Norton, Michelle - FS, HAMILTON, MT

From: Smith, Julie <[redacted]
Sent: Friday, May 20, 2022 3:09 PM
To: FS-comments-northern-bitterroot-stevensville
Cc: Snyder, Shannon (she/her)
Subject: [External Email]EPA Scoping Comments_Bitterroot Forest_Bitterroot Front Project EA
Attachments: EPA Scoping Comments_USFS_Bitterroot Front Project EA 5_20_22.pdf

Importance: High

Good day!

Please accept the attached EPA Region 8 scoping comments on US Forest Service's proposal for the Bitterroot Front Range Project NEPA review and environmental assessment. We appreciate the opportunity to provide comments at this early scoping stage for the E. We look forward to reviewing a draft assessment, as available, and stand ready to assist you in finalizing the NEPA document. Please do not hesitate to reach out to me with questions or comments.

Best regards – Julie Smith

Julie Ann Smith, PhD
Physical Scientist – NEPA Branch
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May 20, 2022

Ref: 8ORA-N

Matthew D. Anderson, Forest
Supervisor
Bitterroot National Forest
1801 N. First Street
Hamilton, MT 59840

Dear Supervisor Anderson:

The U.S. Environmental Protection Agency Region 8 has reviewed the U.S. Department of Agriculture Forest Service April 20, 2022, "Scoping Document" for the Bitterroot Front Project on the Bitterroot National Forest (Project). As a part of this review, EPA also used information from the 1987 Bitterroot National Forest Plan (Forest Plan) and related information available on the agency's Project website. [1] In accordance with our responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA), we are providing comments. These scoping comments convey important questions or concerns that we recommend be addressed during the NEPA process. We are dedicated to working with you to develop ideas for addressing them effectively and efficiently.

The Bitterroot National Forest (Forest) is located in southwestern Montana and eastern Idaho and includes a portion of the Selway-Bitterroot Wilderness Area. The proposed project area is located along the eastern face of the Bitterroot Range primarily in Ravalli County, Montana, with a small portion of the area in Missoula County. The project area is bounded to the west by the Selway-Bitterroot Wilderness Area and to the east by private lands and communities situated along U.S. Highway 93, and it includes lands administered by the Stevensville and Darby-Sula Range Districts.

In an effort to address risks associated with high severity wildfires, the Forest is proposing to prepare an environmental assessment (EA) under NEPA to analyze the potential for significant impacts from the proposed landscape-scale, timber management and prescribed fire and fuels reduction program on portions of the Forest in Montana. Through proposed Project activities, USFS aims to increase forest health and landscape resiliency, provide for public and firefighter safety, improve wildlife habitat, and contribute to local community viability with forest-based jobs. The proposed decision would authorize the use of commercial and non-commercial timber management (both mechanical and hand-treatments),

[1] https://www.fs.usda.gov/project/?project=57341

prescribed fire and associated treatments within seven (7) different "management areas in the 143,983-acre Project area. Within the Project area, the USFS would apply commercial timber harvesting on 55,133 acres (including over 13,000 acres in inventoried roadless areas), non-commercial vegetation management and fuels treatment on approximately 37,271 acres, and prescribed fire and fuels management (including burn preparation treatments such as hand thinning, slashing, piling, pruning, pile burning, mechanical thinning, chipping and mastication) as determined necessary. According to the scoping document, the Forest would also improve existing roads and construct new roads for improved access to timber harvesting, recreational vehicle, and mining resource opportunities within the Forest.

The EPA is generally supportive of well-designed and properly implemented vegetation management projects that utilize prescribed fire as an ecologically preferrable forest management practice. EPA's review of the high-level, management-focused information provided in the scoping document identified a potential overarching concern for this Project NEPA review. It is not clear whether the Forest is implementing a programmatic (vs. site- specific) NEPA approach and analysis that would authorize landscape-scale, on-the-ground timber harvest, road management, and burn actions without appropriately analyzing site-specific resource information to support a Finding of No Significant Impact (FONSI). Given the size and diversity of the proposed program of activities or management tools identified by USFS in the scoping document, we recommend that site-specific NEPA analysis be prepared upfront to present a thorough discussion of potential impacts from the proposed timber harvest, prescribed burn and fuels reduction activities. If for this document, the Forest plans to do a non-site specific, programmatic analysis, we recommend tiering future NEPA documents from this one to assess and disclose site-specific resource impacts and to consider related mitigation and monitoring.

