UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

November 14, 2022

Erin Noesser
U.S. Forest Service, Inyo National Forest
351 Pacu Lane, Suite 200
Bishop, California 93514

Subject: Scoping Comments for the Eastern Sierra Climate and Communities Resilience Project, Mono County, California

Dear Erin Noesser:

The U.S. Environmental Protection Agency has reviewed the U.S. Forest Service's notice to initiate a Draft EA for the above referenced project. The EPA's comments are provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508) and our NEPA review authority under Section 309 of the Clean Air Act.

The Forest Service proposes community wildfire protection and forest resiliency treatments on approximately 56,000 acres of Inyo National Forest in Inyo County, California. Project actions include hand or mechanical thinning, varying methods of biomass removal including pile burning, and revegetation/reforestation. The project may also be implemented in tandem with prescribed burning authorized under the Eastern Sierra Fire Restoration and Maintenance Project. We are providing the enclosed comments to assist in the development of the Draft EA. The topics that the EPA recommends to be fully analyzed and disclosed include impacts to water resources, air quality, environmental justice, biological resources, and cumulative impacts, among others.

We commend the Forest Service for providing a thorough scoping document with well-linked references. We appreciate the opportunity to provide scoping comments and look forward to continued participation in the NEPA process. If you have any questions, please contact me at (415) 972-3961 or samples.sarah@epa.gov.

Sincerely,

SARAH SAMPLES

Digitally signed by SARAH SAMPLES
Date: 2022.11.14 12:56:21 -08'00'

Sarah Samples
Environmental Review Branch

Enclosure: EPA's Detailed Scoping Comments

U.S. EPA DETAILED COMMENTS ON THE SCOPING NOTICE FOR THE EASTERN SIERRA CLIMATE AND COMMUNITIES RESILIENCY PROJECT, MONO COUNTY, CALIFORNIA – NOVEMBER 14, 2022

General Comments

Site-Specific Analysis

The EPA understands that the Draft EA would be "one unified environmental analysis" (Purpose and Need and Proposed Action (PN&PA) p. 9) and that the Forest Service does not plan for it to be a programmatic Draft EA with site-specific tiering. Instead, the project proposes a formal implementation plan and would review and complete "an inventory of conditions and resource surveys" prior to implementation of annual treatments of approximately 2,000 acres (PN&PA p. 9). We appreciate this effort as impacts associated with the proposed action would be expected to vary based on site-specific conditions including creating and decommissioning temporary access roads and landing areas, volume and type of material burned, equipment used, sensitive species habitat, proximity to aquatic resources, proximity to Class I airsheds, etc. If new or additional impacts are anticipated or discovered through annual reviews, please note that additional NEPA analysis may be required.

Implementation Plan

The EPA understands that the Forest Service will prepare an Implementation Plan concurrent with the Draft EA (PN&PA p. 38). With a project duration of 15 years, we recommend that the Implementation Plan include and allow for annual public input on site-specific projects and the draft Implementation Plan should be appended to the Draft EA to allow for public review of this process.

Water Quality

Waterbodies

Section 303(d) of the Clean Water Act requires that states, territories, and authorized tribes identify waterbodies that do not meet water quality standards and to develop, with EPA approval, Total Maximum Daily Loads for waters identified as impaired to meet established water quality criteria and associated beneficial uses. Because surface water quality degradation is one of the EPA's primary concerns with the proposed project, understanding the setting for the project is important for preparing an impact analysis.

We recommend the Draft EA identify water bodies likely to be impacted by the project, the nature of the potential impacts, and the specific discharges and pollutants likely to impact those waters. The Draft EA should disclose information regarding relevant TMDL allocations for any impaired waters listed on the latest state CWA 303(d) list or Integrated Report, along with the water quality standards and pollutants of concern. As the CWA anti-degradation provisions will also apply, the Draft EA should demonstrate that the proposed action will comply with anti-degradation provisions of the CWA that prevent deterioration of water quality within waterbodies that currently meet water quality standards.

