



## REGION 8

DENVER, CO 80202

**June 13, 2024**

Ref: 8EJC-NE

Judith Perez  
Rio Grande National Forest  
U.S. Forest Service  
1803 W. Highway 160  
Monte Vista, CO 81144  
Transmitted by email

Dear Judith Perez:

The U.S. Environmental Protection Agency Region 8 has reviewed the U.S. Forest Service's May 2024 Notice of Intent to prepare an Environmental Impact Statement (EIS) for the Over-Snow Travel Management Project (#65529) within the Rio Grande National Forest. In accordance with our responsibilities under Section 309 of the Clean Air Act (CAA) and Section 102(2)(C) of the National Environmental Policy Act (NEPA), we are providing scoping comments. The CAA Section 309 role is unique to EPA. It requires EPA to review and comment on the environmental impact on any proposed federal action subject to NEPA's environmental impact statement requirements and to make its comments public.

The Rio Grande National Forest is planning to complete a travel management plan for over-snow motorized vehicles across approximately 1,382,276 acres (74 percent) of Rio Grande National Forest lands. There are currently 260 miles of permitted and groomed motorized routes in the planning area. The proposal would restrict public over-snow vehicle use in Special Designation Management areas. The project is expected to result in an Over-Snow Vehicle Use Map and a Winter Recreation Opportunity Spectrum Map that delineates the planning area using designations such as "primitive" and "semi-primitive" that allow for differing levels of over-snow vehicle use.

### **Key Topics the EPA Recommends the Forest Service Address through the NEPA Process**

There are several important analysis components for this type of project that we recommend including within the scope of analysis for the EIS:

- A range of alternatives for reaching management objectives and environmental desired future conditions outlined in the Rio Grande National Forest Land Management Plan;
- Environmental resource objectives and site-specific baseline conditions, including vegetation cover and condition, soil conditions, ecological site descriptions, watershed conditions, water

quality, sediment loads, wetland and riparian health, wildlife/fish population, habitat health and trends, and air quality;

- A discussion of prior management history in the project area relating to over-snow travel management, such as an overview of previous over-snow travel management plans and over-snow vehicle compliance;
- A project timeline, milestones, and anticipated end dates to help the public and the Forest Service more accurately predict the timing and magnitude of impacts from the proposed action.
- Site-specific impacts or benefits to baseline resource conditions that would likely result from over-snow activities associated with each alternative and a comparative assessment of how each alternative will affect the attainment of management objectives and environmental desired future conditions;
- Consideration of minimization and mitigation measures to address any identified potential adverse impacts to resources; and
- A detailed monitoring plan that will be used to assess how well the eventual selected alternative addresses concerns associated with each resource category.

Based on preliminary information, our initial areas of interest for the Rio Grande Over-Snow Travel Management Project include: (1) road and trail development; (2) water quality; (3) air quality; (4) noise pollution; (5) monitoring and compliance; (6) wildlife and special-status species; (7) environmental justice communities; (8) climate-related impacts and greenhouse gas emissions; (9) recreational safety; and (10) invasive species. We recommend the EIS disclose the environmental effects on resources associated with each alternative in a manner that will allow for the decision-maker to effectively plan to reduce potential impacts to such resources to the greatest extent possible.

The EPA appreciates the opportunity to provide comments at this early stage of the NEPA process. These comments are intended to facilitate the decision-making process. Thank you for considering our input. If further explanation of our comments is desired, please contact me at (303) 312-6155 or [mccoy.melissa@epa.gov](mailto:mccoy.melissa@epa.gov), or Greyson Abid, lead reviewer for this project, at (303) 312-6425 or [abid.greyson@epa.gov](mailto:abid.greyson@epa.gov).