The following list of comments and recommendations are intended to assist in the NEPA process as the Forest conducts the impact analysis and develops Project design features, best management practices (BMPs) and monitoring plans. There are several important topics associated with this type of project that we recommend including in the scope of the draft EA, including:

- Area management objectives for high severity wildfire risk, public and infrastructure safety, and forest regeneration and restoration;
- Range of alternatives for reaching the management objectives, and a discussion of the science supporting the ability of each alternative or project action to meet the objective;
- Resource objectives and site-specific baseline conditions, including pest and disease status and trends, vegetation cover and condition, soil conditions, watershed conditions, water quality, sediment loads, wetland and riparian health, wildlife and fish population and habitat health and trends, climate change and air quality;
- Site-specific impacts on these baseline resource conditions that would likely result from Project activities associated with each alternative and a comparative assessment of how each alternative will affect attainment of desired resource objectives in the Forest Plan;
- Site-specific ecological history, including bark beetle, disease, and wildfire histories;
- Management history, including vegetative treatments, invasive species control, grazing and prescribed burns; and
- Monitoring plan that will be used to assess how well the selected alternative addresses concerns associated with each resource category determined to be significant.

The EPA appreciates your consideration of our comments in this letter at this early stage of the process and hopes to work closely with you on preparation of the EA Our detailed comments are enclosed for your consideration. These comments are intended to support and facilitate the timeliness of USFS's decision-making process. If we may provide further explanation of our comments, please contact me at [redacted]

Sincerely,

Julie A Smith, PhD

Julie Ann Smith, PhD
NEPA Lead Reviewer
Office of the Regional Administrator

Cc: Steve Brown, USFS Stevensville District
Enclosure

Key Topics the EPA Recommends USFS Address During the NEPA Process

EPA notes that the scoping materials do not appear to indicate the planned timeframe for the activities comprising the proposed action. Given the unclear timeline for the Project, real-time effects of climate change on the existing landscape that affect forest management decisions on the ground, as well as several on-going and reasonably foreseeable activities related to fuels management (including prescribed burns and mechanical vegetation treatments) on adjacent and nearby Forest Service lands, it will be important that the USFS develop a well-designed fire risk management program. Our comments and recommendations below are intended to assist in the NEPA process as the USFS conducts the impacts analysis and finetunes project design elements, BMPs, and monitoring plans to determine whether a FONSI or EIS would be prepared in accordance with 36 Code of Federal Regulations (CFR)§1501.6(c).

Landscape-scale Projects and Site-Specific Analysis. The scoping document presents the Forest's proposal to develop a NEPA analysis for a suite of "tools" and management actions that would comprise a landscape-level project proposal. NEPA requires a "hard look" at potential environmental impacts of a proposed action and public disclosure of those impacts prior to project implementation. The impacts associated with the proposed action would be expected to vary based on site-specific conditions including: vegetation community composition, soils, slopes, proximity to residences, proximity to aquatic resources, proximity to Class I airsheds, road construction needs, road maintenance status, volume and type material burned, equipment used, sensitive species habitat, etc.

EPA understands the Forest's desire for flexibility and timeliness of its actions to reduce immediate risks from uncharacteristic fires to communities and public lands resources and a related desire to have flexibility in planning that allows for implementation to react to changing on-the-ground conditions. Such responsiveness is difficult to achieve under a typical approach to planning that can take a season or more of survey work, years to plan, and a decade or more to accomplish, and in the meantime Project area conditions can drastically change and the analysis data becomes stale. The CEQ NEPA regulations anticipate the need for a nimble response to an ever-changing landscape. Those regulations allow for a programmatic NEPA analysis to define the sideboards of the program, and for quicker and more efficient site-specific project analyses tiered to it. A programmatic NEPA planning document would seem most consistent with CEQ's regulations and could speed the consideration and implementation of the proposal while providing the "hard look" and required opportunity for public review and input under NEPA.

To that end, EPA recommends that the Forest provide to the public and partner agencies an annual report on specific planned vegetation management, commercial logging, and prescribed burn activities as part of the implementation process. We also recommend that the EA include information about how the Forest will notify the public and how the public will be provided the opportunity to comment and to provide input of local knowledge on planned prescribed fire activities and any site-specific treatment plans developed to guide Project implementation.

