



## REGION 8

DENVER, CO 80202

April 1, 2024

Ref: 8EJC-NE

Carolyn P. Upton, Forest Supervisor  
Lolo National Forest  
Attn: Lolo Plan Revision Team  
24 Fort Missoula Road  
Missoula, Montana 59804  
Transmitted electronically

Dear Supervisor Upton:

The U.S. Environmental Protection Agency Region 8 has reviewed the U.S. Department of Agriculture Forest Service January 31, 2024, notice of intent (NOI) for the environmental impact statement (EIS) that is being prepared for the proposed revision of the Land Management Plan (Forest Plan) for the Lolo National Forest (Forest). In accordance with our responsibilities under Section 102(2)(c) of the National Environmental Policy Act (NEPA) in the development of the Draft EIS for the proposed Project, the EPA is providing scoping comments.

The USFS intends to prepare the Lolo Forest Plan, which will replace the existing 1986 Land and Resource Management Plan, consistent with the 2012 USFS Planning Rule. The proposed action is programmatic in nature and will guide forest management decisions for the next 15-20 years by determining forest-wide and geographic area desired conditions, goals, objectives, standards, and guidelines, as well as suitability of lands for specific multiple uses. A monitoring program also will be proposed.

The following are important topics associated with Forest Planning that we recommend for discussion in the Draft EIS and Forest Plan:

- Baseline conditions of soils, watersheds, water quality, sediment loads, wetland and riparian health, vegetation cover (including pest and disease status and trends), wildlife and fish population/habitat health and trends, and air quality;
- Resource desired conditions, goals, objectives, standards, and guidelines for the above resources;
- Impacts on the baseline resource conditions that would likely result from management actions associated with each alternative and a comparative assessment of how each alternative will affect attainment of resource metrics;
- Best management practices (BMPs) for water quality protection; protection of riparian areas and wetlands; reduction of impacts from roads, trails, and grazing; and maintenance

and restoration of watershed health to achieve water quality that fully supports beneficial uses of surface waters in cooperation with State/EPA Total Maximum Daily Loads (TMDL) development and implementation efforts;

- Strong monitoring, mitigation, and if needed, adaptive management programs, in support of watershed analysis and evaluation of BMP effectiveness and watershed restoration success; and
- BMPs and design criteria to reduce air quality impacts from emissions generated in the forest.

Based on preliminary information, our initial areas of interest for the Draft EIS and Forest Plan focus on identifying potential impacts and mitigation measures related to (1) water resources, including wetlands; (2) air quality; (3) environmental justice; (4) monitoring; (5) climate change; and (6) minerals and energy development. We recommend the Draft EIS discuss the direct, indirect, and cumulative impacts associated with each alternative on environmental resources 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 while providing for the Forest's multiple uses. Our detailed recommendations are attached in the enclosure of this letter for your consideration.

We appreciate your consideration of our comments at this early stage of the process. These comments are intended to help ensure a thorough assessment of the project's environmental impacts, adequate public disclosure, and an informed decision-making process. If further explanation of our comments is desired, please contact me at (303) 312-6500 or [hubner.matt@epa.gov](mailto:hubner.matt@epa.gov), or my supervisor Melissa McCoy at (303) 312-6115 or [mccoy.melissa@epa.gov](mailto:mccoy.melissa@epa.gov).

Sincerely,

Matt Hubner  
Lead Reviewer, NEPA Branch  
Environmental Justice, Community Health, and  
Environmental Review Division

ENCLOSURES

Detailed Scoping Comments for Lolo National Forest Land Management Plan Revision

cc: Amanda Milburn, Lolo National Forest

## Detailed Scoping Comments for Lolo National Forest Land Management Plan Revision

### Water Resources, Including Wetlands

The EPA recommends that the Draft EIS and Forest Plan delineate and assess existing water resources, including tributaries and wetlands in the Forest Plan area. A detailed baseline discussion of water resources will provide the basis for an effective analysis of potentially significant impacts resulting from the proposed Forest Plan to hydrology, water quality, aquatic habitat, and other water resources in the study area, as well as what measures are needed to improve existing conditions. The EPA recommends including disclosure of which waters may be impacted, the specific pollutants likely to impact those waters, and the nature of potential impacts from Forest Plan activities.

#### *Surface Water*

In order to effectively analyze impacts to surface water resources in the study area, the EPA recommends that the Draft EIS include the following analyses or descriptions:

- Clear maps and summaries of Forest Plan study area waters and surrounding waters, including streams, lakes, springs, and wetlands. The summary should identify high resource value water bodies and their designated beneficial uses (e.g., agriculture, fisheries, drinking water, recreation);
- Watershed conditions, including vegetation cover and composition, soil conditions, and areas not meeting desired conditions;
- Surface water information, including available water quality data in relation to current Montana Water Quality Standards, stream functional assessments, stream channel/stream bank stability conditions, sediment loads, and aquatic life conditions;
- Types, functions, conditions, and acreages of wetlands, riparian areas, and springs;
- A map and list of Clean Water Act (CWA) impaired or threatened water body segments within, or downstream of, the study area, including the designated uses of the water bodies and the specific pollutants of concern potentially affected by on-going activities within or adjacent to the Forest.

