March 31, 2020

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E., Room 1A
Washington, D.C. 20426

RE: Opposition to Northwest Pipeline LLC’s Request for Extension of Time for the Kalama Lateral Project, CP15-8

Dear Ms. Bose,

Columbia Riverkeeper is writing to express its opposition to Northwest Pipeline’s (Northwest) March 12, 2020, Request for Extension of Time to construct the Kalama Lateral Project. The Project—an approximately 3 mile, 24-inch diameter, lateral pipeline extending from Northwest’s existing 30-inch mainline through Cowlitz County, Washington—is meant to supply gas to Northwest Innovation Works’ (NWIW) proposed methanol refinery at the Port of Kalama, WA. NWIW’s project, however, continues to face significant opposition at both the state and federal level, as well as substantial grassroots resistance in and around Kalama. The Commission’s Office of Energy Projects (OEP) was clear when it granted Northwest’s last extension request: no further extensions would be granted absent a showing that local permit issues have been resolved and construction has begun or is imminent.1 Northwest cannot make this required showing, thus the Commission should deny the extension request.

The present request is Northwest’s third request for an extension of time. FERC granted Northwest a Certificate of Public Convenience and Necessity for the Kalama Lateral Project on April 11, 2016, and required construction to be completed by April 11, 2018. On April 11, 2018, OEP, by delegated order, extended the construction deadline to April 11, 2019. On Feb. 28, 2019, Northwest filed a second request seeking a two-year extension of time (until April 11, 2021). On April 10, 2019, OEP responded to Northwest’s request by granting an extension for just one year—to April 11, 2020. At that time, OEP noted that “[a]ny further extension beyond April 11, 2020 would require additional submissions by Northwest that local permit issues have been resolved and that their construction has begun or is imminent.” Northwest is now requesting a third two-year extension of this deadline.

1 April 10, 2019, Letter from Richard Foley, Chief, Certificate Branch 1, Office of Energy Projects to David J. Madsen, Director, Business Development & Regulatory Affairs, Northwest Pipeline LLC.
through April 11, 2022, despite the fact that the local permit issues are no closer to being resolved and construction of the project is nowhere near “imminent.”

NWIW, the sole customer for the Kalama Lateral project, is experiencing serious state-level opposition to its proposed methanol refining facility. In May 2019, Governor Jay Inslee publicly denounced the project saying that he “cannot in good conscience support” construction of the facility. Furthermore, after numerous unfulfilled requests to NWIW for additional information to assess the proposal’s greenhouse gas emissions, the Washington Department of Ecology (Ecology) announced in November that it will complete a Second Supplemental Environmental Impact Statement (Second SEIS) on its own. This process will likely take a year or more to complete, could result in additional litigation, and is not guaranteed to result in a favorable decision to NWIW. Although the Port of Kalama and NWIW are challenging Ecology’s decision in court, a favorable decision would only result in the case going back to WA’s Shoreline Hearings Board where it will remain for at least the rest of the year. Given the total lack of forward movement in obtaining local permits, Northwest cannot make the showing OEP has required for an additional extension.

The Commission’s Office of Energy Projects was clear in its prior order, that to obtain an additional extension Northwest would have to show that 1) the local permit issues have been resolved, and 2) that construction has begun or is imminent. Since Northwest is unable to make this showing, it has instead made up its own three-part test that is nowhere found in prior Commission orders. The first prong of Northwest’s test requires a showing that the project’s environmental findings are still valid. Northwest asserts the environmental assessments relevant to the Kalama Lateral project are still valid regardless of the fact that both the state and federal environmental findings are not only facing legal challenges but the agencies responsible for those findings have already proposed revisions.

