



USDA Forest Service,
 Rocky Mountain Region,
 Attn: Frank Beum, Reviewing Officer,
 C/O Director of Strategic Planning,
 2nd floor, 1617 Cole Blvd. Building 17,
 Lakewood, CO 80401

submitted electronically to http://www.fs.usda.gov/goto/gmug/forestplan_objections

October 28, 2023

Thank you for the opportunity to object to the GMUG National Forest Plan and FEIS. Please accept this objection on behalf of Great Old Broads for Wilderness (Broads) - Northern San Juan chapter, who has been engaged in this plan revision process since the time of Scoping. The Northern San Juan Broadband submitted comments on the draft GMUG Forest Service Plan on November 23, 2021. The following objections pertain to grazing issues and the use of recreational drones.

I. THE RESPONSE TO COMMENTS (VOLUME 3 OF THE FEIS) DID NOT ADDRESS THE OBJECTOR'S RECOMMENDATION FOR ONE OR MORE GRAZING PLAN COMPONENTS TO 1.) PROVIDE THE PUBLIC WITH A REGULAR AND FORMAL OPPORTUNITY TO OFFER INPUT TO LIVESTOCK MANAGEMENT DECISIONS AND 2.) TO PROVIDE A CONSISTENT, FORMAL AVENUE FOR THE PUBLIC TO REPORT, IN WRITING, ANY NON-COMPLIANCE WITH ANNUAL OPERATING INSTRUCTIONS (AOIs) AND/OR GRAZING REGULATIONS AND POLICY, AND TO SUBSEQUENTLY RECEIVE A TIMELY WRITTEN RESPONSE FROM THE USFS WITH ACTION(S) TO BE TAKEN TO RECTIFY THE PROBLEM.

The objectors wrote on page 14 of draft comments dated November 23, 2021:

“Broads also strongly recommends addition of the following plan components:
 Objective: Within one year of plan approval, publish a list of processes available for public participation in livestock management decisions, and how concerns raised by the public will be processed. Currently to our knowledge, the GMUG does not provide the public with formal avenues for communication by which the public can expect a response to grazing problems observed or documented and submitted to the GMUG. Furthermore the GMUG provides no process for responding to suggestions from the public regarding better livestock management on public lands. We recognize the limited capacity of the Forest Service, and therefore strongly recommend that partner organizations and the public are provided with a clear, defined process to contribute information and can rely upon the GMUG's response and potential action commensurate with concerns.”

ARGUMENTS

A. OMISSION OF RESPONSE. Seeing no response to Great Old Broads for Wilderness (Broads) request for the recommended objectives above, the request remains that the GMUG include the following objectives:

Objective: Within one year of plan approval, publish a list of processes available to the public for public participation in livestock management decisions.

Objective: Within one year of plan approval, post on the GMUG website a process by which independent entities documenting non-compliance with permit terms and conditions and/or AOIs, or reporting resource damage due to livestock grazing within the previous 12 months will receive a written response from the GMUG indicating steps that have been or will be taken within a stated time period to address the concern that has been documented, or an explanation as to why no action is necessary.

B. PUBLIC OBSERVATIONS ARE BENEFICIAL TO THE GMUG, PERMITTEES AND RANGE MANAGEMENT.

Given the GMUG's limited capacity to have boots on the ground throughout the grazing season, the public plays a vital role in observing grazing practices and reporting non-compliance and impacts to natural resources. Reporting lost or injured livestock, damage to fences and impacts such as erosion or invasive weeds can contribute to livestock operation success and rangeland health. The public needs clear protocols, regular opportunities, and an efficient procedure to assist the USFS in managing rangelands.

CONCLUSION

The FEIS did not respond to the objector's recommendation and such a response is warranted with benefits to the agency, permittees and rangeland health.

SUGGESTED REMEDIES

1. For every grazing permit renewal process, the public will be provided an in-person and/or online procedure and opportunity to offer recommendations for permit terms and conditions.
2. The GMUG will offer opportunities for public review of draft AOIs for each allotment annually.
3. Final AOIs will be posted online on the GMUG Range webpage 14 days prior to the start of the grazing season.
4. Within one year of plan approval, post on the GMUG website an online tool (and/or other written reporting protocol) for the public to document resource problems and permit violations on allotments and a defined process by which the GMUG will respond to those observations in a timely manner.
5. The above provisions (A-D) will be included in plan components, policies or other venues to ensure they will be followed and afford public engagement opportunities related to grazing.