#### *Groundwater*

Shallow aquifers are more susceptible to contamination because a contaminant introduced at the surface may more rapidly enter the system, and there is less intervening soil to adsorb the contaminants before they reach the groundwater. Shallow aquifers also commonly exchange flows with surface-water features, such as streams and lakes, and may supply groundwater to support wetlands and wildlife. Since projects will tier to the Forest Plan EIS, we recommend the USFS include a map of groundwater resources and a discussion to include the following topics, as appropriate:

- Identification of major aquifers, and their physical and chemical characteristics;
- Location and extent of groundwater recharge areas;
- Characterization of source water protection zones for public water systems;
- Location of shallow and sensitive aquifers that are susceptible to contamination from surface activities, including alluvial aquifers along streams and rivers; and

- Location of existing and potential (i.e., those that can reasonably be used in the future) underground sources of drinking water (USDW).<sup>1</sup>

Please include available groundwater quality information and identify which shallow aquifers are sources for public water systems, domestic wells, or stock wells. We also recommend identifying any public water systems in the planning area with water quality violations or with requirements for increased frequency of monitoring for contaminants. The Montana DEQ is a good source of information concerning aquifers.

If shallow aquifers are present and could be impacted by future USFS-authorized project activities, then we recommend the Draft EIS include appropriate standards and guidelines to address siting of management areas and facilities to protect vulnerable resources. For example, latrines and fuel tanks should be sited a minimum of 50 feet away from water wells. We also recommend the USFS require BMPs such as: establishing proper equipment and vehicle fueling and maintenance practices; providing well-maintained toilets, including secondary containment pans under portable toilets where possible; inspecting vehicles, equipment, and storage tanks regularly for leaks; and developing a spill plan.

#### *Water Quality Data*

Water quality data for waterbodies within, adjacent to, and downstream from the planning area provide important information for evaluating the potential influence of the Forest Plan on water quality. This evaluation can guide management for the Forest Plan with the data providing a baseline for future monitoring of impacts. The EPA recommends that the Draft EIS provide a summary of available information and monitoring data on water quality within the planning area and for surrounding waters that may be affected by the proposed Forest Plan, including, but not limited to, parameters such as total phosphorus, total nitrogen, *Escherichia coli* (*E. coli*), fecal coliform, total suspended solids, turbidity, total dissolved solids, and temperature. It will also be important to include water quality data for parameters listed for impaired water bodies within or downstream of the study area. Identifying any significant gaps in available data may be helpful in developing a monitoring plan. At a minimum, the EPA recommends summarizing in the NEPA Draft EIS what the available data indicate about water quality within and surrounding the project area and providing a reference to a publicly accessible technical document or an appendix that contains the data on the relevant water quality parameters.

#### *Impaired Water Bodies*

To include the most relevant data, we recommend the Draft EIS utilize Montana's most-recently approved 303(d) list to inform its analysis of impaired waterbodies. Primary causes of impairment include, but are not limited to, temperature, total dissolved solids, selenium, bio-assessment (an observed versus an expected assessment for macroinvertebrates), dissolved oxygen, gross alpha (a

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<sup>1</sup> In general, this includes aquifers with a concentration of total dissolved solids (TDS) less than 10,000 mg/L and with a quantity of water sufficient to supply a public water system. Aquifers are presumed to be USDWs unless they have been specifically exempted or if they have been shown to fall outside the definition of USDW (e.g.,  $\geq 10,000$  mg/L TDS).

measure of radioactivity), pH, phosphorous, and sedimentation. Where a TMDL exists for impaired waters in the area of potential impacts, pollutant loads should comply with the TMDL allocations for point and nonpoint sources. Where new loads or changes in the relationships between point and nonpoint source loads are created, we recommend that the USFS work with Montana DEQ to revise TMDL documents and develop new allocation scenarios that ensure attainment of water quality standards. Where TMDL analyses for impaired water bodies within or surrounding the planning area still need to be developed, we recommend that proposed activities in the drainages of CWA impaired or threatened water bodies be either carefully managed to prevent any worsening of the impairment or avoided altogether where such impacts cannot be prevented.

#### *Public Drinking Water Supply Source Characterization*

In order to ensure that public drinking water supply sources (surface water and groundwater sources) are protected from potential impacts associated with USFS-authorized activities in the planning area, it is important to identify where these sources are located. Therefore, the EPA recommends that the USFS include a map depicting municipal supply watersheds<sup>2</sup> and source water protection areas for public water supply wells and surface water intakes (streams, rivers, and reservoirs) in accordance with State data security requirements. We also recommend identifying reservoirs that are drinking water sources and an analysis of potential impacts to drinking water sources.