I. The Environmental Findings the Commission Based its Initial Decision On Are Stale and Facing Legal Challenges.

Not only is NWIW facing permitting issues at the state level, but the federal environmental assessments—those the Commission based its initial decision on—are facing legal challenges as well. The Commission imposes construction completion deadlines in certificates because the information supporting the Commission’s “public convenience and necessity determination goes stale with the passage of time.” Chestnut Ridge Storage LLC, Order Denying Rehearing and Vacating Certificate, 139 FERC ¶ 61,149 at 4 (May 23, 2012). The specific deadline established in the certificate is based on the Commission’s “assessment of the circumstances relevant to the specific project” and represents what the

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3 See Letter from Perry J. Lund, Section Manager, Southwest Regional Office, Wash. Dept. of Ecology, to Dr. Elaine Placido, Cowlitz County (Nov. 22, 2019) (Attachment A).
4 NWIW itself notes that the Second SEIS process “may take as much as 12 to 14 months to complete.” NW Innovation Works Kalama, LLC Comments in Support, Docket No. CP15-8-000 (Mar. 30, 2020).
Commission believes “to be a reasonable period of time, within which the findings supporting [its] authorization can be expected to remain valid.” *Id.* As the Commission noted in *Chestnut Ridge*, the data that supports its “conclusions on the need for a project, its commercial prospects, and its environmental impacts are subject to change.” *Id.* at 4, n.9.

With respect to the Lateral Project’s environmental findings, Northwest argues that the findings remain unchanged from when the Commission originally granted its Certificate. However, what both Northwest and NWIW have failed to disclose is that the National Environmental Policy Act (NEPA) review and associated Clean Water Act 404 permits issued by the Army Corps of Engineers are currently being litigated; as is the Biological Opinion completed by the National Marine Fisheries Service. Those analyses address both the methanol refinery and the Kalama Lateral pipeline project. Northwest’s decision to leave this information out of its extension request while asserting these decisions “remain unchanged” is incredibly misleading. Furthermore, contrary to the first prong of Northwest’s invented three-part test, the question before the Commission is not whether the environmental findings are still valid, but whether the environmental “findings underlying the Commission’s authorization can be expected to remain valid.” *Chestnut Ridge*, 139 FERC ¶ 61,149 at 4 (emphasis added). Here, the environmental findings are not only being actively litigated but the agencies responsible for those findings have already revised their positions in response to the complaint—relaying substantial uncertainty about the sufficiency of the reviews and associated permits. Given the agencies’ response to this ongoing litigation, there cannot be an expectation that the environmental assessments will remain valid.

Additionally, at the state level, Northwest’s assertion that “the Final Supplemental Environmental Impact Statement for the Methanol Facility has been received” is grossly misleading. Whether Northwest thinks it was reasonable or not for Ecology to require more information regarding the global greenhouse gas emissions and mitigation measures for the project is immaterial; Ecology has not only determined that the FSEIS is inadequate but it has stepped in to complete the necessary analysis itself.

**II. Property Owners Along the Pipeline Route Deserve Finality**

The property owners impacted by the Kalama Lateral project deserve some finality with respect to whether their land will be condemned. The Commission has noted that “an extension of time which results in limitations in the use of a landowner’s property might not be warranted unless the company can demonstrate credible prospects for its project’s completion.” *Chestnut Ridge*, 139 FERC ¶ 61,149 at 5. Here, Northwest Pipeline’s delay has left a number of property owners along the pipeline route

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wondering for nearly half a decade if their property will be condemned. For example, the pipeline is expected to cut through Cowlitz County Cemetery District #6—an important historic and cultural resource in Cowlitz County. The county and public should not have to indefinitely wonder if this culturally significant land will be condemned for a gas pipeline that is no closer to being built today than it was when it was first proposed five years ago.

In addition to the permitting issues discussed above, whether NWIW actually has the funding to construct the methanol refinery is a huge question mark. In 2015, NWIW applied to the U.S. Department of Energy for a nearly $2 billion loan guarantee under the agency’s Title 17 Loan Guarantee Program for Advanced Fossil Energy Projects. That loan application has been on hold for nearly four years. Similarly, the Port of Kalama has applied to the U.S. Department of Transportation’s Maritime Administration multiple times for grant funding to construct the necessary dock for NWIW’s refinery and been denied every time. There is simply no indication that NWIW’s project is anywhere close to fruition. Pursuant to OEP’s prior order, since the Kalama Lateral project is solely in service of the methanol refinery, and Northwest cannot “demonstrate credible prospects for [the] project’s completion,” the Commission must not grant any additional extensions.