II. THE PLAN FAILS TO ACKNOWLEDGE THE DISCRETION GRANTED TO THE AGENCY TO ADJUST GRAZING PERMITS AND TERMS & CONDITIONS THAT COULD BENEFIT BOTH THE PERMITTEES AND NATURAL RESOURCES, AND INSTEAD THE GMUG DEFERS TO POLICY THAT, IN ESSENCE, DISINCENTIVIZES PROTECTION AND CONSERVATION OF RANGE RESOURCES.

The objectors wrote on page 15 of draft comments dated November 23, 2021:

“Broads also strongly recommends addition of the following plan components:

Objective: Within 2 years of plan approval, develop processes by which permittees may apply for (a) reduced use for conservation and restoration purposes (while retaining existing permit numbers); and/or (b) voluntary closure of all or part of an allotment based on ecological values, location within wilderness, conflicts with other forest uses, and/or lack of sufficient production for economic sustainability. Permittees who might want to reduce their livestock use in response to conditions on the allotment for which they have a permit are reluctant to do so, in fear of being cited for not running cattle at near-permit limits or having their permit numbers reduced. Amid rising temperature and frequent below-normal precipitation, the current policies provide disincentives for conservation and restoration by the permittee.”

ARGUMENTS

A. INADEQUATE GMUG RESPONSE. In Volume 3, page 170, the GMUG response reads: “There is current policy to address these suggested objectives. FSH 2209.13, Chapter 10, section 15.32 addresses term grazing permits with variable numbers, seasons, and areas to be grazed. Section 16.1 addresses changes in term grazing permits and section 17 addresses non-use for resource protection or personal convenience. Requests for increases in AUMs by the permittee or decreases (ex: from the public) would occur following policy in this handbook as well as from FSH 1909.15.”

The GMUG possesses the authority and discretion to include plan components that would enhance and streamline opportunities for permittees to voluntarily opt to maintain or improve rangeland health and the agency chose not to take advantage of this opportunity at a crucial time when drought, wildfires, rising temperatures, and other climate conditions are negatively impacting resources on allotments and livestock production.

B. THE GMUG SHOULD USE THE DISCRETION THEY POSSESS TO FACILITATE CHANGES IN GRAZING PERMITS THAT COULD LESSEN THE BURDEN ON PERMITTEES AND IMPROVE RANGE CONDITIONS. A review of the FSH sections cited above reveals that a permittee’s application for reduced use or voluntary closure comes with time limits and requirements to continue to justify and report reasons for reductions or non-use and enter into MOUs every 2-3 years. As an organization committed to advocating for rangeland health, and in light of the fact that 29% of the GMUG rangelands are in fair or poor condition, the GMUG is encouraged to streamline and expedite a process whereby permittees can enter into these contracts with the USFS with ease and for periods of time that exceed 5 years and even indefinitely without required review. The GMUG possesses the discretion to include such provisions in the plan components.

C. NEED FOR REGULAR MONITORING OF RANGELANDS NOT MEETING HEALTH STANDARDS. Furthermore, Broads’ recommended the following in our draft comments (page 16:)

“To that end, we suggest the following standard: Allotments in fair or poor conditions and those showing degradation over time must be surveyed/monitored every 2 years and improved range conditions must be achieved within 3 years of the survey.”

To which the GMUG responded (Volume 3, page 175:)

“Improving an area’s range condition class (ex: from poor to fair, or fair to good) occurs in the long term. The best available science shows that it’s not possible to expect to see a change in condition class after 3 years of monitoring, especially if disturbances like drought, fire, etc., occurs either before that monitoring takes place or during that time.”