It appears that the planning area contains or is adjacent to important drinking water resources of the highest value, including sole source aquifers. EPA recommends the Draft EIS include generalized maps depicting the location of sensitive groundwater resources such as sole source aquifers (available from the EPA Sole Source Aquifer website at <https://www.epa.gov/dwssa>), municipal watersheds, source water protection zones, sensitive aquifers, and recharge areas.

Designated by the EPA under the Safe Drinking Water Act (42 U.S.C. 300 et. seq.), a sole source aquifer is one which supplies at least fifty percent of the drinking water consumed in the area overlying the aquifer with no reasonably available alternative drinking water sources. By this designation, the EPA has determined that if the sole source drinking water aquifer is contaminated, it would create a significant hazard to public health. EPA encourages the USFS to determine if additional data collection and source water protection zones are warranted in the Forest Plan.

#### *Wetlands*

We recommend the Draft EIS include a description of the impacts to wetlands and associated springs that may result from management activities. Such impacts may include functional conversion of wetlands (e.g., forested to shrub-scrub); changes to supporting wetland hydrology (e.g., snow melt patterns, sheet flow, and groundwater hydrology); and wetland disturbance and loss. If impacts are anticipated, we also recommend that the Draft EIS describe how the USFS intends “to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands” as described in Executive Order (EO) 11990, Protection of Wetlands, including how wetlands will be identified and avoided, and how unavoidable impacts would be mitigated.

Discharge of dredged or fill material into waters of the United States, including wetlands, is regulated under CWA Section 404. This permit program is administered jointly by the U.S. Army Corps of

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<sup>3</sup> [fws.gov/policy/501fw2.html](https://www.fws.gov/policy/501fw2.html)

Engineers (Corps) and the EPA. For future USFS activities authorized under the Forest Plan, please consult with the Corps to determine the applicability of CWA Section 404 permit requirements to wetlands that would be impacted in the planning area and to ensure appropriate minimization measures are applied to avoid adverse impacts to wetlands.

We recommend avoiding impacts to aquatic resources that are considered “difficult to replace” under the EPA’s and the Corps’ Final Rule for Mitigation for Losses of Aquatic Resources [33 CFR Parts 325 and 332; 40 CFR Part 230 (73 FR 19594, April 10, 2008)]. The rule emphasizes the need to avoid and minimize impacts to these “difficult-to-replace” resources and requires that any compensation be provided by in-kind preservation, rehabilitation, or enhancement to the extent practicable. We recommend restoration plans require that soil profiles and hydrology are re-established as much as possible to the original state. In addition, the EPA recommends the USFS consider the Mitigation Rule to protect aquatic resources even when a CWA Section 404 permit is not required.

To ensure that wetlands are protected to the greatest extent possible, it may be necessary to consider exclusion of certain activities, e.g., road construction and vegetation treatments, in management areas where wetlands or riparian areas would be adversely impacted. We support the use of BMPs and well-defined adaptive management strategies to protect sensitive soils, wetlands including fens, riparian areas, meadows, resources affected by stream crossings, and critical habitat. Riparian habitat buffer zones can prevent adverse impacts to streams and riparian areas. The EPA recommends the Forest Plan include standards and guidelines to protect these valuable resources.

#### *Special Consideration for Fen Wetlands*

The September 2023 Revised Assessment Report includes a qualitative discussion of wetlands, including the presence of fen wetlands in the planning area. As noted in these documents, fen communities are very sensitive to hydrologic alterations and restoration is extremely challenging once function has been impaired. Due to the slow rate of accumulation of peat in fens, these ecosystems are generally considered to be irreplaceable and impacts to fens are irretrievable.

Fens are groundwater-fed, peat-forming wetlands that often host rare plants and animals. Fens also provide important ecological and hydrological functions by improving water quality in headwater streams, sequestering carbon, and providing base flows to streams during late summer and/or drought periods. Fen wetlands rely on permanently saturated soil conditions which slows the decomposition of organic material, and therefore fen communities are very sensitive to hydrologic alterations. With accumulation of peat occurring at rates between 4 and 16 inches per 1,000 years, these ecosystems are generally considered to be irreplaceable. The U.S. Fish and Wildlife Service (USFWS) Region 6 designated fen wetlands a Resource Category 1, which is habitat that is considered unique and irreplaceable on a national basis or at the ecoregion level.<sup>3</sup> Further underlining the uniqueness and importance of fens in Montana, the Corps revoked the use of most Nationwide Permits in peatlands/fen-type wetlands to protect this unique wetland type.

When fen hydrology is disturbed and peat is exposed to aerobic conditions (e.g., due to a change in or elimination of groundwater flow paths) soil microbes shift from anerobic respiration to aerobic respiration and begin to consume the organic matter within the soils. Oxidation of the organic soils can

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<sup>3</sup> [fws.gov/policy/501fw2.html](https://www.fws.gov/policy/501fw2.html)

permanently alter groundwater flow paths and hydro-physical properties of the soil such that restoration relies on the development of new peat material above the impaired soils. Restoration of fens is therefore both an extremely lengthy, challenging, and uncertain process. The USFWS's Region 6 fen protection policy states, *"Therefore, onsite or in-kind replacement of peat wetlands is not thought to be possible. Furthermore, at present there are no known reliable methods to create a new fully functional fen or to restore a severely degraded fen."* Mitigation for fen impacts is not possible on regulatory time scales, therefore impacts to fens are irretrievable.