Impacts to Aquatic Resources. The EPA considers the protection of aquatic resources to be among the most important issues to be addressed in any NEPA analysis for vegetation management activities. Most treatments contemplated under the proposed action have the potential to adversely impact aquatic resources, including surface waters, wetlands, streams, riparian areas, and their supporting hydrology. It is

recommended that the draft EA include a discussion of existing resource conditions to provide the basis for an effective analysis of potential for significant impacts. Therefore, the EPA recommends that the EA include the following baseline aquatic resource information:

- A map and summary of Project area waters and downstream waters, including streams, lakes, springs and wetlands. It would be helpful if the summary identified 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 future 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;
- Types, functions and acreage of wetlands, riparian areas, and springs;
- Available groundwater information; and
- A map and list of Clean Water Act (CWA) impaired or threatened water body segments within, or downstream of, the planning area, including the designated uses of the water bodies and the specific pollutants of concern potentially affected by on-going vegetation management practices within or adjacent to the defined Project analysis area.

Water Quality Data. Water quality data for the streams and lakes of the Project area provide important information as well as a baseline for future monitoring of impacts and evaluation of potential influence on downstream water quality. We recommend the EA provide a summary of available information and monitoring data on water quality for the Project area and downstream waters affected by the Project area, including parameters such as total phosphorus, total nitrogen, *Escherichia coli (E. coli)*, fecal coliform, total suspended solids, turbidity, and temperature. It will also be important to include water quality data for parameters listed for impaired water bodies within or downstream of the Project area. Identifying any significant gaps in available data may be helpful in developing the monitoring plan. At a minimum, EPA recommends providing a reference to a publicly accessible technical document or an appendix that contains the requested relevant water quality parameters.

Potential Impacts to Impaired Waterbodies**.** Based upon the most recent EPA-approved CWA Section 303(d) list for Montana (2020) there are impaired streams, (e.g., the Bitterroot River Lick Creek), located within the proposed project area. [2] These resources are important to note as the proposed activities conducted upstream from the watershed may further impact systems or portions of systems downstream. We recommend the USFS:(a) analyze potential impacts to impaired waterbodies within and/or downstream of the project area, and (b) coordinate with the State of Montana if there are identified

[2] EPA notes the Bitterroot River Watershed Restoration Plan (2020) that could be consulted to inform mitigation methods to avoid further degradation of this valuable regional resource and drainage area. See: https://deq.mt.gov/files/Water/WPB/Nonpoint/Publications/WRPs/Bitterroot_WRP_FINAL_01132020.pdf.

potential impacts to impaired waterbodies (in order to avoid causing or contributing to the exceedance of water quality standards). It will be important to ensure this project will avoid causing or contributing to the exceedance of water quality standards (WQS) as such impacts are prohibited and would be considered a "significant" impact under NEPA. Where a TMDL exists for impaired waters, 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 the State to revise TMDL documents and develop new allocation scenarios that ensure attainment of water quality standards. Where TMDL analyses for impaired waterbodies within, or downstream of, the project area that still need to be developed, we recommend that proposed activities in the drainages of CWA impaired or threatened waterbodies be either carefully managed to prevent any worsening of the impairment or avoided altogether where such impacts cannot be prevented.

Groundwater. Groundwater is an important resource since it provides domestic and public water supply and supports environmental flows and levels in groundwater dependent ecosystems (GDEs). GDEs include fens and other wetlands fed by groundwater, terrestrial vegetation and fauna sustained by shallow groundwater, ecosystems in streams, lakes fed by groundwater, and springs. While GDEs occupy a small percentage of landscapes in the West, riparian areas and GDEs provide disproportionately large ecosystem services such as water filtration, wildlife habitat, and flood control. Forest management practices, including prescribed fire, associated roads, and heavy equipment use have the potential to impact GDEs by altering surface run-off, infiltration, evapotranspiration, sedimentation, and soil compaction. Additionally, activities associated with forest management such as equipment fueling and waste practices at man camps have the potential to introduce contaminants to GDEs and shallow aquifers. We recommend the NEPA document include a map of groundwater resources, including GDEs, and a discussion to include the following information (if available): identification of major aquifers; location and extent of groundwater recharge areas; location of existing and potential (i.e., those that can reasonably be used in the future) underground sources of drinking water (USDW) ; and characterization of source water protection zones for public water systems in proximity of the project (see more information below). We also recommend identifying the shallow aquifers, including bedrock and alluvial aquifers along streams and rivers, that are located in the planning area and are sources for public water systems, domestic wells, stock wells or GDEs. Shallow aquifers are more susceptible to contamination because there is less intervening soil to adsorb 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.