Though range conditions may require longer than three years to improve, that possibility does not negate the need for regular and consistent monitoring of allotments in fair or poor conditions. If the GMUG doesn’t commit to surveys every two years to maintain records of improvements to or deterioration of rangeland health, the agency is unable to hold permittees accountable for terms and conditions annually and unable to provide guidance or recognition to permittees. The whole purpose of monitoring is to show trends over time which requires periodic monitoring with consistent criteria. The GMUG should not wait over two years nor until there is a suspected change in range condition class before they survey allotments.

D. INCONSISTENCY. If improving rangeland conditions requires more than three years as the GMUG claims in the quoted response above, why place added pressure on livestock producers to restock their allotments within a 2-3 year period or be required to apply again for reduced use or voluntary closure? This inconsistency between time needed to improve rangeland health and FSH protocols for permittee reapplication for changes in term grazing permits is, therefore, illogical.

CONCLUSION

The intention of the recommended objection is to urge the GMUG to make it easier for permittees to voluntarily reduce use of their allotment or seek a voluntary closure without pressure to restock in a time frame less than 5 years. Understanding the pressure on the landscape in these times of drought, wildfires, high winds, and super storms and acknowledging the stress on livestock producers as their livelihood becomes less and less sustainable under these conditions, the USFS should take steps to ease the negative impacts on producers and the natural resources. Though it is not within the scope of this forest plan to modify policy, it is evident that the agency possesses discretion to adjust the grazing permit terms and conditions and AOIs to better serve the permittee and better protect the natural resource.

SUGGESTED REMEDIES

1. Include an objective in the final Plan that streamlines and expedites the process by which permittees may request (a) reduced use for conservation and restoration purposes (while retaining existing permit numbers); and/or (b) voluntary closure of all or part of an allotment based on ecological values, location within wilderness, conflicts with other forest uses, and/or lack of sufficient production for economic sustainability.
2. Include an additional standard FW-STD-RNG-XX that reads: “Allotments in fair or poor conditions and those showing degradation over time must be monitored every 2 years and a reasonable timeframe be established for the improvement of rangeland health.”

III. THE PLAN FAILS TO INCLUDE PLAN COMPONENTS THAT HOLD LIVESTOCK PERMITTEES RESPONSIBLE FOR ENGAGING IN BEST PRACTICES FOR NON-LETHAL PREDATOR AVOIDANCE PRIOR TO ANY EFFORTS AT PREDATOR CONTROL.

The objectors wrote on page 15 of draft comments dated November 23, 2021 in reference to a recommended standard:

“Standard: Predator control to protect livestock cannot be undertaken without documentation of the failure of predator avoidance efforts by livestock operators. There are well-developed and effective herd management methods that enhance co-existence between carnivores and livestock. See the organizations Working Circle <https://www.workingcircle.org> and Wood River Wolf Project <https://www.woodriverwolfproject.org>”

In Volume 3, page 174, the GMUG response reads:

“Livestock operators work directly with the federal agency APHIS Wildlife Services for predator control.”

ARGUMENTS

A. THE GMUG HAS AUTHORITY TO REQUIRE ACTIONS BY PERMITTEES. The above response by the GMUG abdicates all responsibility to Wildlife Services when, in fact, the GMUG has broad authority to craft the terms and conditions of grazing permits and AOIs. Terms and conditions should include best management practices (BMPs) for co-existence and predator avoidance, and permittees should be required to document non-lethal measures taken to minimize wildlife livestock conflicts before any predator control is initiated and before compensation is awarded. These required BMPs should be written into a relevant plan component in the range section of the forest plan.

B. WOLF RESTORATION ELEVATES THE NEED FOR A PLAN COMPONENT REGARDING NON-LETHAL MEASURES. Especially with the restoration of gray wolves to Colorado anticipated in December 2023, including one or more plan components related to predator avoidance and non-lethal measures is essential in the management of rangelands for the health of livestock, the economic benefit of producers, and the sustainability of the wolf population.

CONCLUSION

Given the USFS authority to draft grazing permit terms and conditions and AOIs and ability to utilize this authority to increase permittees’ accountability to practice non-lethal predator control on allotments, one or more standards should be included in the Rangelands, Forage, and Grazing section of the forest plan to ensure compliance with the use of these measures. Though Wildlife Services is authorized to perform predator control, the GMUG need not abdicate their authority to require permittees to implement measures that would safeguard livestock and minimize the possibility of lethal control of predators.