We recommend that the Draft EIS include a description, acreage, and locations of fens within the planning area and the potential direct and indirect impacts to fens and their groundwater supply that could result from USFS-authorized activities. We also recommend the Forest Plan contain robust desired conditions, goals, objectives, standards, and management actions for protection of these irretrievable resources. Consistent with the goals of the Clean Water Act Section 404, we strongly recommend that the alternatives analysis include requirements to avoid both direct and indirect impacts to these effectively irreplaceable resources.

#### *Erosion and Sediment Load Analysis*

Erodible soils may represent a source of pollutants in the planning area. Increased sediment from surface disturbance may represent a significant source of pollutants and degrade water quality in receiving streams. Depending on a host of variables including soil characteristics, industrial operations, condition of roads and trails, and topography, associated runoff from future USFS-authorized activities could introduce sediments as well as salts, selenium, heavy metals, nutrients, and other pollutants into surface waters.

We recommend providing a map of fragile soils, such as those with elevated levels of salinity or selenium and those prone to erosion, in the planning area. Because sediment loading may already be a concern and future USFS-authorized activities could result in new surface disturbance that may enable erosion, it is important to provide baseline information about this issue. We recommend that the Draft EIS provide a quantitative estimate of erosion rates. For example, erosion rates can be calculated using the Water Erosion Prediction Project (WEPP) model, a web-based interface developed by the USDA Agricultural Research Service.<sup>4</sup> We recommend that the USFS consider using this model or another appropriate model that would be applicable to this planning area.

These highly erosive soils potentially include biological soil crusts. Biological soil crusts are important resources in the arid West because they improve water filtration, soil stability, and provide resistance to the establishment of invasive grasses. Since biological soils can take up to 250 years to regenerate depending on the species composition, we recommend the Draft EIS discuss potential impacts to these sensitive soils and include a description of impacts to biological soil crusts as an Irretrievable Commitment of Resources. We also recommend the Forest Plan include specific standards and guidelines to protect biological soil crusts.

#### *Roads and Trails*

We recommend that the USFS include a map identifying the existing forest roads and trails network along with planning area waters. We recommend that the map and analysis identify existing road

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<sup>4</sup> <https://www.nrcs.usda.gov/resources/tech-tools/water-erosion-prediction-project>

usage and any ongoing impacts of that usage to inform Forest Plan measures for future protection of impacted resources. We further recommend the Draft EIS identify current and foreseeable construction, reconstruction, maintenance, storage, decommissioning, and watershed improvement activities, where such activities are positively or negatively affecting known roads and trails impacts to water resources. The following are the EPA's general recommendations to protect aquatic resources from road impacts:

- Locate roads away from streams and riparian areas, steep slopes, landslide prone areas, and erosive soils; design roads to allow for natural drainage patterns;
- Minimize the number of road stream crossings; construct unavoidable road stream crossings during periods of low flow to avoid fish spawning and incubation periods, or dewater relevant stream segments prior to construction;
- Use bottomless or textured bottom culverts that are large enough in diameter to accommodate extreme flood events whenever possible;
- Provide adequate road drainage and erosion control to avoid routing sediment to streams;;
- Consider road decommissioning or rehabilitation at a rate equal to or greater than new road construction to prevent increases in overall watershed impacts.

#### *Livestock Grazing*

Grazing management and practices have the potential to impact soil and water resources through vegetation loss, accelerated soil loss, bank erosion, soil compaction, increased surface storm flow, reduced stream base flows from decreased infiltration to groundwater, and changes in water temperature associated with shade loss or channel widening. Based on the USFS's experience with grazing in the planning area, we recommend the Draft EIS include an assessment of each alternative's potential impacts and benefits to aquatic resources that may stem from grazing impacts to water quality, stream and wetland processes, and fish populations and habitat.

We recommend that the Forest Plan include objectives, standards, and guidelines to protect vulnerable resources from potential grazing impacts. We support the development of BMPs to be utilized and refined during future site-specific analyses, including mitigation and monitoring measures to reduce the potential for aquatic resource impacts. Requirements for inspection, maintenance, and adjustment of BMPs are important to ensure protection of groundwater and surface water resources. We recommend that the Draft EIS include a list of mitigation measures that will be required as part of future authorizations or refined through site-specific NEPA analyses. Such measures may include special buffer zones for high quality riparian and wetland resources (e.g., springs and fens) and management to limit deposition of animal waste in and adjacent to water bodies (e.g., protecting or repairing existing exclusions, providing upland water developments, and developing new range improvements to discourage congregation near water bodies).

Further, since range improvements (e.g., water developments, spring enclosures, fencing, and corrals) are generally designed and constructed in a manner to protect aquatic resources from adverse impacts associated with livestock grazing, we recommend the Draft EIS address how range improvements will be protected from impacts associated with future activities such as vegetation management, prescribed fire, recreation use, and road construction that may be authorized under the Forest Plan.



