



REGION 5
CHICAGO, IL 60604

May 14, 2024

VIA ELECTRONIC MAIL ONLY

Thomas Hall
Forest Supervisor
Superior National Forest
8901 Grand Avenue Place
Duluth, Minnesota 55808

Re: EPA Comments: Early Scoping Coordination for Development of a Forest Plan Amendment for the Boundary Waters Canoe Area Wilderness, Minnesota

Dear Mr. Hall:

The U.S. Environmental Protection Agency (EPA) has reviewed the U.S. Forest Service's (USFS) request for early coordination dated March 29, 2024, regarding the above-mentioned proposed project. This letter provides EPA's comments pursuant to our authorities under the National Environmental Policy Act (NEPA), the Council on Environmental Quality's (CEQ) NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

The Boundary Waters Canoe Area Wilderness (BWCAW) includes over one million acres of protected forest along the Canadian border in northeastern Minnesota. This area contains more than 1,200 miles of canoe routes, 12 hiking trails and more than 2,000 designated campsites.¹ The USFS is considering amending and updating the current 1993 Forest Management Plan (Management Plan) in order to address visitation trends, motorized towboats, prescribed burns, and other matters of interest.

EPA's detailed comments in response to the request for early coordination are enclosed with this letter and focus on the purpose and need, project alternatives, water quality and wetlands, threatened and endangered species, historic, architectural, archaeological, and cultural resources, noxious and invasive species, climate change, cumulative impacts, and agency coordination. We recommend USFS address these comments and our recommendations when developing the forthcoming Draft Environmental Assessment (Draft EA).

¹ US Forest Service: <https://www.fs.usda.gov/visit/destination/boundary-waters-canoe-area-wilderness>

Thank you for the opportunity to provide input at the earliest stages of project development. We recognize that it is inherently difficult to balance the competing needs of various parties and multiple land uses and commend USFS for its efforts. Please send an electronic copy of future NEPA documents to R5NEPA@epa.gov. If you would like to discuss the contents of this letter further, please contact Kathy Kowal, the lead NEPA reviewer for this project, at kowal.kathleen@epa.gov. Ms. Kowal is also available at 312-353-5206.

Sincerely,

Krystle Z. McClain, P.E.
NEPA Program Supervisor
Environmental Justice, Community Health, and
Environmental Review Division

Enclosure:
EPA's Detailed Comments

EPA Detailed Comments

Early Scoping Coordination for Development of a Forest Plan Amendment for the Boundary Waters Canoe Area Wilderness

May 14, 2024

PURPOSE AND NEED / PROJECT ALTERNATIVES

- The USFS's *Invitation for Public Input on Developing Forest Plan Amendment of Management Direction for the Boundary Waters Canoe Area Wilderness* states that "increasing visitation and changing trends in utilizing public lands and primitive management areas in general is adversely impacting all four management areas of the BWCAW."

Recommendations for the Draft EA:

- Provide a quantification of recent visitation data, historic trends, and future projected visitation numbers for the BWCAW. Provide evidence to show how current levels of visitation are adversely impacting BWCAW resources within each of the four management areas - pristine, primitive, semi-primitive non-motorized, and semi-primitive motorized wilderness management areas.²
- Describe the level of visitation at which USFS has been able to successfully manage BWCAW management areas according to wilderness standards. Provide information on the specific indicators (e.g., aquatic wildlife, vegetation, erosion, etc.) USFS will use to measure successful management. Compare these levels against current and projected visitor numbers under each alternative, including the No Action alternative.
- Explain the methodology used to determine a suitable range of visitors for each of the four management areas that would not result in negative impacts to Wilderness resources.
- Consider and discuss how the Wilderness capacity has changed from the 1993 Management Plan in light of impacts due to climate change. Discuss expected trends due to the climate change within the BWCAW and how those trends are factored into proposed alternatives.
- Detail how proposed approaches to towboat activity, prescribed fires versus natural fires, and any other proposed changes to the Management Plan may complement or conflict with the Wilderness Act of 1964³ (Wilderness Act).
- Identify the criteria used to evaluate the performance of alternatives, and clear explanations for elimination of any alternatives.
- Comprehensively (and quantitatively, to the extent possible) compare environmental impacts among alternatives (e.g., impacts to businesses operating in and around the BWCAW, visitor numbers, visitor experience, etc.) and identify trade-offs with impacts to other resources that could result from each of the alternatives.
- Discuss whether a monitoring plan is necessary to determine if the preferred alternative is accomplishing stated goals (e.g., preventing undesirable impacts, achieving landscape resilience, etc.). EPA recommends monitoring both pre- and post-implementation of any amendments to the Management Plan to determine the effect of any Management Plan amendments.

