for Cow Creek and West Fork and Middle Fork of the Cimarron River, which all cherry-stem into the Uncompahgre Wilderness. Managing the Uncompahgre Wilderness boundary in the winter is challenging and results in motorized incursions into primitive areas. We recommend a semi-primitive non-motorized setting for all of these drainages to protect the adjacent Wilderness character. Middle Fork, in particular, is also proposed as a Wildlife Management Area in Alternative B and should be classified as non-motorized to protect sensitive habitats. The Roaded Natural setting around the East Fork drainage also seems extensive, especially adjacent to a Wilderness boundary.

* Red Mountain Pass - The Roaded Natural setting boundaries along Highway 550 near the top of Red Mountain pass appear arbitrary. We recommend reviewing this boundary more closely.

* Sneffels - The northern foothills of the Sneffels mountain range should be classified as semi-primitive non-motorized, as proposed in Alternative D. The area north of Mount Sneffels Wilderness is a high-priority winter recreation area for non-motorized users including backcountry skiers, nordic skiers, snowshoers, and backcountry hut users. Outdoor Alliance recommended this zone as a Backcountry Management Area. Alternative B includes a large non-motorized area between the East and West Whitehouse Mountain Wilderness additions but proposes an adjacent patchwork of semi-primitive motorized areas. This will be confusing for users and difficult to manage. We recommend expanding the semi-primitive non-motorized setting to include the entire area along the northern foothills of the Sneffels mountain range.

Desired Conditions

* Revise, FW-DC-REC-01: The GMUG provides a variety of high-quality, year-round recreation opportunities across a range of resilient recreation [SUGGESTED NEW "opportunity spectrum"] settings[mdash]from primitive to rural, and gradients between. Recreation opportunities and facilities (1) meet persisting and evolving needs of diverse user groups, (2) accommodate adjusted management as advancements in recreational equipment technologies make way for new and different uses, (3) are inclusive of a culturally diverse population and, (4) are accessible to persons with disabilities, wherever feasible. Unique cultural, historical, and ecological resources are featured through recreation opportunities, education, and interpretation, which connect visitors to the past, present, and future of the national forest landscapes.

* Revise, FW-DC-REC-02: [SUGGESTED NEW "The recreation opportunity spectrum settings reflect the integration of"] [SUGGESTED DELETION "Recreation is managed to achieve a sustainable balance with"] other resources values (e.g., recreation and wildlife habitat; recreation and vegetation management; recreation and timber; recreation and minerals), [SUGGESTED NEW "in a sustainable manner, with the desired recreation opportunities, access, facilities, and infrastructure provided within those settings."] Impacts to the social and biophysical environments from recreational use are limited, monitored, and well-managed, and recreationists consistently enjoy positive visitor experiences.

* Add, FW-DC-REC-XX: Primitive recreation opportunity spectrum settings (summer) encompass large, wild, remote, and predominantly unmodified landscapes. Primitive settings often provide secure wildlife habitat, naturally appearing vegetation, clean water, may contain the unit's most intact ecosystems and often coincide with designated wilderness. Primitive recreation opportunity spectrum settings contain no motorized recreation. They provide quiet solitude away from roads and people, are generally free of human development, and facilitate self-reliance and discovery. Historic structures such as administrative ranger stations are occasionally present. Signing and other infrastructure are not prevalent and constructed of rustic, native materials.

* Add, FW-DC-REC-XX: Primitive recreation opportunity spectrum settings (winter) are large, remote, wild, and predominantly unmodified. Winter primitive recreation opportunity spectrum settings provide quiet solitude away from roads and people. There is no motorized activity and little probability of seeing other people. Constructed trails that are evident in the summer months are covered by snow, making these settings appear even more natural and untouched by human management.

* Add, FW-DC-REC-XX: Semi-primitive non-motorized settings (summer) provide opportunities for exploration, challenge, and self-reliance in a naturally appearing landscape. Rustic structures such as signs and footbridges are occasionally present to direct use and protect the setting's natural and cultural resources. These rustic constructed features are built from native materials or those that mimic native materials. Rustic facilities, such as backcountry cabins and yurts, may exist but are rare. These settings are free of motorized transport, but mechanized transport may be present on appropriately designed and constructed routes.

* Add, FW-DC-REC-XX: Semi-primitive non-motorized settings (winter) provide backcountry and Nordic skiing, snowboarding, and snowshoeing opportunities. Trails are generally ungroomed and not marked for winter travel. Some areas that have enough compaction may see fat tire bike use. Rustic facilities, such as backcountry cabins and yurts, may exist but are rare. These settings are free of motorized transport, but mechanized transport may be present on appropriately designed and constructed routes.

* Add, FW-DC-REC-XX: Semi-primitive motorized recreation opportunity spectrum settings (summer) provide motorized recreation opportunities in backcountry settings. Routes are designed for off-highway vehicles and high-clearance vehicles, including motorcycles, that connect to local communities, access key destinations and vantage points, provide short day trips on scenic loops or facilitate longer overnight expeditions. Visitors challenge themselves as they explore vast, rugged landscapes. Mountain bikes and other mechanized equipment may also be present. Facilities are rustic and are used to protect the setting's natural and cultural resources. Bridges are sometimes present to accommodate foot, horse, and all-terrain vehicle traffic, but are built from native or natural appearing materials that blend with the surrounding landscape and maintain the semi-primitive character of the setting. There may also be nodes that function as portals for visitors to park their all-terrain vehicles and explore adjacent semi-primitive non-motorized and primitive settings on foot. Vegetation management may be present, but does not dominate the landscape or detract from the experience of visitors traveling throughout the semi-primitive motorized setting. Occasionally, backcountry cabins or warming huts are available for short breaks or overnight use.

* Add, FW-DC-REC-XX: Semi-primitive motorized settings (winter) provide backcountry skiing and snowmobiling opportunities. Routes are typically ungroomed, but are often signed and marked. Over-snow vehicle use is only allowed on designated routes and in designated open areas. Occasionally, backcountry cabins or warming huts are available for short breaks or overnight use.

* Add, FW-DC-REC-XX: Roaded natural recreation opportunity spectrum settings (summer) are often referred to as frontcountry recreation areas. This setting is managed as natural appearing with nodes and corridors of development that support higher concentrations of use, user comfort, and social interaction. The road system is well defined and can typically accommodate sedan travel. Sanitation, potable water, interpretive signage, and other amenities are strategically placed to serve as destination points and portals to adjacent backcountry settings. Signage, facilities, bridges and other infrastructure are constructed of native materials or natural appearing materials that blend with and complement the surrounding natural setting.

* Add, FW-DC-REC-XX: Roaded natural recreation opportunity spectrum settings (winter) support higher concentrations of use, user comfort, and social interaction. The road system is plowed and accommodates sedan travel. Winter trails are routinely groomed and may have ancillary facilities such as warming huts and restrooms. System roads and trails often provide staging to adjacent backcountry settings (primitive, semi-primitive non-motorized and semi-primitive motorized). Examples include snowmobiling, fat tire bikes, dog sledding, skiing, and snowshoeing. Over-snow vehicle use is only allowed on designated routes and in designated open areas.

* Add, FW-DC-REC-XX: Rural recreation opportunity spectrum settings (summer) often serve as recreation destinations and sometimes provide access to adjacent roaded natural and semi-primitive settings and opportunities. These areas are accessed from paved roads and are generally close to communities. Developed recreation facilities are designed for large groups and provide opportunities to socialize in both day-use and overnight sites.

* Add, FW-DC-REC-XX: Rural recreation opportunity spectrum settings (winter) provide staging to adjacent winter settings and opportunities. These areas are accessed from paved and plowed roads and are generally close to population centers. Warming huts or other shelters, sanitation, and information and education are commonly present. Parking areas are large and plowed. Entry points and routes are signed and lead snowmobiles to adjacent roaded natural and semi-primitive motorized settings. Non-motorized trails are also typically groomed for skate skiing and cross-country skiing. Rural winter settings provide quick and convenient access for communities and families to celebrate holidays, conduct racing events, walk their dogs, or simply get some exercise. Over-snow vehicle use is only allowed on designated routes and in designated open areas.

* Add, FW-DC-REC-XX: Rural recreation opportunity spectrum settings (summer and winter) support use of alternative transportation and new technologies.

* Add, FW-DC-REC-XX: Most visitors are focused in recreation management areas (recreation emphasis corridors and mountain resorts), where the primary focus of management decisions and activities is related to recreation. Outside of those emphasized use areas, the GMUG provides for a myriad of other developed and dispersed recreation opportunities for a variety of recreation uses.

* Add, FW-DC-REC-XX: Recreation opportunity spectrum settings (All): The type and level of infrastructure, visitor services, and information are sustainable and consistent with the desired recreation opportunity spectrum settings.

Objectives

* Revise, FW-OBJ-REC-06: Within 10 years of plan approval, to reinforce [SUGGESTED NEW "primitive and"] semi-primitive non-motorized settings, eliminate at least [SUGGESTED NEW "50% of all"] unauthorized motorized travel routes [SUGGESTED NEW "from each setting."]

* Question, How many unauthorized motorized routes currently exist across the GMUG?

* Revise, FW-OBJ-REC-07:

* Social impacts: Observable indicators of unacceptable social impacts include unsustainable use levels or types exhibited by the expansion of dispersed campsites. Expansion includes the growth of both the size and number of campsites, and signals that the existing infrastructure is crowded and overflowing during peak periods. Other indicators of social impacts include considerably decreased visitor satisfaction, persistent use conflicts, reduced safety, [SUGGESTED NEW "parking issues, [SUGGESTED NEW] and/or unauthorized use.

* [SUGGESTED NEW] Add, FW-OBJ-REC-XX: Winter travel management planning, per 36 C.F.R. part 212, should be initiated within one year of completing the revised forest plan."

* Add, FW-OBJ-REC-XX: Develop an over snow vehicle use map within four years of completing the revised forest plan.

* Add, FW-OBJ-REC-XX: Through a collaborative process, develop a GMUG National Forests climbing strategy that provides guidance on rock climbing and bouldering; guidance shall address climbing in general forest and designated areas within three years of plan approval.

* Add, FW-OBJ-REC-XX: Develop an operation and maintenance guide for all designated dispersed campsites containing provisions for public health and safety and protection of water, aquatic, and riparian resources within three years of plan approval.

Standards

* Add, FW-STND-REC-XX: In rural, roaded natural, semi-primitive motorized recreation opportunity spectrum settings, new motorized routes and areas shall be located so the new route does not change the setting of an adjacent semi-primitive non-motorized and primitive recreation opportunity spectrum class.

* Add, FW-STND-REC-XX: New permanent motorized routes shall not be constructed, and no routes or areas

shall be designated for motorized transport in semi-primitive non-motorized settings. Temporary roads for vegetation management projects, where otherwise not prohibited, may occur.

Guidelines

* Change, From Management Approach to FW-GDL-REC-XX: For the purposes of future travel management planning for over-snow motorized vehicle use, [SUGGESTED Replace "work to develop a method for identifying adequate snow depths to avoid or minimize damage to natural and cultural resources from snow machine use." WITH "the Forest Plan should specify that over-snow vehicle travel within designated areas should only be allowed when consolidated snow depth at established, representative locations, measures at least 18 inches, regardless of the date."]

* FW-GDL-REC-XX: Because of recent changes in technology and the increased use of electric-assist bikes (e-bikes), including electric-assist mountain bikes (e-mtbs), it is important that the Forest Service proactively consider how this technology will be managed. The revised forest plan should state that e-bikes should be permitted only on natural surface trails where those trails allow for motorized use. In some cases, it may be appropriate to re-categorize non-motorized trails to allow for Class 1 e-bike use (while continuing to exclude other classes of motorized uses, including Class 2 and 3 e-bikes). The revised Forest Plan should state that these decisions will exclusively be made through the travel management process, including full application of NEPA and robust public engagement, and that e-bikes will not be permitted in areas with ROS settings of Primitive or Semi-Primitive Non-Motorized.

* Table 12, Winter Characteristics

* Facilities: [SUGGESTED NEW "Rustic facilities, such as historic cabins and yurts, may exist but are rare.]

* Table 13, Winter Characteristics

* Access: ungroomed but marked over-snow vehicle routes and areas. Ungroomed ski trails. Over-snow vehicle use [SUGGESTED NEW "only allowed"]on designated routes [SUGGESTED NEW "and in designated open areas."]

* Facilities: [SUGGESTED NEW "Warming huts, cabins, and rustic facilities may be present."]

* Table 14, Winter Characteristics

* Access: [SUGGESTED NEW "Over-snow vehicle use only allowed on designated routes and in designated open areas."]

* Table 15, Winter Characteristics

* Access: [SUGGESTED NEW "Over-snow vehicle use only allowed on designated routes and in designated open areas."]

Suitability

* Add, FW-SUIT-REC-XX: Motorized transport is not suitable in pristine, primitive, or semi-primitive non-motorized settings.