Public Drinking Water Supply Sources. The proposed treatments and activities could potentially impact sources of public drinking water. For example, road construction is a major source of sediment in forests. Sediment can adversely impact water quality by increasing turbidity, plugging filters and other treatment systems, and increase cost of water treatment. Suspended sediment can also carry chemical pollutants, such as phosphates, pesticides and hydrocarbons into surface water and groundwater. The EPA recommends that the NEPA document include a map, appropriate for public dissemination, showing the generalized locations of all source water assessment and protection areas associated with public drinking water supplies. We also recommend that the NEPA document include an assessment of potential project

impacts or benefits, design criteria and mitigation options for protecting these high value drinking water resources from potential project impacts.

Potential Impacts to Wetlands. EPA recommend that the NEPA document include a description of the impacts that may result from project activities to wetlands and associated springs. 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. If impacts are anticipated, we also recommend that the NEPA document 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 minimized and 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 Engineers (Corps) and the EPA. Please consult with the Corps to determine the applicability of CWA Section 404 permit requirements to wetlands that would be impacted by the project activities 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, it may be necessary to consider exclusion of temporary roads and skid trail construction if applicable, and vegetation treatments in areas where wetlands or riparian areas would be adversely impacted. The EPA recommends the Forest reduce impacts through the use of BMPs to protect sensitive soils, wetlands, riparian areas, meadows, stream crossings, and critical habitat. EPA Region 8 has reviewed technical and policy literature and existing state regulatory policies and requirements developed for water resource setbacks. To avoid the potential for project activities to impact aquatic resources (including the potential to contribute to Water Quality Standards violations, see below), we recommend providing a buffer for attenuating sediment runoff. We recommend buffer widths of at least 100 feet for steep slopes (5%-15%) and buffer width additions with each 1% increase of slope (e.g., 10 feet for each 1% of slope greater than 15%) in order to reduce sedimentation and maximize wildlife habitat and diversity. These setback distances are likely to be protective of water resources in most circumstances. The EPA recognizes that the Forest may adjust setback distances during project implementation to reflect site-specific conditions, including the use of larger buffers to protect sensitive aquatic resources.

Fen Wetlands. Based upon available information there are potentially fen wetlands in the project area. [3] 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 in 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. Further underlining the uniqueness and importance of fen wetlands, in Colorado the U.S Army Corps of Engineers revoked the use of the majority of Nationwide Permits in peatlands/fen-type wetlands to protect this unique wetland type. In the EPA's view these wetland ecosystems are, for all practical purposes, non-renewable and irreplaceable.

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. We recommend the NEPA document include a description and the spatial extent of fens within the project area as well as specific measures to ensure that no potential impacts could occur from proposed project activities. Additionally, in accordance with the goal of no overall net loss of the nation's remaining wetland base for the Section 404 regulatory program, we strongly recommend that project design criteria include requirements to avoid both direct and indirect impacts to these highly valued resources. The EPA considers any temporary or permanent impact to fens or to their groundwater source to be a "significant" impact under NEPA.

Soil Disturbance and Vegetation Changes. The potential environmental impacts of project activities may stem from 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 the proposed types of project activities in the analysis area, we recommend the NEPA document include an assessment of each alternative's potential impacts and benefits to aquatic resources that may stem from the drivers listed above, including impacts to water quality, stream and wetland processes, and fish populations and habitat.

Watershed Monitoring**.** To help evaluate and adjust vegetation management strategies, the EPA also recommends that the EA include a monitoring discussion that describes how monitoring will be implemented at the watershed or sub-watershed level to determine landscape condition (including water quality) status and trends. Monitoring is essential to determine whether land management objectives are being achieved and to help ensure that water quality in the project area is not being adversely affected. An integrated approach to monitoring would evaluate nutrient cycling, soil and water quality, and plant and aquatic community dynamics and would support EPA's related recommendation for the development of an adaptive management strategy.

