REGION 10

SEATTLE, WA 98101

November 14, 2024

Kelsey Jolley, Spirit Lake NEPA Coordinator
987 McClellan Road
Vancouver, Washington 98661

Dear Kelsey Jolley:

The U.S. Environmental Protection Agency has reviewed the US Forest Service (USFS)'s Notice of Intent (NOI) to prepare an Environmental Impact Statement for Spirit Lake Outflow Safety Improvement Project (EPA Project Number 24-0051-USFS). The EPA conducted its review pursuant to the National Environmental Policy Act and our review authority under Section 309 of the Clean Air Act. The CAA Section 309 role is unique to the EPA and requires the EPA to review and comment publicly on any proposed federal action subject to NEPA's environmental impact statement requirement.

The NOI proposes to evaluate the potential environmental impacts associated with safety improvement activities at the Spirit Lake Outflow in southern Washington. The current lake outlet tunnel was constructed in the 1980s under emergency conditions to maintain safe lake levels. The tunnel is at risk for failure due to aging and its location in an area of volcanic, geologic, hydrologic, and seismic hazards. These hazards increase the potential for breach of debris blockage and/or tunnel failure, putting downstream communities at risk of flooding and mudflows in the event of a full lake breach. The proposed project evaluates future long-term lake level management and outflow improvement measures, such as: constructing open outlet channels to keep Spirit Lake at its current elevation or draining it; building a new pressure tunnel or outlet channel and intake through Harry's Ridge; rehabilitating the existing tunnel in shear zones; and converting the existing tunnel into a pressure tunnel.

The proposed project activities may result in environmental impacts and require mitigation measures. In particular, the project may result in impacts to water, air, biological, and cultural resources. Our enclosed comments and recommendations provide more information on these and other potential environmental impacts to consider when developing the EIS.

Thank you for the opportunity to review the NOI for this project. If you have questions about this review, please contact Theo Mbabaliye of my staff at (206) 553-6322 and mbabaliye.theogene@epa.gov, or me, at (206) 553-2117 or at sturges.susan@epa.gov.

Sincerely,

SUSAN STURGES

Digitally signed by SUSAN STURGES
Date: 2024.11.14 13:03:49 -08'00'

Susan Sturges, Acting Manager
NEPA Branch

Enclosure

U.S. EPA Detailed Scoping Comments on
Spirit Lake Outflow Safety Improvement Project
Cowlitz and Skamania Counties, Washington
November 2024

Water Resources

To sufficiently assess the potential temporal and direct, indirect, and cumulative impacts of the proposed project on water resources, the EPA recommends the Draft EIS include information on the following Clean Water Act (CWA) topics, where applicable.

CWA § 303(d)

The CWA requires states to develop a list of impaired waters that do not meet water quality standards, establish priority rankings, and develop action plans called Total Maximum Daily Loads (TMDLs) to improve water quality. The EPA recommends the DEIS include information on CWA § 303(d) impaired waters in the project area and any efforts related to TMDLs. Discuss what effect, if any, project discharges may have on impaired waterbodies. The EPA recommends the DEIS describe existing restoration and enhancement efforts for those waters, how the proposed project will coordinate with on-going protection efforts, and any mitigation measures that will be implemented to avoid further degradation of impaired waters.

CWA § 401

The CWA provides states and authorized Tribes the authority to grant, deny, or waive certification of proposed federal licenses or permits that may discharge into waters of the U.S. (WOTUS). This section of the CWA is an important tool for states and authorized tribes to help protect the water quality of federally regulated waters within their borders, in collaboration with federal agencies. In developing the DEIS, the EPA recommends early coordination with Washington State regarding CWA § 401 for the purposes of streamlining regulatory processes.

CWA § 402

The EPA recommends the DEIS identify any discharges to WOTUS that are known, or are likely, to occur during construction and operation of the project and how these discharges will be managed and minimized. Identify the National Pollutant Discharge Elimination System (NPDES) permits that will be obtained for the construction phase, new (or modifications to) existing permits for operations, and how any previous permit exceedances could be prevented by incorporating pollution prevention measures into the project. In Washington State, the EPA issues NPDES permits for federally owned facilities and permits on tribal lands and that the EPA has delegated authority to issue other NPDES permits to the Washington State Department of Ecology.[1]

CWA § 404

The NOI indicates the proposed project will require a permit under CWA § 404 from the U.S. Army Corps of Engineers (USACOE) for the discharge of dredged or fill material into WOTUS. Wetlands,

[1] https://www.epa.gov/npdes-permits/washington-npdes-permits. Accessed 11/7/2024.

