June 14, 2024

Rio Grande National Forest
Att: Winter Planning Team
Submitted Via Portal only

Re: Winter Suitability/OSV Planning

Dear Planning Team Members;

Please accept this correspondence as the input of the motorized community with regard to the public comments on the proposed OSV suitability mapping that has been provided. There is a long history of winter recreation on the Forest without conflict between uses and this has to be the starting point for analysis. We are aware that recently planning efforts on the Forest has resulted in significant asserted conflict on issues, but this has not reflected the historical level of challenges facing the Forest. The motorized community has enjoyed a long partnership with the Forest and has always enjoyed proactively addressing challenges on the forest in a collaborative manner.

It has been the Organizations experience that while USFS planners have effectively managed OSV recreation for decades without resource impacts, they are also hesitant to rely on this successful management history as the basis for future planning. We hope the information below supplements this generally accepted knowledge with a high level of scientific certainty and encourages managers to avoid large scale changes to OSV management in the hope of avoiding possible impacts to resources or a lack of scientific certainty around the commonly understood conclusions that managers have relied on for decades in OSV management.

The Organizations are aware the scale of information and scope of information provided on these issues may be much larger than expected. This response is being provided in the hope

of streamlining and speeding up the planning process as much as possible. While there is a large amount of information provided on these issues, we have significantly more information on many of these issues. There are also many topics we did not provide information on as we are hoping these are comparatively minor in scope. We hope this information triggers an ongoing dialogue with the forest on issues they are encountering in the Planning process so these resources can be effectively used. We have devoted significant resources towards avoiding overly sensational resources or information that lacks basic credibility. In addition to this resource specific information, we have also provided information we believe is relevant to planning, such as the financial sustainability of our clubs grooming support through the CPW grooming program, which we are in the process of updating currently. We hope these efforts and information provide an accurate picture and vision for the winter grooming efforts of our clubs, as this is the primary method all public users rely on to access the winter backcountry on the forest.

1. Who We Are.

Prior to addressing the specific concerns, the Organizations have regarding the Proposal, we believe a brief summary of each Organization is needed. The Colorado Off-Highway Vehicle Coalition ("COHVCO") is a grassroots advocacy organization of approximately 250,000 registered OHV users in Colorado seeking to represent, assist, educate, and empower all OHV recreationists in the protection and promotion of off-highway motorized recreation throughout Colorado. COHVCO is an environmental organization that advocates and promotes the responsible use and conservation of our public lands and natural resources to preserve their aesthetic and recreational qualities for future generations. The Trail Preservation Alliance ("TPA") is a largely volunteer organization whose intention is to be a viable partner, working with the United States Forest Service (USFS) and the Bureau of Land Management (BLM) to preserve the sport of trail riding. The TPA acts as an advocate of the sport and takes the necessary action to ensure that the USFS and BLM allocate to trail riding a fair and equitable percentage of access to public lands. Colorado Snowmobile Association ("CSA") was founded in 1970 to unite the more than 30,000 winter motorized

recreationists across the state to enjoy their passion. CSA has also become the voice of organized snowmobiling seeking to advance, promote and preserve the sport of snowmobiling through work with Federal and state land management agencies and local, state and federal legislators telling the truth about our sport. CORE is an entirely volunteer nonprofit motorized action group out of Buena Vista Colorado. Our mission is to keep trails open for all users to enjoy. For purposes of these comments, TPA, CSA, CORE and COHVCO will be referred to as "the Organizations."

2a. Our partnership with the Rio Grande NF.

Our Organizational representatives have been active participants in winter travel management decisions and planning across the western United States, including the 5 forests in California that were forced to review their winter travel decisions after the release of the 2012 Planning Rule. As a result of the years of involvement in partnership with the USFS addressing winter travel management issues, we have developed a large database of information. Our partnerships with the Rio Grande NF extend far beyond the recent USFS efforts addressing winter travel, as the grooming clubs on the Rio Grande NF were some of the oldest clubs in the State and were some of the first to embark on a public benefit grooming effort that they funded.

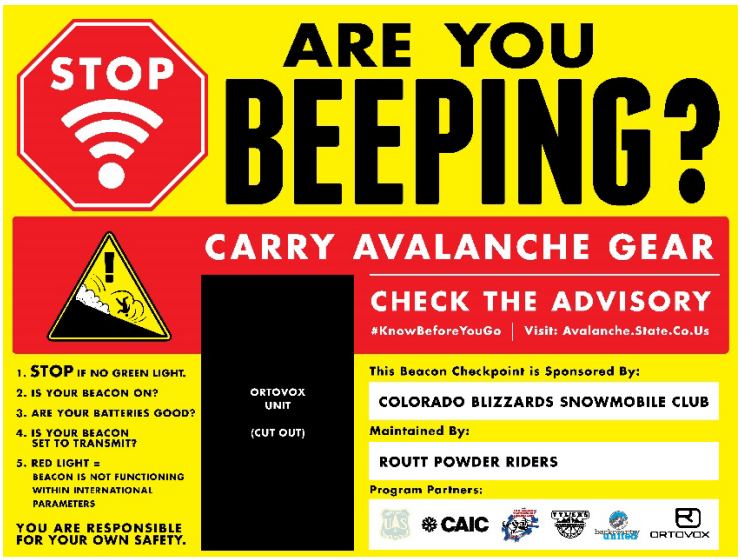
The Colorado Snowmobile Association has partnered with several local snowmobile clubs on the RGNF to provide hundreds of miles of groomed winter access to the Forest for decades for all type of uses to the public free of charge. These grooming efforts have been provided through special recreation permits issued by the USFS and have reflected the partnerships with users that the USFS is now moving towards as their management model more generally. These local club partners include the South Fork Powder Busters, Creede Snow Country Explorers, Wolf Creek Trailblazers out of Pagosa and Lake City's Continental Divide Snowmobile Club. The hundreds of miles of groomed winter routes on the Forest provided by these Clubs support motorized recreation, cross country skiing, snowshoeing, ice fishing, dog sledding and many other forms of recreation. This groomed network also provides consistent and critical access for search and rescue teams, various 911

infrastructure such as radio repeaters, administrative access for efforts such as wildlife counts and private lands access.

The consistency of our efforts in providing public access for a wide range of usages stands in stark contrast to the trail maintenance provided to the public by some permitees on the Forest, who only chose to maintain their routes when it suits their own needs. We do not believe it is appropriate to discuss this group by name but we are also confident managers will not need us to clarify the group at issue. We are aware that both managers and representatives of our clubs have gotten complaints from the public who erroneously believe the USFS or our clubs are responsible for maintaining these routes, when these routes are not maintained by either group. When there is snow that is easier for the group to maintain, routes on the Forest are often ignored until the lower more easily accessible routes are no longer holding snow. Too often these routes are simply treated as a private resource for that Organizations interests and any impacts from other uses is seen as something other than a reason to regroom the routes. This is a stark difference when compared to the efforts of CSA clubs and the motorized community that works consistently to provide opportunities for all and funding for the USFS to hire staff and buy equipment for all seasons.

Our recent winter partnerships with USFS extend far beyond grooming trails. Our efforts have included expansion and improvement of the Tucker Ponds parking area. CSA is also proud to partner with local interests such as Mountain Skillz, who provides a wide range of educational and guiding services, globally recognized avalanche training and serves as a hugely positive role model for all forms of recreation. Our summer based partnerships have included funding to support good management crews on the Divide and District and also a heavy maintenance crew on the Divide RD. CSA in partnership with the USFS and Tylers Backcountry Awareness, our club based in Fort Collins dedicated to avalanche safety, has placed almost three dozen avalanche beacon checkpoints throughout the western United States. These units are funded by local partners and maintained throughout the season by

local snowmobile clubs. Several of these checkpoints are on the Wolf Creek Pass planning area and help remind all users of the winter backcountry to turn on their avalanche beacons and remind them that batteries in these units need to be periodically replaced. These signs have evolved periodically but generally are represented by the following photo.



It has been an interesting experience to discuss these signs as many of the public simply do not understand how these signs were developed or who is maintaining these signs. We hope the presence of these electronic checkpoints remind all users of the critical need to check their beacon and other avalanche equipment every time they go in to the winter backcountry. We have partnered with several nonmotorized groups to provide this type of resource in other areas of the state as well.

The motorized community believes our partnership with managers is somewhat unique in the Colorado, as we attempt to work to resolve the ever evolving and changing challenges facing public lands in a proactive and effective manner. This stands in stark contrast to many other users and interests who simply seek to create new problems and challenges on public lands that will force closures or will result in opportunities for a consistently reducing portion of the public. This difference is profound in its application as the Colorado motorized community, in partnership with CPW and the programs we have voluntarily created is

seeking to address issues like how to provide additional funding to the forest for basic operations. We are working hard to address issues like making positions more appealing for new hires, moving from a seasonally based good management crew to a permanent seasonal model of hiring, streamlining saw training, providing motorcycle certifications and trail trainings for the seasonals that the forest hires through the OHV program.

CSA is aware that many of these examples are summer based, it is highly relevant as this same mentality is hugely present in the winter program as often in other states the USFS is largely performing grooming of winter routes, that may be supplemented with volunteers. The Colorado model is foundationally different as the clubs own and operate the groomers operated under special use permits. Last year our member clubs provided more than 20,000 volunteer hours to support grooming on USFS lands across the State in addition to the almost $2 million in direct funding that our voluntary registration program provides for winter grooming operations. While the CPW program provides significant funding, CSA and our clubs provide significant additional funding and resources, such as the purchase of annual liability insurance for grooming programs throughout the state. Last year this insurance cost more than $50k to purchase for the year. This is a cost that can be easily overlooked and is incurred before a single groomer starts or fuel is purchased to operate this equipment.

In Colorado, winter grooming is almost entirely performed by CSA clubs which is a profound difference from most other states and one we hope is providing additional resources to the Forest to allow them to perform basic operations. We believe this type of partnership is easily overlooked and with many new faces on the forest, may not be well known. We are also aware of the rather grim nature of the agency operational budgets currently being faced and the even more grim outlook being faced moving forward. We are hoping that the large amount of information we are providing in these comments will allow possible issues to be quickly addressed with high quality information and effective winter travel plan. Efficient development of an effective plan will allow limited resources to be used for active management of resources on the Forest.

2b. Our 50 year partnership with CPW.

We are providing this section of our comments to allow the planning team to understand where our partnership is currently and where we are hoping to go with the partnership over the life of the winter travel plan being developed. CSA and our member clubs have partnered with CPW for more than 50 years for the operation of the winter grooming program. CSA and CPW recently secured passage of legislation to clarify the need for out of state residents to obtain a permit for use of a snowmobile in Colorado and that the $.25 Search and Rescue surcharge was required on the sale of all permits. [1] This legislation requires the out of state permit, made mandatory again by SB24-56, be set by the CPW commission by January 1, 2025. We are also working with CPW to increase the snowmobile registration and permit fees within this timeline to provide more funding to support grooming and improvement of other infrastructure such as parking lots and toilets at winter trail heads. CSA has supported moving the registration/permit fee from the current level of $30 to a $50 annual cost. This will bring us into alignment with most states around Colorado. We hope that this new funding will be an important resource for the winter community moving forward and we believe the health of this partnership and new funding streams to support efforts on the RGNF that we provide to the public free of charge is an important component of the success of this planning effort.