Sincerely,

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NEPA Branch Manager  
Environmental Justice, Community Health, and  
Environmental Review Division

Enclosure

## Enclosure – EPA Comments on the Rio Grande Over-Snow Travel Management Project

### General Comments

The EPA recommends the EIS describe the screening process the Forest Service will use to balance over-snow vehicle use against other non-motorized recreational uses and the sustained yield of ecosystem values and services, such as clean water in streams and functioning aquatic habitat. For instance, over-snow roads, trails, and areas are generally poor candidates for a motorized travel system if they present overall low benefits for the Forest Service and the public and create environmental, safety, and financial burdens. The high recreational benefits of over-snow roads, trails and areas should not outweigh the risks and benefits that would otherwise result in a decision to decommission a road, trail, or area. To help the public understand the basis for this aspect of the Forest Service's screening process it would be helpful to address:

- The level of recreational use considered high enough to outweigh other considerations of risks and benefits and the reasons for selecting this threshold.
- The level of risk individual over-snow roads, trails, and areas pose to ecosystem values and services when deciding on a travel system that meets the intent of multiple-use and sustained-yield.
- The level of risk posed by dwindling budgets and increasing travel system maintenance costs when deciding on a travel system that meets the intent of multiple-use and sustained-yield.

Throughout the planning process, the EPA recommends:

- Ensuring compliance with applicable pollution control laws, including state and federal air, water, noise, or other pollution standards or implementation plans;
- Limiting open travel areas to a size that can be effectively managed and locations that are geographically identifiable; and
- Assessing and describing how each over-snow road, trail, or area, or management thereof, will minimize damage to vegetation, soil, waterbodies, cultural sites, and any other ecologically or historically sensitive areas through required best management practices (BMPs), design features, and mitigation measures.

### Road and Trail Development

Purpose and Need/Proposed Action document does not indicate whether the proposed action will include any new over-snow trail or road development, nor does it discuss whether the proposed action will include any existing trail or road closures. Roads through forests can have a wide range of negative effects, such as increasing the spread of invasive species, impacting the behavior and habitat of wildlife, affecting waterbodies by increasing sedimentation, and so on.<sup>1</sup> Therefore, including information regarding trail and road development and closures will provide the public with a clearer understanding of the impacts to expect in light of the proposed action.

The EPA recommends providing a table in the EIS outlining the mileage of new over-snow trails and roads within the planning area, the mileage of removed over-snow trails and roads, and the net increase or decrease of over-snow trail and roads. In addition, the EPA recommends providing

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<sup>1</sup> See, e.g., <https://link.springer.com/article/10.1007/s40725-016-0044-x#Sec2>.

information on the status of each trail and road, such as whether it is temporary, designated for Forest Service employees only, or an upgrade to an existing trail or road.

The EPA also recommends including a high-resolution map depicting this information, with pertinent information labelled in an easily accessible format alongside any features of interest, such as the locations of perennial, intermittent, and ephemeral waterbodies, residential structures, roadless areas, recommended and designated wilderness, lands with wilderness characteristics, wilderness study areas, and other sensitive sites. If any non-road or non-trail areas will be open for over-snow vehicle use, we also recommend outlining these areas on the map.

## **Water Quality**

### *Existing Water Quality Conditions*

We recommend the EIS provide a summary of available information and monitoring data on water quality and identify impaired waterbodies within and downstream of the planning area, including waterbodies listed on the State of Colorado's most recent EPA-approved Clean Water Act (CWA) §303(d) list, which can be accessed using EPA's How's My Waterway tool.<sup>2</sup> A preliminary search using this tool indicates that there are impaired waterbodies present in the project area. Such data for any streams and waterbodies potentially affected by proposed activities, such as road or trail development or maintenance, would provide information for the evaluation of the potential impacts on downstream water quality, and a point of comparison for future monitoring of impacts. We recommend including parameters of significance to impaired waterbodies within or downstream of the project area and evaluating what ongoing impacts may be due, at least in part, to the existing transportation network. Identification of any significant gaps in data may be helpful in developing the project monitoring plan. When defining existing conditions, please consider the following:

- Include waters directly impacted by the project as well as the waters indirectly (or secondarily) impacted by the project, such as downstream segments.
- Include water quality data, including at a critical flow condition if available, for any potentially affected stream reaches.
- Consider and document water quality impairments per State CWA Section 303(d) lists and draft or established Total Maximum Daily Loads (TMDLs), and identify potentially affected dischargers, including water treatment providers.
- Identify any Source Water Protection areas and how the project will be consistent with Source Water Protection planning measures.