### *Potential Impacts of Beetle Epidemic*

The presence and handling of beetle-killed trees has the potential to impact public water supplies if it leads to organic loading of area waterbodies that are sources of drinking water. Organic matter interacts with disinfectants used in the drinking water treatment process to form disinfection byproducts, which are a human health concern. Organic loading may also decrease oxygen levels leading to the release of metals such as arsenic, manganese, and iron from sediments. For more information, see Mikkelsen, K et al. 2013, 'Bark beetle infestations affect water quality in the Rocky Mountains of North America' GWF Discussion Paper 1306, Global Water Forum, Canberra, Australia. We recommend the Draft EIS provide an assessment of the potential for organic loading impacts to drinking water supplies associated with these municipal watersheds. If appropriate, we also recommend the Forest Plan include specific standards and guidelines addressing the handling of beetle-killed trees and mitigation of impacts to public water supplies.

### *Monitoring*

When the USFS develops the monitoring plan, we recommend including monitoring for the status and trend of water quality, soil function, and aquatic and riparian conditions, as well as identification of specific adaptive management actions responsive to monitoring of these resources. This is important for achieving watershed-related desired conditions. We recommend assessing water resource data gaps and addressing them to provide a baseline for future monitoring of impacts. We also recommend including requirements to monitor the effectiveness of BMPs and mitigation measures in protecting aquatic resources and returning them to desired conditions. We are available to assist the USFS in developing the monitoring plan if desired.

### **Air Quality**

#### *Existing Air Quality and Air Quality Related Values (AQRVs)*

It is important to characterize the existing air quality baseline in order to evaluate potential changes in air quality that could result from authorized activities under each alternative. We recommend that the Draft EIS include information about existing air quality for criteria pollutants and AQRVs (including visibility and resources sensitive to deposition). For criteria pollutants we recommend coordinating with the Montana Department of Environmental Quality to establish representative design values (background pollutant concentrations) based on the most recent monitoring data. Data are also available to the public through EPA's design values webpage<sup>5</sup> and outdoor air monitor webpage,<sup>6</sup> as well as through the EPA's Air Quality System (AQS)<sup>7</sup> for AQS users. Due to the size of the Forest planning area and mountainous geography and available monitoring data, we recommend characterizing the airsheds with multiple background concentrations. We also recommend identifying all nonattainment and maintenance areas that are proximal to the forest. We note that there are such areas in Montana and in Idaho (see 40 CFR 81.327 for Montana and 40 CFR 81.313 for Idaho). We recommend characterizing trends in visibility utilizing data available through the IMPROVE monitoring network as well as information prepared by the Federal Land Managers (FLM) for Class I areas they manage (noted below). It may be appropriate to work with the respective FLMs regarding

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<sup>5</sup> <https://www.epa.gov/air-trends/air-quality-design-values>

<sup>6</sup> <https://www.epa.gov/outdoor-air-quality-data/interactive-map-air-quality-monitors>

<sup>7</sup> <https://www.epa.gov/aqs>

existing AQRVs in those managed areas as well. Additional information on this topic is available online at:

- <https://www.epa.gov/outdoor-air-quality-data/interactive-map-air-quality-monitors>;
- <http://vista.cira.colostate.edu/Improve/>;
- [https://www.fs.usda.gov/air/technical/class\\_1/alpha.php](https://www.fs.usda.gov/air/technical/class_1/alpha.php); and
- <https://www.nps.gov/subjects/air/park-conditions-trends.htm>

Existing deposition may be characterized utilizing the National Atmospheric Deposition Program monitoring network in conjunction with total deposition (TDEP)<sup>8</sup> estimates as well as information available from the FLMs cited above. Areas that may be of interest to the analysis include, but are not limited to, Selway-Bitterroot, Bob Marshall, Scapegoat, and Rattlesnake Wilderness Areas.

#### *Air Quality and AQRV Impact Analysis*

We recommend that the Draft EIS analyze all potential development-related impacts to air quality, both those that are and are not regulated by state air permitting. EPA looks forward to working with the USFS on the approach for the air quality impact analysis including the emission inventory, and we recommend that the USFS work with Cooperators and FLMs to address the following analysis components:

- Impacts from each of the criteria pollutants (i.e., ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide and lead), including with respect to the National Ambient Air Quality Standards;
- Impacts to AQRVs in potentially impacted Class I areas and any sensitive areas identified as being relevant to the planning area in collaboration with Cooperating Agencies and FLMs; and
- Impacts that could result from exposure to Hazardous Air Pollutants (HAPs) based on relevant health-based risk thresholds for HAPs. We are available to assist with methods of analysis and appropriate characterization of available thresholds.