Our partnership with CPW extends beyond the operation of the winter grooming program. CSA has been working with CPW to develop winter educational materials on the Colorado Trail Explorer (COTREX) platform. We have worked with CPW to accurately inventory existing groomed routes and provide accurate snowfall information in various areas of the State. We are also working to make real time avalanche forecast information available on COTREX platform. We hope this information provides safety to all users. CSA is also aware that CPW

[1] *See*, SB24-56

administrative funds created through the snowmobile registration program also supports the Winter Skills training efforts (WISTA) that CPW has run for years. WISTA training events allow basic education of CPW and USFS staff to obtain basic training on winter survival, the operation of snowmobiles in a wide range of conditions and teach them how to recover snowmobiles when they become stuck.

3. Winter travel triggers

The Organizations were active participants in the development of the winter travel rule nationally and support the requirement of sufficient snow for operation of a snowmobile that the rule provides. While we are aware that sufficient snow has questions, it is superior to other tools we reviewed. In our opinion, hard start and stop dates are often unrelated to conditions on the ground. This disconnect results in a double loss of opportunity for our community as any early snow cannot be ridden as the snowfall has occurred before the start date for winter travel. This is a lost opportunity for our community, which has occurred on the planning area on many years. If there is no snow on the start date for winter travel that is applied, we still cannot ride as there is no snow. Again, this is another lost opportunity.

Candidly, CSA believes that the dates that have been relied on for many winter travel plans are the result of other management models being poorly applied to winter travel management issues, than a reasonable resolution of issues facing winter travel. Hunting seasons are based on dates, which resulted in seasonal closures for OHV usage. OHV management guided a lot of winter travel decisions. This process is understandable in how and why it developed but also is probably a model that really does not relate well to winter travel decisions and recreational experiences. The Organizations would also urge the office to avoid novel standards, such as use of a minimum altitude, as was attempted on several forests in California. These efforts created more issues than they resolved.

The use of snow depth as a trigger for starting winter travel management decisions allows for more management flexibility to address local access improvements. The Organizations support lower snow depths for the use of roads for OSV travel when compared to off trail or

cross country usage. USFS roads or improved trails are hardened for the use of wheeled vehicles, meaning low pressure vehicles such as snowmobiles, pose little risk of damage to the surface of the roads. This means there is less snow needed to protect these surfaces. These lower snow depth requirements for the use roads also provide an important opportunity for the snowmobile community. Many riders will seek out roads with minimal amounts of snow early in the year to confirm their snowmobile is mechanically reliable and ready for the season.

Riding in conditions such as this allow our members to ensure that mice have not eaten wiring, fuel has not gone bad, drive belts have not hardened in the summer heat, miscellaneous important bolts have not worked loose in storage or spark plugs need to be changed. These conclusions can be reached and resolved quickly under these conditions. It is a lot easier to address these issues on a road with minimal snow when compared to more remote areas that could have feet of snow later in the year. It is not out of the realm of possibility that if issues such as these are encountered under the wrong conditions, this could result in a call to search and rescue, which only taxes exceptionally limited management resources even further. This is an important opportunity for our members who can later enjoy the rest of the riding season with comparable confidence that their equipment will function reasonably well. The need for sufficient snow in these situations is basically self-enforcing as all sleds manufactured in the last decade or more are equipped with an automatic shut off feature if the machine tried to overheat. The machine simply shuts off and you wait for it to cool if there is not enough snow.

4(a) Snow depth as a trigger for winter travel decisions.

We support the flexibility provided in the Proposal on measurement of snow depth and when usage is allowed in relation to snow depths.[2] Measurements of snow depth has proven to be one of the major challenges we have encountered in developing winter travel plans on other

[2] *See,* Proposal at pg. 3.

forests that are using this standard. The larger amounts of flexibility to address changing snow depth is vigorously supported by our Organizations. Often the Rio Grande receives such immense depths of snowfall to make this a minor concern for most of the season but we are compelled to address this.

While the RGNF received large amounts of snow, understanding the behavior of snow under a wide range of mechanical and natural processes is important to understanding the decisions being made. Based on our experiences with winter planning on other forests throughout the region, we are aware that the behavior of snow under a wide range of conditions has proven to be a major planning issue for certain interests. These analysis seem to always start from an erroneous assumption that no one has researched the compaction and behavior of snow, both naturally and as a result of outside factors. This simply could not be further from the truth as numerous highly credible organizations have devoted large amounts of research to snow properties and behavior including the avalanche research community, land managers, the US military and private industry.

The mechanical properties of snow and the behavior of snow under a wide range of natural and manmade forces has been studied by the Army Corp of Engineers since the mid 1940's. This research was performed by their Cold Regions Research and Engineering Laboratory. ("CREEL").[3] A large amount of this information was deemed classified and was outside the public purview, but this information recently has been declassified and available for public consumption. The development of this information appears to have been driven by many factors, which have evolved over time. In the 1940's through the 1980's this information was developed for national defense purposes and focused on the ability to traverse snow effectively and the development of winter roads to supply remote outposts to defend the country from Arctic invasions through Alaska. In the 1990's to current, this information was developed to facilitate exploration of the Antarctic Continent and involved targeted research

[3] More information on this office is available here About Cold Regions Research and Engineering Laboratory (CRREL) (army.mil)

around landing loaded transport planes on snow runways in Antarctica. Most recently the research of snow behavior has targeted the development and operation of autonomous vehicle systems and understanding the consistency of snow from season to season. Much of this newer research from the Army Corps of Engineers has been performed in Colorado on forests immediately adjacent to the Rio Grande NF, making the conclusions highly relevant to the Rio Grande Planning efforts.

The Organizations have also included extensive additional research around the behavior of various types of snow under a range of forces that roughly falls into four general categories. These four categories are snow compacted by man; 2. Snow compacted by natural forces; 3. Uncompacted snow subjected to high pressure vehicles; and 4. Uncompacted snow subjected to low pressure vehicles. We hope this new information is helpful.

The Organizations have investigated the wide-ranging scientific analysis that has been previously conducted regarding the application of force to snow in both an uncompacted and compacted nature. While this process has been long and costly to undertake, this research has also been highly fruitful as it yielded a large body of work from the Army Corp of Engineers regarding activities they have been conducting in the Antarctic continent since the 1940's.[4] It is significant to note that while the research methodology and management standards have dramatically evolved over the life of this research, the basic conclusions have remained highly consistent over time, mainly that snow is a highly effective buffer of force. Unfortunately, snowmobiles were found early in research process to not meet the purpose and need of the project due to the inability of early snowmobiles to carry large amounts of cargo, inability to start in exceptionally low temperatures, and that sleds were generally unstable. [5] As a result, this research can provide a lot of general information of varying relevance but cannot directly answer the questions around

[4] For a complete summary of the more than 75 years of research that has been performed by the Army Corps of Engineers please see Shaprio et al; *Snow Mechanics; A Review of the State of Knowledge and applications*; US Army Corps of Engineers CRREL Report 97-3 August 1997.

[5] *See*, Blaisdell et al; *First International Conference on Winter Vehicle Mobility*; US Army Corps of Engineers; Special Report 93-17 (July 1993) at pg. 91

winter travel of OSVs. Researchers have also come to embrace newer snowmobiles as part of the management and operational process.

The value and credibility of much of the Army Corp work and information to the US Government cannot be overstated as much of the information was deemed to be "CLASSIFIED" when it was developed in the 1940s and 1950's[6] and the classification of this research continued into the 1980's. Clearly if there were concerns about the basic accuracy or integrity of the information such a determination would not be warranted. Much of the research and activity on the Antarctic Continent has been the subject of similar or higher levels of conflict and scrutiny as USFS OSV planning efforts have been, again speaking to the veracity of any of the conclusions reached. It is also important to note that while this research has been occurring for more than 75 years, there has been little question or controversy around the scientific method used to reach the conclusions regarding groomed snow or the conclusions regarding the ability of groomed snow to absorb force. After being declassified, much of this information has been subjected to additional rounds of publication and review.

Prior to addressing the conclusions of this research, the Organizations believe it is critically important for USFS managers to understand the strict management guidelines in place for any activity on the Antarctica Continent and to recognize that any actions in Antarctica are managed to a "zero impacts" standard for activity. This is far stricter when compared to the multiple use management requirements that are the management goals and objectives of the USFS. Pursuant to paragraph 1 of Article 3 of the 1959 Antarctic Treaty as amended[7] (Hereinafter referred to as "The Treaty") all actions on the Antarctic Continent are subject to the following management standard:

> "The protection of the Antarctic environment and dependent and associated ecosystems and the intrinsic value of Antarctica, including its wilderness and

[6] A partial copy of foundational research from 1948 and 1952 are attached as Exhibit "1". Complete copies of these works are available but have not been included with these comments as the conclusions are addressed in subsequent works identified with far greater detail.

[7] A complete copy of this treaty has been enclosed for your reference as Exhibit "2".

> aesthetic values and its value as an area for the conduct of scientific research, in particular research essential to understanding the global environment, shall be fundamental considerations in the planning and conduct of all activities in the Antarctic Treaty area."

The remainder of Article 3 of the Treaty provides a detailed process to apply the zero-impact standard to the wide range of actions occurring on the Antarctic Continent. It is also significant to note that pursuant to Article 8 of the Treaty, all actions on the continent are fully subject to NEPA planning requirements to insure there are zero resource impacts to the Antarctic Continent. As a result, any actions that are taken on the Antarctic Continent are fully subject to NEPA requirements and are managed to a much stricter zero impacts standard than USFS efforts multiple use requirements for OSV. Again this provides strong indications of reliability for these efforts.