### *Impacts to Water Quality*

The Forest Service should determine whether and to what extent the proposed activities may contribute to a degradation of water quality in the area. We recommend that the Forest Service: (a) analyze potential direct and indirect impacts to any waterbodies within and/or downstream of the planning area, including waterbodies listed on the most recent EPA-approved CWA § 303(d) list; and (b) coordinate with the Colorado Department of Public Health & Environment if there are identified potential impacts to impaired waterbodies in order to avoid causing or contributing to the exceedance of water quality standards.

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<sup>2</sup> <https://mywaterway.epa.gov/>

We recommend discussing impacts to water quality from trail and road development and maintenance caused by soil loss, altered soil chemistry, increased surface storm flow, changes in water temperature associated with erosion of soils and stream banks, soil compaction, reduced stream base flows from decreased infiltration to groundwater, and vegetation loss. To minimize water quality impacts stemming from these activities, we recommend utilizing BMPs, design features, and mitigation measures. We also recommend discussing the effectiveness of the selected practices. Examples include the following:

- Avoid or bridge wetlands and sensitive ecological areas where feasible;
- Minimize road and trail construction and density to reduce adverse impacts to watersheds;
- Locate roads and trails away from difficult to replace alpine resources, such as alpine meadows, wetlands, streams, and riparian areas as much as possible;
- Locate roads and trails away from steep slopes or erosive soils;
- Minimize road and trail stream crossings;
- Stabilize cut and fill slopes according to BMPs developed by the Forest Service that are applicable to sensitive alpine areas;
- Provide road and trail drainage to control surface erosion using appropriate design features and BMPs;
- Consider road and trail effects on stream structure and seasonal spawning habitats when determining alignment; and
- Allow for large woody debris recruitment to streams and riparian buffers near streams.

#### *Existing Aquatic Resource Conditions*

We recommend the EIS identify aquatic resource existing conditions in the proposed project area, including wetlands (including peatlands or fens), springs, streams, and ephemeral drainages. Specifically, we recommend describing watershed conditions, streambank conditions, vegetation cover, soil conditions, and wildlife and fish population health and habitat. We recommend that the EIS include a map of the project area that identifies wetlands and regional water features within a minimum of 500 feet from any proposed or existing roads, trails, or other travel areas, with dominant and rare plant community types identified. We also recommend conducting wetland functional analyses if there is any potential that proposed activities will cause impacts.

#### *Existing Fen Wetlands Conditions*

Fen wetlands provide important hydrological and water quality functions by improving water quality in headwater streams and may support rare assemblages of aquatic invertebrates. They also provide critical ecological functions such as providing base flows to streams during late summer and/or drought periods. The EPA recognizes fen-type wetlands as ecologically critical in that they provide local and regional biodiversity. The U.S. Fish and Wildlife Service (USFWS) designated fen wetlands a Resource Category 1 with respect to the USFWS Peatland Mitigation Policy. The mitigation goal of USFWS Resource Category 1 is no loss of habitat values and the Peatland Mitigation Policy places the protection and avoidance of fen wetlands as a priority during CWA Section 404 reviews.

Human land use activities can have a substantial impact on the hydrologic regime and the biotic integrity of fens. For example, roads, trails, and associated drainage structures upslope of fens may intercept groundwater flow, alter subsurface flow pathways, and concentrate overland flow away from the fen area, causing desiccation of the fen. Roads are also a common source of sediment that can

bury organic soils. Construction related disturbances (e.g., excavating, grading) and subsequent use from motorized equipment can negatively impact fens by exposing soil and bare peat, causing erosion, creating channels which act as a water diversion, and compacting soil.<sup>3</sup> Although minimum snow depths buffer against the effects of soil compaction caused by over-snow vehicles (e.g., snow groomers), research indicates that over-snow vehicle use can have detrimental impacts to fens by compacting snow cover, eliminating the insulating function of snow cover and causing the fens to freeze.<sup>4</sup> Snow compaction caused by over-snow vehicles can substantially reduce the thermal insulation of snow cover beneath the surface, exposing underlying vegetation to potential frost-related damage. Snow compaction may ultimately result in a reduction in soil temperatures as well as a delay in snowmelt, potentially reducing the length of the growing season and altering primary productivity and organic matter decomposition rates.<sup>5,6,7</sup>

Fen communities are very sensitive to hydrologic alterations and restoration is extremely challenging and at many times impossible, once function has been impaired. Due to the slow rate of accumulation of peat in fens, these ecosystems are generally considered to be irreplaceable. We recommend that the EIS include a description and the spatial extent of fens within the project area as well as a description of potential impacts that could occur from proposed project activities. We strongly recommend that project design criteria include requirements to avoid both direct and indirect impacts, whether permanent or temporary, to these highly valued resources. Specifically, we recommend restricting over-snow vehicle use within 500 feet of fens wetlands to provide ample buffer and reduce the likelihood of damage to fens wetlands from inadvertent over-snow vehicle use.