III. The Commission’s Decisions in Other Cases are Immaterial to Northwest’s Request. The Facts of This Case Necessitate that Northwest’s Request be Denied.

The chart Northwest included in its request illustrating other recent extension requests made to the Commission is immaterial to the project before the Commission now. Other companies have tried to make similar arguments in their extension requests, however the Commission has been clear that it examines the facts of each case separately. See Chestnut Ridge, 139 FERC ¶ 61,149 at 6. Here, OEP was clear when it granted Northwest’s last extension request—for half of the time Northwest requested—that “[a]ny further extension beyond April 11, 2020 would require additional submissions by Northwest that local permit issues have been resolved and that their construction has begun or is imminent.” Northwest simply has not met this burden, therefore the Commission must deny its current request.

If you have any questions or would like to discuss this further, please feel free to contact me at erin@columbiariverkeeper.org or 541-399-4775.

Sincerely,

[Signature]

Erin Saylor
Staff Attorney
Attachment A

Letter from Perry J. Lund, Section Manager, Southwest Regional Office, Wash. Dept. of Ecology, to Dr. Elaine Placido, Cowlitz County (Nov. 22, 2019)
November 22, 2019

Dr. E. Elaine Placido
Cowlitz County
207 Fourth Avenue North
Kelso, WA 98626-4187

Re: Notice of Determination for a Second Supplemental EIS
Cowlitz County Permit SL 16-0975
Port of Kalama and Northwest Innovation Works – Applicants
Shoreline Conditional Use Permit #1056

Dear Dr. Placido:

The Department of Ecology has determined that a Second Supplemental Environmental Impact Statement (Second SEIS) is required to adequately identify and analyze the greenhouse gas emissions and impacts for the shoreline conditional use permit to construct and operate a marine facility to manufacture and export methanol (the Project) at the Port of Kalama. The Second SEIS will supplement the information included in the August 30, 2019, Final Supplemental Environmental Impact Statement (2019 Supplemental EIS), prepared by Cowlitz County and the Port.

A Second SEIS is necessary because Ecology’s written comments on the 2018 Draft SEIS for the Project were not adequately addressed in the 2019 Supplemental EIS, nor were they adequately addressed in the County’s November 4, 2019, letter to Ecology. As the Shorelines Hearings Board noted in its September 15, 2017, Order on Motions for Partial Summary Judgment (SHB No. 17-010c), a sufficient analysis of the Project’s greenhouse gas emissions and potential impacts is necessary for Ecology to determine the adequacy of the proposed mitigation for the Project. We also need this information to determine whether the conditional use permit should be approved, modified, conditioned, or denied under the Shoreline Management Act, as required by Cowlitz County Superior Court’s July 12, 2018, Order.

For these reasons, Ecology will prepare a Second SEIS. See WAC 197-11-600(3). We will scope the Second SEIS to supplement Chapter 3, Appendix A, and Appendix C of the 2019 Supplemental EIS. We will proceed with preparation of the Second SEIS as provided in the attached State Environmental Policy Act (SEPA) Notice, which we have posted on our website and in the SEPA Register.
Ecology will make a final permit decision on the conditional use permit submittal for the Project once the Second SEIS is completed. See WAC 173-27-130(5).

Please let me know if you have any questions regarding the Second SEIS process.