In the following portions of these comments, the Organizations are not attempting to provide a complete review of the Army Corp of Engineers research, as such documentation would necessitate the use of a large capacity jump drive. Rather the Organizations are attempting to summarize the most up to date information in particular areas or subjects. Much of the Army Corp of Engineers research efforts centered around the operation of high-pressure vehicles on snow, such as large military transport planes and transport vans as the cost-effective movement of supplies and other resources needed for Antarctic research has been a significant hurdle for researchers. Army Corps research on the ability of compacted snow to provide a suitable landing surface for a wheeled C141 transport plane provided the following conclusions:

> "Present studies indicate that this type of processing is needed for only the top 25 cm of a cold, dry processed base course in order to land wheeled C141 and other similar large whether or not an additive such as sawdust is really needed for the base course. Depth processing the snow with a snow miller, in combination with

> water or heat injection (or dynamic compaction of the top layer), may be adequate."[8]

Early research centered on the use of bulldozers, road graders, wheel loaders and other large construction equipment to prepare these runways. Subsequent research performed by the Army Corp concluded that snow compacted with the utilization of snow grooming equipment, which is almost identical to the equipment currently used on the RGNF and throughout the country for preparation of snowmobile trails, was the most cost-effective manner to prepare compacted snow. The subsequent research by the Army Corps provided significantly greater detail regarding the levels of force being applied to the snow as part of the landing of wheeled C-130 and C-141 aircraft on the prepared snow, which are as follows:

> "For a snow road or a snow runway to be feasible, a method of snow processing is needed such that the resulting snow pavement attains a strength that can support tire pressures in the range of 690kPA. Most cargo-carrying vehicles can easily be equipped to operate with tire pressures at or below 690 kPa and the C130 Hercules tire pressures normally ranges from 550 kPa to 690 kPa. Ideally, a snow strength that could support r1380 kPa would be desirable since that would allow the operation of essentially any conventional surface vehicle or cargo plane."[9]

The conclusions of this Army Corp research regarding the effectiveness of 25 cm of groomed snow to absorb the forces of landing a wheeled C130 or C141 were as follows:

> "This snow maintained a strength between 3000 and 7000 kPA throughout the course of our 12-week study. This strength is more than suitable for the support of heavy wheeled vehicles and aircraft that typically do not require more than 1,000 kPa strength." [10]

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[8] *See,* Lee et al; *Improving snow roads and airstrips in Antarctica*; US Army Corps of Engineers Special Report 89-22 (July 1989) at pg. 17. A copy of this research is enclosed as Exhibit "3" to these comments.

[9] *See*, Lang et al; *Processing snow for high strength roads and runways*; Journal of Cold Regions Science and Technology 25 (1997) at pg. 18. A copy of this research is included as Exhibit "4" to these comments.

[10] *Supra* note 28 at pg. 29

There appears to have been no criticism of the Army Corps 1997 research and this unanimity of research community around these conclusions was exemplified by the fact the conclusions of this research were again the basis of further analysis and review in 2017. It is significant to note that the conclusions of the earlier works were not questioned in any manner and there was no discussion of concerns around the original conclusions after more than 10 years of landing of high-pressure aircraft and use of high pressure wheeled vehicles on the groomed snow surface. [11] It was accepted that 25 cm of snow provided that level of resource protection.

It is uncontested that OSV usage averages 5 kPa of force on the snow, even under worst case scenarios. Given the clear conclusions decades of Army Corps of Engineers research concluding that 25 cm of groomed snow can support 300 to 1,400 times the amount of force applied by a snowmobile for prolonged periods of time, the Organizations submit the levels of snow proposed in the Proposal are more than sufficient to protect resources from much lower pressures. Significantly lower levels of snow than those proposed would allow the landing of a C130 aircraft on the snow without resource impact.

7b. Snow compaction via natural forces occurs throughout the world and results in material density similar to asphalt.

The Organizations are also aware that developing a complete understanding of snow compaction, both from natural processes and recreational activity, has been a significant factor in allowing OSV travel on roads and trails with lower amounts of snow. There is an exceptionally well-developed body of research regarding snow compaction from natural processes, a process which is commonly identified as snow sintering or snow metamorphosis. This large body of research is most directly targeting avalanche safety but also is directly involved with issues such as large construction projects on snow such as roads or mines, the monitoring of polar ice cap activity with satellites[12], flooding in high alpine communities and the advancements in the construction

[11] *See,* White et al; *Review of ice and snow runway pavements*; International Journal of Pavement Research and Technology 11 (2018) 311-320.

[12] *See*, Arthern et al; *In situ measurements of Antarctic snow compaction compared with predictions of models;* JOURNAL OF GEOPHYSICAL RESEARCH, VOL. 115, F03011, doi:10.1029/2009JF001306, 2010

of ice breaking vessels. The Organizations assert that snow compaction is the same regardless of what natural force is compacted and the conclusions of research should be the same regardless of what continent the research is performed on.

In this portion of our comments, the Organizations are not seeking to provide a complete outline of this rapidly developing snow science body of research that has resulted from the avalanche research community generally. This general body of work has been outlined in the 2016 textbook entitled *"Snow and Ice Related Hazards, Risks and Disasters*" edited by Wilfried Haeberli, collectively referred to as the "Haeberli Text" in these comments.[13] Generally, Chapters 2 through 4 of the text provide an introduction to the compelling body of work that now supports snow sintering and metamorphosis and significant data that clearly can be relied on in defense of the varying snowfall totals based on surfaces under the snow and explaining why current management has been so successful. This edition of the Haeberli text appears to be the most complete peer reviewed body of work on this issue and represents a consolidation of an enormous number of articles from globally recognized leaders in snow science.

This global summary of snow science research starts with the recognition that:

> "Once deposited on the Earth's surface, snow and fin density increases through metamorphism, eventually approaching the density of ice. Metamorphism is a combination of both physical and thermal properties of snow." [14]

Snow scientists recognize that sintering alters snow significantly, which is summarized as follows:

[13] A complete copy of this text is available for your review at the following website: Snow and ice-related hazards, risks, and disasters : Free Download, Borrow, and Streaming : Internet Archive

[14] *See*, Haeberli at pg. 38.

> "New snow generally has the lowest densities with about 100 kg/m -3 and densities increase with aging snowpack due to metamorphism to about 350-400 kg/m -3 for dry old snow and up to 500 kg/m -3 for wet old snow." [15]

Snow compaction is important to developed ski areas for avalanche management and general operations. These ski area efforts found that fallen/existing snow is subjected to additional snow load on top of the compacted snow densities continue to increase. Why is the ongoing sintering or metamorphosis process a general management issue for the downhill ski community? The industry is trying to resolve the problem of skiers catching an edge on a ski run, which at best provides for a lower quality skiing experience for users and can also result in serious injury or death to skiers if an edge is caught at the wrong time or locations or occurs under competition conditions.

The conclusions of this long-term snow compaction research for developed ski areas are outlined as follows:

> "Fresh fallen snow has a low density, <100 kg/m3. The snow is a mixture of solid snow crystals, liquid water and gaseous air. Over time it is compacted by wind. Snow crystals are sintered by daily temperature variations. The snow loses most of its gaseous and liquid content and, because of this, snow densities rise to 100–500 kg/m3. After a long time, snow converts to firn (500–800 kg/m3) and, under the load of newer snow, it even transforms to ice (917 kgm3)."[16]

Given that best available science clearly concludes that the impacts of natural processes, such as wind, sun and gravity, can compact snow to a density of 5 to 9 times what the density of uncompacted snow, the Organizations submit this type of understanding is helpful in

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[15] *See,* Haeberli et al at pg. 101.

[16] See, Mossner et al; *Measurement of mechanical Properties of snow for the simulation of skiing*; Journal of Glaciology, Vol 59, No 218 2013 at pg. 2013. *See Also*, Fauvre et al; *Optimal Preparation of Alpine Ski Runs*; Proceedings of the 2004 International Snow Science Workshop, Jackson Hole, Wyoming; University of Montana; 2004.

understanding snow compaction. Understanding snow compaction is important to the management of OSVS under the wide range of natural conditions seen on the RGNF.

Developing a general understanding of snow behavior is significant for other reasons as well. The scientific conclusions that the natural compaction of fallen snow results in snow density levels of 500-917 kg/m3. In isolation, this conclusion simply means nothing. When this conclusion is compared to more commonly understood materials, the conclusion is highly relevant. These conclusions become more compelling when this density is compared to many other common road and construction materials as many land managers are far more familiar with the highly rigid behavior of these materials when forces are applied to them. By comparison, the average weight and density of common building materials for roads and skyscrapers hundreds of stories tall is as follows:

Material	**Density kg/cubic meter**
Compacted Snow	500-917
Asphalt[17]	712
Cement	1,400
Lightweight Concrete [18]	1,700

The relationship of the density of compacted snow and asphalt cannot be overlooked as this comparison adds good context to the levels of protection from possible OSV impacts to resources that is provided by compacting snow. This information also provides scientific context and defensibility to explain why current management is effective in protecting resources. While land managers are very familiar with the performance of asphalt roads in avoiding contact with resources that might be under that roadway, often their experiences with snow are very limited. Given that the average road appears to receive 2-3 inches of asphalt with 4-6 inches of base under it to support motor vehicle traffic that commonly approaches 80,000 lbs. for a commercial motor

[17] *See*, https://theconstructor.org/building/density-construction-materials/13531/ for values of asphalt and cement
[18] *See*, https://hypertextbook.com/facts/1999/KatrinaJones.shtml for density of lightweight concrete

vehicle on the asphalt for decades, even a minimal amount of compacted snow is sufficient to provide resource protection at levels very similar to asphalt when forces of an OSV are applied.

The relationship between the weight of compacted snow and asphalt cannot be overlooked in determining what is sufficient snow and what levels of resource protection are provided by snow from the time it falls to the times when it is fully compacted. Given that a snowmobile only applies .5 lbs. per inch on the snow or 5 kPa, while natural processes result in pressures many hundreds of times that of an OSV clearly the significant factors identified above must be addressed in any research addressing additional impacts to compacted snow from OSV travel. Additionally, the similarity in weight of snow and asphalt gives rise to another question, mainly if resources can survive the hundreds of Kg of pressure on them that can result from a meter of snow being on them, why would the .5psi of pressure from an OSV be a concern? Often these resources are buried under several meters of compacted snow for extended periods of time and emerge from the burial in the spring without issue. Several meters of compacted snow can easily result in sustained pressures on any resource of tons of force for many months drawing concerns about snow compaction into further question.

While not as developed to the research and analysis levels referenced above, the Organizations believe the position of the downhill ski industry regarding the impacts of snow sintering or metamorphosis is also very important to this discussion as the downhill ski industry has developed extensive technologies to improve mechanical grooming of downhill ski runs to address the continued impacts of sintering after the initial grooming of ski runs.[19] These technologies are relevant to this discussion as downhill ski grooming and snowmobile trail grooming occur with the same pieces of equipment and there is no question that the sintering process continues after the grooming has completed. Asserting that sintering does not continue after grooming simply is not an option in the skiing or avalanche community, and the Organizations believe this compaction is equally relevant in the OSV world as a result of natural

[19] For a representation of this technology please see https://www.prinoth.com/fileadmin/user_upload/pdf/prinoth_snowdepthmeasurement_EN_NA_01.pdf

processes snow compacts into stronger and stronger layers and into layers that are far more compacted that could ever result from OSV traveling over the snow. The Organizations believe this compaction provides continued protection for resources even after the depth of snow from a storm has ended and has been compacted.

4b. Snow sintering/natural snow compaction has already been recognized as a natural process in best available science by the USFS.