SUGGESTED REMEDY

Include standard FW-STD-RNG-XX: Livestock permittees are required to document and demonstrate use of ongoing predator avoidance techniques and non-lethal control measures on allotments prior to any use of lethal predator control by authorized federal personnel.

IV. THE PLAN AND FEIS FAIL TO INCLUDE A CALCULATION FOR THE SOCIAL COST OF CARBON AND THE SOCIAL COST OF METHANE AS IT PERTAINS TO GRAZING ON THE GMUG FOREST.

The objectors wrote on page 17 of draft comments dated November 23, 2021:

“ Include management direction (and plan components) to increase carbon sequestration and to develop a monitoring protocol for use at the project level with a goal of increasing carbon storage consistently and quickly to address the urgency of our climate crisis. The Social Cost of Carbon and the Social Cost of Methane should be used in this analysis.”

To which the GMUG responds (Volume 3, page 133:)

“ The 2023 CEQ Guidance directs agencies to exercise judgment when considering whether to apply this guidance to the extent practicable to an ongoing NEPA process. The 2023 CEQ Guidance was issued after the publication of the draft EIS and public comment period, which closed in 2021. The EIS analyzes the two fundamental considerations required by the 2023 CEQ guidance: (1) the potential effects of a proposed action on climate change, including both greenhouse gas (GHG) emissions and reductions from the proposed action (see both Carbon Stocks and Air Resources sections of the FEIS), and (2) the effects of climate change on the proposed action and its environmental impacts (see Climate section of the FEIS, Vol. 1, Chapter 3, Part I, and numerous resource sections throughout Chapter 3). However, while the EIS incorporates previous versions of CEQ guidance (CEQ 2016), the EIS does not include all recommendations in the 2023 CEQ guidance, such as applying social cost of estimates to the incremental metric tons of each individual type of GHG emissions expected from the proposed action and its alternatives. The GMUG has exercised its judgment that applying these aspects of the 2023 CEQ guidance is not practicable at this stage of the process.”

ARGUMENTS

A. THE SOCIAL COST OF CARBON IS A SIGNIFICANT COST BORNE BY THE PUBLIC AND SHOULD BE CALCULATED. Though the 2023 CEQ Guidance (Guidance) does not require calculation of the social cost of carbon (SCC) or the social cost of methane (which is typically converted to SCC,) the Guidance strongly recommends NEPA processes include such calculations, based upon “a finding that declared that the changes in our climate caused by elevated concentrations of GHGs in the atmosphere are reasonably anticipated to endanger the public health and welfare of current and future generations.” The Guidance references the significant impacts “on our ecosystems, infrastructure, human health, and socioeconomic makeup” with a disproportionate impact on vulnerable communities (2023 CEQ Guidance, page 1200.) For the response to comments above to justify the GMUG’s omission with the conclusion that such a calculation is “not practical at this stage of the process” shirks a responsibility to provide the public with this important information.

B. AT A MINIMUM THE SOCIAL COST OF CARBON SHOULD BE CALCULATED IN ALL NEPA DOCUMENTS INVOLVING LIVESTOCK ON THE GMUG PARTICULARLY SINCE THE CALCULATION IS QUITE SIMPLE. Kaufmann et al. (2022) illustrate calculation of SCC for grazing on public lands. (Table 1) using USEPA data on annual methane and nitrous oxide emissions by individual types of livestock (EPA 2018; see updated EPA 2023.) SCC monetizes quantified enteric emissions and manure emissions of methane and nitrous oxide from livestock, which are two potent greenhouse gases (GHG.) These emissions significantly contribute to global warming. Translation of weights of GHG emissions into the economic costs these emissions impose globally in terms of climate disruption (e.g. seawater entry into coastal drinking water) places abstract numbers into relatable context.

C. IN ADDITION, THE SOCIAL COST OF CARBON for the different alternatives related to Timber Suitability SHOULD BE CALCULATED. The acres of GMUG lands found suitable for timber varies greatly across the four alternatives. (Volume 2, Appendix 8, page 9.) To be transparent with the public, the FEIS should include the SCC for each alternative to reflect the real costs of timber extraction in our region.