Sincerely,

Perry J Lund, Section Manager
Southwest Regional Office
Shorelands and Environmental Assistance Program

By certified mail 9489 0090 0027 6093 6863 25

cc: Mark Wilson, Port of Kalama
    Brian Carrico, WSP USA
    Vee Godley, Northwest Innovation Works
    Emily Nelson, Assistant Attorney General
    Rich Doenges, Department of Ecology
STATE ENVIRONMENTAL POLICY ACT
NOTICE OF SECOND SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

Date of Notice: November 22, 2019

Lead agency: Department of Ecology

Second SEIS Required: The Department of Ecology (Ecology) has determined that a Second Supplemental Environmental Impact Statement (Second SEIS) is required to adequately identify and analyze the greenhouse gas emissions and impacts for the shoreline conditional use permit to construct and operate a marine facility to manufacture and export methanol at the Port of Kalama. Ecology will prepare a Second SEIS under WAC 197-11-600(3). The Second SEIS will supplement the information included in the August 30, 2019, Final Supplemental Environmental Impact Statement (2019 Supplemental EIS) prepared by Cowlitz County and the Port.

The lead agency has identified the following areas for discussion in the EIS: The Second SEIS will supplement Chapter 3, Appendix A, and Appendix C of the 2019 Supplemental EIS. The Second SEIS will complete the analysis of the Project’s life cycle greenhouse gas emissions, the Project’s environmental impacts, and the potential mitigation of those impacts.

Description of Proposal: The construction and operation of a natural gas-to-methanol production plant, storage facilities, and marine export terminal on approximately 90 acres owned by the Port of Kalama.

Proponent: Northwest Innovation Works, Kalama, LLC and the Port of Kalama.

Location of the Proposal: The project would be located on land leased from the Port of Kalama. The site is located on the Columbia River in unincorporated Cowlitz County in Section 36 Township 7N Range 2 West W.M. and Section 31 Township 7N Range 2West W.M. The site consists of tax parcels 63302, 60831, 63304, 63305, and 60822. It is accessible from Tradewinds Road, a private Port road.

Documents Available: Ecology documents and more information regarding the proposal can be found at http://ecology.wa.gov/Regulations-Permits/Permits-certifications/Shoreline-permits-enforcement/Northwest-Innovation-Works-Kalama. Prior EIS documents and information regarding the project can be reviewed at www.kalamamfgfacilitysepa.com

Contact: E-mail kalama.comments@ecy.wa.gov or call (360) 407-6969.

Responsible Official: Rich Doenges, Southwest Regional Director

Signature __________________________ Date 11/22/19
Attachment B

INTRODUCTION

1. Northwest Innovation Works (“NWIW”), a corporation majority owned by the Chinese government, seeks to build a methanol manufacturing and shipping terminal on the
banks of the Columbia River in Kalama, Washington (the “Kalama Project”). The Kalama Project involves building a refinery to convert fracked gas (which consists primarily of methane) to methanol, a marine export terminal to load methanol onto ships bound for China, and a short gas pipeline to supply the refinery with fracked gas. With further processing, methanol can be turned into olefins, which is then used to make plastic. Methanol can also be used as a fuel. NWIW would use fracked gas to both power its refinery and to chemically create methanol. Each step on the journey releases greenhouse gases, including methane, which has at least four times the climate impact as carbon dioxide.

2. The Kalama Project will have significant and harmful environmental impacts. The refinery would be among the largest methanol refineries in the world and would be one of the largest gas users in the State of Washington. The refinery would use between 270,000 and 320,000 dekatherms of fracked gas every day for methanol production and as fuel for an on-site gas-fired electric generating unit, which is more gas than all the power plants in the state combined, and more than all residential uses combined. The refinery alone would emit more than 1,000,000 tons of greenhouse gases per year and would increase the state’s greenhouse gas emissions by 1 percent, while at the same time Washington strives to reduce such emissions to combat the current climate crisis.