#### *Impacts to Aquatic Resources*

In mountain environments, cut and fills associated with grading for trail and road construction have the potential to impact streams, wetlands, and their supporting hydrologic systems. Given the potential for the project to affect aquatic resources, we recommend that the EIS evaluate potential impacts by including the following information in the analysis:

- Assessment of potential impacts on aquatic resource existing conditions, including direct, indirect, and cumulative effects. Impacts may include changes in surface and groundwater hydrology supporting streams and wetlands.
- A description of any direct, indirect, and cumulative wetland impacts, both temporary and permanent. Such impacts may include functional conversion of wetlands (e.g., forested to shrub-scrub); changes to wetland hydrology; and wetland disturbance.
- Disclosure of any aquifers that may be vulnerable to impacts from the project (e.g., changes in hydrology).

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<sup>3</sup> See, e.g., <https://sites.warnercnr.colostate.edu/davidcooper/wp-content/uploads/sites/15/2017/02/ChimnerLemlyCooper2010-San-Juan-Fens-1.pdf>.

<sup>4</sup> See, e.g., <https://www.doc.govt.nz/globalassets/documents/science-and-technical/Sfc085.pdf>.

<sup>5</sup> See, e.g., <https://www.sciencedirect.com/science/article/abs/pii/S2213078020300712>.

<sup>6</sup> See, e.g., <https://www.doc.govt.nz/Documents/science-and-technical/Sfc120B.pdf>.

<sup>7</sup> See, e.g., <https://www.cambridge.org/core/journals/annals-of-glaciology/article/impact-of-artificial-snow-and-ski-slope-grooming-on-snowpack-properties-and-soil-thermal-regime-in-a-subalpine-ski-area/OC3524AF032DD7EA67C64EE777B84E87>.

We recommend the EIS describe how the project will comply with Executive Order 11990, *Protection of Wetlands*, including how wetlands will be identified and avoided, and how unavoidable impacts would be minimized and mitigated. To ensure that wetlands are protected, it may be necessary to consider the exclusions of roads, trails, and other over-snow travel areas where wetlands or riparian communities would be adversely impacted either directly or indirectly from adjacent activities. We support the establishment of riparian habitat buffer zones to avoid adverse impacts to streams and riparian areas.

## **Air Quality**

### *Existing Air Quality Conditions and Impacts*

The EPA recommends that the Forest Service quantitatively characterize existing air quality conditions to enable a detailed quantitative estimate of air quality impacts resulting from the proposed action and alternatives. Providing baseline data regarding existing air quality in the project area and an estimation of the existing emission-generating activities and resulting air pollutants facilitates an understanding of the environmental impacts currently occurring.

The EPA recommends the EIS present existing air quality and air quality related values (AQRV) data, including the most relevant and recent air quality design values (background pollutant concentrations).<sup>8</sup> The EPA also recommends identifying all sensitive receptors in the vicinity, such as population centers, nonattainment areas, Class I Areas, and Class II Areas with sensitive resources, and noting regional air quality and air quality related values (AQRV) trends over the past several years.

### *Environmental Consequences*

Quantitatively estimating the emissions for the proposed action, including a consideration of, for example, types of emissions-generating equipment and over-snow vehicles, is key to disclosing what impacts may be and whether they have the potential to create air quality impacts to local communities and resources. This step is also key to stakeholders understanding which alternative considered in the EIS, including the No Action Alternative, would result in the largest environment benefit and least impact.