Where a TMDL exists for impaired waters, pollutant loads should comply with the TMDL allocations for point and nonpoint sources. If new loads or changes in the relationships between point and nonpoint source loads are created, we recommend that the Forest Service work with the Central Valley Regional Water Quality Control Board to revise TMDL documents and develop new allocation scenarios that ensure attainment of water quality standards. In addition, where waters are listed as impaired under Section 303(d) of the CWA, the Draft EA should describe existing restoration and enhancement efforts for those waters, how the project will coordinate with on-going protection efforts, and any mitigation measures that will be implemented to avoid further degradation of water quality within impaired waters.

Where TMDL analyses for impaired waterbodies within, or downstream of, the project area still needed 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. For projects that would take place in watersheds with streams not meeting desired future conditions, we recommend including a provision that would require actions to improve riparian, stream, and water quality conditions.

Roads and Skid Trails

Roads can contribute more sediment to streams than any other management activity and interrupt the subsurface flow of water, particularly where roads cut into steep slopes. In addition, roads have been shown to produce elevated volumes of chronic surface sediment runoff from the road surface. Roads and their use can also contribute to habitat fragmentation, wildlife disturbance, and the introduction or exacerbation of noxious weeds. As such, we recommend the Draft EA include a map showing project area waters and identifying the existing road networks as well as a discussion of foreseeable construction, maintenance, and decommissioning activities by alternative. If temporary roads/skid trails would be created to facilitate the removal of biomass or hazard trees, the Draft EA should disclose these actions as project activities and describe the anticipated number and location of newly created temporary roads segments and landing areas, as well as providing the size of landing areas.

To reduce adverse impacts to watersheds, the EPA recommends focusing on the use of existing system roads to minimize road construction impacts on previously unimpacted areas to the maximum extent practicable. For temporary roads and landings that must be constructed, we recommend the Draft EA discuss design criteria and best management practices that will be followed to prevent negative effects to soil and water resources. For your consideration, we provide the EPA's general recommendations to protect aquatic resources from road and skid trail impacts, as follows:

- Locate roads and skid trails away from streams and riparian areas.
- Locate roads and skid trails away from steep slopes, landslide prone areas, and erosive soils.
- Minimize the number of stream crossings.
- Construct unavoidable stream crossings during periods of low flow to avoid fish spawning and incubation periods, and/or dewater relevant stream segments prior to construction.
- Provide adequate drainage and erosion control to avoid routing sediment to streams.
- Use bottomless or textured bottom culverts if possible.
- Design features to allow for natural drainage patterns.
- Consider decommissioning or rehabilitation at an equal or greater rate than new construction to prevent increases in overall watershed impacts.
- Develop a monitoring plan and schedule to assess the effectiveness of road decommissioning after project completion.

Clean Water Act Section 404 Applicability

The protection, improvement and restoration of wetlands and riparian areas are a high priority because they increase landscape and species diversity, support many species of western wildlife, and are critical to the protection of water quality and designated beneficial water uses. Identify the direct, indirect, and cumulative impacts to wetlands in the geographic scope, including impacts from changes in hydrology even if these wetlands are spatially removed from the construction footprint. Include the indirect impacts to wetlands from loss of hydrology from water diversion/transfers, as well as the cumulative impacts to wetlands from future development scenarios based on population and growth estimates.

Confirm with the U.S. Army Corps of Engineers if any jurisdictional waters would require a CWA Section 404 permit for discharge of dredged or fill materials into waters of the United States, including wetlands and "special aquatic sites." If a permit is required, describe the impacts under individual or nationwide permits authorizing the discharge of fill or dredge materials to waters of the U.S.

Air Quality

In the Draft EA, include a detailed discussion of ambient air conditions (existing conditions), National Ambient Air Quality Standards, and criteria pollutant non-attainment areas in the analysis area and vicinity. This type of evaluation is helpful in demonstrating compliance with state and federal air quality regulations and disclosing the potential impacts from temporary or cumulative degradation of air quality. We recommend that the Forest Service characterize existing air quality conditions to set the context for evaluating project impacts, including identification of:

- Sensitive receptors in the vicinity (such as population centers, nonattainment areas, and Class II areas with sensitive resources).
- Airshed classifications and monitored baseline conditions (design values) for each criteria pollutant.
- Any regional concerns in the area (e.g., ozone, $PM_{2.5}$, seasonal wildfire smoke).