vegetated shallows, mud flats, cobble substrates, eelgrass, and kelp beds are all considered special aquatic sites under the CWA § 404(b)(1) Guidelines (40 CFR 230). The EPA recommends that the DEIS:

- Clearly identify any discharges to WOTUS that are known, or likely, to occur that will be subject to CWA § 404. Identify and describe the impact of those discharges, control measures to be employed to address those impacts, and best management practices to prevent discharge of water and pollutants.
- Include sufficient information that can serve as at basis to determine whether the project would satisfy the requirements for the CWA § 404 permit or identify appropriate measures to mitigate the project's impacts to all WOTUS.
- Structure the alternatives analysis so that it is consistent with meeting requirements of both the CWA and NEPA.
- Describe the regulatory criteria and processes utilized to screen potential alternatives and thoroughly evaluate alternatives that would pose less adverse impacts.
- Describe how compensatory mitigation will be quantified and provided to offset impacts, with specific project examples and options as available.

For context on the CWA § 404(b)(1) analysis, the Guidelines include four main requirements (40 CFR 230.10 (a) through (d)):

Least Environmentally Damaging Practical Alternative (LEDPA) Determination - Section 230.10(a)

A CWA § 404 permit can be issued for the LEDPA only. Practicable alternatives include those that are capable and feasible of being done after taking into consideration costs, technology, and logistics. Costs alone cannot make a project not practicable. USACOE permit decisions require a comprehensive evaluation of the range of alternatives to ensure the permitted alternative is the LEDPA. Identification of the LEDPA is achieved by performing an alternatives analysis that estimates the direct, indirect, and cumulative impacts to jurisdictional WOTUS that would result from each of the potential project alternatives. Only when this analysis has been performed can the applicant or the permitting authority be assured that no discharge other than the practicable alternative with the least impact on the aquatic ecosystem will be authorized.

Water Quality - Section 230.10(b)

Prohibits permitting projects that would cause or contribute to violations of water quality standards, violates any applicable toxic effluent standard, jeopardizes continued existence of endangered or threatened species and impacts to critical habitat under the Endangered Species Act, or violates any requirements to protect any marine sanctuary designated under Marine Protection, Research, and Sanctuaries Act.

Significant Degradation - Section 230.10(c)

Prohibits permitting a project that causes or contributes to significant degradation of aquatic resources. Effects contributing to significant degradation include: (1) adverse effects on plankton, fish, shellfish, wildlife, and special aquatic sites (40 CFR 230.10(c)(1)), (2) adverse effects on life stages of aquatic life (40 CFR 230.10(c)(2)), (3) aquatic ecosystem diversity, productivity, and stability including loss of fish and wildlife habitat (40 CFR 230.10(c)(3)), and (4) impairment or destruction of endangered species habitat (40 CFR 230.30(2)).

Mitigation - Section 230.10(d)

Requires compensatory mitigation for unavoidable impacts to aquatic resource functions. The 2008 Joint EPA-Corps Federal Mitigation Rule (40 CFR 230.91-98) establishes a preference for compensatory mitigation based on a watershed approach, which can ensure that potential direct and indirect impacts of the project are offset. In addition to identifying all measures to avoid and minimize adverse impacts to the aquatic environment (showing compliance with 40 CFR Part 230.10(a)), for unavoidable impacts, identify compensatory mitigation.

Climate Change

On January 9, 2023, the Council on Environmental Quality (CEQ) published interim guidance to assist federal agencies in assessing and disclosing climate change impacts during environmental reviews. CEQ developed this guidance in response to Executive Order (EO) 13990, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis. CEQ indicated that agencies should use this interim guidance to inform the NEPA review for all new proposed actions and may use it for evaluations in process, as agencies deem appropriate, such as informing the consideration of alternatives or helping address comments raised through the public comment process. The EPA recommends the DEIS:

- Consider potential climate impacts, mitigation, and adaptation issues.
- Evaluate direct, indirect, and cumulative greenhouse gas (GHG) emissions of each alternative including the no action alternative. Example tools for such an analysis can be found at CEQ's website.[2]
- Estimate the social cost of GHG emissions for each alternative to facilitate decisionmakers' and the public's evaluation of the proposed alternatives by monetizing the calculated GHG emissions.
- Evaluate the effects of climate change on each of the proposed alternatives, including evaluating how a changing climate may impact each alternative and identifying potential mitigation measures that could improve resiliency of the project.