² Examples include campsites, travel routes, towboat activity, etc.

³ 16 USC 1131-1136

WATER QUALITY AND WETLANDS

- Wetlands and waters are primary features of the BWCAW. Many terrestrial and aquatic species use and rely upon the quality of water resources for one or more stages of their lifecycles.

Recommendations for the Draft EA:

- Include baseline information concerning water quality and wetlands in the BWCAW.
- Discuss the environmental impacts (i.e., erosion, waste, etc.) from the current number of visitors and compare this to the visitation levels that USFS identifies as a sustainable level of impact.
- Discuss whether restoration of aquatic resources is needed within any of the management areas due to the current number of visitors to reverse habitat degradation, if identified. Discuss the desired restoration goal(s), how those goals were derived, and what quantifiable measures of success will be used to determine if goals were achieved.
- Explain direct, indirect, and cumulative impacts to water quality and wetlands from each alternative (planned amendments to the Management Plan), including the No Action alternative. Analyze how implementation of the proposed project could potentially affect the water resources within the BWCAW (both positively and negatively).
- Describe best management practices for protecting water quality that can be used to keep impact levels to allowable levels.

THREATENED AND ENDANGERED SPECIES

- The BWCAW serves as critical habitat for numerous plant and animal species, including listed species.

Recommendations for the Draft EA:

- Discuss findings from U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) tool.⁴
- Discuss how USFS is in compliance with the Fish and Wildlife Coordination Act,⁵ which requires that agencies consult with the U.S. Fish and Wildlife Service and state wildlife agencies regarding the conservation of wildlife resources where the water of any stream or other water body is proposed to be controlled or modified by a Federal agency or any public or private agency operating under a Federal permit.
- Discuss how each alternative, including the No Action alternative, is expected to impact Federally- and state-listed threatened and endangered species - both beneficially and detrimentally.
- Consider suitable habitat for listed species when determining whether seasonal restrictions should be included in any of the alternatives to reduce or eliminate visitor disturbance during spawning or breeding periods.

⁴ US Fish and Wildlife Service Information for Planning and Consultation (IPaC) tool: <https://ipac.ecosphere.fws.gov/>

⁵ 16 U.S.C. §§661-666c; PL 85-624

HISTORIC, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Recommendations for the Draft EA:

- Discuss results of consultation with the State Historic Preservation Officer under Section 106 of the National Historic Preservation Act to determine how each alternative may impact historical or archaeological resources, including structures that are listed on the National Register of Historic Properties or eligible for listing.
- Tribal connections to the BWCAW should be considered when developing alternatives and analyzing impacts.

NOXIOUS AND INVASIVE SPECIES

- Non-native, invasive species (NNIS) can spread due to management activities and visitor use, resulting in adverse impacts to the ecosystem as well as the natural qualities of the BWCAW.

Recommendations for the Draft EA:

- Describe how proposed alternatives will meet the requirements of Executive Order 13112 on invasive species.
- Discuss the environmental impacts from NNIS caused by visitor use.
- Discuss whether removal of NNIS is needed within any of the management areas.
- Analyze how each alternative could potentially affect habitat and NNIS – both positively and negatively.
- Discuss standard best management practices and educational tools that can be used to reduce the likelihood of spreading NNIS within the BWCAW (e.g., having visitors clean hiking boots before entering the BWCAW, educational videos for visitors before they are allowed to enter the BWCAW, etc.).

CLIMATE CHANGE

- Executive Order 14008: Tackling the Climate Crisis at Home and Abroad states, “*The United States and the world face a profound climate crisis. We have a narrow moment to pursue action...to avoid the most catastrophic impacts of that crisis and to seize the opportunity that tackling climate change presents.*” The U.S. Global Change Research Program’s National Climate Assessment provides data and scenarios that may be helpful in assessing trends in temperature, precipitation, and frequency and severity of storm events.⁶

Federal courts have consistently held that NEPA requires agencies to disclose and consider climate impacts in their reviews, including impacts from greenhouse gas (GHG) emissions. On January 9, 2023, the Council on Environmental Quality’s (CEQ) *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change*,⁷ was published in the Federal Register. CEQ issued this interim guidance to assist Federal agencies in assessing and disclosing

⁶ Information on changing climate conditions is available through the National Climate Assessment at: <https://nca2023.globalchange.gov/>

⁷ <https://www.federalregister.gov/d/2023-00158>

climate impacts during environmental reviews. The guidance responds to Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, which directed CEQ to review, revise, and update CEQ's 2016 emissions guidance. The 2023 interim guidance was effective immediately and should be used to inform the reviews of new proposed actions. EPA recommends that USFS apply the interim guidance as appropriate, to ensure robust consideration of potential climate impacts, mitigation, and adaptation issues.