Management Approaches

* Add, Promote effective communication with gateway communities to help foster partnerships, inspire volunteers, educate the public, and support stewardship that contributes to funding, implementation of projects, and long-term maintenance of facilities.

- * Add, Coordinate with partners, including nongovernmental organizations, early in project development to elicit collaborative input on sustainable recreation opportunities, needs, and potential conflicts.
- * Revise, Expand public access to and education about the [SUGGESTED REPLACE "socioeconomic and WITH "mining"] and cultural history and [SUGGESTED NEW "environmental issues"]of the national forests through programs such as cabin rentals and interpretation when possible.

- * (Create separate bullet point) Improve trail systems by coordinating with municipalities, counties, states, other Federal agencies, and partners to allow for integration and connectivity.
- * (Create separate bullet point) For existing trail systems, partner to better ensure funding and resources for basic maintenance, including leveraging all available resources through outfitters and guides, other permitted uses, and the general public.

- * Revise, Desired recreation opportunity spectrum functions as a framework for (1) meeting the persisting and evolving needs of diverse user groups (FW-DC-REC-01) and, (2) ensuring that recreation is appropriately prioritized and balanced with other national forest resources over time (MA-DC-EMREC-01 and FW-DC-REC-02). Mapped at the national forest-scale, desired recreation opportunity spectrum settings provide desired landscape-level settings to work toward and/or maintain over the life of the forest plan. [SUGGESTED DELETE "However, should finer-scale analysis, public feedback, and/or place-based needs lead to a decision that is substantially or irreversibly inconsistent with the Forestwide mapped desired recreation opportunity spectrum setting allocations (e.g., installation of permanent infrastructure such as a non-conforming trail class cutting through the middle of a desired recreation opportunity spectrum setting), the following will be done as part of that planning effort: (a) the inconsistency and rationale for deviation is documented, and, if changes are spatial, (b) the desired recreation opportunity spectrum map(s) is/are amended. The responsible official will determine whether the scale of inconsistency is of such magnitude to require a plan amendment or an administrative map change due to mapping alterations"]

Trails (TRLS)

Desired Conditions

- * (Separate paragraph into distinct desired conditions), FW-DC-TRLS-01: A sustainable, diverse trail system is in place and maintained at least to the minimum standards appropriate for safe public access.
- * Add, FW-DC-TRLS-XX: National Forest System trails support multiple recreation use types that contribute to social and economic viability in the plan area, and connect established towns and developed recreation sites to the surrounding landscape.
- * Add, FW-DC-TRLS-XX: National Forest System trails are designed and maintained in a manner that ensures resource protection and facilitates positive visitor experiences. National Forest System trails accommodate a variety of use types across a variety of terrain designed for a variety of skill levels.
- * Add, FW-DC-TRLS-XX: New trail development is [SUGGESTED REPLACE "concentrated" WITH "considered"] in areas close to communities where open road and trail densities, and human activities, are already high (i.e., MA 4.2 - EMREC), [SUGGESTED NEW "and where multiple recreation use types connect established towns and developed recreation sites to the surrounding landscape."] Development of stacked/looped/stacked-loop trails are considered in appropriate areas and circumstances.
- * Add, FW-DC-TRLS-XX: National Forest System trails are clearly marked, particularly where routes cross ownership and jurisdiction. Trailheads adequately accommodate the levels and types of use occurring along the system within the prescribed desired recreation opportunity spectrum settings, and are adjusted based on resource needs and use demands.
- * Add, FW-DC-REC-XX: Partner organizations and communities are involved in sustainable trail planning and stewardship efforts.

Objectives

* Revise, FW-OBJ-TRLS-02: Annually, maintain at least 500 miles of National Forest System trails, per the INFRA database definition of "maintained to standard." Trails are prioritized [SUGGESTED REPLACE / ADD "through the Trail Management Objectives process, with a focus on trails" WITH "by those"] located in recreation emphasis corridors (MA 4.2 - EMREC), by amount of use, and those where use is causing unacceptable resource damage (FW-STND-REC-08) and/or presenting hazards outside of the trail. See also the Forestwide desired condition for partnerships, PART-01.

* Add, FW-OBJ-REC-XX: Complete Trail Management Objectives (TMOs) for all GMUG National Forest System trails within three years, and schedule trail maintenance tasks according to frequencies identified in the TMO.

Transportation System (TSTN)

Goals

* Add, FW-GO-TSTN-XX: Consider transportation systems as a way to connect people to nature, improve personal health, and increase access for underserved communities and minorities.

Standards

* In accordance with the "minimization criteria" in 36 C.F.R. [sect] 212.55(b), all areas and trails designated for off-road vehicle (ORV) use should be located to minimize: damage to soil, watershed, vegetation, and other public lands resources: harassment of wildlife and significant disruption of wildlife habitat; and conflicts between ORV use and other existing or proposed recreational uses.

Eligible Wild and Scenic Rivers (WSR)

The Eligible Wild & Scenic Rivers desired conditions and standards included in the Draft Revised Forest Plan should be supported with additional plan components. While desired conditions essentially refer to the "wild, scenic and recreation" criteria included in the Wild and Scenic Rivers Act (See FW-DC-WSR-01, FW-DC-WSR-02, and FW-DC-WSR-03), the sole standard included refers only to the Forest Service Handbook regulations in place to implement the act. We fully support managing eligible reaches and sub-basins in accordance with management direction contained in Forest Service Handbook (FSH) 1909.12, Chapter 80, Section 84, FSM 2354 and the Wild and Scenic Rivers Act. However, the 2012 Forest Planning Rule directs the Forest Service to include standards or guidelines for management of eligible rivers to protect the values that provide the basis for their eligibility determination.³ [3 2012 Forest Planning Rule [sect]219.10(b)(v)] Additional plan components, including standards, are needed in the forest plan to adequately protect eligible Wild and Scenic Rivers and their free-flowing character and identified values.

Desired Conditions

* Add, FW-DC-WSR-XX: Education and interpretative resources contribute to the protection, understanding, and appreciation of the GMUG's eligible rivers.

* Add, FW-DC-WSR-XX: Outstandingly remarkable values of eligible rivers are protected.

* Add, FW-DC-WSR-XX: The desired recreation settings range from Primitive in segments classified as Wild and Semi-Primitive Non-Motorized to Roaded Natural across the other segments. A variety of dispersed and developed recreational opportunities are available with typical uses including canoeing, fishing, hiking, kayaking, outfitting and guide use, and wildlife viewing.

* Add, FW-DC-WSR-XX: Eligible wild and scenic river corridors are valued by the public for the ecosystem services they provide, including contributions to clean water, enhancing wildlife habitat, and recreation opportunities

Suitability

- * Add, FW-SUIT-WSR-XX: Eligible river corridors are not suitable for timber production. Vegetation management, including timber harvest, is suitable in eligible river corridors for purposes such as fuels reduction, restoration, or wildlife habitat enhancement if the current preliminary classification and the outstandingly remarkable values of the river segment are protected.
- * Add, FW-SUIT-WSR-XX: New dams or other structures that impede the flow of the river on eligible segments are prohibited."
- * Add, FW-SUIT-WSR-XX: Saleable mineral materials shall not be allowed in eligible river corridors.

Management Approach

- * Plan direction for eligible rivers applies to a 0.25-mile-wide (on either bank) corridor on national forest system lands or where the Forest Service holds an interest on non-Federal lands, such as scenic or access easements.

Management Area Direction

Recommended Wilderness - MA 1.2 (RECWILD)

Desired Conditions

- * Add, MA-DC-RECWILD-XX: Lands are managed to protect their undeveloped character, contribution to biodiversity and landscape connectivity, conservation values, and quality outdoor recreation and learning opportunities.
- * Add, MA-DC-RECWILD-XX: Recommended wilderness areas appear and feel natural to visitors. They are places where natural processes dominate and they contribute to landscape scale protected networks.
- * Add, MA-DC-RECWILD-XX: These areas provide visitors opportunities to explore vast areas away from the "built" civilization and experience wildness and solitude.
- * Add, MA-DC-RECWILD-XX: Trailhead facilities and trail infrastructure are rustic and unobtrusive.

Standards

- * Add, MA-STND-RECWILD-XX: Motorized public use is prohibited.
- * Add, MA-STND-RECWILD-XX: Mineral leasing and sales shall not be permitted.
- * Add, MA-STND-RECWILD-XX: Timber harvest shall not be permitted.
- * Add, MA-STND-RECWILD-XX: New commercial communication sites shall not be allowed.
- * Add, MA-STND-RECWILD-XX: New energy or utility structures shall not be allowed.

Guidelines

- * Add, MA-GDL-RECWILD-XX: Management activities utilize minimal tool approach. Protect and preserve wildlife, wildlands, and biodiversity by minimizing impacts and avoiding habitat fragmentation.

Wildlife Management Area - MA 3.2 (WLDF)

The plan components for Wildlife Management Areas are concerning, as the science and research regarding the effects of trail-based recreation on the fitness of different wildlife species and taxa is inconsistent and inconclusive. This is discussed further in Wisdom et al. (2018), which is cited as an expert opinion in the Draft Revised Forest Plan and further used as justification for a route density standard,

"Additional research is needed to address inconsistencies among studies and to investigate effects of trail-based

recreation on fitness of different wildlife species and taxa."

Wildlife Management Area acreage varies by alternative, Alt. B is 740,000 acres, Alt. C is 36,000 acres, and Alt. D is 621,000 acres, and within Wildlife Management Area boundaries, the Forest Service proposes that "there shall be no net gain in system routes, both motorized and non-motorized, where the system route density already exceeds 1 linear mile per square mile." While there is a growing body of literature on the recreation effects to wildlife, many studies fail to go beyond the disturbance effect on individual animals and to answer the question(s) of how populations or herds are affected. All recreation activity affects wildlife to some degree, but the mixed findings from studies suggest that the story is more complicated, thus generalizations can be misleading and counterproductive. Furthermore, of the best available science cited in Appendix 12, only one out of the eight studies listed included a route density standard or recommendation and that was for roads. To this end, we believe that there is inconclusive evidence that warrants using a route density standard that includes non-motorized trail-based recreation.

Desired Conditions

- * Revise, MA-DC-WLDF-01: Large blocks of diverse habitat are relatively undisturbed by [SUGGESTED NEW "motorized"] routes, providing security for the life history, distribution, and movement of many species, including big-game species. Habitat connectivity is maintained or improved as fragmentation by [SUGGESTED NEW "motorized"] routes is reduced. See also the Forestwide objective for native species diversity SPEC-03.
- * Add, MA-DC-WLDF-XX: Landscape patterns throughout the GMUG provide habitat connectivity for wildlife, particularly wide-ranging species such as medium to large carnivores and wild ungulates. Resulting habitat connectivity facilitates daily and seasonal movement, as well as long-range dispersal of wildlife to support genetic diversity, allowing animals to adapt to changing conditions over time.
- * Add, MA-DC-WLDF-XX: Vegetation conditions are generally within the natural range of variation as described for vegetation, thereby providing wildlife habitat for a variety of life cycle needs, including year-round and seasonal use by a diverse suite of native species.

Standards

- * Revise, MA-STND-WLDF-02: MA-STND-WLDF-02: To maintain habitat function and provide security habitat for wildlife species by minimizing impacts associated with roads [SUGGESTED DELETE "and trails,"] there shall be no net gain in [SUGGESTED NEW "motorized"] system routes, [SUGGESTED DELETE "both motorized and non-motorized,"] where the [SUGGESTED NEW "motorized"] system route density already exceeds 1 linear mile per square mile, within a wildlife management area boundary. Additions of new [SUGGESTED NEW "motorized"] system routes within wildlife management areas shall not cause the route density in a proposed project's zone of influence to exceed 1 linear mile per square mile. Within the Flattop Wildlife Management Areas in the Gunnison Ranger District, there shall be no new routes. Exception: this does not apply to administrative routes (see appendix 12, Footnotes Regarding Best Available Scientific Information for further detail).

Objectives

- * Revise, MA-OBJ-WLDF-03: Within 5 years of plan approval, identify potential area-specific management actions for each wildlife management area to improve habitat connectivity with respect to existing [SUGGESTED NEW "motorized"] route densities and to achieve desired ecological conditions for constituent ecosystems. Within 10 years of plan approval, complete one action in each wildlife management area.

Appendix 12. Footnotes Regarding Best Available Scientific Information

System route density is calculated using the Line Density Tool in ArcGIS with a 1-mile grid cell size and a 1.5-mile search radius from the center of the grid cell.

* According to Colorado's Guide to Planning Trails with Wildlife in mind,⁴ [4 Colorado's 2021 Guide for Planning Trails with Wildlife in Mind, accessed here, <https://cpw.state.co.us/aboutus/Pages/Planning-Trails-for-Wildlife.aspx>] there are important considerations to keep in mind with route density (listed below). The Line Density Tool in ArcGIS cannot account for these factors alone.