Disaster Resilience and Green Construction

As the climate changes, flood mitigation becomes even more crucial for communities. Heavy precipitation events have increased in recent years and are expected to become more frequent and intense as global temperatures continue to rise. As a result, the risk of flooding is likely to increase in many areas across the United States.[3] The EPA recommends that the DEIS incorporate *Disaster-Resilient Design Concepts* while considering how communities may experience a combination of hazards — for instance, drought can contribute to wildfire, after which erosion and flooding may occur in the same area.[4]

The EPA encourages consideration of ongoing and projected regional and local climate change while ensuring robust climate resilience and adaptation planning in the project design. The EPA and Federal Emergency Management Agency (FEMA) created the *Regional Resilience Toolkit* to help multiple

[2] https://ceq.doe.gov/guidance/ghg-tools-and-resources.html. Accessed 11/14/2024.
[3] https://www.epa.gov/green-infrastructure/mitigate-flooding. Accessed 11/4/2024.
[4] https://www.epa.gov/system/files/documents/2023-03/Disaster-ResilientDesignConcepts_Feb2023v-6_Final.pdf. Accessed 11/4/2024.

jurisdictions and levels of government, as well as non-governmental partners and local groups, collaborate on regional-scale actions.[5,6] The EPA also developed the Climate Resilience Evaluation and Awareness Tool,[7] which is designed for water utilities but is flexible and customizable to determine the economic consequences of climate change on infrastructure under different climate scenarios as well as the potential monetized risk reduction of implementing adaptive strategies. Additionally, the Resilient Strategies Guide is designed for water utilities, but the strategies section provides a library of adaptation ideas for infrastructure projects.[8]

The EPA notes that communities with fewer resources to prepare for and recover from floods are disproportionately vulnerable to flood damage and other negative impacts.[9,10]

Sustainable Procurement

EO 14057 urges federal agencies to set annual targets for reducing GHG emissions, including by way of sustainable procurement via a Buy Clean policy. The USFS Sustainable Operations states support for initiatives such as the Federal Buy Clean Initiative, which encourages suppliers to identify US-based sources for their materials, as well as the Made in America Initiative.[11] Additionally, the USFS created the *National Sustainable Operations Strategy* to reduce agency emissions, shift consumption habits and purchases, and ensure that USFS employees are supported throughout the process.[12] In the NEPA analysis, discuss strategies to ensure sustainable procurement in accordance with federal guidance. We suggest that the DEIS include any suppliers and contractors to publicly disclose GHG emissions and set science-based targets to reduce emissions. The EPA announced expanded technical assistance opportunities to businesses, the federal government, and other organizations by offering Environmental Product Declaration (EPD) development support to help estimate embodied carbon emissions.[13,14] General Services Administration also provides tools for measuring embodied carbon in buildings and actionable strategies for reduction and procurement approaches.[15]
Further, under Subpart 23.1 of the Federal Acquisition Regulation,[16] federal purchasers are to procure sustainable products and services that, to the maximum extent practicable, meet required EPA purchasing programs, including EPA's Recommendations of Specifications, Standards, and Ecolabels.[17] Additionally, General Services Administration provides a database for lightly used surplus items.[18] The

[5] https://www.epa.gov/smartgrowth/regional-resilience-toolkit. Accessed 11/4/2024.
[6] https://www.epa.gov/sites/default/files/2019-07/documents/regional_resilience_toolkit.pdf. Accessed 11/4/2024.
[7] https://www.epa.gov/crwu/climate-resilience-evaluation-and-awareness-tool. Accessed 11/6/2024.
[8] https://www.epa.gov/crwu/resilient-strategies-guide-water-utilities#/resilient-strategies?region=10. Accessed 11/6/2024.
[9] https://www.epa.gov/newsreleases/epa-report-shows-disproportionate-impacts-climate-change-socially-vulnerable. Accessed 11/4/2024.
[10] https://www.epa.gov/green-infrastructure/equitable-green-infrastructure. Accessed 11/4/2024.
[11] https://www.fs.usda.gov/managing-land/sustainability-and-climate/sustainable-operations. Accessed 11/4/2024.
[12] https://www.fs.usda.gov/sites/default/files/fs_media/fs_document/sustainable-operations-strategy.pdf. Accessed 11/4/2024.
[13] https://www.epa.gov/greenerproducts/tools-resources-and-funding-opportunities. Accessed 11/6/2024.
[14] https://www.buildingtransparency.org/resources/. Accessed 11/4/2024.
[15] https://sftool.gov/learn/about/658/embodied-carbon. Accessed 11/4/2024.
[16] https://www.acquisition.gov/far/part-23#FAR_Subpart_23_1. Accessed 11/4/2024.
[17] https://www.epa.gov/greenerproducts/recommendations-specifications-standards-and-ecolabels-federal-purchasing. Accessed 11/6/2024.
[18] https://ppms.gov/about-ppms. Accessed 11/4/2024.