#### *Vegetation Management and Timber Harvesting Activities*

Air quality may be negatively impacted by emissions from heavy diesel equipment utilized for removal and thinning of trees, idling trucks used for transportation of wood products, and re-entrained dust generated from USFS-authorized activities. If proposed management areas will allow substantial vegetation management and harvesting activities over the planning horizon, then we recommend the Draft EIS include a qualitative discussion of air emissions that may result from foreseeable harvesting and thinning of trees and associated activities. Road dust control, limiting gas engine truck idling and electrification of vehicles (including timber trucks) are among the measures available to manage localized impacts. We also recommend the Forest Plan include guidelines to manage these types of emissions.

#### *Prescribed Fire*

Prescribed fire is a valuable tool that can have ecological benefits over other treatment techniques. Prescribed fire activity also has the potential to cause periodic degradation of air quality and visibility. We realize the individual burn plans prepared for future prescribed fire activities would quantify expected emissions. We recommend that the Draft EIS provide an estimate of the foreseeable acreage to be proposed for prescribed fire management, as well as an estimate of predicted emissions (or at

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<sup>8</sup> <https://nadp.slh.wisc.edu/committees/tdep/>

least a qualitative discussion of the types of pollutants expected to be generated) that may result from such burn-related treatments as well as the air quality benefits of reduced wildfire scope and intensity that may be achieved through use of prescribed fire. We also recommend the USFS consult with the Montana DEQ for any modeling, mitigation, or other measures required under state regulations or the State Implementation Plan to address CAA requirements.

### *Monitoring*

As the USFS develops the monitoring plan, we recommend including objectives for monitoring in Class I areas and sensitive Class II areas and identifying the parameters to be monitored. This would be consistent with the air quality-related desired conditions and goals in the 2024 Proposed Action document.

### **Environmental Justice and Tribal Consultation**

On April 21, 2023, Executive Order (EO) 14096, *Revitalizing Our Nation's Commitment to Environmental Justice for All*,<sup>9</sup> was signed and supplements EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*.<sup>10</sup> EO 14096 strengthens the federal government's commitment to provide meaningful opportunities for engagement of communities with environmental justice (EJ) concerns. 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. 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. Consistent with these executive orders and CEQ’s Environmental Justice Guidance Under NEPA,<sup>11</sup> the EPA recommends the NEPA analysis include the following:

- Identify people of color, low-income, and indigenous communities within the geographic scope of the impact area that are living with 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 identified community members with EJ concerns early in a public participation process, including those groups who are non-English speakers in or near the planning area.
- Assess EJ and other socioeconomic concerns for people of color, low-income, and indigenous communities, including:

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<sup>9</sup> <https://www.federalregister.gov/documents/2023/04/26/2023-08955/revitalizing-our-nations-commitment-to-environmental-justice-for-all>

<sup>10</sup> <https://www.federalregister.gov/documents/1994/02/16/94-3685/federal-actions-to-address-environmental-justice-in-minority-populations-and-low-income-populations>

<sup>11</sup> Available along with other environmental justice resources at:

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

- An assessment of historic and ongoing, baseline environmental impacts, including health impacts from cumulative pollution loads, and identification of any already existing disproportionate and adverse impacts in overburdened communities.
- A discussion of potential direct, indirect, and cumulative impacts of the alternatives on the health of these communities, with consideration of any already disproportionate and adverse impacts being experienced.
- Identification of any potential disproportionate and adverse impacts, including cumulative impacts, associated with the alternatives on the identified communities. This should involve comparing the impacts to communities with EJ concerns to the impacts of the alternatives on the reference community.
- Establish measures or alternatives responsive to any anticipated disproportionate and adverse impacts to members of identified communities with EJ concerns.
- Document the process used for community involvement and communication, including all measures to specifically address equitable community engagement and involvement of low-income, minority, and indigenous communities. Include an analysis of results achieved by reaching out to these populations.

We also recommend including, in the Forest Plan, measures to reduce any disproportionate impacts on EJ communities and to involve the affected communities in developing the measures. The EPA recognizes the need for early involvement of the local communities and supports the meaningful participation of community representatives in the NEPA process.

A report of the Federal Interagency Working Group on Environmental Justice & NEPA Committee, *Promising Practices for EJ Methodologies in NEPA Reviews*,<sup>12</sup> provides methodologies gleaned from current agency practices to both consider EJ concerns during environmental analyses and encourage effective participation by communities with EJ concerns.

### *EJScreen*

The EPA strongly encourages the use of EJScreen when conducting EJ scoping efforts.<sup>13</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>12</sup> [https://www.epa.gov/sites/default/files/2016-08/documents/nepa\\_promising\\_practices\\_document\\_2016.pdf](https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf)

<sup>13</sup> <https://www.epa.gov/ejscreen>

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 to comply with the direction provided in EO 14096.

### *Tribal and NHPA Consultation*

We appreciate the Forest's consultation with the Confederated Salish and Kootenai government, Séliš-Qłispé Culture Committee, and the Séliš-Qłispé Elders Cultural Advisory Council on Forest Plan development as identified in the Proposed Action document. To ensure that all avenues have been attempted to consult with not only Tribal nations currently affiliated with the area but also those that may consider the project area to be ancestral homelands, we offer our assistance in the Forest's efforts to contact Tribal Governments and Tribal Historic Preservation Officers. Our Tribal Assistance Branch can help ensure the Forest has correct contact information and any other means of contact.