Based on the planned project schedule and necessary equipment, the EPA recommends providing an emissions inventory for the project. The emissions inventory provides the basis for conclusions regarding the severity and nature of air quality and AQRV impacts. Examples of potential air emissions associated with the proposed activities include emissions generated from travel to over-snow vehicle loading and offloading locations, over-snow vehicle use, and trail and road maintenance. The EPA recommends estimating air pollutant emissions within the project area based on plans and types of emission-generating equipment used for development and maintenance activities, and projected vehicle miles traveled by forest visitors for each over-snow vehicle class. We also recommend outlining any projected increases or decreases in over-snow vehicle use as a result of the proposed action. In considering vehicle classes, we recommend distinguishing between 2- and 4-stroke snowmobiles, which produce differing emissions. In estimating projected changes in over-snow vehicle use in the

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<sup>8</sup> Data are available from EPA's design value webpage (<https://www.epa.gov/air-trends/air-quality-design-values>). Monitoring locations and data can also be accessed by the public through the EPA's outdoor air monitor webpage (<https://www.epa.gov/outdoor-air-quality-data/interactive-map-air-quality-monitors>), as well as through the EPA's Air Quality System (AQS) for AQS users (<https://www.epa.gov/aqs>). For PM<sub>10</sub> the background concentration is the fourth highest monitored PM<sub>10</sub> concentration each year averaged over the three-year period.

project area due to the proposed action, we recommend soliciting public input from local communities and interested organizations.

Emission factors may be used to develop an emissions inventory for the planned activities and operations. To estimate emissions factors for over-snow vehicle use, we recommend utilizing the EPA's most recent Motor Vehicle Emission Simulator (MOVES4),<sup>9</sup> which includes the NONROAD module, as well as its Non-Road Technical Report.<sup>10</sup>

#### *Air Quality Design Criteria*

Emissions from trail and road development and maintenance, including grooming, could be reduced through project design criteria. Example measures to consider include the following:

- Limit idling of heavy diesel equipment and transportation vehicles;
- Require heavy diesel equipment to use cleanest available engines or retrofits with diesel particulate control technology;
- Include requirements for the maintenance of engines; and
- Minimize fuel use and emissions by limiting unnecessary trips to and from the project area.

#### **Noise Pollution**

Noise pollution has a wide range of health-related impacts in humans, such as creating sleep disturbances, raising stress hormone levels, increasing cardiovascular risk, and impairing cognitive function.<sup>11</sup> For wildlife, noise exposure can increase the risk of death by modifying reproduction, foraging, hunting, communication, and navigation.<sup>12</sup> Likewise, noise can negatively impact the recreational experience of forest visitors who are seeking quiet and solitude. While over-snow vehicle noise pollution is variable depending on vehicle type, vehicle speed, distance from the receptor, and other factors, over-snow vehicles can produce continuously audible noise in developed areas and busy travel corridors during some hours.<sup>13</sup> Thus, over-snow vehicles can contribute to noise pollution and have the potential to alter the forest soundscape.

For these reasons, the EPA recommends discussing and assessing the noise from the proposed action on human health, wildlife, and recreation. In considering these impacts, the EPA recommends distinguishing between the noise produced by 2-stroke and 4-stroke snowmobiles, noise exposure at different distances from over-snow vehicles (e.g., operator versus other exposure levels), and noise produced by over-snow vehicles travelling at different speeds.

The EPA also recommends evaluating the susceptibility of any nearby residential structures to noise pollution and implementing noise-related mitigation and BMPs whenever possible. Example measures include:

- Constructing noise barriers, such as berms or fences, between residential areas, and roads and trails;
- Implementing needed restrictions on over-snow vehicle use during nighttime hours;

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<sup>9</sup> <https://www.epa.gov/moves/latest-version-motor-vehicle-emission-simulator-moves>

<sup>10</sup> <https://www.epa.gov/moves/nonroad-technical-reports#4>

<sup>11</sup> See, e.g., <https://www.nature.com/articles/s41569-021-00532-5>.

<sup>12</sup> See, e.g., <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9819367/pdf/ijerph-20-00591.pdf>.

<sup>13</sup> See, e.g., <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1016&context=natlpark>.



- Providing educational materials to help nearby residences with sound abatement;
- Analyzing development plans with consideration of noise pollution;
- Utilizing noise dampening and minimizing equipment (e.g., mufflers), technology, and engines whenever possible for maintenance equipment; and
- Providing follow-up monitoring to ensure that noise pollution levels have not exceeded noise pollution standards.