EPA has also developed Energy Star energy performance scores for nearly 20 industries, which can be an additional metric to support decarbonization efforts through procurement.[19] Furthermore, the EPA developed the Safer Choice label to help consumers, businesses, and purchasers find products with ingredients that are safer for human health and the environment, without sacrificing quality or performance.[20] Safer Choice is an EPA Pollution Prevention program, which includes practices that reduce, eliminate, or prevent pollution at its source, such as using safer ingredients in products.

Environmental Justice

EO 12898 F*ederal Actions to Address Environmental justice in Minority Populations and Low-Income Populations*, February 11, 1994 was supplemented by EO 14096, *Revitalizing Our Nation's Commitment to Environmental Justice for All*, April 26, 2023 which directs federal agencies, as appropriate and consistent with applicable law: to identify, analyze, and address disproportionate and adverse human health and environmental effects (including risks) and hazards of Federal activities, including those related to climate change and cumulative impacts of environmental and other burdens on communities with environmental justice concerns. Section 3 (b)(i) of EO 14096 also directs the EPA to assess whether each agency analyzes and avoids or mitigates disproportionate human health and environmental effects on communities with environmental justice concerns when carrying out responsibilities under Section 309 of the Clean Air Act, 42 U.S.C. 7609.

EJScreen is the EPA's nationally consistent environmental justice screening and mapping tool.[21] EJScreen offers a variety of powerful data and mapping capabilities that enable users to understand details about the population of an area and the environmental conditions in which they live. The tool provides information on environmental and socioeconomic indicators as well as pollution sources, health disparities, critical service gaps, and climate change data. The data is displayed in color-coded maps and standard data reports which feature how a selected location compares to the rest of the nation and state.

Assessing data from EJScreen is a useful first step in identifying locations in the area that may be candidates for further review or targeted outreach. The EPA considers a project to be in an area of potential EJ concern when an EJScreen analysis for the impacted area shows one or more of the EJ Indexes at or above the 80th percentile in the nation and/or state. At a minimum, the EPA recommends an EJScreen analysis consider EJScreen information for the block group(s) which contains the proposed action(s) and a one-mile radius around those areas. In addition, the EPA recommends identifying transient users of the project area to identify potential EJ concerns, consistent with Promising Practices for EJ Methodologies in NEPA reviews,[22] which states that agencies can be informed by determining if any minority or low-income transient populations (e.g., Tribes, indigenous populations, migrant

[19] https://www.energystar.gov/industrial_plants/energy_star_plant_certification/buy_clean_procurement_and_energy_star_0. Accessed 11/4/2024.
[20] https://www.epa.gov/saferchoice. Accessed 11/4/2024.
[21] https://ejscreen.epa.gov/mapper/. Accessed 11/4/2024.
[22] https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf. Accessed 11/14/2024.

farmworkers) may be affected (e.g., may reside elsewhere but come within the affected area for subsistence fishing or to collect traditional medicines) by the project.

It is important to consider all impacted areas by the proposed action(s). Areas of impact can be very focused and contained within a single block group, or broader, spanning across several block groups and communities.[23] Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators.[24] Therefore, additional review or outreach may be necessary for the proposed action. To address these potential concerns, the EPA recommends the DEIS:

- Apply methods from Promising Practices for EJ Methodologies in NEPA Reviews report to this project. This report compiles methodologies from current agency practices for integrating EJ considerations in NEPA processes. The Promising Practices Report provides particularly useful guidance in assessing the potential direct and indirect impacts of a project, as well as the potentially increased vulnerabilities certain populations may have due to the cumulative impacts of environmental harm.
- Apply guidance from the CEQ's guidance document "Environmental Justice Guidance Under the National Environmental Policy Act" to this project (CEQ's EJ Guidance).[25]
- Characterize the project site with specific information or data related to EJ concerns.[26]
- Describe potential EJ concerns for all EJ Indexes at or above the 80th percentile in the state and/or nation.
- Screen for and describe all individual block groups within or intersecting at least a 1-mile radius of the project, as well as transient users as explained above.
- Describe individual block groups within the project area in addition to an area-wide assessment.
- Supplement data with state and county level reports and local knowledge such as Washington's Environmental Health Disparities mapping tool.[27]

It is important to consider both the potential short-term impacts of the proposed action(s) (e.g., construction noise, disrupted air quality, and viewscape), along with the potential long-term impacts (e.g. noise and air quality disruption due to vehicle traffic, disrupted access to areas of subsistence and traditional use by Tribes and indigenous populations) on communities with EJ concerns.