Evaluate whether project activities could affect air quality and include measures in the Draft EA that are needed to prevent significant impacts. Examples of potential air emissions associated with the proposed project activities include air pollutants from conducting planned burns in tandem with the Eastern Sierra Fire Restoration and Maintenance Project (ESFRMP) or pile burning, gasoline and diesel emissions from equipment used in the planned activity, 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 the Draft EA describe the management activities and provide timelines for implementation, if possible. 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 Draft EA estimate the amount of material to be combusted and the method of combustion (pile burning, etc.). Emission factors may then be used to estimate emissions from planned activities. While we recognize that project activities are much less significant than wildfires, public disclosure of impacts remains important.

The Draft EA should analyze reasonable and practicable mitigation measures to reduce project-related emissions. Typical mitigation measures include fugitive dust control measures, mobile and stationary source controls, and administrative controls. Ensure the Draft EA includes a comprehensive list of all best management practices and mitigation measures to be implemented as part of the project. Example measures include, but are not limited to, the following:

Fugitive Dust Control:

- Adhere to any Great Basin Unified Air Quality Management District's dust control rules.
- When hauling material and operating non-earthmoving equipment, limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

Mobile and Stationary Source Controls:

- Reduce unnecessary idling from heavy equipment.
- Prohibit engine tampering to increase horsepower, except when meeting manufacturer's recommendations.
- Lease or buy newer, cleaner equipment using the best available emissions control technologies.
    - Use lower-emitting engines and fuels, including electric, liquified gas, hydrogen fuel cells, and/or alternative diesel formulations, if feasible.
    - *On-Highway Vehicles* - On-highway vehicles should meet, or exceed, the U.S. EPA exhaust emissions standards for model year 2010 and newer heavy-duty on-highway compression-ignition engines (e.g., drayage trucks, long haul trucks, refuse haulers,

shuttle buses, etc.).[1]
    - *Nonroad Vehicles & Equipment* - Nonroad vehicles and equipment should meet, or exceed, the U.S. EPA Tier 4 exhaust emissions standards for heavy-duty nonroad compression-ignition engines (e.g., nonroad trucks, construction equipment, cargo handlers, etc.).[2]

Administrative Controls:

- Locate diesel engines, motors, and equipment staging areas as far as possible from residential areas and other sensitive receptors (e.g., schools, daycare centers, hospitals, senior centers, etc.).
- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking.[3]
- Reduce construction-related trips of workers and equipment, including trucks.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
- Identify where implementation of mitigation measures is rejected based on economic infeasibility.

The EPA also recommends that the Forest Service coordinate closely with the Great Basin Unified Air Quality Management District to ensure that the project moves forward in a manner that reduces air quality impacts to the greatest extent possible.

Pile Burning

Describe any potential short-term air quality impacts associated with pile burning. The Draft EA should include a discussion of the burn plan process, and (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 National Wildfire Coordination Group Standards for Prescribed Fire Planning and Implementation guide (May 2022). We also recommend utilizing air curtain burners to reduce smoke generation and promote full combustion of slash material. Air curtain burners that create biochar are preferred as applications would contribute to overall forest health and proposed restoration activities.

Biological Resources, Habitat, and Wildlife

Threatened and Endangered Species

We recommend that the Forest Service work closely with the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife to determine potential impacts of the project on species classified rare, threatened, or endangered on either federal or state Endangered Species Act lists. We also recommend that the Draft EA:

- Identify and quantify which species and/or critical habitat might be directly, indirectly, or cumulatively affected by each alternative and mitigate impacts to these species. Emphasis should be placed on the protection and recovery of species due to their status or potential status under federal or state ESA.
- Include general locations of rare or special status plants and disclose how these sites would be managed to avoid impacts on the plants.

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[1] See https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100O9ZZ.pdf.