As discussed above, there is a huge body of work now available that clearly identifies the impacts of natural processes such as gravitational, thermal and physical forces on snow over time and conclude that these factors can significantly improve the ability of the snow buffer between recreation and any resource to function. This type of protection is significant in allowing OSV usage on roads and trails with lower amounts of snow that is often the result of compaction. The Organizations would also note that the failure to address the natural forces resulting in snow compaction directly conflicts with best available science identified by land managers. The USFS, USFWS and BLM experts have concluded this by clearly stating as follows:

> "Snow compaction in the Southern Rocky Mountain region is frequently a result of natural process and not recreational usage;"[20]

In 2021 wolverine researchers reached similar conclusions about the compaction of snow resulting almost entirely from natural forces such as sun, wind, gravity and other factors. [21]

Given that the natural process causing the compaction of snow has already been recognized as best available science on what is a natural process occurring throughout the world, the Organizations must question how research can be identified as best available science on any issue

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[20] *See,* Interagency Lynx Biology Team. 2013. *Canada lynx conservation assessment and strategy.* 3rd edition. USDA Forest Service, USDI Fish and Wildlife Service, USDI Bureau of Land Management, and USDI National Park Service. Forest Service Publication R1-13-19, Missoula, MT. at pg. 26.

[21] *See*, Glass et al; *Spatiotemporally variable snow properties drive habitat use of an Arctic mesopredator*; Oecologia (2021) 195:887–899. A copy of this research is attached as Exhibit "5" to these comments.

involving snow depth without addressing this factor in some manner. The Organizations submit that best available science brings new information and understanding to allow managers to explain why current management of OSV travel on the RGNF has been effective rather than providing the basis for change of this management.

Best available science must be applied to allow for OSV usage on roads and trails recognized in summer travel management as significantly smaller amounts of groomed snow are sufficient for resource protection in these areas as these areas are important recreational corridors for usage of areas with deeper snow and will bring the RGNF to a consistent position with adjacent forest OSV decisions.

4c. Research addressing behavior of high-pressure vehicles in uncompacted snow from Army Corps of Engineers.

The Organizations would also like to address Army Corp research regarding the use of high-pressure vehicles on uncompacted snow. While the specific conclusions of this research are not relevant to these discussions regarding the use of low-pressure vehicles, the recognition of several basic facts are important to the discussion. Army Corp researchers concluded that comparatively high levels of force resulting from wheeled vehicle usage over small areas of uncompacted found that could be modeled for both hard snow and soft snow using the Capped Drucker-Page model.[22] Similar modeling could also be developed for exceptionally small amounts of force being applied to thin layers of snow.[23] Army Corp and other researchers also accepted the fact that expanding the foot print of the vehicle reduced the pressure applied to the snow. While the conclusions are clearly not dispositive to the OSV travel questions due to the exceptionally large and small scales the work was performed at, the fact that snow density can be modeled consistently is significant to recognize as USFS efforts have been applying such a

[22] *See,* Haehnel et al; *A Macroscale model for low density snow subjected to rapid loading*; Cold Regions Science and Technology 40(2004) 193-211. *See also*, Richmond et al; *A macroscopic view of snow deformation under a vehicle*; Army Corp of Engineers Special Report 81-17. July 1981.

[23] *See,* Huang et al; *Mechanical properties of snow using indentation tests; size effects*; Journal of Glaciology; vol 59 No 213 (2013)

model on the ground for years to avoid possible impacts to resources. Such modeling is clearly possible and scientifically valid as a management tool and would support the conclusions of the 35 or more years of OSV management on the RGNF, mainly that snow is a highly effective buffer between recreational activity and resources under the snow.

The Canadian Government has decades of experience managing ice roads accessing hugely remote portions of the country. Canadian governments ice road management policies for the operation of trucks up to 120,000 lbs. This article specifically addresses the portage/fen areas where ice roads are transitioning from frozen lake surfaces to a more soil based medium, where the Canadian government has a long history of documenting minimal impacts with only 15 cm of snow for operation of the 120,000lb wheels trucks. Protocols have allowed grooming of these areas to start with only 5cm of snow.[24] We have also provided an article from 1975 providing further detail into the long history of highly detailed research of these sites and minimal impacts that have resulted.[25] While this information does not specifically identify usage of OSVs, the Organizations believe it is highly valuable information for the discussion.

4d. Behavior of low-pressure vehicles in uncompacted snow.

A compelling body of work has generally originated out of the University of Calgary and has been driven by Professor Bruce Jamieson who has researched the behavior of uncompacted snow in the development and actions of avalanches for more than 2 decades in the Canadian Rockies. The Organizations would like to direct USFS to a series of three studies Mr. Jamieson conducted with Scott Thumlert and several others, published in the *Journal of Cold Regions Science and Technologies,* which for purposes of this document will be referred to as the "Jamieson/Thumlert" studies. Copies of each of these research documents have been included with these comments

[24] See, Sladen; et al; Evaluation of threshold freezing conditions for winter road construction over discontinuous permafrost peatlands, subarctic Canada *Cold Regions Science and Technology 170 (2020) 102930;* A copy of this article is attached as Exhibit "6"

[25] *See*, Adam et al; Snow and Ice Roads: Ability to Support Traffic and Effects on Vegetation; Snow and Ice Roads (1975). A copy of this article is attached to these comments as Exhibit"7"

for your convenience as Exhibit "8". The Jamieson/Thumlert studies were generally in light snow as the densities were 191 kg/m3, 203 kg/m3 and 219 kg/m3, respectively (averaged for the top 90 cm) and as a result are addressing snow densities similar to those found on the RGNF. In later stages of the research, the scope was expanded in include more compacted/multilayer snow in the research process. In this research, snowmobiles climbing a hill under full throttle and skiers were traversing down the same hill were measured and factors such as snow displacement were incorporated into the analysis. This research concluded:

> "**the static stresses applied to the surface of a mountain snow cover are similar for a typical skier (2.6 kPa, from 85 kg skier, 0.32 m2 area) compared to a typical snowmobile (3.8 kPa, from 350 kg machine and rider, 0.9 m2 area).** The fact that the magnitude of stress added to the snow cover should be similar for skiers and snowmobiles was further evidenced in Fig. 5 which showed stress vs. effective depth. There is no substantial difference between the fitted curves for the skier and snowmobile data."[26]

A variety of testing processes were used over the three years started with skiers simply skiing over the test areas and advancing to skiers falling onto the testing areas and snowmobiles simply traveling over the area to snowmobiles jumping onto the test area or climbing uphill in the test area to simulate worst case scenario conditions. Video available for their research process here.[27] While the Jamieson/Thumlert studies provide ground breaking information into low pressure snowmobiles and skiers for application of force on snow, the scale or context of the work is difficult to apply for the creation of management decisions as the works are more targeted at how these minimal forces are related to avalanche triggering rather than application of force on flat ground. The concerns around the levels of force necessary to trigger avalanches is simply much lower levels of force than the levels of force that would result in resource impacts but this research provides additional context and understanding into the movement of force through

[26] *See,* Thumlert/Jamieson et al; *Measurements of localized dynamic loading in a mountain snow cover;* Journal of Cold Regions Science and Technology; Vol 85 ed 94-101; 2013 at pg. 99 emphasis added.
[27] *See*, https://vimeo.com/20563669

various depths of uncompacted snow and how the effectiveness of snow as a buffer improves as the snow compacts naturally.

While the conclusions of the Jamieson/Thumlert series of works are valuable alone as it is precedent setting nature of the dynamic measurement of force on snow from OSV/skier travel, these works are complex and difficult to place in a context for comparison. Earlier works of Bruce Jamieson with Brown provide good context for comparison of the Jamieson/Thumlert conclusions, as these earlier works provide conclusions around generalized force from compacted snow on materials under the snow. This earlier research provides as follows:

> "Figure 7 illustrates the response of weak layer shear strength to increasing overlying load due to continued snowfall. The weak layer deposited on 16 January had an initial shear strength of 195 Pa and strengthened over 9 days to 1532 Pa (Fig. 7a). **Overlying load increased by 196 Pa during the same interval. For the layer deposited on 21 February, Figure 7b shows shear strength and load increasing by 403 and 216 Pa, respectively over 5 days.**
>
> For three separate time series measured shear strength is plotted against the overlying load (Fig. 8). At each observation snowfall had increased the load and strengthening in the weak layer was measured. **In all three cases strength is positively correlated with load (Fig. 8; Table 2).** The average loading rate and average strengthening rate varied for each time series resulting in different slopes of linear trend lines fit to the data."[28]

The data set for the above conclusions is provided in the following charts:

[28] *See*, Brown & Jamieson; *Evolving Shear Strength, stability and snowpack properties in storm snow*; Proceedings of the International Snow Sciences Workshop 2006 Telluride Colorado at pg. 15. (Emphasis added.) A complete copy of this research has been included with these comments as Exhibit "8"

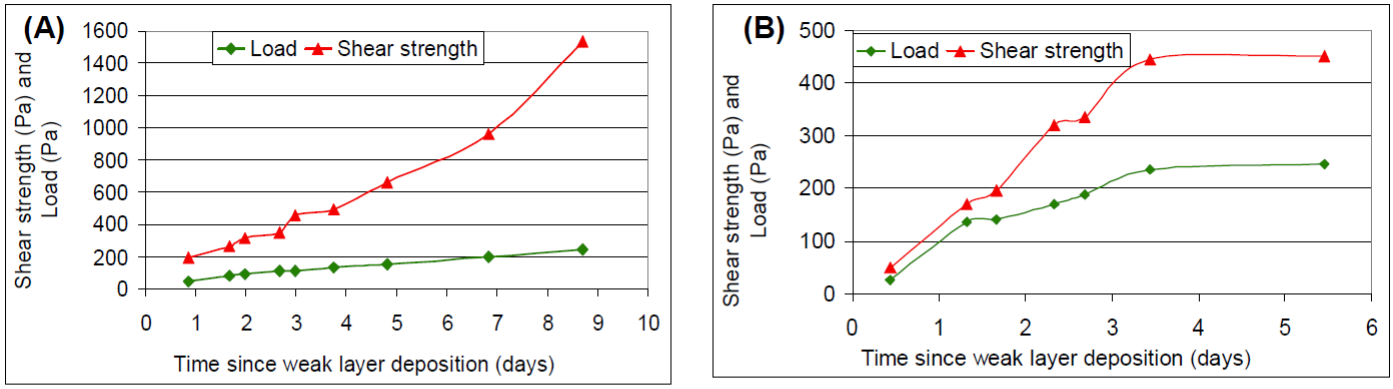

Figure 7. Time series graphs of weak layer shear strength and overlying load for two separate weak layers: ***(A)*** *layer deposited on 16 January 2006 was 10 mm thick, consisting of stellar crystals (1-2 mm) and decomposing fragments (1-2 mm), and had an initial (measured) and final (estimated) density of 56 and 188 kg/m^3 respectively,* ***(B)*** *layer deposited on 21 February 2006, with an initial and final measured density of 38 and 135 kg/m^3 respectively, was 45 mm thick at time of deposition and consisted of stellar crystals (1-3 mm). Markers represent an average of 12 measurements made at each observation.*

When the conclusions of the Jamieson/Thumlert works, mainly that skiers apply 2.6 kPa and snowmobiles apply on average 3.8kPa of force on the snow, is compared to the conclusions of the 2006 Brown/Jamieson research, mainly that natural snow compaction results in between 196 kPa and 216 kPa the conclusions are highly valuable and provide highly valuable conclusions in terms of scale of forces being applied. This research was also invaluable in understanding how snow is a more effective buffer as time and natural forces are applied to the uncompacted snow. When the force of an OSV or skier through minimal amounts of snow is compared to the force of the snow on the ground, the conclusion is that the snow provides almost 50 times more force on the ground than an OSV. While this is not dispositive for management, the fact that natural resources commonly survive application of forces averaging 50 times more than an OSV applies through minimal amounts of snow is highly valuable. This information is being provided to allow for a more detailed analysis and understanding of why current management has been effective in resource protection and why lesser amounts of snow may be permitted in certain circumstances, such as use of OSVs on developed roads and trails. Adoption of separate snowfall depths for on and off trail usage that are supported by best available science conclusions that snow is a highly effective buffer of force and recognize that snow compacts naturally and this

compaction results in greater resource protection than uncompacted snow in the planning process.