REFERENCES

Federal Register/Vol. 88, No. 5/Monday, January 9, 2023

Kauffman JB, Beschta RL, Lacy PM, Liverman M (2022) Livestock on public lands of the western USA accentuate effects of climate change: Implications for mitigation and adaptation. Environmental Management. <https://doi.org/10.1007/s00267-022-01633-8>

(EPA) United States Environmental Protection Agency (2018) A-250. Inventory of U.S. greenhouse gas emissions and sinks: 1990-2016. United States Environmental Protection Agency.

EPA (2023). Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2021. U.S. Environmental Protection Agency, EPA 430-R-23-002. <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2021>

CONCLUSION

The Social Cost of Carbon is a significant and real cost borne by the American public as a result of management decisions pertaining to the GMUG Forests. These costs are specifically significant when considering timber suitability and grazing allotments. The Plan needs to calculate these costs to better evaluate management practices and to be transparent with the public regarding the true costs of management decisions and plan implementation.

SUGGESTED REMEDY

At a minimum, the FEIS should include calculations for the Social Cost of Carbon for cattle and sheep grazing across the GMUG as well as for timber suitability for each of the four alternatives.

V. THE PLAN DOES NOT PROVIDE ADEQUATE PROTECTION OF WILDLIFE AND PEOPLE FROM RECREATIONAL DRONE ACTIVITY

Objector raised this issue in our comments on the draft plan dated November 23, 2021 beginning on page 19 under Recreation. Our recommendations for revisions to Forest Service plan components included:

Broads supports the most restrictive plan components relevant to unmanned aircraft systems (aka drones) due to their impacts on fauna (including avian species) and the disturbance to quiet users. Even though the FAA has ruled that flying drones over people is safe, Broads believes that our public lands are for all users and the use of drones over visitors is intrusive and incompatible with a quality experience. We appreciate the prohibitions included in STDN-REC-09 and recommend addition of the following management areas to those prohibiting drones: existing and proposed (in Alt D) Special Management Areas, Colorado Roadless Areas, and Wildlife Management Areas.

In the Draft EIS/Workplan the FS proposed restrictions on drone use:

FW-STND-REC-09: All unmanned aircraft systems, also known as drones, flown from and above National Forest System lands must comply with Federal Aviation Administration and U.S. Forest Service, regulations, and policies. Public recreational use, including launching, landing, and operating of unmanned aircraft systems shall be prohibited within MA 1.1 (Wilderness), 1.2 (Wilderness to be Analyzed), 2.1 (Special Interest Areas), 2.2 (Research Natural Areas), 4.1 (Mountain Resorts), 4.2 (Recreation Emphasis Corridors), at developed recreation sites (campgrounds, designated campsites, trailheads, visitor centers, parking lots, overlooks, day-use areas, boat launches), on Forestwide roads and trails, and at trail summits. Consistent with Federal law, drones shall be prohibited to be flown overhead any visitor to National Forest System lands. **Exception:** Recreational operation of unmanned aircraft systems via special use permit could involve flight over or close to occupied use areas under certain circumstances, only if all permit requirements ensure compliance with Federal Aviation Administration and Forest Service laws, regulations, and policies.

The Final EIS/Workplan reduced significantly the areas where drones are restricted:

FW-STND-REC-09: All unmanned aircraft systems, also known as drones, flown from National Forest System lands must comply with laws, regulations, and policies of the Federal Aviation Administration, the State of Colorado, including Colorado Parks and Wildlife, and the U.S. Forest Service. In accordance with Federal law, public recreational use, including launching, landing, and operating of unmanned aircraft systems, shall be prohibited within Management Area 1.1 (Congressionally Designated Wilderness). Specific to the GMUG, public recreational use, including launching, landing, and operating of unmanned aircraft systems, shall be prohibited within Management Areas 1.2 (Recommended Wilderness) and 4.1 (Mountain Resorts), and developed recreation sites. **Exception:** The forest may authorize, via special use permit, recreational operation of unmanned aircraft systems within developed recreation sites and Management Area 4.1 (Mountain Resorts) if all permit requirements ensure compliance with the existing legal framework at the time of the special use authorization. (Revised Land Management Plan at 80)

ARGUMENTS

A. The Coalition disagrees with the statement in the FEIS that “managing the potential disturbances of wildlife by drones is not within the scope of the revised plan standard...” (I FEIS at 546.) The Forest Service makes conflicting statement thorough out the documents about the FS obligation to protect wildlife by restricting drone use.