[2] See https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100OA05.pdf.

[3] Suitability of control devices is based on whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.

- Discuss the project's consistency with federal or state ESA.
- Summarize, or include as an appendix in the Draft EA, the USFWS's biological assessment. Demonstrate that the preferred alternative is consistent with the biological assessment.
- Discuss mitigation measures to minimize impacts to special status species, describe the effectiveness of such measures to protect wildlife, and indicate how they would be implemented and enforced.

Other Wildlife Species

Identify and quantify other wildlife species might be directly, indirectly, or cumulatively affected by each alternative and mitigate impacts to these species. For example, if California spotted owl Protected Activity Centers or Home Range Core Areas exist within the project area, we recommend clearly discussing proposed treatments and monitoring. In addition, discuss the project's consistency with existing laws and regulations, including the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Invasive Species

We appreciate that design criteria included to minimize the potential introduction and spread of non-native invasive species (PN&PA p. 40-42) and encourage the Forest Service to include these measures in the Draft EA. We also encourage the Forest Service to promote integrated weed management, with prioritization of management techniques that focus on non-chemical treatments first, and mitigation to avoid herbicide transport to surface or ground waters. Early recognition and control of new infestations is critical to stop the spread of the infestation and avoid wider future use of herbicides, which could correspondingly have more adverse impacts on biodiversity, water quality, and aquatic resources.

Environmental Justice

The EPA's goal is to provide an environment where all people enjoy the same degree of protection from environmental and health hazards and equal access to the decision-making process to maintain a healthy environment in which to live, learn, and work. This goal is reflected through our review of NEPA analyses under Section 309 of the Clean Air Act. In addition, Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (February 16, 1994), directs federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations. It further directs agencies to develop a strategy for implementing environmental justice and providing minority and low-income communities access to public information and public participation.

While most treatments proposed by this project are not likely to cause adverse environmental effects, cumulative impacts from tandem applications with the ESFRMP (i.e., fine particulate matter generated during fuel treatments) may present a human health risk. As such, we encourage the Forest Service to include an environmental justice section in the Draft EA to address potential adverse environmental effects of the proposed project on these communities and outline measures to mitigate for impacts.

As part of an environmental justice analysis, we encourage the Forest Service to use EPA's EJScreen and/or the most recent American Community Survey from the U.S. Census Bureau to determine the presence of minority and low-income populations. However, it is important to note that minority and low-income can be measured in various ways.

A minority population does not need to meet a 50 percent standard if "the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general

population or other appropriate unit of geographic analysis."[4] To best illustrate the presence of a minority population, we also recommend that the Forest Service separately analyze block groups, the smallest geographical unit that the U.S. Census Bureau publishes data for. We caution using larger tracts as the basis for analysis, such as counties or cities, as these may dilute the presence of minority populations.

The NEPA Committee of the Federal Interagency Working Group on Environmental Justice has noted that, in some cases, it may be appropriate to use a threshold for identifying low-income populations that exceeds the poverty level.[5] For this project, a low-income population may not be accurately recognized by U.S. Census Bureau data as it does not account for California's housing costs or other critical family expenses and resources. For example, the California Department of Public Health suggests that "200% of the federal poverty level (FPL) is a more realistic measure of financial hardship than the official 100% FPL" due to California's high cost of living.[6] Therefore, we recommend that the Forest Service consider using a 200% FPL when analyzing low-income populations.

After the Forest Service has determined if minority and low-income populations exist in the project area, we recommend that the Draft EA discuss whether these communities would be potentially affected by individual or cumulative actions of the proposed action. Even though project impacts may be the same for all populations within the proposed project area, please note that social determinants of health,[7] such as language and literacy skills, education, job opportunities, and income, may result in minority and low-income populations bearing a disproportionate burden of environmental health risk from project impacts. For example, non-English speaks may bear disproportionate environmental health risk if burn notifications are not translated to Spanish, or lower educated populations may not fully understand environmental health risks if they are exposed to smoke from prescribed burning. These factors of risk should be accounted for in the Draft EA and considered in the analysis for determining if any alternative would cause any disproportionate adverse impacts.