1. Site-specific factors, such as topography, may influence the quality of habitat, and are not accounted for in the calculation for route density.
2. Route density calculations do not necessarily account for how trails are spatially distributed across the landscape (e.g. are the trails all located in a general area or are they spread across the landscape?).

* Furthermore, the overarching intent of the route density consideration is to minimize habitat fragmentation and loss of habitat functionality for wildlife. Consultation with local agency staff and on the ground evaluation of the habitat are important to avoid any misapplications of trail density. Remember that these strategies are part of a larger suite of BMP recommendations; it's always important to consider how other strategies can be applied to minimize and/or mitigate impacts on wildlife.

1. Question, Has the Forest Service conducted on the ground evaluation of the proposed wildlife management areas to avoid any misapplications of route density?

* 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. 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.

1. Question, Does the Forest Service have a clear understanding about the use levels of roads and trails? Is there any monitoring data of roads or trails that would support the frequency of visitor use?

Sources for the density standard include expert opinion; Canfield et al. (1999); Miller and Hobbs (2000); Lenth et al. (2008); Reed and Merenlender (2008); Rogala et al. (2011); Preisler et al. (2013); Weidmann and Bleich (2014); Wisdom et al. (2018).

* Of the above sources listed, only (1/8) made a recommendation limiting route density and that was for roads (see Canfield et al. 1999).

* Two studies including Rogala et al. (2011) and Wisdom et al. (2018) directly acknowledged that more research was needed to understand the long-term behavioral responses to human activity.

Recent research by the USFS Pacific Research Station (Miller et al. 2020)⁵ [Sustaining wildlife with recreation on public lands: a synthesis of research findings, management practices, and research needs, accessed here, <https://www.fs.usda.gov/treearch/pubs/61721>] is missing from the sources of best available science and we recommend that this report be included for further review.

* Canfield et al. (1999):

* This report looks at the effects of recreation on Rocky Mountain wildlife and makes recommendations for road densities, cited below.

* Summer range recommendation, "Limit open road densities to zero in scattered key areas and less than 1 mile per section elsewhere;"

* The authors of this study noted, "One of the surest methods of increasing elk security has been to close roads and/or areas to motorized vehicles."

* Miller and Hobbs (2000):

* This study focuses on nest predation in lowland riparian areas and does not recommend any route density standards for wildlife management.

* Lenth et al. (2008):

* This study focuses on "The Effects of Dogs on Wildlife Communities" and does not recommend or mention any route density standards for wildlife management.

* In regards to management implications the authors noted, "Trails that are kept dog-free or with dogs closely restricted to trails could protect against the demonstrated ecological impacts that dogs have on wildlife communities and could facilitate wildlife viewing opportunities for trail users."

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* Reed et al. (2008):

* This study looked at the effects of recreation on carnivores (coyotes, bobcats, foxes) in protected areas and does not recommend or mention any route density standards for wildlife management.

* The authors of the study noted, "we suggest that the effect of recreation functions at the site level, because we did not observe effects of protected area edge or the locations of trails for any species except domestic dogs. The configuration of recreational trails may be important for determining recreation impacts in larger landscapes with more dispersed activities (for example, Taylor & Knight 2003). However, for moderately sized protected areas (50-2000 ha) near urban development, the key variable seems to be whether or not the site is open to public access."

* Rogala et al. (2011):

* This study documented marked responses to human activity by wolves and elk and does not recommend or mention any route density standards for wildlife management.

* The authors in this study noted, "Additionally, future research focusing on the likelihood of returning to disturbance areas would be useful to further address possible long term behavioral consequences attributed to human activity because some studies have suggested persistent low levels of disturbance may lessen the likelihood of returning to previously used areas (Kuck et al. 1985) and lead to permanent shifts in habitat use (Rowland et al. 2000), whereas other studies found animals returned when activity lowered or desisted (Casirer et al. 1992, Gagnon et al 2007)." Suggesting that long-term behavioral responses of wildlife to human activity are still not well understood.

* The authors in this study acknowledge, "We acknowledge that wildlife may have been affected by other trails/roads further away from our documented trail/road, but with higher human activity levels. Such additional effects on wildlife movements in theory have the potential to confound, attenuate, or obscure the responses found in this study."

* Preisler et al. (2013):

* This study models data from Wisdom et al. (2004) and does not recommend or mention any route density standards for wildlife management.

* This paper is quite complex and we would welcome someone from the GMUG Planning Team to explain the research and what information was used to inform the route density standard.

* The authors of this study noted, "Deriving ecological inferences from animal movement data has been difficult, in part because it is a multistate, stochastic process (McClintock et al. 2012). Elk, like many ungulates, exhibit

pronounced switching behavior between fine- and broad-scale movements, corresponding to crepuscular transitions in habitat preferences (Ager et al. 2003). Different landscape features and associated scales of perception may be responsible for decision making and navigation during these phases. State-space models are one approach to handle multiphasic movements where both time-dependent and time-independent factors must be considered (Forester et al. 2007)."

* Wiedmann and Bleich (2014):

* This study looked at disturbances of sheep from recreationists on a hiking trail and it does not recommend or mention any route density standards for wildlife management.

* The authors of this study noted, "Responses of bighorn sheep may not diminish after successive harassment events but, in those situations where sources of disturbance are non-threatening, consistent, and occur predictably, bighorn sheep have the capacity to acclimate (Geist 1971b; Hicks and Elder 1979; Jansen et al. 2007, 2009; Bleich et al. 2009). It should not be assumed, however, that bighorn sheep eventually will ignore perturbations where sufficient spatial separation does not exist, or where sources of disturbance are erratic or unpredictable (Papouchis et al. 2001)."

* The authors also noted, "Moreover, our results support the notion that the responses of bighorn sheep[mdash]and ungulates in general[mdash]are influenced greatly by the consistency, predictability, and level of threat associated with each source of disturbance (Graham 1980; Jansen et al. 2007, 2009; Bleich et al. 2009; Malo et al. 2011), rather than the mere presence of people (Ciuti et al. 2012) or other perturbations perceived as benign by those large mammals."

* Wisdom et al. (2018):

* This study looks at elk responses to trail-based recreation on public forests and does not recommend a route density standard for wildlife management.

* The authors of this study noted, "Additional research is needed to address inconsistencies among studies and to investigate effects of trail-based recreation on fitness of different wildlife species and taxa."

* Trails (in the physical sense) are not the problem, recreationists using trails is what drives the separation distance between elk and recreationists. This is further explained in Wisdom et al. 2018, "Mean and median distances were significantly farther (non-overlapping 95% CIs and median notches) during ATV riding, mountain biking, and horseback riding than distances of these same telemetered elk during the paired control periods (Fig. 3; Table 1), indicating that elk moved away from the trails during recreation and back toward trails when no humans were present. During hiking, mean and median distances of elk from trails were similar to those during horseback riding, but elk movement back toward trails during the hiking control period was less distinct (Fig. 3), and CIs for the hiking treatment and control periods slightly overlapped (5-m overlap, Table 1)."

* The authors also noted, "Estimates thus represented the "average" distribution of elk in relation to trails during each recreation treatment, and did not account for finer temporal responses, such as potential population shifts away from and back toward trails as recreationists passed by a given area."

The zone of influence for motorized routes is 1,000 m (0.62 mile); zone of influence for non-motorized routes is 660 m (0.41 mile) (Wisdom et al. 2018).

* In Wisdom et al. 2018, this is referred to as "separation distance" versus "zone of influence", and it measures the mean minimum distances that elk maintained from recreationists. Mean minimum distances from recreationists were: ATV riding (879 m, [plusmn]68 m), mountain biking (662 m, [plusmn]53 m), hiking (547 m, [plusmn]44 m), horseback riding (558 m, [plusmn]45 m).

* Question, What numbers are the Forest Service citing for both motorized and non-motorized routes in the "zone of influence"?

Wisdom et al. (2018:231) summarizes the approach intended by the GMUG planning team and cooperating agencies for these wildlife management areas:

"Although public forests are governed by laws and policies of multiple use, not all areas can be simultaneously co-managed for recreation and recreation-sensitive wildlife. Different land allocations can accommodate such competing uses, but often on different landscapes with clear objectives about which resources are featured. Optimizing land allocations through spatial analyses of tradeoffs between competing forest uses (Wang et al., 2004), with the inclusion of human ecology mapping (McLain et al., 2013a, 2013b) and stakeholder engagement (Asah et al., 2012a, 2012b) is a forest planning approach that holds promise in helping address recreation and wildlife conflicts. We suggest that such an approach be considered in co-managing trail-based recreation and sensitive wildlife like elk on public forests."

* This approach is intended to be applied before Wildlife Management Areas are allocated (i.e. before releasing allocations in a draft revised forest plan), and we would support the use of human ecology mapping to optimize land allocations through spatial analyses of tradeoffs between competing forest uses. The GMUG planning team should clarify what the approach is and the status of current efforts. Further description of the approach and forest plan components are needed to co-manage trail-based recreation and sensitive wildlife, like elk, on public forests.

* If the GMUG Planning Team is looking for examples, the Bridger-Teton National Forest is engaged in the "Recreation-Wildlife Co-Existence Project" with multiple agencies, partners (including Outdoor Alliance), and researchers. This project has been initiated before the Assessment Phase and shows promise in developing management and education strategies that can be used to inform land management plans and actions.

Recreation Emphasis Corridors - MA 4.2 (EMREC)

Designating Recreation Emphasis "Areas" or Recreation Focus Areas, as highlighted in OA's proposal, is one way for the Forest Service to address specific areas where many different recreational uses are concentrated. These areas receive more visitors than other areas of the forest and require special management direction to ensure that recreation within these areas is sustainable - both in terms of the public enjoying specific recreation opportunities, but also so that recreation uses do not degrade the natural environment.

Within the Draft Revised Forest Plan, Recreation Emphasis Corridors are too narrowly defined and focus on dispersed camping versus high use recreation areas. While we agree that the Forest Service should address the impacts of dispersed camping and properly manage dispersed camping activities, the Forest Service should also identify areas that receive high recreation use or provide outstanding recreational opportunities. Outdoor Alliance has identified several recreation emphasis areas where many different recreational uses are concentrated and receive more visitors than other areas of the GMUG, and we have identified areas that may see increasing use in the future. GIS data regarding these areas has been shared with the Planning Team. The Planning Team should review these areas and prioritize recreation emphasis areas that need to be managed for current and future use, so that recreation opportunities are sustainable, while preserving the health and integrity of the surrounding natural and cultural resources.

Recreation Emphasis Areas should be added as a management area in the Draft Revised Forest Plan and can be described as follows:

[SUGGESTED NEW "Recreation Emphasis Areas typically offer a variety of quality recreation opportunities, and may include both motorized and non-motorized uses. The recreation opportunities are accessible to a wide range of users, in several seasons, and typically offer challenges to a wide range of skills. The areas may be regional, national, or international destinations, or may be close to higher population centers. Recreation Emphasis Areas close to population centers may offer opportunities for trail connections to communities.

Recreation Emphasis Areas may have a high density of human activities and associated structures. There may be roads, utilities, and trails as well as signs of past and ongoing activities of managed forest vegetation. Opportunities for solitude and a primitive experience may be limited near roads or trails due to frequent contact with other users."]

Desired Conditions (for Recreation Emphasis Areas (REA))

- * Add, MA-DC-REA-XX: Recreation emphasis areas provide sustainable recreational opportunities and settings that respond to changing recreation desires. Local communities can readily access these areas for a variety of quality recreation opportunities that may include both motorized and non-motorized experiences.
- * Add, MA-DC-REA-XX: Trail systems connect communities to recreation emphasis areas.
- * Add, MA-DC-REA-XX: Loop trail opportunities are available.
- * Add, MA-DC-REA-XX: Educational programs are available for recreation users to learn about topics such as the prevention of spread of invasive species, wildlife-human conflicts, safe fire use, and sharing trails.
- * Add, MA-DC-REA-XX: Vegetation management complements the recreational setting over the long term.
- * Add, MA-DC-REA-XX: Developed recreation sites in recreation emphasis areas are accessible to all forest users.

Guidelines

- * Add, MA-GDL-REA-XX: To reduce the likelihood of establishing unplanned new visitor use patterns, temporary roads, skid trails, and landings should be constructed and rehabilitated to discourage new visitor use of that structure.
- * Add, MA-GDL-REA-XX: To accommodate under-represented communities, youths, seniors, and veterans, approval of new outfitting and guiding permits should emphasize proposals focused on experiential education.

Suitability

- * Add, MA-SUIT-REA-XX: Recreation emphasis areas are suitable for a high density of recreation development.