Though the FAA has regulations for drone usage, those regulations do not consider protections of, nor impacts on, NFS lands, resources, or visitors, which necessitates the addition of Plan direction. (III FEIS, p. 183, #9; emphasis added)

The Forest Service is also proposing direction to protect wildlife and wilderness values that are outside the scope of FAA rules (III FEIS at 183, #7; emphasis added)

It is clear that the FS has, and attends to fulfill, the obligation to manage drone use for the protection of wildlife, habitat, and people.

B. The FS provided only vague, not scientifically based reasons, for allowing more drone use, in the responses to comments on drones in the FEIS, Volume 3, Response to Comments. The intent of the Forest Service appears to be to open up a majority of the GMUG to allow for recreational drone use, without due consideration of wildlife:

FW-STND-REC-09 has been modified to provide protections for wildlife in general, but it does not categorically prohibit drones in MA 3.2. (III FEIS at 183, #11; emphasis added)

Initial proposed Plan direction has been modified to more conditions-based guidance rather than prohibiting drones on large swaths of the landscape. The new proposed direction is consistent with Forest Service and FAA guidance, provides protections specific to the GMUG NFs and its visitors, and allows for use of drones in many areas of the Forest. (III FEIS at 184, #12; emphasis added.)

The GMUG strives to create balanced Plan direction regarding drones, providing opportunities for both quiet uses and the use of drones where appropriate. The Recreation Management Approach to recreational use of unmanned aircraft systems on National Forest System lands is consistent with national Forest Service guidance. FW-STND-REC-09 provides direction to protect specific GMUG resources such as wilderness areas and areas to be managed as wilderness, establishes conditions for use around wildlife populations, and prohibits operation in crowded areas while still allowing drones to be used under appropriate circumstances. (III FEIS at 184 #16; emphasis added.)

C. Part of the changes from Draft Plan to Final Plan includes the addition of language that the Forest Service will follow Colorado Parks and Wildlife (CPW) guidance on NFS lands to lessen the impact of drones on wildlife. (III FEIS at 183, # 10).

...Colorado Parks and Wildlife has drone regulations to manage this potential impact [to wildlife]. (Draft Record of Decision at 23.)

FW-STND-REC-09 now protects wildlife by aligning with Colorado Parks and Wildlife guidance while protecting Forest visitors and infrastructure by prohibiting use in populated areas such as campgrounds and visitor center parking lots. (III FEIS at 184, #16; emphasis added.)

The FS refers to CPW regulations, which support regulating drones throughout CPW controlled land to protect wildlife. Here are the pertinent sections of CPW rules and regulations:

State Wildlife Area Access Rules. Except when specifically authorized, the following activities are prohibited on lands, waters, frozen surfaces of waters, rights-of-way, buildings or devices under CPW control: #22. To launch, land or operate aircraft or NEW unmanned aerial vehicle, including, but not limited to, drones and model airplanes. (State Wildlife Area Access Rules. Colorado Parks and Wildlife, 2023 Colorado State Recreation Lands. <https://cpw.state.co.us/Documents/RulesRegs/Brochure/lands.pdf>)

Colorado State Parks Regulation 406-0-004C, Aids in Taking Wildlife: It shall be unlawful to use a drone to look for, scout, or detect wildlife as an aid in the hunting or taking of wildlife. (Colorado Parks and Wildlife 2 CCR 406-0-IV-#004-C)

Drones and wildlife harassment. "...drone operators should be aware that it is illegal to harass wildlife...The definition of harassment is causing any change in the behavior of the wildlife. So if the animal runs, if it changes direction, if it stops eating, that's harassment. Any change in the animal is considered harassment and it's illegal." (Colorado Parks and Wildlife urges public to avoid harassing wildlife when using drones, 2021.