We further recommend the USFS conduct consultation under the National Historic Preservation Act (NHPA) with the Tribes (as identified above) as well as the State Historical Preservation Office. It has been our experience that these contacts change frequently and must be verified with each action. To ensure that NHPA consultation requirements are met, provided below are two resources which are updated and maintained online:

- The National Association of Tribal Historic preservation Officers – <https://www.nathpo.org/>; and
- The National Conference of State Historic Preservation Offices – Directory: <https://ncshpo.org/directory/>

We recommend including an updated contact list for THPOs and SHPOs in the Draft EIS to clearly identify those who consulted on the Forest Plan and Draft EIS. This will help ensure that NHPA consultation requirements are met and assist the USFS in protecting existing and discovered cultural resources into the future.

### **Monitoring and Adaptive Management**

We support the inclusion of a monitoring plan in the Forest Plan, as noted in the 2024 Proposed Action Document. The September 2023 Revised Assessment Report identifies monitoring needs related to several resource areas, e.g., air, soil, and water resources, and adaptive management practices. We recommend assessing data gaps and addressing them in order to provide a clear baseline for future monitoring of impacts and evaluation of the condition of forest resources. We also recommend monitoring the effectiveness of BMPs and mitigation measures in protecting aquatic resources. We support enhanced monitoring of resource conditions adjacent to and upstream of high value water resources to ensure timely adjustment of BMPs, effective adaptive management practices, and informed management decisions. Finally, we recommend the Draft EIS identify the features of an effective monitoring plan and adaptive management practices that may be expected for future activities, including the following:

Decision tree with achievable and measurable objectives to provide accountability and guide future decisions;

- Targets that correlate to desired future conditions;

- Specific decision thresholds with identified indicators for each impacted resource;
- Firm commitment to implement and fund a monitoring plan with protocols to assess whether thresholds are being met;
- Firm commitment to use monitoring results to modify management strategies as necessary; and
- Designated timeframes for completion of necessary management modifications

## **Climate Change**

Given the urgency of the climate crisis and NEPA's important role in providing critical information to decision makers and the public, NEPA reviews should quantify proposed actions' GHG emissions, place GHG emissions in appropriate context, disclose relevant climate impacts, and identify alternatives and mitigation measures to avoid or reduce GHG emissions. The Council on Environmental Quality (CEQ) encourages agencies to mitigate GHG emissions associated with their proposed actions to the greatest extent possible, consistent with national, science based GHG reduction policies established to avoid the worst impacts of climate change.

On January 9, 2023, CEQ published interim guidance titled *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change* (CEQ's 2023 GHG/NEPA Guidance) to assist agencies in assessing and disclosing climate change impacts during environmental reviews.<sup>14</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 effective immediately.

As discussed in this guidance, when conducting climate change analyses in NEPA reviews, agencies should consider, as appropriate: (1) the potential effects of the alternatives on climate change, including by assessing both GHG emissions and reductions from the proposed action; and (2) the effects of climate change on the alternatives and their environmental impacts. To describe climate effects in the Project area, we recommend including the following analyses or descriptions:

- A discussion of ongoing and projected regional climate change relevant to the planning area in the "affected environment" section of the Draft EIS, based on resources such as the U.S. Global Change Research Program (including the Fifth National Climate Assessment<sup>15</sup>), the EPA's Climate Change Indicators,<sup>16</sup> and the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.<sup>17</sup> This would enable the Draft EIS to identify impacts that may be exacerbated by climate change.
- Estimation of the anticipated direct and indirect GHG emissions associated with Forest activities authorized by the Forest Plan. We recommend estimating GHG emissions in CO<sub>2</sub>-equivalent terms and translating the emissions into equivalencies that are more easily understood by the

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<sup>14</sup> <https://www.federalregister.gov/documents/2023/01/09/2023-00158/national-environmental-policy-act-guidance-on-consideration-of-greenhouse-gas-emissions-and-climate>

<sup>15</sup> <https://nca2023.globalchange.gov/>

<sup>16</sup> <https://www.epa.gov/climate-indicators>

<sup>17</sup> <https://archive.ipcc.ch/report/ar5/syr/>

public.<sup>18</sup> The NEPA.gov website includes a non-exhaustive list of GHG accounting tools available to agencies for a variety of sectors from forestry to land use and development.<sup>19</sup>

- Accounting of the Forest Plan’s climate impact, including by utilizing a new set of Social Cost of Greenhouse Gas (SC-GHG) estimates as outlined in EPA’s November 2023 *Report on the Social Cost of Greenhouse house Gases: Estimates Incorporating Recent Scientific Advances*.<sup>20</sup> In the regulatory impact analysis of the EPA’s December 2023 Final Rulemaking, “Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review,” the EPA estimated climate benefits using a new set of SC-GHG estimates that reflect the state-of-the-science and address recommendations from the National Academies of Science, Engineering, and Medicine (NASEM) on estimating the SC-GHG. The EPA recommends the Draft EIS monetize the climate benefits of the proposed Project using the EPA estimates of SC-GHG, which incorporate the most recent scientific advances on climate change and its economic impacts. These values have undergone an expert peer review and are consistent with the recommendations of the NASEM.<sup>21</sup>