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

[3] https://www.fs fed.us/rm/pubs_series/rmrs/gtr/rmrs_gtr369.pdf

byproducts, which are a human health concern. Organic loading may also decrease oxygen levels in reservoirs leading to the release of metals such as arsenic, manganese, and iron from sediments. We recommend the NEPA document assess the potential for organic loading impacts to drinking water supplies associated with municipal watersheds.

Potential Impacts to Air Quality. While we recognize that prescribed fire is a valuable tool that can have ecological benefits over other treatment techniques, prescribed burn activities have the potential to cause periodic degradation of air quality and visibility. In addition to the health-based National Ambient Air Quality Standards (NAAQS) that protect ambient air quality, the CAA provides Class I Areas special protection for air quality and air quality related values (AQRVs), including visibility. The nearby Selway-Bitterroot Wilderness Area, Anaconda Pintler Wilderness Area, and Bob Marshall Wilderness Area are considered a Clean Air Act Class I areas afforded the highest level of protection from air quality impacts. Additionally, there are nearby towns and Class II areas with sensitive resources. Examples of potential air emissions associated with the proposed project activities include air pollutants from prescribed burning, diesel and gasoline emissions from heavy and light duty equipment and tools, emissions from idling equipment, emissions from vehicles traveling on paved and unpaved roads and re-entrained dust. To better understand project effects, the EPA recommends that the EA describe the management activities and where possible provide timelines for implementation. This will be the basis of the information that will inform the level of emission generating activity and potential air quality impact. We recommend including maps to identify areas where management activities will be focused in relation to existing Forest features and resources. We also recommend the NEPA document estimate the timing of combustion activities, amount of material to be combusted and the method of combustion (pile burning, backing fire, etc.).

We recommend consulting with Montana Department of Environmental Quality (MTDEQ) to present background air quality design values as compared to each respective NAAQS. In addition, we recommend narrative discussions to explain the numeric design values and NAAQS in plain terms such that the public can understand the overall quality of the air. We also recommend identifying any monitoring data that would be representative of smoke impacts from wildfire or prescribed burning and explain the nature of the source relative to the impact.

In summary, for the Forest to characterize existing air quality conditions and set the context for evaluating project impacts, we recommend the NEPA document identify:

- Sensitive receptors in the vicinity (such as residences and population centers, forest or park visitor facilities, nonattainment areas, Class I areas and Class II areas with sensitive resources);
- Airshed classifications and monitored baseline conditions (design values) for each criteria pollutant and each relevant AQRV at available monitoring locations; and
- Any regional concerns in the area (e.g., visibility issues in the area, seasonal wildfire smoke).

Such data are available from EPA's Air Quality System (AQS), EPA's Air Data web-interface and MTDEQ. To summarize existing AQRV conditions (visibility, nitrogen, and sulfur deposition), we recommend utilizing information prepared by the National Park Service available online by the park. Data

are also available through the Interagency Monitoring of Protected Visual Environments (IMPROVE) monitoring network for AQRVs. [4]

Decision-makers will need to understand baseline conditions in an effort to ensure project activities, when combined with air quality impacts from non-project sources, do not adversely impact the NAAQS or AQRVs such as visibility.

We support prescribed fire design criteria and monitoring requirements including: (1) incorporation of the Interagency Prescribed Fire Planning and Implementation Procedures Guide (July 2017) into the site-specific burn plans designed for each prescribed burn conducted under this project, and (2) public notification of pending burns. We recommend the Forest implement public notification procedures for each planned burn to reach remote areas that may not have access to newspapers or the internet. Disadvantaged communities can lack computer and internet resources and can be difficult to notify. If there are residents or communities with environmental justice concerns who could be impacted by smoke during burn actions, we recommend providing in-person, door-to-door notification. It may be necessary to include written notice in other languages where applicable. Effective notification is important to ensure that sensitive individuals with compromised respiratory or pulmonary systems can avoid exposure to smoke.

Since the proposed action includes pile burning, we recommend the NEPA document describe any potential short-term air quality impacts associated with this treatment type. For an example estimation of PM2.5 emissions associated with pile burns, please refer to the Kootenai National Forest Starry Goat Project Draft EIS (see the Air Quality section, p. 113), or to the Black Hills National Forest's Calumet Project Draft EIS (see the Fire and Fuels Section, p. 159). We also recommend that the NEPA document include a discussion of the burn plan process, as well as: (1) whether the Forest develops such plans for pile burns, and (2) if pile burns would be subject to the same process that is utilized for prescribed fire treatments as described in the Interagency Prescribed Fire Planning and Implementation Procedures Guide (July 2017). In some circumstances it may be appropriate to utilize equipment such as air curtain destructors (ACDs) to reduce smoke generation and promote full combustion of slash material.