<https://cpw.state.co.us/Lists/News%20Releases/DispForm.aspx?ID=3208>)

Therefore, since CPW, through their regulations and statutes, provide restrictions on drone use to protect wildlife, the Forest Service should also include similar drone restrictions for the protection of wildlife.

D. The FS ignores all scientific evidence for risks to wildlife from drones.

One review comment included the statement, "Some commenters question the need to limit drones to protect wildlife." (III FEIS at 183, #9) The FS did not provide any response with science-based information to address this issue.

The Forest Service guidance from the reference mentioned in the 2023 Revised Land Management Plan included the wording:

Do not fly over or near wildlife as this can create stress that may cause significant harm and even death. Intentional disturbance of animals during breeding, nesting, rearing of young, or other critical life history functions is not allowed unless approved as research or management.
(<https://www.fs.usda.gov/visit/know-before-you-go/recreational-drone-tips>)

Information is available on the impacts of drones on wildlife. The following three references all discuss negative impacts of drones on wildlife:

- Mulero-Pazmany M., S. Jenni-Eiermann, N. Strebler, T. Sattler, J. J. Negro, and Z. Tablado, 2017: Unmanned aircraft systems as a new source of disturbance for wildlife: A systematic review. *PLoS ONE* 12(6): e0178448. <https://doi.org/10.1371/journal.pone.0178448>
- Rebolo-Ifrán N, M. Grana Grilli, and S. A. Lambertucci, 2019: Drones as a Threat to Wildlife: YouTube Complements Science in Providing Evidence about Their Effect. *Environmental Conservation* 46: 205–210. doi: 10.1017/S0376892919000080
- Ditmer, M. A., J. B. Vincent, L. K. Werden, J. C. Tanner, T. G. Laske, P. A. Iaizzo, D. L. Garshelis, and J. R. Fieberg, 2015. Bears Show a Physiological but Limited Behavioral Response to Unmanned Aerial Vehicles. *Current Biology*, 25(17), 2278-2283. <https://doi.org/10.1016/j.cub.2015.07.024>

The Forest Service should include science-based information on how well the agency's plan provisions on drone use will protect wildlife in all areas of the GMUG.

E. The Forest Service did not provide details on what is meant by Forest Service guidance on drones, and how this guidance is science-based to protect wildlife and people. Here are the pertinent sections which mention, but do not provide details on, Forest Service guidance:

Initial proposed Plan direction has been modified to more conditions-based guidance rather than prohibiting drones on large swaths of the landscape. The new proposed direction is consistent with Forest Service and FAA guidance, provides protections specific to the GMUG NFs and its visitors, and allows for use of drones in many areas of the Forest. (III FEIS at 184, #12; emphasis added.)

The Recreation Management Approach to recreational use of unmanned aircraft systems on National Forest System lands is consistent with national Forest Service guidance. (III FEIS at 185, #17; emphasis added.)

F. WMAs in the Plan should have restricted drone use, due to the intent in those areas to protect wildlife, following the example of the Colorado Parks and Wildlife.

The FS has categorized WMAs for protection of wildlife:

MA-DC-WLDF-01: Large blocks of diverse habitat are relatively undisturbed by route and associated recreational use, providing security for the life history, distribution, migration, and movement of many species, including big-game species. Habitat connectivity is maintained or improved as fragmentation by routes is restricted. (Revised Land Management Plan at 118.)

The intent of the WMAs is similar to the CPW definition for Colorado's State Wildlife Areas.

State Wildlife Areas (SWAs) are state- or privately-owned lands that offer wildlife-related recreation to the public. While most activities focus on hunting and fishing, each SWA has different allowed activities, based on location and available resources. These parcels of SWA land are paid for by sportspeople and managed under state law by Colorado Parks and Wildlife employees for the benefit of wildlife. Colorado Parks and Wildlife manages about 350 WSA lands around the state. Drone use is not allowed in SWAs. (State Wildlife Areas, Colorado Parks and Wildlife, 2023 Colorado State Recreation Lands. <https://cpw.state.co.us/Documents/RulesRegs/Brochure/lands.pdf>.)