Monitoring

The 2012 Planning Rule identifies eight specific monitoring requirements. Of those eight, three are either directly related to sustainable recreation or can incorporate sustainable recreation questions and indicators. Each plan monitoring program must contain one or more monitoring questions and associated indicators addressing each of the following:

1. The status of visitor use, visitor satisfaction and progress toward meeting recreation objectives.
2. Measurable changes on the plan area related to climate change and other stressors that may be affecting the plan area.
3. Progress toward meeting the desired conditions and objectives in the plan, including for providing multiple use opportunities.

Since desired conditions for sustainable recreation must include mapped desired ROS settings, one of the most useful indicators in measuring and monitoring sustainable recreation is the condition and trend of the unit's ROS settings. By comparing existing ROS settings with desired ROS settings, achievement or movement toward sustainable recreation can be accomplished.

Recreation objectives must also be monitored. These objectives are designed in the plan development phase to maintain or enhance the unit's distinctive roles and contributions, move existing conditions to desired conditions, and/or address specific issues, concerns, and/or opportunities identified through public engagement and

integration with other resources. Tools and systems to measure desired conditions and objectives include the Scenery Management System to measure the integrity and stability of the desired scenic character, Special Uses Data to monitor compatibility of visitor services delivered through recreation special uses, and Infra to monitor the condition and trend of recreation facilities and access.

Caution should be used when using National Visitor Use Monitoring data to assess visitor use and visitor satisfaction across the forest. The limited survey periods conducted by the NVUM program do not adequately capture visitor use regarding seasonality, types of uses, new emerging uses, and volume. Moreover, some recreational activities (e.g., rock climbing) do not have protocols for data collection within the NVUM system. We encourage the Forest Service to expand upon its NVUM protocols and partner with universities, local stewardship groups, and other institutions that can assist with monitoring through formal programs and/or volunteer efforts.

Monitoring questions, indicators, measures, and adaptive management actions tables:

Trail Plan Components, Table 29

Indicator(s) and Measure(s)

- * Add, number of trail miles maintained to standard annually.
- * Add, number of trail miles with maintenance provided annually.
- * Add, number of road miles removed annually.
- * Add, percentage of high clearance vehicle roads maintained annually.
- * Add, percentage of passenger clearance vehicle roads maintained annually.

Adaptive Management Actions

- * Revise, [SUGGESTED REPLACE "Consider NVUM data in prioritization of trail maintenance." WITH "The Trails Management Objectives process should be used to prioritize trail maintenance."]
- * Add, Consider consulting with local trail-based stewardship organizations in prioritization of trail maintenance.

Recreation Plan Components, Table 30

Monitoring Questions

- * Add, What management actions have occurred to eliminate existing motorized travel incursions?

- * Plan Component: FW-OBJ-REC-06
- * Indicator(s) and Measure(s): # and types of actions that eliminate motorized travel incursions in Primitive and Semi-Primitive Non-Motorized Recreation Opportunity Settings
- * Data Source and Frequency of Collection: INFRA, 2 year intervals

- * Add, How satisfied are visitors with developed sites?

- * Plan Component: FW-DC-REC-01
- * Indicator(s) and Measure(s): Developed sites satisfaction ratings
- * Data Source and Frequency of Collection: NVUM, 2 year intervals [SUGGESTED NEW]

- * Add, To what extent have recreation sites been developed or modified for sustainable recreation?

- * Plan Component: FW-DC-REC-02
- * Indicator(s) and Measure(s): Developed sites actions responding to changed conditions; number of

decisions/actions where modifications occurred to adapt to changing conditions.

* Data Source and Frequency of Collection: INFRA, 2 year intervals

Outdoor Alliance and our partners are invested in the GMUG National Forests plan revision process and we are available as a resource to the GMUG Planning Team. We look forward to continuing our work on the GMUG National Forests and collaborating with other forest stakeholders. Please do not hesitate to contact us with any questions.

Appendix - Wild and Scenic River Eligibility Evaluation

The Western Slope of Colorado has no designated Wild and Scenic Rivers, despite that the region is host to some of the nation's most prized, free-flowing rivers and streams. To be eligible, a stream must be free-flowing and have at least one "outstandingly remarkable value" (ORV) that is regionally or nationally significant.⁶ [Wild and Scenic Rivers Act, [sect] 1273 (b)]

[T]hese ORV's are specific place-based values associated with recreation, scenery, geology, history, fisheries, culture, and other types of values, such as scientific research and climate adaptation. Eligibility is important as it ensures interim protection for these very special rivers and streams.

We appreciate the work that the Forest Service has done thus far on the Draft Wild and Scenic River Eligibility Evaluation and strongly support the inclusion of 118 eligible stream miles. We especially support the addition of the four segments that were added to the eligibility inventory between the 2019 Draft Wild and Scenic River Eligibility Evaluation and the current draft, including Fall Creek, Muddy Creek, Anthracite Creek, and Copper Lake.

However, the Draft Wild and Scenic Eligibility Evaluation still fails to recognize numerous rivers that are both free-flowing and have at least one ORV. The eligibility phase of the Wild and Scenic Rivers Act is designed to be a broad review process, with the least number of qualifications. Factors such as competing use, land ownership, politics, water rights, and management feasibility should not be considered in the eligibility phase. The Forest Service should complete a more robust Wild and Scenic River Eligibility Evaluation and consider every river segment that is both free-flowing and has one or more ORV - of which there are many within the GMUG. Our comments below address (1) the overall process and (2) specific stream segments.

Wild and Scenic River Eligibility Evaluation Process

Outstandingly Remarkable Values and Criteria

Scientific Research ORV

We support the identification of additional ORVs, including botanical, scientific research, and paleontology. All three of these ORVs are important to the GMUG landscape and contribute to the outstanding value of numerous streams on the forests. However, the definitions for these ORVs need to be expanded and appropriately considered for additional stream segments.

The proposed requirement that these scientific research areas are necessarily located within a research natural area is unnecessarily restrictive. We recommend eliminating this final bullet point to recognize that many of the outstanding opportunities for scientific research may be positioned outside of a research natural area (RNA). The Forest Service has recognized that the ecosystem types in the Rocky Mountain Region are poorly represented in the RNA network.⁷ [Routt National Forest EIS, Appendix F. Retrieved from https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5166048.pdf]

Excluding a river from recognition for a scientific research ORV because it has not been recognized in an RNA would exclude segments that demonstrate outstanding remarkable scientific research values.

Colorado Parks and Wildlife manages the Colorado Natural Areas Program (est. 1977) to preserve and protect special areas with distinctive and unique high-quality natural areas. These areas are akin to the research natural areas recognized by the Forest Service but do not always overlap. For instance, Colorado has recognized the Gothic Research Natural Area in the Gunnison National Forest. It has also recognized the Escalante Canyon Natural Area, San Miguel River at Tabeguache Creek Natural Area, and Tabeguache Natural Area in the Uncompahgre National Forest. The requirement that scientific research ORVs be restricted to Forest Service RNAs alone is too restrictive and will not protect segments that reflect these values and are outside of an existing RNA.

Moreover, eligible Wild and Scenic Rivers and RNAs are concurrently identified during the Forest Service plan revision process and maintaining that the ORV depends on an existing RNA status would make the process convoluted. Additionally, there could be other conflicts in the larger proposed RNA that preclude RNA designation, but do not invalidate the qualities of the river corridor for the identified scientific research values.

Recommendation

* Revise: Remove the requirement that a segment possessing scientific research values be located within a research natural area.

Climate Adaptation and Ecosystem Services ORV

Climate adaptation and ecosystem service ORVs should be added to the list of ORVs and be appropriately identified for existing and additional eligible segments.

Eligibility, and corresponding interim protective management of eligible streams and stream corridors, can play important roles in forest adaptation to climate change. Changing temperatures, stream flows, and precipitation patterns affect the survival and health of sensitive plant species, plant communities, fish, and wildlife.

A common form of adaptation, extensively documented for many species, involves a general shifting of overall or seasonal range. Most frequently, these shifts move upstream and otherwise up in elevation.

Correspondingly, additional consideration should be given to the potential eligibility of headwaters and of other higher-elevation portions of streams in order to anticipate and accommodate those upward-moving adaptations of sensitive species.

Furthermore, as climate change continues to impact water volumes and seasonal variability for forest landscapes and ecosystems, irrigation water supplies, and municipal water-supply networks, eligibility applied to key headwaters and to other intact stream segments can help minimize and manage those impacts with an ORV for ecosystem services.

Recommendation

* Add: Ecosystem services and climate adaptation should be added as outstandingly remarkable values for select streams (particularly headwaters and other higher-elevation stream segments).

Recreation ORV

The Forest Service should broaden their interpretation of the "recreation" ORV. Interpretation of the definition is

narrow and has led to the exclusion of numerous rivers that are both free-flowing and, in fact, possess a recreation ORV. The definition for a recreation ORV is written in the Forest Service Handbook (FSH)⁸ [Forest Service Handbook 1909.12 Ch. 82.4] and a similar definition is provided in the Draft Evaluation. Draft Evaluation page five states, "Recreational opportunities are, or have the potential to be, popular enough to attract visitors from throughout or beyond the State of Colorado or are unique or rare within the Western Slope region of Colorado. Visitors are willing to travel long distances to use the river resources for recreational purposes[hellip]The river may provide, or have the potential to provide, settings for national or regional usage or competitive events." (emphasis added) In this definition, "or" is used to list the ORV standards, indicating that the ORV threshold can be met by either the recreation opportunity being popular enough to attract visitors from throughout or beyond Colorado or by being unique or rare within the region. Because there is no use of "and", popularity and uniqueness are not both required. In email communication,⁹ [Kestrel Kunz (email correspondence, February 25, 2019) with Forest Service staff, Brittany Duffy: "Re: Recreation ORVs"] the Forest Service stated that they focused on the latter part of the definition, using uniqueness as the primary standard for ORV qualification. This approach is inconsistent with the definition for recreation-based ORVs and has limited the scope of the Eligibility Evaluation. We ask the Forest Service to use the full definition for recreation ORVs and expand the Eligibility Inventory accordingly.

Furthermore, the definition of the recreation ORV is completely unreasonable and adds unnecessary and unachievable criteria compared to the minimum criteria defined in the Forest Service Handbook.¹⁰ [Forest Service Handbook 1909.12 Ch. 82.4] While the Forest Service has some discretion to include additional criteria, it is inconsistent with the Wild and Scenic Rivers Act to have such a narrow and exclusive definition of ORVs. In the GMUG Draft Revised Land Management Plan, Table 56 in Appendix 11 [GMUG Draft Revised Land Management Plan, Appendix 11, Table 56] includes the following rationale, "Rivers that provide the most diverse opportunities to the widest range of recreationists are of higher value, while rivers that support only limited recreation for a narrower range of users (e.g., only users with advanced skill levels) in the river corridor are generally less outstanding and remarkable."¹¹ However, it is nearly impossible for one river segment to provide opportunities that are beginner-appropriate and also provide a challenge for experienced boaters. Challenging class five creeks on the GMUG are unique and sought after by experienced and professional recreationists from around the nation and the world. While other rivers, like the lower Taylor River provide an incredibly popular opportunity that is accessible by intermediate paddlers and river outfitters. Both of these experiences provide quality recreational opportunities and should be the focus of a Recreation ORV, rather than limiting the scope to quantity and popularity.

Additionally, Recreation ORVs should not be based on how their accessibility corresponds to the Recreation Opportunity Spectrum. If accessibility is assessed at all, it should be based on the types of existing recreational use and the preliminary classification. It should be assumed that if high quality recreation opportunities currently exist, evidenced by user data, that access adequately supports a recreation ORV.

Equally important, private land ownership, by definition, should not be included in an eligibility determination. Private land considerations should only be considered during Suitability studies on Congressional study rivers and designations. Segments that were deemed ineligible due to the existence of private land ownership, such as the Taylor River, need to be reexamined and determined as eligible. If the river segment currently provides outstanding recreational opportunities, which the lower Taylor River does, then it should be deemed as eligible.

Finally, the interpretation of the recreation ORV for fishing is entirely too narrow and does not encompass the unique and highly valuable fishing and fishery resources on the GMUG's rivers and streams. For example, in discussion on the Taylor River, the Forest Service declared that while the Taylor River is a Gold Medal Fishery, it is not unique because there are 322 miles of Gold Medal Fisheries in Colorado. This is a flawed conclusion because Colorado has 105,344 total stream miles¹² [Colorado Dept. of Public Health & Environment. Retrieved from, <https://www.colorado.gov/pacific/cdphe/clean-water-rivers-lakes-and-streams>] and thus only 0.3% of stream miles are Gold Medal Fisheries; this small percentage indicates that a Gold Medal Fishery on the

Taylor River is actually unique when compared to the State of Colorado.

Recommendation

* Revise: The definition and criteria for the Recreation ORV should be significantly expanded to encompass the high-quality recreation opportunities that exist on many of the GMUG's rivers.