If it is determined that minority and low-income populations may be disproportionately impacted, describe in the Draft EA the measures taken by the Forest Service to fully analyze the environmental effects of the action on minority communities and low-income populations and identify potential mitigation measures. Mitigation measures could include ensuring public notification procedures occur for all project area fuel treatments and pile burns, and media releases to inform locals and visitors about the expected impacts of the fire (specifically related to smoke, closures, and restrictions).

Present opportunities for affected communities to provide input into the NEPA process. In the Draft EA, include information describing what was done to inform these communities about the project and the potential impacts it will have on their communities (notices, mailings, fact sheets, briefings, presentations, translations, newsletters, reports, community interviews, surveys, canvassing, telephone hotlines, question and answer sessions, stakeholder meetings, and on-scene information), what input was received from the communities, and how that input was utilized in the decisions that were made regarding the project.

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[4] Council on Environmental Quality. Environmental Justice: Guidance Under the National Environmental Policy Act. December 1997. Available at https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf.

[5] Federal Interagency Working Group on Environmental Justice & NEPA Committee. Promising Practices for EJ Methodologies in NEPA Reviews. March 2016. Available at https://www.epa.gov/sites/production/files/2016-08/documents/nepa_promising_practices_document_2016.pdf.

[6] California Department of Public Health. April 2019. Poverty and Health: Healthy Communities Data and Indicators Project, Office of Health Equity (Factsheet). Available at https://data.chhs.ca.gov/dataset/4ea80791-c308-4026-8a94-0e9070b53929/resource/ea66eef9-d854-4792-a587-636579780481/download/hci-one-page-poverty-fact-sheet-june-2019-lm.pdf.

[7] Centers for Disease Prevention and Control. September 2022. Social Determinants of Health. Available at https://health.gov/healthypeople/priority-areas/social-determinants-health.

If the Forest Service needs assistance with the environmental justice analysis, please contact Sarah Samples, lead the reviewer for this project, at samples.sarah@epa.gov.

Climate Change

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. The EPA recommends that the Draft EA include a discussion of reasonably foreseeable effects that changes in the climate may have on the proposed project, and what impacts the proposed project will have on climate change consequences. These considerations could help inform the development of measures to improve the resilience of the project.

Consultation with Tribal Governments

It is important that formal government-to-government consultation take place early in the scoping phase of the project to ensure that all issues are adequately addressed in the Draft EA. The principles for interactions with tribal governments are outlined in the presidential "Memorandum on Government-to Government Relations with Native American Tribal Governments" (April 29, 1994) and Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments" (November 6, 2000).

In the Draft EA, summarize the results of tribal consultation and identify the main concerns expressed by tribes (if any), and how those concerns were addressed. As a resource, we recommend the document *Tribal Consultation: Best Practices in Historic Preservation*,[8] published by the National Association of Tribal Historic Preservation Officers. Please note that the Advisory Council on Historic Preservation (ACHP) considers that "[c]onsultation is more than simply notifying an Indian tribe about a planned undertaking."[9] While consultation should begin with a formal letter, the ACHP advises that "[f]ace-to-face meetings or on-site visits may be the most practical way to conduct consultation." If the Forest Service needs assistance with consultation or updated tribal contacts, EPA Region 9 has a robust tribal program.

National Historic Preservation Act

Consultation for tribal cultural resources is required under Section 106 of the National Historic Preservation Act. Historic properties under the NHPA are properties that are included in the National Register of Historic Places or that meet the criteria for the NRHP. Section 106 of the NHPA requires a federal agency, upon determining that activities under its control could affect historic properties, to consult with the appropriate State Historic Preservation Office/Tribal Historic Preservation Office. Under NEPA, any impacts to tribal, cultural, or other treaty resources must be disclosed in the Draft EA. Section 106 of the NHPA requires that federal agencies consider the effects of their actions on cultural resources, following the regulation at 36 CFR Part 800.