Climate Change. EPA recognizes the potential ecological benefits and improvement to forest lands of prescribed fire are preferrable to the impacts of wildfire. EPA recommends the EA include a climate change analysis and discussion of potential impacts to and from GHG emissions on the project. We encourage the Forest to use the Council on Environmental Quality Final Guidance for Federal Departments and Agencies on the Consideration of Greenhouse Gas (GHG) Emissions and the Effects of Climate Change in NEPA Reviews (August 1, 2016) in the development of its analysis of the GHG emissions and climate impacts being experienced in the planning area in relation to its proposed activities. This guidance provides a reasonable approach for the Forest to outline the framework for analysis

[4] EPA's AQS can be found at: EPA's Air Data web-interface (https://www.epa.gov/outdoor-air-quality-data). Information on AQRV conditions (visibility, nitrogen, and sulfur deposition), can be found at: https://www.nps.gov/subjects/air/park-conditions-trends.htm). Data are also available through the IMPROVE monitoring network for AQRVs is at: http://vista.cira.colostate.edu/Improve/.

regarding GHG emissions, opportunities to reduce those emissions, climate impacts on the planning area and climate change adaptation strategies.

Consistent with Executive Order 14008 goals, 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; and use pollinator-friendly plant species in restoration and revegetation projects. We also recommend discussing actions to improve forest adaptation to changing environmental conditions, such as selecting resilient native 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.

Regional wildfire smoke transport, and other USFS landscape-level prescribed fire projects in the area (i.e. Nez Perce-Clearwater, Deer Lodge, Beaverhead National Forests), also have the potential to cause long and/or short term impacts to regional air quality and may occur concurrently with project activities. Wildfires are no longer confined to the summer months and the adjacent and nearby forests may utilize the same burn windows based upon favorable weather conditions. The effects from climate change on regional weather patterns in the project area may narrow appropriate burn windows and potentially limit the timeframe for implementing prescribed fire and fuels treatments on the Bitterroot and adjacent Forest Service lands. We therefore recommend that the EA assess reasonably, foreseeable prescribed burn activities adjacent or nearby the project area and disclose a consideration of potential cumulative effects – particularly to air quality and public health – to develop a well-coordinated program of prescribed fire and fuels reduction treatments (including pile burns) with other Forest Service units adjacent and nearby to the project area. We recommend this NEPA document specify the baseline air quality conditions that would need to be met for a burn project to proceed.

Endangered Species Act. Section 7(a)(2) of the ESA requires federal agencies to consult with the USFWS whenever a proposed action "may affect" listed species or destroy or adversely modify its critical habitat to ensure that the action is "not likely to jeopardize" these species. 16 U.S.C. §1536. Agencies cannot properly determine whether an action "may affect" or is "likely to jeopardize" a listed species when the consulting agencies do not know the specifics of when or where the action will be implemented, or what the site-specific impacts of the action may be. We recommend working with USFWS to ensure Section 7 consultation will cover the overall effects of the entire project at the initial stage before the project can commence rather than on an individual treatment site-basis, in order to avoid segmenting the project consultation duties. [5]

Environmental Justice. Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," applies to federal agencies that conduct activities that substantially affect human health or the environment. In addition, Executive Order 13985, "Advancing Racial Equity and Support for Underserved Communities Through the Federal Government," sets

[5] See Conner v. Burford, 848 F.2d 1441, 1457 (9th Cir. 1988).

expectations for a whole government approach to advancing equity for all. Consistent with these executive orders and CEQ's Environmental Justice Guidance Under NEPA[6] the EPA recommends that the NEPA analysis for the project:

Identify any minority, low-income and indigenous communities within the regional scope of the impact area, including the sources of data and a description of the methodology and criteria utilized. The EPA recommends comparing census block group percentages (if available, or, at a minimum, census tract data) for below poverty and minority populations with the state average, and conducting the following steps outlined below if a block group percentage is greater than the state average. The EPA does not recommend use of higher thresholds.