5. A multi-year study on the Medicine Bow/Routt NF determined that fens are not impacted by snowmobile usage.

The Organizations have been actively involved in the development of the Rio Grande RMP and the GMUG RMP over the last decade. As planners are aware we intervened in the defense of the USFS decision on the Rio Grande when it was litigated and it is disappointing that we are assuming the same type of legal challenge will be brought against the GMUG. We raise this issue as during these objections and legal challenges we have consistently heard assertions that fens are not well understood and are highly sensitive and could be impacted by human activity in summer and winter.

Given that we anticipate this position to be again taken we have attached the results of a multi-year study that was performed on Rabbit Ears Pass on the Medicine Bow/Rout NF by the USFS in conjunction with CSU. After a multiyear study the researchers were unable to establish any relationship or impact from snowmobile usage on fens. These researchers were unable to establish any impact to fens from low to medium recreational usage, which they summarized as follows:

> "Our data and analyses indicate found no significant impacts to fens from winter recreation activities in the areas we investigated on the Routt NF."[29]

[29] *See*, Gage et al; EVALUATING SNOW COMPACTION EFFECTS TO FEN WETLANDS ON RABBIT EARS AND BUFFALO PASS OF THE ROUTT NATIONAL FOREST; Final Report; Challenge Cost Share Agreement No. 08-CS-11020603-032 Department of Forest and Rangeland Stewardship Warner College of Natural Resources Colorado State University May 30, 2013 at Pg 51. A complete copy of this work has been attached as Exhibit "9" to these comments.

The researchers were able to find a variety of relatively minor impacts from highly intensive ski grooming associated with developed ski areas such as steamboat. This was quickly distinguished from dispersed recreation by the researchers as follows:

> "Mechanized grooming associated with Alpine skiing operations is both intense and frequent, but on an aerial basis, the extent of impact is typically smaller than that possible with snowmobiling. However, our failure to document significant changes in areas subject to high snow machine use such as Rabbit Ears Pass suggest that more remote areas are unlikely to show greater impacts."[30]

We hope this research can proactively address concerns around possible impacts to fens from low to medium intensity recreational activity and that this information will allow an effective and streamlined planning process to occur.

6(a) The Proposal must apply best available science on Canadian Lynx management.

The Organizations are aware there has been a large amount of staff turnover on the RGNF since the finalization of the RMP in 2020. As a result of this turnover, we would like to outline our involvement with lynx and the forest plan since it was finalized, as the Organizations have intervened with the USFS in defense of the legal challenges that have been brought by interests that are simply not involved with the forest. The Organizations are aware of the wildly inaccurate and unsubstantiated assertions that are made in the legal challenges centered around the Canadian Lynx on the RGNF. While we are confident these allegations will eventually be dismissed in Court, we are also aware that these allegations and the Court action could impact planning efforts such as those currently being undertaken.

[30] *See,* Gage et al Pg 50.

The Organizations vigorously supported RGNF planning efforts, and more specifically the research of John Squires with the Rocky Mountain Research Station to understand the behavior of lynx in the large fire scars now on the forest.[31] The Organizations vigorously support management based on best available science as best available science is not a static goal but rather is an ever evolving effort in planning. Steadfast reliance on out-of-date theoretical planning docs is not in compliance with these requirements.

The Organizations are also aware that significant other research has been occurring throughout the region on lynx management issues. The body of best available science was again updated with the release of the most recent version of the Lynx Recovery strategy for public comment on December 1, 2023 by the US Fish and Wildlife Service. [32] This comment period closed on Jan 30, 2024 so we doubt RGNF planners were aware of this document as scoping efforts were moving forward on the winter suitability effort.

The Organizations are concerned that the lynx standards outlined in the Proposal may reflect planning standards that are badly out of date, such as closure dates for lynx. This conflicts with new USFWS planning tools that has entirely removed motorized usage as a threat to the Lynx and only requires Lynx be counted in motorized recreation areas. This new standard is clearly stated in the 2023 USFWS Recovery plan for the Lynx as follows:

> "10. Minimize sources of human-caused mortality, particularly vehicle collisions (cars, logging trucks, snowmachines) and incidental trapping or hunting mortality (including mistaken identity) in each SSA unit (Recovery Criteria 1, 4). 10.1. Evaluate the relative influence of human caused mortality on population viability within each SSA unit.

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[31] Squires, J.R., J. Ivan, J. Holbrook, R. Lawrence, S. Savage, and R. Ghormley. 2018. Habitat relationships of Canada lynx in spruce bark beetle impacted forests – analysis summary March 2018. USDA Forest Service internal report for the Rio Grande National Forest. Rocky Mountain Research Station, Missoula. MT. 34 p. including tables and figures.

[32] We have enclosed a copy of these new lynx management plans as Exhibit "10" to these comments. More information on this effort is available here: Canada lynx draft recovery plan available for public review & comment | U.S. Fish & Wildlife Service (fws.gov)

10.2. Work with appropriate state and federal agencies to limit new highway development in lynx habitat, or steer development in a way that is minimally harmful to lynx (e.g., implement wildlife crossings, speed limits).

10.3. Increase awareness among vehicle (car and snowmachine) operators in areas of lynx presence of potential for collisions.

10.4. Monitor development of new motorized trails for recreational vehicles and levels of use.

10.5. Continue to work with state and tribal furbearer/hunting managers to refine and ensure implementation of measures to limit incidental take from trapping/hunting. Examples may include improving hunter/trapper education programs, Habitat Conservation Plans with state agencies, or trapping prohibitions or restrictions." [33]

The Organizations have never even heard rumors of a lynx being struck by a snowmobile or other OHV being used recreationally, which mitigates our concerns around the need to address this type of an issue in the Proposal. The Organizations are unable to find any requirements of timing or other restrictions for recreational usage of lynx habitat. As a result, we are addressing these new lynx standards early in the process as we are VERY concerned that again the RGNF is relying on badly out of date information on the Lynx, rather than applying best available science.

The Organizations concerns around the need for management that is based on Best Available Science as we are intimately aware that social conflicts around wildlife in Colorado are at unprecedented levels, which is creating immense conflicts and challenges for managers and the public. While this conflict is most directly focused on wolves, lynx management remains a difficult challenge due to the unintended impacts from that successful reintroduction by CPW in 2000. Conflict around the species has been immense

[33] *See*, U.S. Fish and Wildlife Service. 2023. *Recovery implementation strategy (RIS) for the contiguous United States Distinct Population Segment of Canada lynx*. November 2023. U.S. Fish and Wildlife Service, Mountain-Prairie Region, Denver, Colorado. At pg 7.

as the lynx was successfully reintroduced and then listed on the ESA list. Conflict was immediate and significant as research was generally lacking on lynx management issues and the failure of the reintroduction to address the listing status. Conflict has continued as when science advanced, planning efforts lagged far behind these efforts. We have been working hard with CPW to address these issues and CPW has directly partnered with Colorado State University to develop better materials to engage the public with.[34] We hope this winter planning effort can be a plan that has moved forward from the highly arbitrary research of the early 2000s on the lynx and applies new science. This would be a major step towards reducing and hopefully removing conflict around the Canadian Lynx.

6(b) Reintroduced Wolves as a management concern for the Proposal.

The Organizations are aware that a huge amount of effort has gone into the wolf restoration efforts mandated by Proposition 114. We believe it is important to recognize that this has occurred but has resulted in significant conflict in a wide variety of ways, and unfortunately recreational usage of public lands has been drawn into this discussion.

The Organizations need to clarify that our concerns on wolf management issues have nothing to do with herds of wolves chasing motorized users. That would be silly. The Organizations are also aware that both the USFWS and CPW management plans are silent on the possible need to restrict access to recreational opportunities as a result of the wolf reintroduction. We have had the opportunity to discuss this possible issue with CPW representatives who have simply chuckled that anyone could asset such a management standard. Similar silence is found in the USFWS determinations and analysis around the 10j population designation provided for the wolves in Colorado.

We are concerned that wolves will impact species populations and behaviors, such as moving them away from traditional wildlife viewing locations. When this movement occurs the public will not understand why this has happened and seek to blame factors other than wolves for this decline. Our concerns are certainly not abstract or remote on the possible

[34] *See*, CO-WildlifeValuesReport.pdf (colostate.edu)

indirect impacts of the wolf reintroduction to recreational access as this type of issue was on full display in the years of public meetings around the wolf reintroduction we have attended. Many other states have noted significant ungulate population declines as a result of wolf reintroductions. Some of these declines were large on a localized level as these species are simply unfamiliar with this new predator. The poorly understood nature of the ungulate response to fear from a reintroduced alpha predator was recently outlined in great detail by other researchers who concluded as follows:

> "Similarly, in systems where predators have been locally extirpated and are later reintroduced or naturally recolonize, wild prey animals may be naive to risk cues. This naivety has been observed in multiple ungulate species in response to wolf extirpation and recolonization in North America and Europe, and while some populations quickly learn to fear predators, others have not exhibited typical anti-predator responses even after generations (Berger, Swenson, & Persson, 2001; Sand et al., 2006; Berger, 2007b). Further species-specific research is needed to understand the consequences of predator reintroduction for prey behavior and demography and inform potential management strategies."[35]

Yet more researchers have summarized the poorly understood nature of the fear response of ungulates to newly introduced predators and how this is a management concern as follows:

> "In the presence of predators, prey generally alter their behavior to become more difficult to capture, detect, or encounter. Antipredator behaviors are a complex suite of innate and learned behavioral responses, which can be individual or species-specific (Chamaillé-Jammes et al., 2014; Thurfjell et

[35] *See*, Gaynor et al; *An applied ecology of fear framework; linking theory to conservation practice*; Animal Conservation; #24 (2021) at pg. 312.

al., 2017). They can be affected by predator species and habitat characteristics." [36]

The Colorado Wolf Plan outlines the anticipated indirect impacts to consumptive recreation of the wolf reintroduction to the availability of hunting licenses for deer and elk as follows:

> "Ungulate harvest objectives in Colorado may need to be adjusted over time as a result of wolves on the landscape, which will impact hunting opportunities for resident and non-resident hunters, as well as businesses that rely on hunting, such as Outfitters. Additional regulatory restrictions, such as shortened hunting seasons to reduce hunter success rates, may need to be considered in some areas where wolves become established. Management prescriptions should be based on the most up-to-date science and data available to ungulate managers."[37]

The Organizations believe this summary of indirect impacts to the consumptive recreational activities is probably accurate and should be hugely eye opening for many in the hunting community. This will cause conflict. Expanding management responses to issues that have been found unrelated to ungulate population declines will only expand this conflict and that must be avoided.