In addition, estimates of the social cost of greenhouse gases (SC-GHG⁸) are informative for assessing the impacts of GHG emissions. SC-GHG estimates allow analysts to monetize the societal value of changes in GHG emissions from actions that have small, or marginal, impacts on cumulative global emissions. Estimates of the social cost of carbon (SC-CO₂) and other greenhouse gases (e.g., social cost of methane (SC-CH₄)) have been used for over a decade in Federal government analyses. Quantification of anticipated GHG releases and associated SC-GHG comparisons among all alternatives (including the No Action alternative) within the Draft EA would inform project decision-making and provide clear support for implementing all practicable measures to minimize GHG emissions and releases.

Any Action Alternatives that would include the use of towboats (assuming combustion boat engines) would release GHG emissions. It is important for the Draft EA to fully quantify and adequately disclose the impacts of the GHG emissions from the No Action alternative and all action alternatives and discuss the implications of those emissions in light of science-based policies established to avoid the worsening impacts of climate change.

EPA recommends that USFS review EPA's final technical report, "*Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances*"⁹, which explains the methodology underlying the most recent set of SC-GHG estimates. To better assist lead Federal agencies with the utilization of these updated estimates, EPA has also recently released a Microsoft Excel "*Workbook for Applying SC-GHG Estimates v.1.0.1*" spreadsheet¹⁰ which was designed by EPA's National Center for Environmental Economics to help analysts calculate the monetized net social costs of increases in GHG emissions using the estimates of the SC-GHGs.

Recommendations for the Draft EA:

- USFS should apply the interim guidance as appropriate, to ensure robust consideration of potential climate impacts, mitigation, and adaptation issues. Additional recommendations are as follows.

⁸ EPA uses the general term, "social cost of greenhouse gases" (SC-GHG), where possible because analysis of GHGs other than CO₂ are also relevant when assessing the climate damages resulting from GHG emissions. The social cost of carbon (SC-CO₂), social cost of methane (SC-CH₄), and social cost of nitrous oxide (SC-N₂O) can collectively be referenced as the SC-GHG.

⁹ https://www.epa.gov/system/files/documents/2023-12/epa_scghg_2023_report_final.pdf

¹⁰ <https://www.epa.gov/environmental-economics/scghg>

Emissions & SC-GHG Disclosure and Analysis

- Quantify estimates of all direct and indirect GHG emissions¹¹ for the anticipated lifespan for all alternatives, including the No Action Alternative, broken out by GHG type.
- Avoid expressing the overall project-level GHG emissions as a percentage of the state or national GHG emissions. The U.S. must reduce GHG emissions from a multitude of sources, each making relatively small individual contributions to overall GHG emissions, in order to meet national climate targets.
- Use SC-GHG estimates to disclose and consider the climate damages from net changes in direct and indirect emissions of CO₂ and other GHGs resulting from the proposed project. To do so, EPA recommends a breakdown of estimated net GHG emission changes by individual gas, rather than relying on CO₂-equivalent (CO₂e) estimates, and then monetize the climate impacts associated with each GHG using the corresponding social cost estimate (i.e., monetize CH₄ emissions changes expected to occur with the social cost of methane (SC-CH₄) estimate for emissions).¹² When applying SC-GHG estimates, just as with tools to quantify emissions, USFS should disclose the assumptions (e.g., discount rates) and uncertainties associated with such analysis and the need for updates over time to reflect evolving science and economics of climate impacts.
- Use comparisons of GHG emissions and SC-GHG across alternatives to inform project decision-making.

Consistency with Climate Policy

- Provide an analysis of the project's reasonably-foreseeable direct and indirect GHG emissions (for all project alternatives) in the context of GHG reduction targets and policies. This includes Minnesota's policies and GHG emission reduction goals¹³ as well as national policy and GHG emission reduction goals over the anticipated project lifetime, including the U.S. 2030 Paris targets and the 2050 goal for net-zero energy emissions.
- Discuss the implications the expected increase in GHGs should the proposed Project be implemented. Additionally, discuss the ramifications of making it more difficult to meet state emissions goals due to the increase in GHGs.