3. The Kalama Project needs a variety of federal, state, and local permits and approvals to move forward. Prior to the initial issuance of Washington state and local permits, Cowlitz County and the Port of Kalama prepared a state environmental impact statement (“EIS”), pursuant to the State Environmental Policy Act, to review and analyze environmental harms caused by the Kalama Project. Successful 2017 litigation over Washington shoreline permits and the final state EIS required NWIW to undertake supplemental environmental
In this federal case, Plaintiffs Columbia Riverkeeper, Center for Biological Diversity, Sierra Club, Washington Environmental Council, and Washington Physicians for Social Responsibility (collectively “Riverkeeper”) challenge the U.S. Army Corps of Engineers (“Corps”) issuance of a Clean Water Act (“CWA”) § 404 permit (NWP-2014-177/2) to build the marine terminal, as well as the truncated and inadequate National Environmental Policy Act (“NEPA”) review underlying that permit approval.

Under NEPA, the Corps failed to fully consider the significant and harmful greenhouse gas impacts of the Kalama Project in a complete and transparent EIS. Instead, the Corps completed a limited Environmental Assessment (“EA”) and made a Finding of No Significant Impact (“FONSI”) for the issuance of the CWA permits.

The inadequate EA, FONSI, and decision not to prepare a comprehensive federal EIS are the result of the Corps’ failure to take the legally required “hard look” at all direct, indirect, and cumulative impacts of the agency’s decision to allow the refinery, export terminal, and pipeline to be built and operated. The Corps’ review is arbitrary, capricious, and contrary to NEPA and its implementing regulations.

The Corps’ EA also relies on a displacement theory with unsupported assumptions about the extent to which methanol-to-olefin production in Kalama will displace coal-to-olefin production in China, further undermining its conclusions about total greenhouse gas impacts caused by the Kalama Project.

The inadequacies in the environmental review underscore the Corps’ errors in issuing the CWA § 404 permit. Specifically, the Corps prepared an inadequate public interest analysis specifically focused on greenhouse gas emissions and climate change. This additional state environmental analysis continues, and necessary state permits have not yet been finalized.
determination in violation of Section 404 of the CWA and Section 10 of the Rivers and Harbors Act.

9. In balancing the public interest, the EA improperly excluded consideration of the refinery’s detrimental greenhouse gas impacts from the public interest review, even though it applied the refinery’s alleged benefits to the public interest review. The EA ignored greenhouse gas emissions from the marine export terminal and fracked gas feeder pipeline without explanation or analysis, relying only on the invalidated state EIS and a recently discredited draft supplement to treat those impacts as de minimis. The EA also failed to appropriately consider other important public interest factors, including the Kalama Project’s declining profitability, nearby property value losses, and diminished aesthetics.

10. Plaintiffs also challenge the failure of the National Marine Fisheries Service’s (“NMFS”) Biological Opinion (“BiOp”) on the Kalama Project and its accompanying Incidental Take Statement (“ITS”) to set meaningful and required limits on incidental take of threatened and endangered species, including salmon, Southern Resident killer whales, and leatherback sea turtles. Plaintiffs also challenge NMFS’s Revised ITS, issued after this litigation commenced, as an invalid attempt at post-hoc rationalization and as equally inadequate in setting meaningful and required limits on incidental take of threatened and endangered species.

11. Plaintiffs ask the Court to (1) vacate the EA/FONSI, CWA section 404 permit, and NMFS biological opinion and its accompanying Incidental Take Statement (both original and revised); (2) remand to the Corps to prepare an environmental impact statement on the Proposed Project before reconsidering a new CWA section 404 permit; and (3) remand to the Corps and NMFS to re-engage and complete ESA § 7 consultation on the Proposed Project.
JURISDICTION AND VENUE

12. This case is brought under the Administrative Procedure Act ("APA"), 5 U.S.C. § 706(2)(A). Jurisdiction arises under 28 U.S.C. § 1331 (federal question jurisdiction); § 2201 (declaratory relief); § 2202 (injunctive relief).

13. Venue in this district is appropriate under 28 U.S.C. § 1391(e), because the Kalama Project would be located in this district, two plaintiff groups reside in this district, and many of the events and the consequences of the defendants’ violations of law occurred or will occur in this district.