Finally, the EPA recommends conducting outreach to occupants of nearby residences to ensure that they are aware of the proposed action, its possible impacts to their health and standard of living, and opportunities to contribute feedback and public comments.

### **Monitoring and Compliance**

Monitoring and compliance of the over-snow travel management system is critical to the success of resource protection efforts. User-created routes generally have the greatest potential to impact watershed processes, water quality, and riparian health because they lack adequately designed and maintained safeguards. These routes may also cross sensitive wildlife habitat, unstable soils, and other fragile resources. Further, based on our understanding of other past travel management plans in our region, user-created routes can prove difficult to permanently close.

Given these concerns, we recommend that the EIS provide information about unauthorized motorized uses, both off-road or on closed roads/trails, within the Rio Grande National Forest and a discussion regarding whether and how the Forest Service will commit adequate funding and personnel to regulate unauthorized over-snow vehicle use. We recommend that the EIS include a monitoring and compliance plan for determining the effectiveness of over-snow travel management on the Rio Grande National Forest, including the effectiveness of route closures and mitigation taken to prevent user-created routes. Effectiveness monitoring is discussed in the January 2011 Council on Environmental Quality (CEQ) guidance on “Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact” (see <http://energy.gov/nepa/council-environmental-quality>), and a monitoring and compliance plan for mitigation is required under the May 2024 CEQ NEPA Phase II Final Rule when the analysis of the reasonably foreseeable effects of a proposed action in an environmental assessment or environmental impact statement is based on implementation of mitigation or when mitigation is incorporated into a record of decision, finding of no significant impact, or separate decision document (see <https://ceq.doe.gov/laws-regulations/regulations.html>). Such a monitoring plan will support over-snow travel management by allowing the Forest Service to justify adaptations in response to any resource issues that may arise.

### **Wildlife and Special-Status Species**

A preliminary search using data available from the U.S. Fish & Wildlife Service's (USFWS) Information for Planning and Consultation tool<sup>14</sup> revealed several federally threatened and endangered species whose ranges overlap with the project area. These species include fishes, birds, mammals, and insects. Since these species are warranted special protections by the Endangered Species Act, early coordination with the USFWS on this project will be important. Documentation of USFWS's consultation and recommendations for design criteria, mitigation, monitoring, and adaptive management strategies will be an important part of the EIS.

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<sup>14</sup> <https://ipac.ecosphere.fws.gov/>

The Purpose and Need/Proposed Action document states that “To reduce impacts to Canada lynx, groomed snowmobile trails that overlap suitable lynx habitat are open and groomed from December 1 to March 31.”<sup>15</sup> It is unclear how this proposal would reduce impacts to Canada lynx. The EPA suggests explaining this point in the EIS.

The EPA recommends developing BMPs, design features, and mitigation for each listed and sensitive species within the project area. For example, design features might be implemented to limit over-snow travel in areas above trees in white-tailed ptarmigan habitat.<sup>16</sup>

In addition, the EPA recommends considering whether the proposed action may have indirect or cumulative effects on species within the project area. For instance, the Forest Service might consider whether potential increases in over-snow vehicle use due to the proposed action might impact water quality, which could negatively affect Rio Grande cutthroat trout populations. Similarly, the Forest Service might consider research indicating that snowmobile use in the Intermountain West tends to push coyotes into deep snow areas, which may negatively impact Canada lynx.<sup>17</sup>

### **Environmental Justice Impacts**

The EPA recommends that the Forest Service ensure the EIS follows all relevant mandates that guide the information, analyses, and activities necessary for compliance by the Forest Service in the EJ impacts analysis. Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, February 11, 1994 was supplemented by EO 14096, *Revitalizing Our Nation's Commitment to Environmental Justice for All*, April 26, 2023, which strengthens the federal government's commitment to provide meaningful opportunities for engagement of environmental justice (EJ) communities.<sup>18</sup> The government-wide approach in Section 3 of the EO requires each agency “identify, analyze, and address disproportionate and adverse human health and environmental effects (including risks) and hazards of Federal activities, including those related to climate change and cumulative impacts of environmental and other burdens on communities with environmental justice concerns.” Specifically, it directs agencies to conduct NEPA reviews that analyze direct, indirect, and cumulative effects of federal actions on communities with EJ concerns. Section 3(b)(i) of EO 14096 also directs the EPA to assess whether each agency analyzes and avoids or mitigates disproportionate human health and environmental effects on communities with environmental justice concerns when carrying out responsibilities under Section 309 of the Clean Air Act, 42 U.S.C. 7609. In addition, Executive Order 13985 – *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government* – sets expectations for a whole-of-government approach to advancing equity for all. Therefore, consistent with these executive orders and CEQ’s Environmental Justice Guidance Under NEPA,<sup>19</sup> the EPA recommends the EIS include the following:

- Identify communities within the geographic scope of the impact area that are living with

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<sup>15</sup> Page 4

<sup>16</sup> See [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5182070.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5182070.pdf).

<sup>17</sup> See <https://onlinelibrary.wiley.com/doi/abs/10.2193/0091-7648%282006%2934%5B828%3APIOCAS%5D2.0.CO%3B2>.

<sup>18</sup> 88 *Federal Register* 25251 (April 26, 2023).

<https://www.federalregister.gov/documents/2023/04/26/2023-08955/revitalizing-our-nations-commitment-to-environmental-justice-for-all>

<sup>19</sup> <https://www.epa.gov/environmentaljustice/environmental-justice-and-national-environmental-policy-act>

environmental justice (EJ) concerns, including the sources of data and a description of the methodology and criteria utilized. This should involve comparing percentages of low income and/or minority residents in the project area to an appropriate reference community.

- Meaningfully engage any communities with EJ concerns with respect to the Forest Service’s decisions on the proposed Project, and with Tribal Historic Preservation Officers if cultural or historical artifacts are or have been found in the Project area.
- Assess socioeconomic concerns for indigenous communities and communities with EJ concerns, including:
  - An assessment of historic, ongoing, and cumulative baseline environmental impacts, including health impacts from cumulative pollution loads, and identification of any already existing disproportionate impacts in these overburdened communities.
  - A discussion of potential direct, indirect, and cumulative impacts of the proposed project and alternatives on the health of these communities, and identification of disproportionate and adverse impacts. This should involve comparing the impacts to communities with EJ concerns to the impacts of the project on the reference community.
  - An evaluation of socioeconomic impacts, including the potential for additional burden on local communities’ ability to provide necessary public services and amenities during construction.
- Mitigation measures or alternatives to avoid or reduce any disproportionate adverse impacts. We recommend involving the affected communities in developing the measures.
- Document the process used for community involvement and communication, including all measures to specifically address equitable community engagement and involvement of low-income and minority communities. Include an analysis of results achieved by reaching out to these populations.

A report of the Federal Interagency Working Group on Environmental Justice & NEPA Committee, *Promising Practices for EJ Methodologies in NEPA Reviews*,<sup>20</sup> provides methodologies gleaned from current agency practices to both consider environmental justice concerns during environmental analyses and encourage effective participation by communities with environmental justice concerns.

The EPA strongly encourages the use of EJScreen when conducting EJ scoping efforts.<sup>21</sup> The EPA’s nationally consistent EJ screening and mapping tool is a useful first step in highlighting locations that may be candidates for further analysis. The tool can help identify potential community vulnerabilities by calculating EJ Indexes and displaying other environmental and socioeconomic information in color-coded maps and standard data reports (e.g., pollution sources, health disparities, critical service gaps, climate change data). EJScreen can also help focus environmental justice outreach efforts by identifying potential language barriers, meeting locations, tribal lands and indigenous areas, and lack of broadband access. For purposes of NEPA review, a project is considered to be in an area of potential EJ concern when the area shows one or more of the twelve EJ Indexes at or above the 80th percentile in the nation and/or state. However, scores under the 80th percentile should not be interpreted to mean there are definitively no EJ concerns present.

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<sup>20</sup> [https://www.epa.gov/sites/production/files/2016-08/documents/nepa\\_promising\\_practices\\_document\\_2016.pdf](https://www.epa.gov/sites/production/files/2016-08/documents/nepa_promising_practices_document_2016.pdf)

<sup>21</sup> <https://ejscreen.epa.gov/mapper/>

While EJScreen provides access to high-resolution environmental and demographic data, it does not provide information on every potential community vulnerability that may be relevant. The tool's standard data report should not be considered a substitute for conducting a full EJ analysis, and scoping efforts using the tool should be supplemented with additional data and local knowledge when reasonably available in order to comply with the direction provided in EO 14096. Also, in recognition of the inherent uncertainties with screening level data, EPA recommends assessing each block group within the Project area individually and adding a one-mile buffer around the Project area. Please see the EJScreen Technical Information for a discussion of these and other issues.