- Document engagement of such communities with respect to the Forest's decisions on this project.
- Assess the environmental justice and other socioeconomic concerns for any environmental justice communities, to the extent information is available, including:
    - A discussion of the potential environmental impacts of management area decisions on the health of these communities, including air quality and water quality impacts.
    - An evaluation of the socioeconomic impacts to the local communities, including the potential for any additional burden placed on local communities' abilities to provide necessary public services and amenities.
    - A determination of whether and how there may be disproportionately high and adverse human health or environmental effects, including cumulative impacts, associated with the proposed project on the identified communities.
- Include mitigation measures or alternatives to avoid or reduce any disproportionate adverse impacts. We recommend involving the affected communities in developing the measures.

Monitoring Plan. The EPA recommends the NEPA document describe the features of an effective monitoring plan for project activities. In addition to targets that specify a desired future condition, the monitoring plan should include environmental thresholds with protocols to assess whether specific thresholds are being met for each impacted resource. The EPA recommends the NEPA document describe how and with what resources the Forest will conduct the monitoring necessary to ensure the project is meeting objectives and avoiding impacts as predicted. Monitoring results may reflect a need to modify management actions. For example, it may be reasonable to consider provisions for reducing treatment acreage or omitting specific locations if unanticipated resource impacts occur or monitoring does not indicate progress toward desired conditions. We recommend the EA discuss the process that will be applied if monitoring budgets fall short of the need for this project. Typically, lack of monitoring would automatically trigger a more environmentally conservative set of mitigation measures.

We recommend the plan for monitoring the project be included in the NEPA document to allow opportunity for public input. We further recommend the monitoring plan include details regarding the timing of monitoring for water and air quality. Timely monitoring is particularly important given the high

[6] This guidance is available along with other environmental justice resources at https://www.epa.gov/environmentaljustice/environmental-justice-and-national-environmental-policy- act),

resource value and potentially broad scale of the project area. We recommend discussion of the general timing of implementing a monitoring plan including a monitoring schedule, including regularly scheduled interdisciplinary team reviews would provide the opportunity for timely assessment of whether thresholds are being met and any need for specific corrective actions if thresholds are not being met.

The EPA supports a monitoring program that facilitates ongoing treatment effectiveness, as well as quick reaction to newly discovered insect and/or disease concerns, using a decision tree based on affected acreage, location, site characteristics, and consultation with specialists. We recommend that the NEPA document specify both positive and negative potential impacts of each management technique proposed, as well as the general timing of implementation (with shorter timeframes considered if undesirable results are encountered).

We recommend development of a list of management options to address situations where monitoring does not indicate progress toward desired conditions. For example, it may be necessary to require larger buffers than usual around wetlands, streams and lakes during treatments in order to protect these resources from increased levels of sedimentation during road improvement and management activities. In addition, if chemical application will be used, plans may need to consider rainfall forecasts, topography near surface water, soil infiltration capacity, amount of ground cover and chemical persistence and mobility.

Other Considerations for NEPA Review

Transparency of Analyses. We recommend that all technical reports that lead to conclusions regarding environmental consequences be included as appendices to the NEPA document available through the project website. The findings can be summarized in the environmental consequences' discussions of the EA with references pointing the reader to the appropriate technical report and references in the Forest Plan in the appendices or on the agency project website. Providing the technical documents in the appendices as well as requisite summary information in the environmental setting and effects discussions helps to ensure a comprehensive picture of the project and its impacts for reviewers, the public and the decision maker while keeping the EA succinct and in accordance with guidance found in the Council of Environmental Quality's NEPA Implementing Regulations (September 2020).

Incorporation by Reference. EPA supports an approach to incorporate material from existing, related NEPA analyses by reference in the EA to cut down on bulk without impeding agency and public review of pertinent Project information. This is an approach that is supported by both the Council on Environmental Quality's (CEQ's) and USFS's NEPA implementing guidelines (36 CFR §1501.12 and 36 CFR 220.7, respectively). For incorporation by reference to be appropriately utilized, both CEQ and USFS guidance requires a brief summary of the material being incorporated so as to provide context and relevance of the pertinent information to the project under review to the interested party or decision maker reading the EA. EPA recommends that USFS provide brief summaries of relevant information from the Forest Plan and existing Bitterroot Forest studies used to inform the subject EA.