PARTIES

14. The plaintiffs in this action are:

A. Columbia Riverkeeper, a 501(c)(3) non-profit corporation registered in the State of Washington. Columbia Riverkeeper’s mission is to restore and protect the water quality of the Columbia River and all life connected to it, from the headwaters to the Pacific Ocean. To achieve these objectives, it operates scientific, educational, and legal programs aimed at protecting water quality, air quality, public health, climate stability, and habitat in the Columbia River Basin. It has over 16,000 members and supporters, many of whom reside in the area that would be affected by the Kalama Methanol Project. Columbia Riverkeeper was one of the petitioners in Washington state litigation over the original state final EIS and is currently a petitioner in a state-level challenge to the supplemental EIS for the Kalama Project. Riverkeeper and/or its members have submitted comments or correspondence on the Kalama Project to the Army Corps of Engineers, the National Marine Fisheries Service, the Federal Energy Regulatory Commission, the U.S. Department of Energy's Loan Program Office, the U.S. Department of Transportation's BUILD Grant and Port Infrastructure Development Grant programs, the
Committee on Foreign Investment in the United States, the Washington legislature, Governor Inslee's office, the Washington Department of Ecology, the Washington Energy Facility Site Evaluation Commission, the Washington Utilities and Transportation Commission, the Washington State Investment Board, the Southwest Clean Air Agency, Cowlitz County, the Port of Kalama, and the City of Kalama.

B. **Center for Biological Diversity**, a national, non-profit conservation organization with offices throughout the United States. Its mission is to secure a future for all endangered species and wild places through science, law, and creative media, with a focus on protecting the lands, waters, and climate that species need to survive. The Center has more than 70,000 members and supporters who care about protecting the natural environment from the ravages of climate change and other environmental degradation, including approximately 3,500 members in Washington State. The Center was one of the petitioners in Washington state litigation over the original state final EIS, and is currently a petitioner in a state-level challenge to the supplemental EIS for the Kalama Project. The Center and its members have submitted comments on the Kalama Project to the Army Corps of Engineers, the National Marine Fisheries Service, the Federal Energy Regulatory Commission, the U.S. Department of Energy’s Loan Program Office, and the U.S. Department of Transportation’s BUILD Grant and Port Infrastructure Development Grant programs. The Center has advocated for protections for species that rely on the Columbia River, including salmon, Southern Resident killer whales, and leatherback sea turtles by raising public awareness, submitting scientific petitions, and filing lawsuits. Specifically, the Center has petitioned to: list the Southern Resident killer whale under the Endangered Species Act (“ESA”) and successfully challenged the agency’s initial “not warranted” finding; to expand the Southern Resident’s critical habitat to cover ocean foraging grounds down the West Coast, off the coasts...
C. Sierra Club, one of the oldest environmental organizations in the United States.

Sierra Club is incorporated in the State of California as a Nonprofit Public Benefit Corporation with headquarters in Oakland, California. The organization has over 775,200 members, including 31,040 members in Washington State. Sierra Club is dedicated to protecting and preserving the natural and human environment, and its purpose is to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth’s ecosystems and resources; and to educate and enlist humanity to protect and restore the quality of the natural and human environments. In support of this mission, Sierra Club has taken extensive actions on climate change, including participating in state and federal rulemaking, opposing further build-out of fossil fuel infrastructure, and working to reduce greenhouse gas emissions from existing facilities. Sierra Club was one of the petitioners in Washington state litigation over the original state final EIS, and is currently a petitioner in a state-level challenge to the supplemental EIS for the Kalama Project. Sierra Club and its members have submitted comments on the Kalama Project to the Port of Kalama, Cowlitz County, Washington Department of Ecology, and U.S. Department of Transportation.