Region of Comparison

Multiple scales should be used when applying the region of comparison to evaluate ORVs. While the Forest Service Handbook allows, as an alternative option, the Responsible Official to conclude that a single region of comparison can be used for evaluating ORVs,¹³[Forest Service Handbook 1909.12 Ch. 82.73] we strongly advise that multiple regions be used and the regions include multiple scales. The 1999 Report from the Interagency Wild & Scenic Rivers Coordinating Council concludes that the region(s) of comparison needs to include multiple scales and that "In addition to regional or statewide comparison, values must also be considered from a national perspective. For example, while multiple species of anadromous fish are relatively common in rivers on the Mt. Baker-Snoqualmie National Forest this association of multiple species is uncommon nationally."¹⁴ [Interagency Wild and Scenic Rivers Coordinating Council. (1999). The Wild & Scenic River Study Process.]This example in the Mt. Baker-Snoqualmie National Forest is very applicable to ORVs and river segments within the GMUG National Forests.

Additionally, the Forest Service Handbook defines an ORV as a "scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar river-related value that is unique, rare, or exemplary feature and is significant when compared with similar values from other rivers at a regional or national scale."¹⁵[Forest Service Handbook 1909.12 Ch. 80.5] This further indicates that multiple scales should be considered for the region of comparison. As in the Mt. Baker-Snoqualmie

Forest example, the use of multiple scales for the region of comparison should lean on the side of including additional ORVs rather than excluding them. For example, if an ORV is not considered to be unique or exemplary within the State of Colorado, then the Forest Service should also evaluate the ORV relative to the local region and/or the nation.

Recommendation

* Revise: When evaluating ORVs, use multiple scales for the region of comparison, with the intent of including additional ORVs, rather than further limiting them.

Eligibility Review Process, Justification, and Documentation

Forest Service documentation on the Wild and Scenic eligibility evaluation has insufficient data and justification on the eligibility determinations. Documentation made available to the public includes Appendix 11 of the Draft Plan, responses to public comments¹⁶, [Public comments and responses on the 2019 working draft eligibility report, by ORV. Retrieved from, https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd947425.pdf]and the Excel sheet of WSR review notes.¹⁷[GMUG Wild and Scenic Rivers. Retrieved from, <https://www.fs.usda.gov/detail/gmug/landmanagement/planning/?cid=fseprd615932>]

* Of the 962 river segments reviewed, 654 segments or 67.9% of the total segments have little to no justification. To best serve the public and diverse stakeholders, the Forest Service needs to demonstrate that a thorough analysis of each river segment has been completed.

* Numerous justifications for ineligible segments simply state that the segment did not meet the ORV threshold, but no further explanation is given (e.g., Uncompahgre River Segments 2 and 3). Providing further justification

will help the public understand the process and allow for more robust public comment. The Forest Service should provide details on why the ORV threshold was not met and which ORVs were considered.

Recommendation

* Revise, Comprehensive justification needs to be provided for all named rivers within the GMUG and shared with the public for review.

The use of the 2005 Comprehensive Assessment is conflicting and contradictory.

* More than half of the justifications only cite the 2005 Working Maps and Comprehensive Assessment Appendix W-2, which does not provide sufficient evidence for or against eligibility (e.g., Ruby Anthracite Creek, Taylor River headwaters, Slate River, Poverty Gulch, San Miguel River, etc.). Appendix W-2 is simply a list of rivers that were reviewed and found ineligible in the 2005 Wild and Scenic Eligibility Evaluation. The Forest Service should give further explanation for these segments and address how circumstances have or have not changed on each segment since the 2005 Eligibility Inventory. Changed circumstances include broader recognition of recreational opportunities and changes to the river that make it more unique.¹⁸ [Forest Service Handbook 1909.12 Ch. 82.4] As described below in our eligibility recommendations, a number of river segments in the GMUG have had changed circumstances leading to a greater presence of ORVs, and therefore necessitate additional review.

* The Forest Service has created an inappropriate double standard for streams reviewed in the 2005 Comprehensive Assessment. For streams identified as not eligible in both 2005 and 2021, the 2005 assessment is cited as the primary or only justification for ineligibility. Conversely, for streams identified as eligible in 2005 and not in 2021, the Forest Service argues that "the 2005 assessment doesn't have standing because the planning process never resulted in a decision."

Recommendation

* Revise: If the 2005 Comprehensive Assessment report is going to be used, the Forest Service should give equal weight to both ineligible and eligible segments, fully review segments not considered in 2005, and review segments that have changed circumstances since 2005.

The ineligibility justifications include contradictory rationale.

* On some segments, the WSR Review Notes (Excel spreadsheet) indicate that one or more ORVs were identified by the IDT and/or District Review (e.g., Slate River, Uncompahgre Gorge), but that the Responsible Official determined the segment was not eligible when reviewing all potential eligible segments in the Forest. This is contradictory and indicates that the Forest Service is not considering every river segment that is free-flowing and possesses at least one ORV. While the Responsible

Official has the final decision-making authority, decisions on ORVs should be informed by the Interdisciplinary Team, best scientific information, and public input.¹⁹ [Forest Service Handbook 1909.12 Ch. 82.73] In cases where the Responsible Official disagrees with identified ORVs, a defensible argument should be provided.

Recommendation

* Revise: Inconsistencies on ORV identification need to be corrected and should provide rationale when found ineligible. Identification of ORVs should include the best scientific information and public input, including local expert opinion.

Recommended Eligible Wild and Scenic River Segments

We appreciate the inclusion of 118 river miles in the Draft Eligibility Evaluation and the extensive work that the Forest Service has undertaken so far. We support eligibility for all 118 river miles that have been identified thus far. However, less than 4% of the reviewed river miles were found eligible and numerous river segments that are free-flowing and possess at least one ORV have been overlooked. The following comments are divided into two parts: (1) comments on river segments currently determined eligible in the 2021 Draft Plan, and (2) new river segments that should be determined eligible in the Final Plan and FEIS. Since 2019, American Whitewater has partnered with American Rivers, Great Old Broads, High Country Conservation Advocates, The Pew Charitable Trusts, Trout Unlimited, the West Slope Conservation Center, and others to identify river segments that qualify for eligibility. Additional river segments and ORVs are included below based on collaborative efforts and new findings since 2019.

Comments on river segments currently determined as eligible

1. Oh-Be-Joyful Creek (1B)20 [Photo credited to Matt Berglund Photography]

* Recommendation: Oh-Be-Joyful Creek (1B) should be found eligible, Recreation ORV, Scenic Classification

* Tributary of: Slate River

* Length: 1.66 miles

* Free-flowing: Yes.

* Classification: Scenic. Classification should be changed from Recreational to Scenic. Segment 1B is free of impoundments and manmade structures. The segment is paralleled by a hiking trail and a dirt road, but motorized access has been prohibited here.

* ORVs:

* Recreation. We concur with the Recreation ORV for kayaking. Oh-Be-Joyful (OBJ) provides a unique kayaking experience on the Western Slope and attracts visitors from across the state and the nation. Since 1995, OBJ has hosted an annual kayak competition - the steepest kayak race in the country. In addition to a series of 12 to 25 foot waterfalls, OBJ has numerous challenging slides (see photo). OBJ has been recognized in numerous guidebooks for being visually spectacular,²¹[Banks and Eckardt, Colorado Rivers, 162] having exceptionally clean lines,²²[Ibid. 162] a 5-star rating,²³[Stafford and McCutchen, Whitewater, 130] and as "king of the Colorado steeps."²⁴ [Davis, L., and Davis A. The River Gypsies' Guide to North America. USA, (Brushy Mountain Publishing, 2010), 206.]

* Additional Resources:

* AW River Inventory Page/Photo Gallery: Oh-Be-Joyful

* Media:

* Kayak Session Video; Race History; 2019 Race Event; Yeti Gone Crazy Blog

2.San Miguel Segment 1

* Recommendation: San Miguel Segment 1 should be found eligible, Recreation & Scenery ORVs, Recreation Classification

* Tributary of: Dolores River

* Length: 0.08 miles

* Free-flowing: Yes. This segment of the San Miguel meets the requirements for free-flowing.

* ORVs:

* Recreation. We agree with the Recreation ORV for paddling on this segment of the San Miguel. This segment

is part of the popular class II-III paddling stretch between Specie Creek and Beaver Creek.

* Scenery. We agree with the Scenery ORV for this segment. This stretch abuts the Uncompahgre Plateau and provides unique views of the plateau.

* Classification: Recreational.

* Additional Resources:

* AW River Inventory Page: San Miguel River Specie to Beaver Creek

3. San Miguel Segment 2

* Recommendation: San Miguel Segment 2 should be found eligible, Recreation & Scenery ORVs, Wild Classification

* Tributary of: Dolores River

* Length: 0.37 miles

* Free-flowing: Yes. This segment of the San Miguel meets the requirements for free-flowing.

* ORVs:

* Recreation. Agree with the Recreation ORV for paddling on this segment. It is part of the popular and scenic class III paddling stretch known as Norwood Canyon. People travel from around the state to commercially raft this stretch of river.

* Scenery. Agree with the Scenery ORV for this segment. This segment has been described as a "largely roadless, wooded canyon" and provides a very unique opportunity to experience a transition in landscapes between the alpine environment of Telluride to the desert environment of Naturita.²⁵[Banks and Eckardt, Colorado Rivers, 124-125]

* Classification: Wild. We agree with the preliminary classification of Wild.

* Additional Resources:

* AW River Inventory Page: Beaver Creek to Piñon Bridge

New river segments that should be determined eligible in the Final Plan and FEIS

1. Ruby Fork of the Anthracite Creek (Dark Canyon)²⁶ [Photo retrieved from <https://lacemine29.blogspot.com/2017/07/open-mind-summit.html>]

* Recommendation: The Ruby Fork Tributary should be found eligible, Recreation ORV, Wild Classification

* Tributary of: North Fork of the Gunnison

* Ruby Fork TH 836 to Anthracite River

* Free-flowing: Yes. Ruby Fork is free of impoundments and man-made structures within this segment.

* ORVs:

* Recreation. The Ruby Fork of the Anthracite River offers a very unique, mandatory hike-in paddling experience. Paddlers hike their crafts (e.g., kayaks, packrafts, canoes) three-miles along the Dark Canyon Trail to the Ruby Fork of the Anthracite. Depending on the flows, the river provides continuous class IV-V whitewater and gradually gets easier after the confluence with the mainstem Anthracite River. Advanced paddlers from around the state travel to experience the awe-inspiring views and rapids of Ruby-Anthracite. This segment has the longest required hike in, making it both unique and attractive to adventurous paddlers. After the river flows have dropped, fishermen hike out into the Dark Canyon for some incredible dry-dropper fishing opportunities. Both the Ruby Fork and the Anthracite River have been recognized in paddling guide books since 1995 and described as wilderness in character with incredible scenery.²⁷ [Banks, G. and Eckardt, D. Colorado Rivers and Creeks. Hong

Kong, (Dave Eckardt and Gordon Banks, 1995), 145]

* Scenery. Both the Ruby Fork and the mainstem Anthracite offer jaw-dropping views of Marcellina Mountain that are unique to the river corridor. As the hiking trail connects with the Ruby Fork, you are surrounded by lupine, bluebells, and towering Aspens. Once on the Ruby Fork, Marcellina is viewed on the left and sheer cliff walls close you in on the right.

* Classification: Wild. The Ruby Fork is free of impoundments and diversions. It is only accessed via a three-mile hike on the Dark Canyon Trail (TH 836) and there are no established roads in the vicinity. There is a low-impact foot trail that follows the river from the confluence with Anthracite to the takeout at Erikson Springs CG.

* Additional Comments:

* Recreation ORV: In the Response to Public Comment document, the FS states that the Ruby Fork is not being carried forward because a public comment noted that "The main run that is starting to get popularized begins where Trail #836 reaches the Ruby Anthracite and ends at Erickson Springs."28 [Public comments and responses on the 2019 working draft eligibility report, by ORV. Retrieved from, https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd947425.pdf] By reviewing the GMUG GIS data it is clear that Trail #836 intersects with the Ruby Fork, as described in comments from AW and others. Therefore, the FS should correct the justification for Ruby Fork and determine the presence of a recreation ORV.

* Scenery: As indicated in the same Public Comment report, the Ruby Fork was both recommended from the public and confirmed to be highly scenic per the Forest Service GIS data. Based on the description provided above, the FS should determine the Ruby Fork eligible with a scenery ORV. ? Additional Resources: o AW River Inventory Page: Anthracite, Ruby Fork o Media: ?

<https://vimeo.com/224276599><https://www.youtube.com/watch?v=mEfp1NtMqtg>

2.Upper Taylor River

* Recommendation: The Upper Taylor River should be found eligible, Recreation & Scenery ORVs, Recreation Classification

* Tributary of: Gunnison River

* Headwaters to Forest Service Boundary near Illinois Creek

* Free-flowing: Yes. From the headwaters to the Forest Service Boundary, the Upper Taylor River is free of impoundments.