Analyzing reasonably foreseeable climate effects in NEPA reviews helps ensure that USFS’s decisions are based on the best available science and account for the urgency of the climate crisis. The EPA recommends that the Draft EIS discuss how reasonably foreseeable GHG emissions associated with the Forest Plan are, or are not, consistent with state and/or federal policies or goals to prevent the most catastrophic effects of climate change. For example, discuss how emissions help or hinder meeting GHG reduction targets set at the federal, state, or local level as required in 40 C.F.R. § 1506.2(d), including the U.S. 2030 Paris GHG reduction target and 2050 net-zero pathway.<sup>22</sup> We recommend that the USFS avoid percentage comparisons between project-level and national or global emissions, which inappropriately minimize the significance of planning-level GHG emissions.<sup>23</sup>

CEQ 2023 Interim Guidance, Section IV(I), Special Considerations for Biological GHG Sources and Sinks states, “In NEPA reviews, for actions involving potential changes to biological GHG sources and sinks, agencies should include a comparison of net GHG emissions and carbon stock changes that are anticipated to occur, with and without implementation of the proposed action and reasonable alternatives. The Draft EIS should consider the estimated GHG emissions (from biogenic and fossil-fuel sources), carbon sequestration potential, and the net change in relevant carbon stocks in light of the

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<sup>18</sup> See, e.g., <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

<sup>19</sup> <https://ceq.doe.gov/guidance/ghg-tools-and-resources.html>

<sup>20</sup> <https://www.epa.gov/environmental-economics/scghg>

<sup>21</sup> <https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-operations/epas-final-rule-oil-and-natural-gas>

<sup>22</sup> <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/>

<sup>23</sup> See CEQ’s 2023 GHG/NEPA Guidance, p. 16: “NEPA requires more than a statement that emissions from a proposed Federal action or its alternatives represent only a small fraction of global or domestic emissions. Such a statement merely notes the nature of the climate change challenge and is not a useful basis for deciding whether or to what extent to consider climate change effects under NEPA. Moreover, such comparisons and fractions also are not an appropriate method for characterizing the extent of a proposed action’s and its alternatives’ contributions to climate change because this approach does not reveal anything beyond the nature of the climate change challenge itself—the fact that diverse individual sources of emissions each make a relatively small addition to global atmospheric GHG concentrations that collectively have a large effect.”

proposed actions and timeframes under consideration and explain the basis for the analysis.” Therefore, we recommend the Forest quantify carbon stock changes and GHG emissions associated with the projected actions under each Forest Plan alternative in combination with the cumulative effects of other ongoing and planned projects on national forests.

We recommend considering the addition of goals, objectives, standards, guidelines, and management actions for climate protection, including increasing the resiliency of the Forest and the aquatic life and wildlife that inhabit it, reducing the intensity and severity of wildfires, and protecting aquatic resources and drinking water sources from runoff from wildfires. We encourage measures to provide for diverse, healthy ecosystems that are resilient to climate stressors; require effective mitigation and encourage voluntary mitigation to offset the adverse impacts of projects or actions; reduce greenhouse gas emissions from authorized activities to the lowest practical levels; identify and protect areas of potential climate refugia; reduce barriers to plant migration; use pollinator-friendly plant species in restoration and revegetation projects; and design facilities to mitigate potential structural impacts associated with extreme weather events.

We also recommend discussing actions to improve forest adaptation to changing environmental conditions, such as selecting resilient species for replanting. This should anticipate the effects rising temperatures may have on seeds/seedlings growth, the vulnerability of specific species under projected climate conditions in the short and longer term, and any anticipated shift of forest species to more suitable range elevations. Lastly, as USFS considers the wilderness evaluation process, timber suitability and areas open to livestock grazing and energy and mineral development, we recommend considering whether conservation commitments are needed to achieve the goal in Section 216 of E.O. 14008, of conserving 30 percent of the nation’s lands and waters by 2030.

## **Mineral Resources**

### *Locatable and Salable Mineral Resources*

Locatable and salable minerals are historically the largest source of mining activity in the Forest. We recommend the Draft EIS include a discussion of the existing requirements for the adequate bonding of exploration activities to restore the mining site and repair any Forest infrastructure damaged as a result of development. In addition, we recommend including a discussion and maps to specify the areas that have historically been mined, areas that are still heavily impacted, and areas that are more likely to experience heavy exploration in the future or to be the sites of new mines. Such information will be critical for the Forest Plan revision to determine requirements for protection of Forest resources, and reclamation and bonding standards for exploration and mining, in areas that have not been previously mined but may be over the next planning horizon. Further, this information can assist in improved reclamation of historic mining activities in areas with previous mining and incomplete reclamation.