6c. Wolverine reintroductions should not impact the Proposal.

The Organizations have been working with CPW on wolverine reintroduction for more than a decade. Given the intense public interest that has followed the species and only expanded after the wolf reintroduction, we would like to provide input on this issue as well. While we are sure that recent Wolverine listing efforts, which are currently being challenged by most states that support Wolverine, will be prominently featured in comments from those that

[36] *See,* Chitwood et al; "*Ecology of Fear" in ungulates; Opportunities for improving conservation*; Ecology and Evolution; February 3, 2022
[37] *See,* CPW Wolf Plan at pg. 23

oppose multiple uses, we would like to share the direction of our preliminary efforts and discussions with CPW on the wolverine reintroduction required under SB24-171.

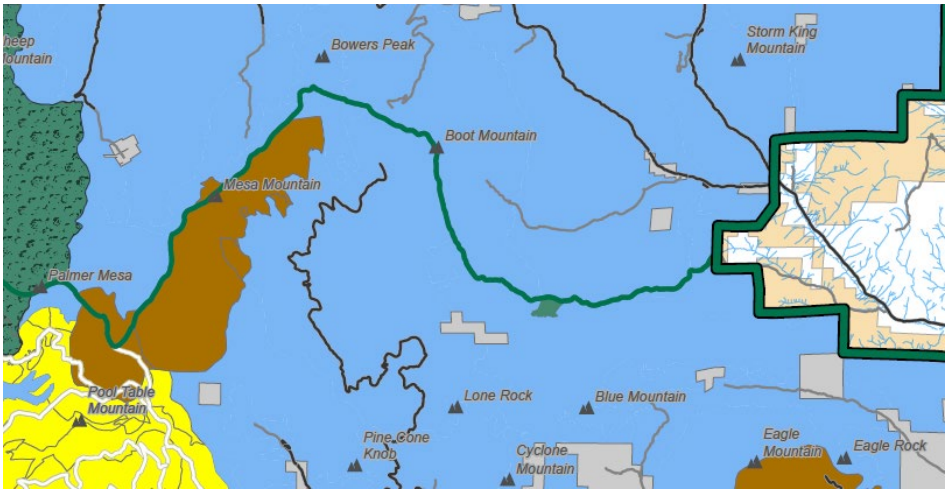
CSA and the motorized community was engaged in discussions around plan development to support a possible reintroduction of wolverine in Colorado around 2012. In these efforts the draft plan that was created with CPW, USFS, USFWS and many others provided significant protections for multiple use recreation.[38] In our wolf discussions with CPW we raised the status of this draft plan and the upcoming wolverine reintroduction. CPW managers have stated they cannot see any reason for any closures to multiple uses on public lands as a result of the Wolverine reintroductions and that protection would be more clear than previous guidance documents. These experts clearly stated they have little concern around the wolverines ability to survive in Colorado if they are not shot or poisoned.

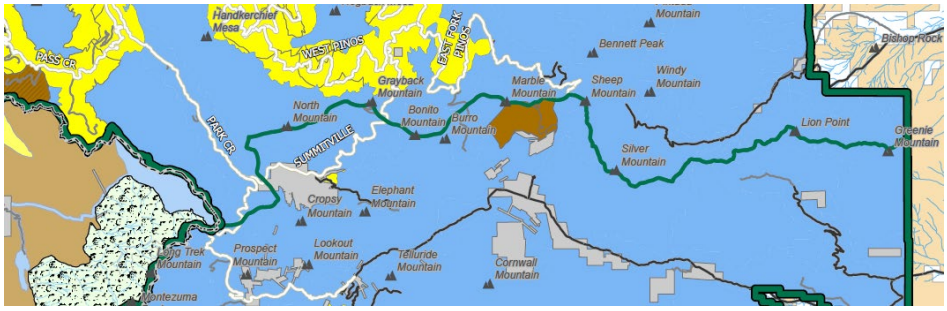
7(a). Exclusionary corridors around CDNST.

The Organizations were concerned when the preliminary review of the Proposal revealed large green corridors around several of the routes on the forest. We were concerned that the exceptionally poor partner guidance on the use of trails designated by the National Trail System Act ("NTSA") that we have encountered on other forests had already been incorporated into this Planning effort. In the various public meetings our representatives addressed this concern with USFS staff who immediately informed us that these lines were not trail buffers but rather planning area boundaries. The GIS team has simply made a poor choice in colors when identifying planning area boundaries and areas that were prohibited for motorized. This was a great relief for many reasons.

While we vigorously support the assertion this issue is the result of poor color choices we will address this issue briefly as we have absolutely encountered this on other forests. The map zooms below represent the types of corridors we are concerned about.

[38] A copy of this plan has not been included as we expect the new wolverine plan to be finalized before the completion of this effort. If you desire a copy of this draft plan can be provided.





Our first concern on this issue would be how would this function on the ground? Informing the public of this boundary would be functionally impossible. USFS staff would have to post multiple signs along these routes to inform the public of this somewhat random closure area on the forest. Given the huge snow depths that are seen on the RGNF post would have to be at several heights so the signage could be seen at times with lesser snow and at times of deeper snow. If the signs became buried in the deep snow, the value of the sign would be zero. We are aware of the staffing challenges on the Forest and that posting such as this would be a lower priority than other issues.

The conflict that would result from this type of designation would also be immense as you could no longer ride across the planning area as these boundaries would essentially divide the forest into large sections that did not connect. This simply would make no sense to the average recreational user.

As a result of almost a decade of effort on this issue we are providing significant information on this issue in scoping in the hope of the issue being resolved quickly and effectively. While we have no objections to these corridors excluding non-trail related usages along the route, such as timber, solar fields, wind farms and other uses not related to trail usage, we vigorously object to any attempt to elevate some trail uses above other trail uses on the route. This concept has been struck down for decades despite the erroneous materials from other partners that continues to resurrect this idea.

7b. The 2020 US Supreme Court determined that NTSA designation dis not alter the multiple use mandate for trails and areas adjacent to the trail.

The possible exclusion of motorized usage around numerous routes on the Forest, and most consistently around the CDNST has been addressed by the US Supreme Court with the issuance of the 2020 US Supreme Court decision in *Cowpasture River Assoc v USFS*. [39] A copy of this decision has been attached for your convenience as Exhibit "11". We are asking that the CDNST be managed in the manner that the USFS argued for in their recent Supreme Court effort where motorized usage was protected. The USFS argued successfully that the designation of any route under the National Trails System act does not alter the multiple use mandate applied to those lands. The Court found that if Congress did not clearly and explicitly remove lands from multiple use, they must remain multiple use areas. We agree with the Court and the USFS argument hat the NTSA is far from clear enough to support removal of routes from multiple uses on the trail . While there is basis in the NTSA for removal of uses that are inconsistent with the trail designation and recreational usages, such as building a large solar or wind farm on or adjacent to any designated trail, we are unable to find any portion of the NTSA that mandates any particular usage of the trail over others. Rather the NTSA explains the multiple use mandate on and around NTSA routes in great detail.

[39] 590 U.S. ___ (*more*);140 S. Ct. 1837; 207 L. Ed. 2d 186

We would also be remiss if we did not raise the concern that the concept of single use recreation on the trail was presented to the Supreme Court by several recreational interest groups who have opposed the multiple use concept as a principal.[40] It is significant that the Court declined to apply the theory that these groups sought to obtain. While this interpretation of the NTSA has been soundly defeated at the US Supreme Court, this concept and effort continues in local and regional planning efforts with guidance materials from certain partner groups. We are aware that this presentation can be somewhat compelling to a lay person and feel compelled to address this issue as it is an entirely inaccurate summary of the NTSA that fails to mention that there are provisions that repeatedly identify and protect multiple uses or that this interpretation and argument lost at the Supreme Court. While we are unable to explain this position continuing to be asserted, we will note that seeking to apply a position that the US Supreme Court declined to apply is simply not the behavior of a partner to land managers.

7c. Federal law specifically protects all recreational usages of a nationally designated trails.

Given the CDNST is a Congressionally designated route, Congressional requirements for its management and the intent of Congress in their efforts is critically important to the scope of allowed and prohibited on particular segments of trail. Since 1968, NTSA specifically identifies that **all** segments of the National Trails System shall be managed as follows:

> **"Development and management of each segment of the National Trails System shall be designed to harmonize with and complement any**

[40] Copies of these documents are available if you should desire to review them. We have not included them here simply to reduce the size of this document and avoid information that is only questionably relevant to these proceedings.

> **established multiple use plans for that specific area in order to insure continued maximum benefits from the land.**"[41]

Congress clearly had the opportunity to manage NTSA routes under a single management standard, such as "horse or hike only" and specifically chose not to require such management. Rather than excluding uses, Congress specifically provides that management must be harmonized with existing multiple use goals and objectives for the areas. As discussed in later portions of this objection, Congress has provided great deal of documentation regarding why the NTSA has been framed in the manner it is currently in. The NTSA also specifically identifies that all national scenic trails shall be managed as follows:

> **"(2)** National scenic trails, established as provided in section 1244 of this title, which will be extended trails **so located as to provide for maximum outdoor recreation potential** and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass."[42]

As the CDNST is a National Scenic Trail, Congress has specified that all national scenic trails be managed to provide for the maximum outdoor recreational potential. This Congressional intent for this amendment was clarified in 1983 with the addition of NTSA subsection j which specifically permits motorized and multiple uses of all NTSA routes as follows:

> **"(j) Types of trail use allowed**
> Potential trail uses allowed on designated components of the national trails system may include, but are not limited to, the following: bicycling, cross-country skiing, day hiking, equestrian activities, jogging or similar fitness activities, trail biking, overnight and long-distance backpacking, snowmobiling, and surface water and underwater activities. Vehicles which

[41] *See,* 16 USC 1246(a)(2) emphasis added.
[42] *See,* 16 USC 1242 (a)(2).