* ORVs:

* Recreation. A high mountain gem - the Upper Taylor River offers unique paddling and fishing opportunities. The river is incredibly scenic, with continuous beginner-intermediate whitewater. The GMUG does not offer many beginner-intermediate paddling runs, making this stretch a unique attraction for rafters, family floating trips, and kayakers alike. In addition, this stretch is very popular for dry-fly fishing opportunities.

* Scenery. The Upper Taylor is in an alpine meadow setting with incredible views of the surrounding peaks. This view is much unlike other river corridors in the region, which are commonly in canyons and densely forested.

* Classification: Recreational. The Upper Taylor River is free of impoundments and man-made structures, however the river is paralleled by an unpaved road (NF-742) and should be classified as Recreational.

* Additional Comments:

* The Forest Service states in numerous places that the Upper Taylor is being further considered by the GMUG for a recreation ORV. We strongly encourage the GMUG to determine the Upper Taylor river eligible with recreation and scenery ORVs.

* Additional Resources:

* AW River Inventory Page: Upper Taylor River

* Media:

* Yeti Gone Crazy Blog

3.Lower Taylor River (Taylor River Canyon)

* Recommendation: The Lower Taylor River should be found eligible, Recreation ORV, Recreation Classification

* Tributary of: Gunnison River

* Lottis Creek to FS Boundary near Almont

* Free-flowing: Yes. This segment is downstream of the Taylor Park Reservoir, however the segment itself is free-flowing in character with minimal man-made structures and diversions. The Reservoir User Group manages the reservoir to best mimic natural flows for fisheries. The Forest Service Handbook (Ch. 82.71) makes it clear that a river segment may still be considered free-flowing if it flows between large impoundments and/or if small impoundments exist within the reach.

* ORVs:

* Recreation. The Taylor River Canyon between Lottis Creek and the Forest Service Boundary near Almont offers Class II-IV paddling opportunities in a scenic canyon setting. This stretch brings the local paddling community together for a well-loved "Taylor Tuesday" tradition and attracts paddlers from across the state. The Taylor Canyon boasts one of the longest paddling seasons in the Upper Gunnison Valley and its boulder-garden character sets it apart from other rivers in the area. In addition, the Taylor River is host to an annual Kayak and Raft Race as part of the Gunnison River Festival. This special river canyon brings together kayakers, rafters, public boaters, and outfitters, providing numerous types of opportunities.

* Classification: Recreational. Although often not visible from the river, this stretch is paralleled by CR 742 and the river is accessed in multiple places by the road.

* Additional comments:

* The Forest Service stated that "Accessibility contributes to the recreational value of a segment. Due to issues with accessibility on this [lower Taylor River] segment, despite its otherwise high value for recreation, it is not outstandingly remarkable within the region of comparison."²⁹ [Public comments and responses on the 2019 working draft eligibility report, by ORV. Retrieved from, https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd947425.pdf]. These claims are inaccurate and land ownership is not appropriate to include in an eligibility review. This statement is also contradictory because if there is existing high value for recreation then there must be adequate access to the river for recreation.

* Except for a few inholdings, the majority of the Taylor River corridor is on public Forest Service land. There are numerous designated campgrounds within the river segment, two fully developed river access sites for paddlers and anglers, and multiple other river access areas on public land. There are also two commercial rafting outfitters that operate on this segment of the Taylor River, further proving that this segment is accessible to a variety of user groups.

* Additional Resources:

* AW River Inventory Page: Lower Taylor River

* Media:

* Southwest Paddler Page

* 2019 Taylor River Race

4.Slate River (Headwaters to Poverty Gulch)

* Recommendation: From the headwaters to Poverty Gulch, the Slate River should be found eligible, Recreation, Scenery, and Botanical ORVs, Scenic Classification

* Tributary of: East River

* Headwaters to confluence with Poverty Gulch (i.e., Daisy Creek)

* Free-flowing: Yes. This segment of the Slate River is free-flowing in its entirety. There are no diversions or man-made structures and the banks are largely undeveloped, save for the Slate River Road which parallels the river in places.

* ORVs:

* Recreation. This segment of the Slate River (known as the North Fork Slate to most paddlers) provides the most challenging creek boating experience in the Gunnison Valley. It is famous for its gigantic falls, the North Fork Slate Falls, and extremely tight chutes.³⁰ [<http://yetigonecrazy.weebly.com/north-fork-slate.html>]While rarely paddled, guide books have given it a 4-star rating and it provides a unique challenge for the bravest of paddlers.³¹ [Stafford and McCutchen, *Whitewater*, 134]The Class V+ paddling section starts approximately one mile upstream from the confluence with Poverty Gulch.

* Scenery. The headwaters of the Slate River are nestled between Treasury and Purple Mountain, offering awe-inspiring views of the Ruby Range. Downstream of the headwaters, the extreme waterfalls provide scenic views and photography opportunities. In the 2006 Comprehensive Evaluation the Forest Service found the Slate eligible on the upper section for its beautiful scenery, including the dramatic canyon, gorgeous waterfalls, and hanging gardens

* Additional comments:

* There are only small well rights on the majority of the identified reach and only a few very small diversions above the confluence of the Slate River and Coal Creek. These minor diversions do not significantly impact the natural flow regime.

* The 2005 Comprehensive Evaluation Assessment determined this stretch to be Eligible with a scenery ORV for the canyon terrain and waterfalls. The scenery conditions have not negatively changed since 2005, indicating that the scenery ORV determined in 2005 should be carried forward in the current Draft Evaluation. Since 2005, the creek boating on this stretch has become more well-known and its uniqueness recognized in regional guide books,³² [ibid. 134]thus necessitating the addition of a Recreation ORV. If anything, the ORVs on this segment have become more prominent since 2005.

* Classification: Scenic. The Slate River is paralleled in some places by an unpaved road and hiking trails, however the banks are largely undeveloped and the river is void of man-made structures.

* Additional Resources:

* AW River Inventory Pages/Photo Gallery: North Fork Slate River

* Media:

* https://www.youtube.com/watch?v=n3Vq_A2kkvU

* <https://vimeo.com/183392076>

* Yeti Gone Crazy Blog - North Fork Slate

5.Slate River (Poverty Gulch to Oh-Be-Joyful)

* Recommendation: The Slate River should be found eligible, Recreation ORV, Scenic Classification

* Tributary of: East River

* Poverty Gulch to Oh-Be-Joyful

* Free-flowing: Yes. There are no man-made structures in the river, although small well-rights and small

conditional water rights exist on the Slate River. At this time, this river segment meets the qualifications for free-flowing.

* ORVs:

* Recreation. This stretch of the Slate River has been recognized in multiple guidebooks for the region.³³ [Stafford and McCutchen, Whitewater, 132; Banks and Eckardt, Colorado Rivers, 164]It provides a different experience than the other creeks in the valley; its gradient is less significant than the other creeks in the area and the hydraulics are fierce. Still a challenging Class V kayaking run, this segment has a longer paddling season than its neighbors.

* Classification: Scenic. The Slate River is paralleled in places by an unpaved road (CR 734) and hiking trails and is accessible at certain points. The river drops away in many places as it flows through the Slate River canyons. There are no man-made structures in the river, although small well-rights and small conditional water rights exist on the Slate River.

* Additional Resources:

* AW River Inventory Pages/Photo Gallery: Upper Slate River

* Media:

* https://www.youtube.com/watch?v=n3Vq_A2kkvU

* <https://vimeo.com/183392076>

* Yeti Gone Crazy Blog - North Fork Slate

6.Slate River Segment (Oh-Be-Joyful to Town of Crested Butte)

* Recommendation: The Slate River should be found eligible, Recreation, Botanical, & Wildlife ORVs, Scenic Classification

* Tributary of: East River

* Oh-Be-Joyful to Town of Crested Butte

* Free-flowing: Yes. There are a couple insignificant diversions upstream of the Coal Creek confluence and the Mount Emmons Mining Company has a small conditional water right near the Oh-be-Joyful confluence, however none of these impact the natural flow regime of the river and at this time the segment meets the qualifications for free-flowing.

* ORVs:

* Recreation. In the past few years this segment of the Slate River has become incredibly popular for Stand Up Paddleboarding (SUPing), a relatively new sport. It has been recognized as some of the best SUPing in the state for its mellow floating experience, grandeur views of the Slate River Valley, and surrounding natural environment. This segment also offers a rare beginner opportunity for kayakers. In the Upper Gunnison Valley there are no other flatwater boating opportunities where people can learn to kayak in a safe environment.

* Botanical. Please refer to High Country Conservation Advocates' comments on this segment for in depth details on the Botanical ORV of this segment.

* Wildlife. Please refer to High Country Conservation Advocates' comments on this segment for in depth details on the Wildlife ORV for the high-altitude heron habitat.

* Additional Comments: Although part of this segment extends outside of the USFS Boundary, we believe that its many ORVs warrant its inclusion as an Eligible river segment. According to the Forest Service Handbook,³⁴ a river segment may extend beyond the USFS Boundary in certain circumstances. In this case, there are ORVs that extend downstream of the Forest Service Boundary on the Slate River that depend on protections under the Wild and Scenic Rivers Act. Additionally, the river maintains its incredibly scenic environment and remoteness until it reaches the Town of Crested Butte.

* Classification: Scenic. The majority of this segment is significantly distanced from CR 734 and is only paralleled by a non-motorized trail in some places. Although the segment has a couple minimal diversions and cattle fencing, it is largely void of man-made structures and the banks are undeveloped.

* Additional Resources:

* AW River Inventory Pages/Photo Gallery: Middle Slate River

* Media:

* https://www.youtube.com/watch?v=n3Vq_A2kkvU

7. Daisy Creek (i.e., Poverty Gulch)

* Recommendation: Daisy Creek should be found eligible, Recreation & Scenery ORV, Scenic Classification

* Tributary of: Slate River

* Headwaters to Slate River Confluence

* Free-flowing: Yes. Daisy Creek is free-flowing in its entirety; it is free of impoundments, man-made structures, and diversions.

* ORVs:

* Recreation. Daisy Creek flows from its headwaters in Daisy Pass through Poverty Gulch and into the Slate River. Advanced paddlers put in below the first significant falls (40 feet tall) and quickly find themselves in fast moving water that drops over a series of short slides and drops. The thrill of the whitewater heightens as Big Woody Falls (22 feet tall) approaches. While still technical, Big Woody Falls offers a unique waterfall experience, without the commitment required of Oh-Be-Joyful.

* Scenery. Daisy Creek meanders through the high alpine fields below Daisy Pass before it drops away from the meadows and into a committing, forested canyon. The character of the canyon is remote and the latter part of the run offers incredible views of the Slate River Valley.

* Classification: Scenic. The majority of Daisy Creek is set back from any roads or trails and requires a steep hike down into the canyon at the base of the 40-foot waterfall. At certain points the river is accessed by a four-wheel drive road (Poverty Gulch Rd) and towards the end of the stretch there exists a bridge over the creek.

* Additional Resources:

* AW River Inventory Page: Daisy Creek

* Media:

* <https://vimeo.com/134668326>

8. East River: Headwaters to Gothic Rd. Bridge below Rocky Mountain Biological Laboratory

* Recommendation: East River should be found eligible, scientific, botanical, and historic ORVs, Recreational Classification

* Tributary of: Gunnison River

* Length: 6.7 miles. Upper East River, headwaters to the Gothic road bridge below Rocky Mountain Biological Laboratory (RMBL).

* Free-flowing: Yes. The Upper East River is free-flowing; there are no diversions. RMBL relies on well water and does not divert from the river.

* ORVs:

* Scientific. An entire page on RMBL's website is devoted to river-related studies, titled "Water Research." [Rocky Mountain Biological Laboratory, <http://www.rmbll.org/scientists/water-research>] A quick search of the

RMBL publication database will reveal numerous scientific articles discussing East River study projects.

* Botanical. The USFS has identified the Gothic area as a Research Natural Area. This RNA was established in 1931 and expanded in 1959. This area of 1080 acres includes plant ecosystems adjacent to the East River that have been identified for special management, including 238 acres of fescue/meadow-rue-vetch-elm sedge. These ecological attributes, adjacent to and dependent on the East River, should be considered in tandem with the scientific ORV.

* Additional comments:

* It passes through the high alpine Gothic Valley, where the Rocky Mountain Biological Laboratory (RMBL) holds several instream flow water rights dating back to 1976 for scientific purposes on the East and its tributaries. The East and its tributaries contain breeding populations of Brook Trout and native Colorado Cutthroat Trout. In the Comprehensive Evaluation Report completed in July of 2006, the Forest Service identified 6.7 miles of the East River as eligible for wild and scenic for scenic and botanical characteristics.