---

[23] Agencies should define community as "either a group of individuals living in geographic proximity to one another, or a geographically dispersed set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions" (Interim Justice40 Guidance – Executive Order 14008 on Tackling the Climate Crisis at Home and Abroad, January 27, 2021).

[24] EPA's Technical Documentation for EJScreen: https://www.epa.gov/ejscreen/technical-information-about-ejscreen. Accessed 11/14/2024.

[25] Environmental Justice Guidance Under the National Environmental Policy Act: https://www.epa.gov/sites/default/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf. Accessed 11/14/2024.

[26] For more information about potential EJ concerns, refer to the July 21, 2021, Memorandum for the Heads of Departments and Agencies Interim Implementation Guidance for the Justice40 Initiative: https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf. Accessed 11/14/2024.

[27] https://fortress.wa.gov/doh/wtn/WTNIBL/. Accessed 7/13/2023.

Meaningful Public Engagement

The EPA recommends the DEIS detail the opportunities for effective and meaningful public engagement for communities with EJ concerns, as described in the Promising Practices for EJ Methodologies in NEPA reviews and EO 14096. We recommend the following measures to further advance meaningful involvement:

- Review and consider community feedback provided during the NEPA process. Ensure that the NEPA engagement approach is sensitive and responsive to the wellbeing of affected communities.
- Ensure that community feedback is reflected in the decision-making process. Design robust community engagement practices to maximize participation opportunities for communities that would be affected by the project, such as community-based workshops to facilitate discussion and issue resolution. Community-based workshops may also provide an opportunity to identify key issues and milestones for meaningful engagement in the NEPA process for the communities.
- Provide early and frequent outreach and engagement opportunities to collect and incorporate community feedback throughout the NEPA process and to maintain maximum transparency.
- Ensure that translation/interpretation services are provided to accommodate linguistically isolated populations.
- Address technology barriers that may prohibit participation from communities affected by the project.
- Ensure that meetings are scheduled at a time and location that is accessible for community participants, including scheduling meetings after work hours and on weekends as appropriate.
- Provide ample notice of meetings and commenting opportunities so that community members have sufficient time to prepare and participate.
- Promote engagement opportunities within appropriate outlets used by affected communities, such as newspapers, radio, and social media.
- Ensure that all project-related information is conveyed using plain language so that community members of varied reading proficiencies can readily understand the project-related information.

Cumulative Effects

The EPA recommends that the DEIS assess impacts over the entire area of impact and consider the effects of the proposed project when added to other past, present, and reasonably foreseeable future projects in and outside the analysis area, including those outside of USFS's jurisdiction. Considering all actions in the project vicinity will help decision makers and the public to understand more clearly what the cumulative impacts on environmental resources are likely to be. The EPA has issued guidance on cumulative impacts, Consideration of Cumulative Impacts in the EPA Review of NEPA Documents,[28] which says 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.

[28] https://www.epa.gov/sites/default/files/2014-08/documents/cumulative.pdf. Accessed 9/3/2024.

- A benchmark or baseline.
- Scientifically defensible threshold levels.

Tribal Consultation

The EPA encourages USFS to consult with affected Tribes and incorporate feedback from the Tribes when making decisions regarding the project. The EPA recommends the DEIS describe the issues raised during the consultations and how those issues were addressed.

Vegetation Impacts

The proposed project may disturb vegetation and organic material due to project activities such as excavation. The EPA recommends the DEIS include information on the following:

- Baseline information on vegetation, including a location/mapping analysis.
- Surface disturbance activities to vegetation and related impacts.
- Mitigation measures to minimize the project impacts to vegetation.
- Potential introduction of invasive plants and how they would be controlled to minimize their economic, ecological, and human health impacts in the area, consistent with EO 13112, *Invasive Species*. Restoration and reclamation of disturbed areas post project construction.

Protected Species and Habitats

The proposed project may impact federally and state protected species and their habitats. The EPA recommends that evaluation of the proposed project identify the species in the project area and surrounding areas and their critical habitats; impacts the project will have on these resources; and how the proposed project will meet all requirements under the Endangered Species Act (ESA). Include information about consultation with the U.S. Fish and Wildlife Service under Section 7 of the ESA and National Marine Fisheries Service. In addition, coordinate with Washington State Department of Fish and Wildlife to ensure project practices will be protective of biota and habitat during implementation of the project.

Monitoring and Adaptive Management

The EPA recommends that the project implement an environmental monitoring and adaptive management program design to assess both impacts from the project and whether implemented mitigation measures are effective. Describe the plan in the DEIS with sufficient detail to evaluate the monitoring effectiveness at meeting monitoring goals and how the public can view results.