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[8] National Association of Tribal Historic Preservation Officers. May 2005. Tribal Consultation: Best Practices in Historic Preservation. Available at http://npshistory.com/publications/preservation/tribal-consultation.pdf.

[9] Advisory Council on Historic Preservation. June 2021. Consultation with Indian Tribes in the Section 106 Review Process: The Handbook. Available at https://www.achp.gov/sites/default/files/2021-06/ConsultationwithIndianTribesHandbook6-11-21Final.pdf.

In the Draft EA, discuss how the Forest Service would avoid or minimize adverse effects on the physical integrity, accessibility, or use of cultural resources or archaeological sites, including traditional cultural properties, throughout the project area. Clearly discuss mitigation measures for archaeological sites and TCPs. We encourage the Forest Service to append any Memoranda of Agreements to the Draft EA, after redacting specific information about these sites that is sensitive and protected under Section 304 of the NHPA. We also recommend providing a summary of all coordination with Tribes and with the State and Tribal Historic Preservation Offices, including identification of NRHP eligible sites and development of a Cultural Resource Management Plan.

Executive Order 13007

Executive Order 13007, "Indian Sacred Sites" (May 24, 1996), requires federal land managing agencies to accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners, and to avoid adversely affecting the physical integrity, accessibility, or use of sacred sites. It is important to note that a sacred site may not meet the NRHP criteria for a historic property and that, conversely, a historic property may not meet the criteria for a sacred site. It is also important to note that sacred sites may not be identified solely in consulting with tribes located within geographic proximity of the project. Tribes located outside the direct impact area the plan area may also have religiously significant ties to lands within the plan area and should be included in the consultation process.

In the Draft EA, address the existence of Indian sacred sites in the project areas, including seeps and springs, that may be considered spiritual sites by regional tribal nations. Discuss how the Forest Service would ensure that the proposed action would avoid or mitigate for the impacts to the physical integrity, accessibility, or use of sacred sites.

Cumulative Effects

Cumulative effects are those that are reasonably foreseeable, related to the proposed action, and subject to the Forest Service's jurisdiction and control. The EPA recommends that the Draft EA consider evaluation of impacts over the entire area of impact and consider the effects of the project when added to other past, present, and reasonably foreseeable future projects in the analysis area, including tandem treatments with the ESFRMP. Considering all the actions in this area together would help decision makers to understand more clearly what the cumulative impacts on environmental resources are likely to be. The EPA has issued guidance on how to provide comments on the assessment of cumulative impacts, *Consideration of Cumulative Impacts in EPA Review of Draft EAs.*[10] The guidance states that to assess the adequacy of the cumulative impact assessment, there are five key areas to consider:

- Resources, if any, that are being cumulatively impacted.
- Appropriate geographic area and the time over which the effects have occurred and will occur.
- All past, present, and reasonably foreseeable future actions that have affected, are affecting, or would affect resources of concern.
- A benchmark or baseline.
- Scientifically defensible threshold levels.

Monitoring Plan

The EPA recommends the Draft EA 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 also recommends the Draft EA describe how and with what resources

[10] U.S. EPA May 1999. Consideration Of Cumulative Impacts in EPA Review of Draft EAs. Available at https://www.epa.gov/sites/production/files/2014-08/documents/cumulative.pdf.

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 Draft 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 appending the monitoring plan to the Draft EA 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 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. Given that the project timeframe is described as long term, 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.

We recommend developing 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 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.

General Mitigation Information

We recommend the proposed action include identification of appropriate mitigation where impacts are expected. Where impacts are not avoidable, we recommend that an explanation be provided as to why these impacts are necessary to make the project feasible. With these considerations in mind, we recommend the NEPA document include the following information for each mitigation measure:

- Designation of the entity responsible for implementing the mitigation
- A defined monitoring plan (see details above)
- Specific management decision points based upon protecting the minimum desired environmental conditions (thresholds) in the project area, which would trigger action
- Management alternatives and mitigation measures that would be implemented should a threshold be exceeded
- Identification of funding sources
- Mechanisms for public disclosure of the analysis and management decisions
- Specific temporal milestones to meet rehabilitation standards