### **Climate-Related Impacts and Greenhouse Gas Emissions**

Since all individual sources of greenhouse gas (GHG) emissions contribute to the collectively profound threat of climate change and most actions will be affected by climate change, it is important to consider impacts to and from climate change in agency decision-making. Therefore, and consistent with EO 14008's policy that "[t]he Federal Government must drive assessment, disclosure, and mitigation of climate pollution and climate-related risks in every sector of our economy," we recommend including analysis of GHG emissions and climate related impacts in the EIS. For the analysis, the EPA recommends that the Forest Service follow interim guidance published by CEQ on January 9, 2023, to assist federal agencies in assessing and disclosing climate change impacts during environmental reviews (CEQ GHG Guidance).<sup>22</sup> CEQ developed this guidance in response to EO 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. This interim guidance is currently in effect and provides direction for analyzing and discussing project-related direct, indirect, and cumulative climate-related impacts. As discussed in the guidance, when conducting climate change analyses in NEPA reviews, agencies should consider, as appropriate: (1) the potential effects of a proposed action on climate change, including by assessing both GHG emissions, such as the emissions generated from the grooming of trails and a potential increase in over-snow motorized vehicle use, and reductions from the proposed action; and (2) the effects of climate change on a proposed action and its environmental impacts. Consistent with this guidance, the EPA recommends the Forest Service include analysis of alternatives and/or identification of practicable mitigation to reduce project-related GHG emissions, and a discussion of opportunities to improve the resilience of the alternatives to climate change-related issues and to reduce any impacts of the alternatives that may be exacerbated by climate change.

The EPA also recommends the EIS include a discussion of reasonably foreseeable climate change impacts in the planning area—such as changes in precipitation patterns, hydrology, vegetation distribution in respective watersheds, and temperature—and the potential effect of these impacts on the proposed action. For instance, ongoing drought could impact snowpack levels, affecting the Forest Service's ability to achieve its project objectives. Evaluating this information in the analysis could help inform the development of measures to improve the resiliency of over-snow travel management plans. Climate considerations should also include how the shifting baseline of climate may affect the significance of impacts in various resource areas over time.

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<sup>22</sup> <https://www.federalregister.gov/documents/2023/01/09/2023-00158/national-environmental-policy-act-guidance-on-consideration-of-greenhouse-gas-emissions-and-climate>

### **Recreational Safety**

The EPA recommends ensuring that necessary steps are taken to maximize recreational safety throughout the planning area. Therefore, we recommend investigating whether a minimum snow depth of 12 inches for over-snow vehicle use on designated roads, trails and areas is sufficient, given the varied and rocky terrain in some parts of the planning area, and discussing the sources used for determining this minimum snow depth.

In addition, since the planning area may include portions of the Wheeler Geologic Area, we recommend ensuring that over-snow vehicles do not enter areas of that are easily disturbed or could provide false bottoms which may endanger recreational users.

### **Invasive Species**

Management of invasive species is an important topic to address in the over-snow travel management Project since these species tend to gain a foothold where there are disturbances in the ecosystem, such as those related to road development and maintenance or motorized vehicle use on unpaved roads and trails. Invasive species can contribute to erosion, reduce tree cover which can increase surface water temperature, cause wildlife, habitat, and biodiversity loss, and increase fire risk. We recommend the EIS provide information on the current state of invasive species in the Rio Grande National Forest and how each alternative would positively or negatively impact the problem. Specifically, we recommend the EIS describe how management actions will address the spread of invasive species through prevention; early detection and rapid response; control and management; and restoration and rehabilitation. We also recommend including BMPs, design features, and mitigation in the EIS focused on reducing the establishment and spread of invasive species, such as limiting soil and vegetation disturbance in areas where invasive species are known to be present and educating the public about methods to prevent the spread of invasive species (as mentioned in the scoping document).<sup>23</sup>

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<sup>23</sup> Purpose and Need/Proposed Action, page 3