* RMBL is a remarkably unique scientific asset in North America. River-dependent scientific research has occurred there for decades. As early as the 1920s, a biology professor at Western Colorado College led his students on field trips to Gothic. In 1928 Professor Johnson established the first field station in Gothic to study the uniqueness of the high altitude ecology. This station eventually became RMBL and is now internationally renowned as being at the forefront of climate research.

* Classification: Recreational. There is a road that parallels the East River. The river is free of impoundments, and the river shore is largely primitive and undeveloped. There are a few locations where it is accessible by road.

9. East River: Gothic Rd Bridge to Meanders

* Recommendation: The East River should be found eligible, Recreation ORV, Scenic Classification

* Tributary of: Gunnison River

* Gothic Road Bridge to East River Meanders

* Free-flowing: Yes. The East River is free of impoundments and man-made structures

* ORVs:

* Recreation. The primary section of the "Upper East" is the easiest of the four high-quality creeks in Crested Butte, but the end of this stretch includes "Stupid Falls", a spectacular waterfall that is one of the tallest in the state. At moderate flows, the upper stretch provides an unique opportunity for intermediate paddlers to test their skills on slides and moderately sized falls.³⁶ [Stafford and McCutchen, Whitewater, 136] This segment is set in the Gothic Valley, the wildflower capital of Colorado and provides scenic views of the East River corridor.

* Classification: Scenic. Immediately after the put-in bridge, the river drops away from the road into a narrow canyon and there is a mandatory hike-out to a dirt road at the end of the segment. The river banks are largely undeveloped and there are no impoundments or man-made structures in the river.

* Additional Comments: In addition to this segment of the East River, we support Eligibility on the entire segment from the headwaters at Emerald Lake to the USFS Boundary for additional ORVs of Scientific Research, Scenery, Ecological, and Geological (see High Country Conservation Advocates' comments).

* Additional Resources:

* AW River Inventory Page/Photo Gallery: Upper East

* Media:

* <https://vimeo.com/129999464>

* <https://www.youtube.com/watch?v=F5r97FRPTvc>

10. East River: Meanders

* Recommendation: The East River Meanders should be found eligible, Scenery and Geology ORVs, Scenic Classification

* Tributary of: Gunnison River

* Stupid Falls to Slate River Confluence

* Free-flowing: Yes. The East River is free of impoundments and man-made structures

* ORVs:

* Scenery. The East River meanders are some of the most iconic in the nation. Looking down on the East River one sees a gorgeous meandering stretch with oxbow after oxbow linking up in a serene pattern. In summer it attracts photographers and local artists that attempt to capture the serene beauty of this reach.

* Geologic. The Forest Service Handbook criteria includes a description for geology that "the feature(s) may be in an unusually active stage of development, represent a "textbook" example, or represent a unique, rare or exemplary combination of geologic features (erosional, volcanic, glacial, or other geologic structures)." The East River meanders are an exemplary "textbook" example of an oxbow river system.³⁷ [37 National Park Service, Fluvial Features-Meandering Stream. Retrieved from, <https://www.nps.gov/articles/meandering-stream.htm>] The textbook structure of this system has been documented in studies;³⁸ [Predicting Cutoff Locations Along Meander Bends on the East River in Crested Butte, Colorado. Retrieved from, <https://gsa.confex.com/gsa/2016AM/webprogram/Paper287227.html>.] One described that "Lidar and Worldview 2 multispectral satellite imagery collected in 2015 revealed approximately 100 abandoned channels in our 10-kilometer-long study reach that occupy approximately 25% of the floodplain. Abandoned channels preserve the shape of former river meander bends." Thus, the East River meanders meet the criteria for a geologic ORV.

* Classification: Scenic. There is a dirt road allowing access to the river along the East River meanders. Above the river corridor (but outside of the wild and scenic corridor) the Gothic Road parallels the meanders and provides a view for those traveling to Gothic. Otherwise this segment is largely inaccessible.

11. San Miguel (Keystone Canyon and Sawpit)³⁹ [Photo retrieved from <https://www.sanmiguelcountyco.gov/197/Parks-Open-Space>.]

* Recommendation: The San Miguel should be found eligible, Recreation ORV, Recreation Classification

* Tributary of: Dolores River

* Keystone to Forest Service/Bureau of Land Management (BLM) boundary ? Free-flowing: Yes. This segment of the San Miguel river is free-flowing with no impoundments or man-made structures.

* ORVs: o Recreation. Keystone Canyon has been described as the best creek boating option in the area, providing a class V to V+ boating experience unlike anywhere else in the San Miguel drainage.⁴⁰ [Stafford and McCutchen, Whitewater, 202.] Keystone Canyon starts 3.5 miles downstream of Telluride and ends at the Bilk Creek access point. Downstream of Bilk Creek is a Class II-III stretch of river frequently described as having quality whitewater and incredibly scenic views.⁴¹ [<https://westerncooutdoors.com/archives/3002>.]

* Additional Comments: This segment abuts the BLM segment of the San Miguel (27.2 miles from the Forest Service boundary near Lime to downstream of Norwood), which was determined to be Eligible (and Suitable) by the BLM Uncompahgre Field Office.⁴² [https://eplanning.blm.gov/epl-front-office/projects/lup/62103/78805/90472/WSR_Suitability_Report_Final_04272012.pdf] This segment of the San Miguel River is the longest segment within the Forest Service boundary and also the most scenic and unique.

* Classification: Recreational. Sections of the San Miguel River are paralleled by Highway 145 and the river is intersected by CR 63L. ? Additional Resources: o AW River Inventory Page: San Miguel Box

12. Uncompahgre River (Uncompahgre Gorge)

* Recommendation: The Uncompahgre River should be found eligible, Recreation & Scenery ORVs, Scenic

Classification

* Tributary of: Gunnison River

* Red Mountain Creek to Ouray Ice Park

* Free-flowing: Yes. There is a small diversion at the end of this segment in the Ouray Ice Park (Ice Box Canyon), however the segment itself is free of diversions and impoundments and is free-flowing.

* ORVs: We agree with the ORVs identified by the District Review team, including Recreation, Scenery, and Geology. We expand on the Recreation ORV below.

* Recreation. From Red Mountain Creek to the Ouray Ice Park, the Uncompahgre Gorge offers challenging Class IV-V whitewater in an incredibly scenic gorge. This is the most challenging section of the Uncompahgre River, as well as the most remote. The canyon walls within the Uncompahgre Gorge are among the tightest in Colorado (see photo).

* Additional Comments:

* The Draft Evaluation cites incorrect rationale for ineligibility of this segment. The "WSR Review Notes" indicate that more information is needed regarding land ownership, water quality, highway impacts, etc. However, these factors are outside the scope of Eligibility and should not be considered at this time.

* The District Review team identified ORVs of Recreation, Scenery, Geology, and Heritage and advocated for Eligibility determination on multiple occasions. These valid insights from the local District Review team and from public comment should inform the Eligibility determination.

* Classification: Scenic. The Uncompahgre Gorge is set back from the road system as it flows through the gorge, although it is paralleled by Highway 550 and the end of the segment runs through the Town of Ouray and the Ouray Ice Park. Between the put-in and the Ouray Ice Park there are no road or trail intersections and the river is free of impoundments within the segment identified.

* Additional Resources:

* AW River Inventory Page/Photo Gallery: Uncompahgre Gorge

13. Uncompahgre River (Ouray to KOA Campground)

* Recommendation: The Uncompahgre River should be found eligible, Recreation ORV, Recreational Classification

* Tributary of: Gunnison River

* Town of Ouray to KOA Campground: 2.2 miles

* Free-flowing: Yes. This segment of the Uncompahgre is free-flowing in its entirety.

* ORVs:

* Recreation. From Ouray to the KOA campground downstream of town, the Uncompahgre provides a popular and challenging class IV-V paddling stretch known to the locals as the "Quality Quickie." This segment has been in the guide books since 1995⁴³ [Banks and Eckardt, Colorado Rivers, 139] and continues to grow in popularity; Whitewater of the Southern Rockies⁴⁴ [Stafford and McCutchen, Whitewater, 538] gives it a 4-star rating.

* Classification: Recreation. Although it is set back from the road, this segment is paralleled by Highway 550 and accessible at multiple points. This stretch is free of impoundments and diversions.

* Additional Resources:

* AW River Inventory Page: Ouray to KOA CG

* Media:

* <https://vimeo.com/99315827>

14. Escalante Creek

* Length: 1.5 miles

* Classification: scenic

* ORVs: vegetation/botanical, scenery, recreation, geologic, wildlife, fish, vegetation/botanical

* Additional Information: Escalante Creek is regionally important habitat for resident populations of native roundtail chubs, bluehead suckers, and flannelmouth suckers, as well as serving as a spawning site for Gunnison River populations of all three of these BLM and Colorado sensitive species. The national forest portion of Escalante Creek includes no impoundments or structures. It is paralleled by an unpaved road, so it qualifies for wild or scenic classification. Escalante Creek should retain its 2005 eligibility, or it should be added to the streams studied in the draft eligibility evaluation and found eligible with outstandingly remarkable values vegetation/botanical, recreation, geologic, wildlife, and fish/rare species.

15. Bridal Veil Creek (falls)

* Length: 0.01 mile

* Classification: recreational classification

* ORVs: historical, wildlife, scenery

* Additional information: The falls of Bridal Veil Creek retain the outstandingly remarkable values identified in 2005. The GMUG interdisciplinary team has since noted that the falls might not be on national forest land. Documentation of that location detail should be published and subject to public review and comment before removing the falls from eligibility. Otherwise, Bridal Veil Creek (falls) should retain its 2005 eligibility.

16. Ingram Falls

* Length: 0.01 mile

* Classification: recreational

* ORVs: wildlife, scenery

* Additional Information: Ingram Falls retains the outstandingly remarkable value identified in 2005. The GMUG interdisciplinary team has since confirmed presence of uncommon black swift at the falls. Any changed circumstances or other evidence should be published and subject to public review and comment before removing the falls from eligibility. Otherwise, Ingram Falls should retain its 2005 eligibility.

17. Monitor Creek

* Length: Approximately 0.75 mile from source to national forest/BLM boundary

* Classification: wild classification

* ORVs: vegetation, fish

* Additional Information: Immediately downstream of the GMUG portion of Monitor Creek, the BLM Uncompahgre Field Office (UFO) has determined its portion of Monitor Creek is wild & scenic eligible, with wild classification; BLM found it to be wild and scenic suitable in the BLM final suitability report (and included in the preferred alternative for the proposed UFO Resource Management Plan). The national forest portion of Monitor Creek includes no impoundments, structures, or constructed routes. It therefore qualifies for wild classification. Monitor Creek should be added to the list of streams studied in the Draft Eligibility Evaluation and it should be found eligible with outstandingly remarkable values vegetation and fish, consistent with and complementary to eligibility finding and pending suitability finding by the BLM.

18. Potter Creek

* Length: 6.5 miles from source to national forest/BLM boundary

* Classification: wild

* ORVs: vegetation, fish

* Description: Immediately downstream of the GMUG portion of Potter Creek, the BLM Uncompahgre Field Office (UFO) has determined its portion of Potter Creek is wild and scenic eligible, with wild classification; BLM found it to be wild and scenic suitable in the BLM final suitability report (and included in the preferred alternative for the proposed UFO Resource Management Plan). The national forest portion of Potter Creek includes no impoundments, structures, or significant constructed routes. The upper stream crosses the Roubideau Mesa Trail. It therefore qualifies for wild classification either for its full length or for the portion downstream of the trail. Potter Creek should be added to the list of streams studied in the Draft Eligibility Evaluation and it should be found eligible with outstandingly remarkable values vegetation and fish, consistent with and complementary to eligibility finding and pending suitability finding by the BLM.

19. Cottonwood Creek

* Length: Approximately 8 miles from source to national forest/BLM boundary

* Classification: recreational

* ORVs: vegetation

* Description: Immediately downstream of the GMUG portion of Cottonwood Creek, the BLM Uncompahgre Field Office (UFO) has determined its portion of Cottonwood Creek is wild & scenic eligible, with scenic classification. BLM found it to be wild & scenic suitable in the BLM Dominguez-Escalante National Conservation Area Resource Management Plan. The national forest portion of Cottonwood Creek includes no impoundments or structures. The segment crosses FSR 504, and an unpaved road parallels approximately three miles of the stream's upper reach. It therefore qualifies for recreational classification. Cottonwood Creek should be added to the list of streams studied in the draft eligibility evaluation and it should be found eligible with outstandingly remarkable value vegetation, consistent with and complementary to eligibility finding and pending suitability finding by the BLM.