> may be permitted on certain trails may include, but need not be limited to, motorcycles, bicycles, four-wheel drive or all-terrain off-road vehicles. In addition, trail access for handicapped individuals may be provided. The provisions of this subsection shall not supersede any other provisions of this chapter or other Federal laws, or any State or local laws."[43]

When subsection j was added to §7 of the NTSA in 1983 generally allowing a wide range of uses on all routes identified under any designation, Congress clearly stated the desire to permit multiple use of trails outside Congressionally designated Wilderness areas. This is clearly stated in the bill memo which provides as follows:

> "A new subsection 7(j) is added to specify various types of potential uses which may be allowed on specific components of the National Trails System. The uses listed are not intended to be all inclusive, but to illustrate the wide range of recreation pursuits which may be served by various trails. While the new subsection would permit the appropriate secretaries to allow trail bikes and other off-the-road vehicles on portions of the National Trail System, the Committee wishes to emphasize that this provision gives authority to the secretaries to permit such uses where appropriate, but that it must also be exercised in keeping with those other provisions of the law that require the secretaries to protect the resources themselves and the users of the system."[44]

The imposition of mandatory corridors not only directly conflicts with the letter of the NTSA, the intent of Congress but also conflicts with one of the basic rules of statutory interpretation as any large scale exclusion of usages conflicts with Congressional requirements that

[43] *See,* 16 USC 1246 (j).
[44] *See,* H.R. REP. 98-28, 1983 U.S.C.C.A.N. 112 at pg. 6.

usages of the CDNST be addressed on a segment by segment basis rather than forest or regional restrictions of usages.

The Organizations hope that the previous information is helpful to USFS staff in addressing this issue if it should arise. Unfortunately this has arisen on many other forests since the Supreme Court decision and addressing this issue has created unnecessary conflict. The Organizations support the interpretation of the USFS that non-trail related multiple uses have been placed at a lower priority in conjunction with any NTSA route designation as clearly the NTSA route elevates recreation in these areas. We also support the determination that trail usages on and around the NTSA are subject to Congressional designations, such as Wilderness. We are not asking to ride in Wilderness. We are asking that recreational values on these trails and areas be maximized as the NTSA does not elevate any recreational uses above others but rather protects all recreational usages.

8. Minimization criteria in winter planning.

The Organizations are aware that one of the major barriers for any form of recreational planning effort on federal lands has been the minimization criteria in the Executive Orders. We are aware of several planning effort that became tangled with this issue for years, such as the recent travel planning efforts on the Pike/San Isabel NF. It has been our experience that areas closed to motorized usages by Congressional designations are often removed from the minimization discussion. This is a decision that simply cannot be defended as many of these designations were made to benefit non-motorized recreation, which was clearly identified by Congress when the Weminuche was designated and repeatedly expanded. Many of the interest groups aligned with the Weminuche continue to identify this area as "backpacking at its best". [45] We don't contest that position that the Weminuche provides backpacking at its best, but do vigorously assert that the Weminuche provides backpacking at its best throughout the year. These Congressionally protected recreational

[45] As an example Weminuche Wilderness: Trails, Camping, and Guides - SJMA

opportunities are highly relevant to minimization. We are unable to identify any portion of the minimization criteria that requires only motorized areas to be reviewed in this process. These must include Congressionally designated non-motorized opportunities that are closed to OSV usage.

We are aware that Wilderness trail maintenance on the Weminuche has been difficult over the last several years but are also aware that the Rio Grande has made huge progress in reopening trails in the Weminuche that have been heavily impacted by beetle kill, wind events and sizeable landslides on other districts. The Organizations are also aware of the heavy toll taken on the Weminuche in recent wildfires. While the toll has been high, these fires reopened major portions of the Wilderness areas on the forest for easier and safer recreational access in the area. Users simply do not have to deal with jack strawed dead trees piled 20-40 high for hundreds of acres.

The Organizations are also aware often assertions are made that these areas are too remote or do not have access via groomed routes. We would agree that often these areas do have limited access for a variety of reasons. Our position is this same assertion could be made for any winter recreational opportunities if the snowmobile community had not moved to provide groomed trails on the forest almost 50 years ago. Without the groomed routes, most of the forest would be inaccessible. The Organizations vigorously assert we should not be penalized in planning with exclusions to provide opportunities for nonmotorized uses due to the fact we worked to address this access challenge many years ago. The nonmotorized community has had the opportunity to create a similar program over the last 50 years and simply has chosen not to address this access issue. This is not our fault, and on several occasions we have offered to share our experiences with grooming and help them develop a nonmotorized grooming program. These offers have consistently been declined.

The Organizations are also aware that planners have proposed boundaries for usages around groomed routes, such as allowing non-motorized uses north of a groomed route and motorized usages south of a groomed route. While this appears reasonable to some, we oppose this type of decision as the motorized community provided the route to get to the area. As a result this is a 100% lost opportunity for the motorized community and simply cannot be asserted to be a balance of any interests. We performed all the volunteer work, fundraised locally to support the grooming, partnered with CPW in the creation and administration of the winter program and then only are obtaining half the benefit.

The Organizations vigorously assert that the RGNF has effectively minimized conflict on the forest for decades in compliance with the minimization criteria. Much of this is the result of large Congressionally designated areas on the RGNF. This successful management must be the starting point for any minimization discussion. Minimization must also account for nonmotorized groomed routes on the forest do not appear to be addressed in minimization of impacts as minimization is a forest level effort. Minimization must also address nonmotorized routes outside the USFS management as we are aware there are several larger nonmotorized networks that are publicly available for the payment of a small fee. While these areas are closed to snowmobile, and should remain closed, these area opportunities for recreational usage that should be identified when opportunities areas are balanced or impacts minimized.

9. Roadless areas are multiple use areas by definition.

We are concerned that the Proposal does identify Colorado Roadless areas as a desired characteristic for nonmotorized users. It is desirable for motorized usage as well and motorized usage is specifically identified as a characteristic of a roadless area. This is clearly and repeatedly identified as follows in the Colorado Roadless Rule as follows:

> "In addition, the rule allows motorized and non-motorized access into CRAs"[46]

This clarity is again provided for Upper Tier Colorado Roadless Areas:

> Upper tier allows for motorized recreation, including future development of off-highway vehicle trails;[47]

The Colorado Roadless Rule also specifically addresses snowmobiles as a permitted usage in a Colorado Roadless Area as follows:

> None of the alternatives affect access or use of existing roads and trails, including motorized travel on roads and trails, nor do they regulate recreational activities such as hunting, fishing, hiking, camping, mountain biking, summer/winter motorized recreation and skiing.[48]

We are asking the Colorado Roadless Rule be applied as required in the 2012 Colorado Proposal, which provides no preference for any usage and only address road construction and maintenance and specifically protects trails in all forms as a characteristic of these areas.

We are aware there is a portion of the public which seeks a winter nonmotorized experience that is often drawn to motorized trail heads due to the groomed routes we provide. We have never understood this course of action. There are significant opportunities for winter solitude and nonmotorized only opportunities on the forest, which are provided by the Weminuche Wilderness, which is the largest Wilderness area in the state of Colorado and other Congressionally designated areas. While there are not groomed routes for these

[46] 39585
[47] 39589
[48] 39589

opportunities, we are also aware that grooming is prohibited by these designations. We have had discussions with those seeking these opportunities and have offered our experiences and relationships to start a nonmotorized winter grooming effort that could access these areas. That offer has never been accepted. These same barriers that are preventing access to these areas in the winter are the same barriers that forced us to start the winter grooming program with CPW 50 years ago.

10. Wilderness buffers are prohibited by the Colorado Wilderness Act.

The Proposal also seeks to protect non-motorized uses adjacent to Wilderness areas. The management of these types of buffer areas is an issue we deal with FAR too frequently in the creation of Wilderness areas through legislation and in planning. This type of management designation is illegal as the Colorado Wilderness Act specifically prohibits the creation of buffers around Congressionally designated Wilderness for the protection of Wilderness values inside the boundary. This is specifically addressed as follows:

> " Congress does not intend that designation of wilderness areas in the State of Colorado lead to the creation of protective perimeters of buffer zones around each wilderness area. The fact that nonwilderness activities or uses can be seen or heard from areas within the wilderness shall not, of itself, preclude such activities or uses up to the boundary of the wilderness area."[49]

The Congressional reasoning for this decision is also clearly identified in the Act as follows:

> "(b) The purposes of this title are to—
> (1) designate certain National Forest System lands in the State of Colorado as components of the National Wilderness Preservation System, in order to promote, perpetuate, and preserve the wilderness character of the land,

[49] *See,* §110 PUBLIC LAW 96-560; 94 STAT. 3265; DEC. 22, 1980

> protect watersheds and wildlife habitat, preserve scenic and historic resources, and promote scientific research, primitive recreation, solitude, physical and mental challenge, and inspiration for the benefit of all the American people, to a greater extent than is possible in the absence of wilderness designation; and (2) insure that certain other National Forest System lands in the State of Colorado be available for nonwilderness multiple uses."[50]

CSA would vigorously assert that the possible designation of bufferes around Wilderness areas, such as those that may be looked at, it exactly the type of conflict that the Colorado Wilderness Act sought to avoid. We are not asking to ride in Wilderness as it is illegal but we are asking to have to have a full opportunity to ride outside Wilderness as has been previously provides for by Congress.

11(a). Accurate economic analysis will be critical to this planning effort given the heavy reliance of small communities on recreation.

The Organizations have worked with local communities across the Forest for decades and they can play an integral part in providing quality recreational opportunities on public lands. We are also aware that these communities are heavily reliant on winter recreational opportunities on the forest to generate tax revenue and income to businesses that remain open in the winter. Often these businesses are providing critical supplies and resources to members of the community and recreational visitors. As a result of this relationship, the Organizations vigorously support the development of accurate and detailed economic analysis and are providing several quality resources to support these calculations. The Organizations are also aware when these types of efforts end up with results that cannot be defended factually, it can create significant conflict between managers and the public.

[50] *See*, §101 PUBLIC LAW 96-560; 94 STAT. 3265; DEC. 22, 1980

Again, we would like to avoid this situation in the development of the Rio Grande Winter Travel Plan.

We have attached the most recent research from the Department of Commerce's Bureau of Economic Analysis that outlines spending amounts and profiles for all recreational groups nationally as Exhibit "12". We have also attached the Dept of Commerce state level research that provides simply immense amounts of information on recreational spending at the state level as Exhibit "13". This report has 5 tabs, which can be easily overlooked, that provide even more information.