The Forest Service looks to Colorado Parks and Wildlife for guidance on how to protect wildlife. Since CPW restricts drone use in State Wildlife Areas, the Forest Service should follow this lead, and should restrict drone use in all WMAs.

Similarly, drone use should be restricted in Colorado Roadless Areas (CRAs). A number of RAs are also WMAs, so this would fall under the Coalition's request for drone restrictions in WMAs. It would be administratively difficult to restrict drone use in only the portions of CRAs which overlap with WMAs, so drone use needs to be restricted in all roadless areas.

The Forest Service recognizes that Colorado Roadless Areas should protect wildlife:

Desired Conditions

MA-DC-CRA-01: Colorado roadless areas encompass large, relatively unaltered and unfragmented landscapes characterized by high-quality scenery, soil, air, and water; diverse, native plant and

animal communities; functional, connected habitat for terrestrial and aquatic wildlife species, outstanding backcountry recreational experiences, and other roadless area characteristics, as defined at 36 CFR 294.41. (Revised Land Management Plan at 117.)

G. The FS in the FEIS does not discuss or provide any evidence to evaluate and address how humans are impacted by drone activity in the recreational setting.

The Forest Service Drone guidance document states:

Keep your UAS away from populated and noise-sensitive areas, such as campgrounds, trail heads, and visitor centers. Do not fly over congressionally designated wilderness areas or primitive areas as many people seek these places for the opportunities for solitude and quiet that they provide. (<https://www.fs.usda.gov/visit/know-before-you-go/recreational-drone-tips>.)

H. Wilderness areas are not the only places where trail users look for solitude, or at least a minimum of human activities. This is recognized by the FS in the desired conditions for Colorado Roadless Areas:

Desired Conditions

MA-DC-CRA-01: Colorado roadless areas encompass large, relatively unaltered and unfragmented landscapes characterized by high-quality scenery, soil, air, and water; diverse, native plant and animal communities; functional, connected habitat for terrestrial and aquatic wildlife species, outstanding backcountry recreational experiences, and other roadless area characteristics, as defined at 36 CFR 294.41.

(Revised Land Management Plan at 117; emphasis added.)

The FS discusses in the Revised Plan the designations of ROS allocations. The allocation of semi-primitive non-motorized includes wording about trail density and human encounter levels.

Table 13: Semi-primitive non-motorized setting prescription for the desired summer and winter recreation opportunity spectrum (ROS), Social setting: High probability of solitude, closeness to nature, self-reliance. High to moderate challenge and risk. Typically 6-15 encounters with other parties on trails. Six or fewer parties visible from camping sites. (Revised Land Management Plan, Table 13 at 91.)

Drone use, which is controlled by people, should be considered, and counted, as human encounters. If drone use is not controlled through forest plan-level restrictions, it is likely that some ROS allocations will exceed the thresholds for human encounter levels. Therefore, drone use should be restricted in all areas with a ROS allocation of semi-primitive non-motorized.

REFERENCES

See list in V. section D above. All references will be sent to the Forest Service with this objection.

CONCLUSION

The Forest Service made a significant change in the approach to drone use from the Draft Plan to the Final plan. In the Final documents, only a small segment of the GMUG is protected from drone use. The Forest Service did not provide science-based information on how the proposed plan will protect wildlife and people from the impacts of drone use. The Forest Service states they will rely on Colorado Parks and Wildlife guidance, which

would mean providing more restrictions on drone use for wildlife protection and visitor use safety and enjoyment. The Forest Service needs to provide more information on how it came to its decision, using science-based details.

SUGGESTED REMEDIES

1. All WMAs and Colorado Roadless Areas should be protected by drone restrictions and be listed in FW-STD-REC-09.
2. The ROS allocation areas of semi-primitive non-motorized should have drone restrictions because drones should be considered human encounters.

Thank you for your attention to these objections on behalf of Great Old Broads for Wilderness-Northern San Juan Broadband.

Sincerely,

Sallie Thoreson
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