20. Beaver Creek

* Length: Approximately 2 miles, from confluence with McCulloch Creek to national forest/BLM boundary

* Classification: wild

* ORV: outstandingly remarkable value vegetation

* Description: Immediately downstream of the GMUG portion of Beaver Creek, the BLM Uncompahgre Field Office (UFO) has determined its portion of Beaver Creek is wild & scenic eligible, with scenic classification; BLM found it to be wild & scenic suitable in the BLM final suitability report (and included in the preferred alternative for the proposed UFO Resource Management Plan). The national forest portion of Beaver Creek includes no impoundments, structures, or constructed routes. The national forest portion therefore qualifies for wild classification (or at least scenic to correspond with downstream BLM classification). Beaver Creek should be added to the list of streams studied in the draft eligibility evaluation and it should be found eligible with outstandingly remarkable value vegetation, consistent with and complementary to eligibility finding and pending suitability finding by the BLM.

21. Horsefly Creek:

* Length: Approximately 17.8 miles, from source to national forest boundary (or approximately 12 miles, from national forest/private land boundary to national forest boundary)

* Classification: wild

* ORVs: fish, wildlife/rare species, vegetation

* Description: The national forest portion of Horsefly Creek includes no impoundments, structures, or constructed routes. The lower reach crosses a low-maintenance trail. It therefore qualifies for wild classification or, at least,

wild above the trail crossing, scenic below the crossing. Horsefly Creek should be added to the list of streams studied in the draft eligibility evaluation and it should be found eligible with outstandingly remarkable values fish, wildlife/rare species, and vegetation.

22.Upper Brush Creek and West Brush Creek tributary

* Length: The proposed segment for eligibility is the entire West Brush Creek tributary and the upper portion of the mainstem of Brush Creek. The West Brush Creek segment begins at the headwaters and extends down to the confluence with Middle Brush Creek. The Brush Creek segment begins at the start of Brush Creek (the confluence of West and Middle Brush creek) and ends where Brush Creek first leaves USFS lands.

* Classification: Scenic. West Brush Creek is only accessible by trails and primitive four-wheel drive roads.

* ORVs:

* Wildlife/Habitat. West Brush Creek and Upper Brush Creek provides important habitat for a rare and ecologically crucial boreal toad population that is dependent on the West Brush Creek and Brush Creek aquatic and riparian natural environment. Forest Service Region 2 classifies the boreal toad as a sensitive species and the boreal toad is presently listed as an endangered species by the State of Colorado. The Boreal Toad has also been found by the Colorado Natural Heritage Program (CNHP) to be "critically imperiled" at the state level. Rare breeding populations of boreal toads are found along West Brush Creek and Brush Creek proper.

* Additional Details: West Brush Creek is entirely free-flowing with no diversions or impoundments. The segment of Brush Creek that is recommended has no diversions or impoundments.

23.Cement Creek

* Length: The proposed reach extends from the Cement Creek Trail trailhead to below the Cement Creek Ranch where the creek drops steeply into a narrow canyon (location pictured above).

* Classification: Recreational. There is a road paralleling the Cement Creek riparian area.

* ORVs: Globally imperiled fen. There is an incredibly unique extreme rich fen along Cement Creek. In 2004, the Colorado Natural Heritage Program at Colorado State University recommended to the Colorado Department of Natural Resources that the Cement Creek extreme rich fen is a Potential Conservation Area (PCA). The assessment ranked the Cement Creek PCA as having "very high biodiversity significance" and noted that "[t]his PCA supports a globally imperiled (G2) extreme rich fen plant community and numerous state rare plants." In contrast to the wide distribution of intermediate and rich fens, extreme rich fens appear restricted to a small area in Colorado, primarily the west and north portions of South Park and Cement Creek. Rare plant communities that include a rare green sedge and an extreme rich fen plant community of Pacific bog sedge and alpine meadow rue along with rare plants such as Rolland's bulrush and variegated scouring rush.

* Additional Information: Cement Creek is home to a mixed fishery and sampling conducted by Colorado Parks and Wildlife in 2005 and 1973 identified a Colorado River Cutthroat population in the creek

24.Curecanti Creek

* Length: Headwaters to the Forest Service boundary.

* Classification: Scenic. The upper portion of Curecanti Creek parallels County Road 720 for a short section and then diverges; it is only accessible on foot thereafter.

* ORVs:

* Fishery. The National Park Service (NPS) has identified two creeks as "eligible" that extend onto Forest Service land and were not included as eligible in the Draft Eligibility Evaluation: Curecanti Creek and Coal Creek (both terminating at Blue Mesa Reservoir).⁴⁵ [45 Nationwide Rivers Inventory, Potential Wild and Scenic Rivers within the National Park System: Colorado. Retrieved here,

<https://irma.nps.gov/DataStore/DownloadFile/547106>.] These creeks retain these some of the same unique qualities upstream as identified in the NPS assessment. However, the wild and scenic review notes provided by the GMUG Planning Team and prior efforts show no evidence for why the Curecanti fishery was not considered valuable upstream of the segment identified by the NPS. The WSR Review Notes merely reference 2005 working maps and Comprehensive Assessment Appendix W-2 and explain that "District review verified no ORVs, not eligible" but without providing further justification for this finding. We encourage the GMUG Planning Team to re-examine Curecanti Creek for eligibility to assess the fishery and recreational fishing values that extend upstream of NPS boundaries.

* Additional information: This reach of Curecanti Creek is free-flowing, with no diversions or impoundments. The NPS has agreed that Curecanti Creek should be eligible for wild and scenic eligibility in their assessment of the Curecanti National Recreation Area.⁴⁶[⁴⁶ Ibid] One of the ORVs that makes this creek "eligible" in the NPS analysis extends onto Forest Service land. In the NPS analysis, the NPS identified the downstream segment of Curecanti for its fishery, as well as for its scenic values. Although the scenic values identified in the NPS report are primarily located on the lower segment of the creek, the upper portion shares the same fishery and fishing characteristics identified in the NPS analysis.

25. Coal Creek

* Length: Headwaters to the Forest Service boundary (terminus in the Curecanti National Recreational Area)

* Classification: Wild. The headwaters of Coal Creek are in the remote West Elk Wilderness area and only accessible by hiking trails.

* ORVs: Like Curecanti Creek, Coal Creek should be assessed upstream in the West Elk Wilderness for scenic, fish and wildlife values. The WSR Review Notes simply state that "Nationwide Rivers Inventory portion within Curecanti National Recreation Area (NRA), NPS confirmed no record of being considered eligible, GMUG portion no ORVs identified." However, it is unclear from the review notes provided by the NPS whether the upstream GMUG portion of these reaches were assessed for any ORVs. Given that the lower segment of Coal Creek was found eligible by NPS for Scenic, Wildlife, and Fishery ORVs, the upper portion of the creek should be assessed for similar values. Particularly when values include fishery and wildlife on the lower portion of the reach, these values may extend upstream out of the Curecanti National Recreation Area boundary.

* Additional information: The NPS has identified Coal Creek as eligible for wild and scenic in their assessment of the Curecanti National Recreation Area. They identified three ORVs for a reach that shares many of the same characteristics as the upstream Forest Service segment identified herein. In the NPS assessment it was classified as eligible for scenic, fish, and wildlife ORVs. Segment Headwaters to the Forest Service boundary. Outstandingly Remarkable Values Like Curecanti Creek, Coal Creek should be assessed upstream in the West Elk Wilderness for scenic, fish and wildlife values. The WSR Review Notes simply state that "Nationwide Rivers Inventory portion within Curecanti NRA, NPS confirmed no record of being considered eligible, GMUG portion no ORVs identified." However, it is unclear from the review notes provided by the NPS whether the upstream GMUG portion of these reaches were assessed for any ORVs. Given that the lower segment of Coal Creek was found eligible by NPS for Scenic, Wildlife, and Fishery ORVs, the upper portion of the creek should be assessed for similar values. Particularly when values include fishery and wildlife on the lower portion of the reach, these values may extend upstream out of NRA boundaries.

26. Lamphier Lake

* ORVs:

* Geologic. Like other lakes in Colorado, Lamphier Lake is a glacial tarn surrounded by a bowl of granite and schist. What makes this high alpine lake unique is that this substrate is capped by a layer of unusual limestone, a geologic feature that contributed to the creation of the adjacent Fossil Ridge Wilderness area. This sedimentary overburden is rich in fossils; this unique layer gives the Fossil Ridge Wilderness its name. As shown in the included photograph, this unique layer is immediately above the lake in the corridor area.

- * Fishery. Lamphier Lake is home to a Colorado Cutthroat trout fishery. As noted in our general recommendations, the rarity of cutthroat trout across the historic range and need to provide special protections.
- * Recreation: Lake fishing. In addition to displaying unique geologic features, Lamphier Lake also offers extraordinary fishing. Included here is one recreationalist's experience hiking and fishing Lamphier Lake and the adjacent peak. The first half of the video shows multiple photos of the lake, geographic features from afar, and pictures of healthy cutthroat cruising the lakeshore (<https://www.youtube.com/watch?v=iQE4YEzqljY>).
- * Additional information: Lamphier Lake is an outstandingly beautiful lake surrounded by unique geologic features and providing one of the best backcountry lake angling opportunities in the region. Lamphier Lake is a natural lake that has not been augmented.

27. Big Blue Creek and Slide Lake

- * Length: Headwaters to the Forest Service boundary.
- * Classification: Wild. This portion of Big Blue Creek and Slide Lake are only accessible by hiking trail.
- * ORVs:
- * Recreation Big Blue Creek offers excellent recreational fishing and hiking opportunities. The Big Blue Trail (232) extends along the creek.
- * Geology. There is a natural lake that formed mid-creek after a rock slide tore across the creek in the 1940s. Slide Lake offers excellent recreational fishing for brook and rainbow trout and exceptional hiking. Slide Lake is a unique geologic feature; it is a natural lake that was not created by the same means as others in the area. While most GMUG lakes were carved out glacially, Slide Lake was created by a rockslide.
- * Additional information: Big Blue Creek is free-flowing. Slide Lake was created by a natural geologic feature and is unaltered. Big Blue Creek begins at an elevation of 12,500 feet in the Uncompahgre Wilderness and extends down to 8,700 feet over the course of 25 miles.

28. Dry Fork of the Escalante

- * Reach: Segment of Dry Fork of Escalante Creek that extends through the Blue Spruce Research Natural Area.
- * Classification: Scenic.
- * ORVs:
- * Research. The Dry Fork of the Escalante is a Research Natural Area (RNA) as designated by the Forest Service. The Forest Service defines RNAs as "permanently established to maintain areas of natural ecosystems and areas of special ecological significance." The Forest Service identifies RNAs as serving three important functions, including to serve as ecosystem benchmark areas, for research into how ecosystems function, and to protect biological diversity. The Dry Fork RNA was established in 1981 as 61 acres along the Dry Fork of Escalante creek to protect the surrounding blue spruce (*Picea pungens*) that "exists in narrow stringers along the stream bottom and northwest slopes."

30. Bear Creek (Ouray)

- * Length: Headwaters to Hwy 550
- * Classification: Scenic. There is access from Highway 550 at the lower portion of this segment. The remainder is accessible by foot.
- * ORVs:
- * Recreation (hiking). As described by the Forest Service website: The Bear Creek Trail #241 is designated as a National Recreation Trail because of its unique and spectacular nature. The Bear Creek National Recreation Trail that climbs and follows the creek is river-related; its popularity and notoriety stems from beauty of the cascading waters and waterfalls of Bear Creek.

* Scenery. The scenery is spectacular with deep gorges, thundering waterfalls, dramatic cliffs and golden aspen in autumn qualifying Bear Creek for a Scenic ORV.

* Geologic. Geologic features including volcanic tuff pinnacles, iron-rich intrusions and fossilized tidal ripple marks qualify for a Geologic ORV. The ripple marks specifically (and alone) should qualify Bear Creek for Wild and Scenic. This Precambrian fossilized rock dates between 1.8 - 2.1 billion years old and is the oldest evidence of the shallow sea that once occupied this region. University geology field camps from across the country visit Bear Creek as an example of significant visible geologic record.

* Additional Information: Bear Creek is free-flowing and has no existing impoundments or diversions. The trail begins at Highway 550 and ends at the Yellow Jacket Mine. Switchbacks on the first part of the trail rise steadily for an elevation gain of about 1,000 feet and cross a large talus field of unstable rock. Just after the switchbacks the trail narrows with steep drops offs. It then levels out for some stretches as it turns eastward along the Bear Creek gorge. In the WSR Review Notes, the Forest Planning Team notes that "Recreation, although along a National Recreation Trail, is not river-related" and then proceeds to determine that this segment is not eligible. We disagree with this finding; the unique and spectacular nature of this trail is river-dependent and exists because of the Bear Creek gorge. This gorge was created by the erosional forces of Bear Creek and continues to host the beautiful creek along its bottom.

* Bear Creek was found eligible in the GMUG's 2005 Wild and Scenic Comprehensive Assessment (not adopted) but not in the current draft forest plan. There is no evidence or explanation that conditions have changed diminishing Bear Creek's ORVs that were identified in 2005.