In addition to the Department of Commerce research, we have attached the most recent economic analysis from the US Forest Service that is created in conjunction with the National Visitor Use monitoring process. This is Exhibit "14". While we are aware that there are often concerns about the sampling of visitors around this process, the economic analysis is respected, high quality and we believe accurate. We would be remiss if we did not highlight the spending profile conclusions in this work: [51]

Table 35—Total visitor spending for high, average, and low spending areas by activity, dollars per party per trip in 2014 dollars[a]

Activity	Nonlocal day trips			Nonlocal overnight trips[b]			Local day trips			Local overnight trips[b]		
	Low	Average	High	Low	Average	High	Low	Average	High	Low	Average	High
	Dollars											
Cross-country skiing	58	70	79	365	584	963	34	36	21	233	268	295
Snowmobiling	164	198	222	526	842	1,388	99	99	76	335	386	426
Hunting	85	103	115	326	371	611	48	53	41	202	233	257
Fishing	66	72	81	225	368	481	43	44	40	146	203	224
Nature-related	50	57	64	313	640	879	36	35	27	255	294	323
Off-road/ motorized trail	74	89	100	208	333	548	63	56	43	133	153	168
Driving	39	46	52	305	488	716	31	32	27	195	224	247
Developed camping	N/A	N/A	N/A	185	212	297	N/A	N/A	N/A	174	190	200
Primitive camping/ backpacking	N/A	N/A	N/A	82	142	315	N/A	N/A	N/A	114	112	124
Hiking/biking	47	57	70	256	489	718	26	24	20	173	183	201
Other	63	74	93	250	355	552	44	44	31	183	213	235
Total	63	76	85	267	427	704	38	38	29	171	197	217
Ratio to average	0.829		1.118	0.625		1.649	1.000		0.763	0.868		1.102

N/A = not applicable.
[a] Shaded cells were filled using rules 1, 2, or 4 as described in the text. Other figures are estimated directly from the National Visitor Use Monitoring sample.
[b] Includes visitors on overnight trips staying on or off the forest.

Again, it should be noted that this USFS research concludes the motorized winter community outspends the cross country ski community at a rate of 2-3 times the amount

[51] See, White 2017 at pg.58.

spend. This is critical information for planning in communities that are heavily reliant on recreation on federal lands for their survival.

The final economic contribution information we would like to provide is the newly released COHVCO economic contribution study for motorized usages in Colorado for 2023, which is attached as Exhibit "15". This was created in partnership with CPW, USFS and BLM. There is dedicated winter recreational information in the report on pg. 17 of the report and the report also provides regional spending information. We believe this is the most site-specific information available on this issue and it is highly relevant as it was just updated in partnership with the USFS regional office.

11(b) Good visitation information is necessary to economic analysis.

The Organizations are aware that accurate analysis of visitation to any planning area is critical to the calculation of economic contributions. We have included a copy of the most recent national visitor use monitoring report for the RGNF as Exhibit "16". While we are aware that the small sampling size of the NVUM effort has been a constant criticism of the process, this is also based on decades of research at this point. The conclusions of the research have been consistent and at least provides a starting point for analysis. NVUM research clearly identifies the strength in the interest as of the snowmobile community as almost all of them identify snowmobiling as the main activity they are visiting the forest to achieve.[52] Almost no other user group approaches this level of single minded usage of the forest.

The Organizations have also been an active participant in the NOCO places planning effort occurring along the Northern Front Range of Colorado. While we are aware that these planning areas are clearly not adjacent this effort is relevant as we have been able to obtain what can only be summarized as groundbreaking visitation information about recreational usage in the planning area. This information has been presented in the following dashboard.

Workbook: NoCo 2050 Dashboard (tableau.com)

[52] *See,* Exhibit 16 at Pg 20.

The Organizations are discussing how to obtain this type of data for the state with the USFS Regional office and with CPW. Funding may be available for this type of effort from several sources. The Organizations have also explored obtaining this type of information for site specific projects with funding from the OHV/OSV programs in the future. While we would not be optimistic about the success of this type of effort currently, given the highly competitive nature of these programs currently, we are more optimistic that data such as this would be a competitive grant after registration fees have been increased.

12. Wildlife Populations are strong and stable in the planning area.

Prior to addressing specific species or issues more directly, the Organizations would like to express our frustration with the situation we encounter far too frequently on wildlife issues across the state. Managers and partners are simply unable to celebrate success on issues. Almost every species in the State is at or above population objectives and many species have been successfully reintroduced. Deer populations are strong across most of the state, and are only slightly below average due to significant winterkill issues in northwestern Colorado. CPW again outlined the populations of elk at the State level with the release of the 2023 Wolf reintroduction management plan which clearly stated as follows:

> "The sum of Colorado's post-hunt HMP population objective ranges for elk statewide is 252,000-306,000 for all 42 elk herds combined. These data indicate that Colorado's elk population is over objective"[53]

The wolf management plan also clearly outlines the generally good position of the deer herd populations in the State. This plan also states the primary threat to deer continues to be Chronic Wasting Disease and the huge localized impacts that resulted from the unprecedented winter kill issues in Northwest Colorado as follows:

[53] *See*, CPW 2023 Wolf plan at pg. 16. Full Copy of this plan is available here: Colorado Wolf Restoration and Management Plan Final (state.co.us)

> "The statewide deer population has been more stable recently, averaging 420,000 over the last 11 years. The sum of all herd population estimates is still far below the sum of individual HMP population objective ranges of 438,000-520,000 for all 54 deer herds combined. Declines in deer populations are primarily in the largest, western most mule deer herds in the state. In 2021, 26 of 54 (48 percent) deer data analysis units were within their population objective ranges and 18 of 54 herds (33 percent) were below their population objective ranges. There is on-going interest from various constituents to increase mule deer populations; however, for many deer herds, population management is largely dictated by herd productivity and performance, winter severity, and Chronic Wasting Disease (CWD) prevalence."[54]

Overall the ability to provide conclusions such those in the wolf plan are a huge win for decades of management efforts by CPW, USFS, BLM and partners like the motorized community and it is frustrating that success like this cannot be recognized or celebrated.

Despite the strong and repeated positions of CPW on these types of issues, The Organizations involvement in the RGNF RMP revision and several other adjacent planning efforts has made us intimately familiar with unsupported assertions that wildlife populations are collapsing throughout the state. As a result, we again expect these types of assertions to be made around this effort. As a result, the guidance and conclusions of the herd management plans for DAU on the RGNF and the regional elk report for the planning area from CPW that these herds are at or above objectives and have been at these levels for an extended period will be relevant. [55] These reports clearly and directly conclude that units on the RGNF are at or above management objectives and these herds have a long history of stable populations along with previous levels of recreational access.

[54] *See*, 2023 CPW wolf plan at pg 17.

[55] Copies of all relevant herd plans above are available here: Colorado Parks & Wildlife - Herd Management Plans (HMP) (state.co.us)

The Organizations are also compelled to share our experiences with the basis for these population declines. It has been our experience that these assertions are based on comparisons to historical high-level populations in a planning area, rather than the population goal that has been set by CPW. We are aware of several units where CPW has significantly increased levels of hunting on the unit to reduce populations to sustainable levels. This situation is not the basis for restrictions on recreational activities on the RGNF.

Winter travel on the forest also occurs in areas that are not winter range and generally calving occurs after the winter season has concluded. While often concerns are raised about calving areas etc we are simply not using these areas for snowmobile recreation as calving areas are lower elevation areas and areas that lack snow. We snowmobile in areas with exactly the opposite criteria.

15. Trail widths for winter travel.

The Organizations frequently are asked if there is any preference or need for 50 inch type trails for winter travel or if there should be a width restriction on winter trails. We do not support any width designation for trails in the winter. Our groomers are often far in excess of 10 feet in width and any attempt to restrict trail width to 50 inches would be a major concern for our grooming operations. While we are aware of challenges around the usage of wider vehicles in other portions of the country, due to limited width efforts to groom trails or trails being provided via easements that only allow snowmobile usages we are not aware of these type of issues on the RGNF.

We are also aware of the growing use of track type Conversions of ATV and SxS or other summer type vehicles that can create concerns. We are also aware these conversions area often used for a wide range of uses including recreation but also allow private lands owners access to their property, search and rescue, ice fishing and many other uses. We have include research into the usage of these type of vehicles and fat tire bicycles on winter routes as Exhibit “17”. Growing community that is restoring older snowcats. We support this type of access and would be concerned if any closure or restriction was proposed to address these uses.

The Organizations must also recognize that the concept of a 50 inch trail is becoming outdated in summer travel management circles with larger machine being produced for summer usages. We are not aware of any restriction or requirement even for summer travel that trails are only 50 inches in width. Many trails are growing in width to accommodate these uses and on many forests existing low level roads are being converted to trails so accommodate larger SxS and to reflect the levels of usage historically found on these routes. Again, this is process we vigorously support.

16. Conclusions.

Please accept this correspondence as the input of the motorized community with regard to the public comments on the proposed OSV suitability mapping that has been provided. There is a long history of winter recreation on the Forest without conflict between uses and this has to be the starting point for analysis. We are aware that recently planning efforts on the Forest has resulted in significant asserted conflict on issues, but this has not reflected the historical level of challenges facing the Forest. The motorized community has enjoyed a long partnership with the Forest and has always enjoyed proactively addressing challenges on the forest in a collaborative manner.

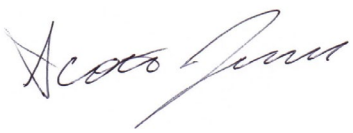
It has been the Organizations experience that while USFS planners have effectively managed OSV recreation for decades without resource impacts, they are also hesitant to rely on this successful management history as the basis for future planning. We hope the information below supplements this generally accepted knowledge with a high level of scientific certainty and encourages managers to avoid large scale changes to OSV management in the hope of avoiding possible impacts to resources or a lack of scientific certainty around the commonly understood conclusions that managers have relied on for decades in OSV management.

The Organizations are aware the scale of information and scope of information provided on these issues may be much larger than expected. This response is being provided in the hope of streamlining and speeding the planning process as much as possible. While there is a

large amount of information provided on these issues, we have significantly more information on many of these issues. There are also many topics we did not provide information on as we are hoping these are comparatively minor in scope. We hope this information triggers an ongoing dialogue with the forest on issues they are encountering in the Planning process so these resources can be effectively used. We have devoted significant resources towards avoiding overly sensational resources or information that lacks basic credibility. In addition to this resource specific information, we have also provided information we believe is relevant to planning, such as the financial sustainability of our clubs grooming support through the CPW grooming program, which we are in the process of updating currently. We hope these efforts and information provide an accurate picture and vision for the winter grooming efforts of our clubs, as this is the primary method all public users rely on to access the winter backcountry on the forest.

The Organizations welcome this opportunity to provide input and hope our input is not overwhelming. We are also aware that there are always new challenges to be addressed and that this is a voyage and not a destination. We would welcome the opportunity to engage with RGNF planners to address these issues as they arise. The Organizations would welcome a discussion of these opportunities and any other challenges that might be facing the Rio Grande National Forest moving forward at your convenience. Please feel free to contact Scott Jones. His phone is (518)281-5810 and his email is scott.jones46@yahoo.com.

Sincerely,



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