¹¹ As discussed in Section IV(A) of CEQ's 2023 interim guidance, "agencies generally should quantify all reasonably foreseeable emissions associated with a proposed action and reasonable alternatives (as well as the no-action alternative). Quantification should include the reasonably foreseeable direct and indirect GHG emissions of their proposed actions. Agencies also should disclose the information and any assumptions used in the analysis and explain any uncertainty. In assessing a proposed action's, and reasonable alternatives', reasonably foreseeable direct and indirect GHG emissions, the agency should use the best available information."

¹² Transforming gases into CO₂e using Global Warming Potential (GWP) metrics, and then multiplying the CO₂e tons by the SC-CO₂, is not as accurate as a direct calculation of the social costs of non-CO₂ GHGs. This is because GHGs differ not just in their potential to absorb infrared radiation over a given time frame, but also in the temporal pathway of their impact on radiative forcing and in their impacts on physical endpoints other than temperature change, both of which are relevant for estimating their social cost but not reflected in the GWP. See the Interagency Working Group on Social Cost of Greenhouse Gases' February 2021 *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990* for more discussion and the range of annual SC-CO₂, SC-CH₄, and SC-N₂O estimates currently used in Federal benefit-costs analyses.

¹³ Including, but not limited to, Minnesota's Next Generation Energy Act and Minnesota's Climate Action Framework and the goals for Minnesota laid out here: <https://climate.state.mn.us/>

- Include a complete discussion of the extent to which the estimated GHG emissions from the proposed project and alternatives may be inconsistent with the need to take actions necessary to achieve science-based GHG reduction targets.¹⁴

Resilience and Adaptation

- Describe changing climate conditions (i.e., temperatures and frequency and severity of storm events) and assess how such changes could impact the proposed project and the environmental impacts of the proposed project and all identified alternatives.
- Include a robust discussion of changes to the BWCAW landscape attributable to climate change, as well as expected trends.
- Discuss measures to address climate change impacts to the BWCAW that could be included in the Management Plan. Discuss how such measures might change based on changing visitor numbers. Describe triggers for changing management approaches if habitat veers from desired conditions.
- Discuss how climate change could worsen long term impacts/risks from the Project to communities with EJ concerns and to Tribes.

DIRECT, INDIRECT, AND CUMULATIVE IMPACTS

- Analyze all direct, indirect, and cumulative impacts of all action alternatives as well as the No Action alternative. This information could assist USFS in avoiding, minimizing, and mitigating adverse impacts.

Recommendations for the Draft EA:

- Analyze direct, indirect, and cumulative impacts to natural resources from each alternative (planned amendment), including the No Action alternative. Analyze how implementation of the proposed project could potentially affect the BWCAW (both positively and negatively).
- Consider reasonably foreseeable impacts as a result of induced growth and/or use along or adjacent to the BWCAW.

AGENCY COORDINATION

- The Boundary Waters Canoe Area is in the northern third of the Superior National Forest, is bordered on the west by Voyageurs National Park, and is south of and adjacent to Canada's Quetico Provincial Park.

Recommendations for the Draft EA:

- USFS should consider how proposed changes to the BWCAW Forest Plan would influence existing projects and ecological initiatives both within the BWCAW and in surrounding protected areas.

¹⁴ See, e.g., Executive Order 14008; U.S. Nationally Determined Contribution to the Paris Agreement (April 20, 2021).

- Summarize coordination with relevant Federal and state agencies, Tribal Nations, and Canadian management of Quetico National Park. EPA recommends that copies of letters to agencies, as well as responses from those agencies, are included as appendices to the Draft EA.

ADDITIONAL INFORMATION

- The scoping letter requested information EPA may have regarding environmental resources in the project area.

Recommendations for the Draft EA: USFS should utilize the following databases to obtain environmental information related to the project area:

- WATERS (Watershed Assessment, Tracking & Environmental Results System)¹⁵:
<https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system>
- Envirofacts¹⁶: <https://www3.epa.gov/enviro/facts/multisystem.html>
- EJSscreen: <https://www.epa.gov/ejscreen>
- NEPAassist: <https://www.epa.gov/nepa/nepassist>
- Clean Water Act Section 303(d) List of Impaired Waters:
<https://www.epa.gov/tmdl/impaired-waters-and-tmdls-region-5>
- National Ambient Air Quality Standards status:
https://www3.epa.gov/airquality/greenbook/anayo_mn.html

¹⁵ The **Watershed Assessment, Tracking & Environmental Results System (WATERS)** unites water quality information previously available only from several independent and unconnected databases.

¹⁶ Includes enforcement and compliance information.