D. Washington Environmental Council, (“WEC”) is a statewide nonprofit organized under the laws of the State of Washington with a mission to protect, restore, and sustain Washington’s environment for all, and achieving clean water is a primary goal of its current strategic plan. It is headquartered in Seattle and has over 35,000 members and supporters in Washington State. WEC’s work finds solutions to address climate change and promote clean energy; protects and restores Puget Sound; protects forest ecosystems through incentives and
other tools; and stops new fossil fuel infrastructure. WEC works in partnership with the Power
Past Fracked Gas campaign, Stand Up to Oil campaign, Environmental Priorities Coalition, and
the Alliance for Jobs and Clean Energy. WEC is a petitioner in a state-level challenge to the
supplemental EIS for the Kalama Project. Washington Environmental Council and its members
have submitted comments on the Kalama Project to Port of Kalama, Cowlitz County, and the
Washington Department of Ecology.

E. Washington Physicians for Social Responsibility, ("WPSR") is the Washington
State chapter of Physicians for Social Responsibility, a 40-year-old physician-led advocacy
organization working to create a healthy, just, peaceful and sustainable world. WPSR takes on
the gravest current threats to human health and survival, including a climate crisis driven by
dependence on fossil fuels. WPSR leverages the credible and trusted voice of healthcare
professionals to educate the public, influence decisionmakers, and promote public policies that
support its mission. WPSR is deeply concerned about the impact of the proposed Kalama
methanol facility on the health and wellbeing of people and the environment, both of which will
be adversely affected by the danger and pollution that this proposed project will bring to the
fragile region, and particularly to those in proximity to the project.

15. Plaintiffs are conservation organizations that represent thousands of members and
supporters working to protect and restore Washington’s environment and the Columbia River.
Plaintiffs’ members work, live, and recreate in and along the Columbia River and the
surrounding landscape near Kalama. Plaintiffs and their members are deeply concerned by plans
to construct the Kalama Project in and along the Columbia River. The Kalama Project would
undermine local and regional efforts to protect water quality, recover endangered and threatened
species, support vibrant fishing communities, protect human health and safety, transition to a
low-carbon economy, and combat climate change. The plaintiffs and their members derive scientific, recreational, aesthetic, and conservation benefits from the waters of the Columbia River and the surrounding areas for fishing, rafting, hiking, walking, windsurfing, photographing, boating, and observing wildlife. The past, present, and future enjoyment of these benefits by plaintiffs and their members has been, is being, and will continue to be irreparably harmed by defendants’ disregard of their statutory duties and by the Kalama Project’s significant environmental impacts.

16. The defendants in this action are:

A. U.S. Army Corps of Engineers, an agency within the executive branch of the federal government. The Corps is the lead agency for permitting the discharge of dredged or fill material into navigable waters of the United States under CWA § 404.

B. National Marine Fisheries Service, an agency of the United States Department of Commerce, with delegated authority to administer the ESA with regard to threatened and endangered marine species and anadromous fish species.

LEGAL BACKGROUND

I. NATIONAL ENVIRONMENTAL POLICY ACT


18. The cornerstone of NEPA’s protections is the environmental impact statement. NEPA requires federal agencies to prepare an EIS before undertaking any “major federal action
significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). The EIS requires a detailed, “hard look” at the environmental impact of—and alternatives to—the proposed action. Id. The environmental effects that must be considered in an EIS include “indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable,” as well as direct effects. 40. C.F.R. § 1508.8. An EIS must also consider the cumulative impacts of the proposed action, that is, the environmental impacts that result “from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.” 40 C.F.R. § 1508.7; see also § 1508.27(b)(7). The purpose of an EIS is to inform the decision-makers and the public of the significant environmental impacts of the proposed action, means to mitigate those impacts, and reasonable alternatives that will have lesser environmental effects.

19. NEPA also requires that defendants use high quality, accurate scientific information and ensure the scientific integrity of its analysis. See 40 C.F.R. § 1500.1(b); 40 C.F.R. § 1502.24.

20. An agency may prepare an Environmental Assessment (“EA”) to determine whether it must prepare an EIS. 40 C.F.R. §§ 1501.4(c), 1501.3(b). If an agency action will cause “significant” adverse effects, the agency must prepare an EIS. 40 C.F.R. § 1501.4. The agency must prepare a finding of no significant impact if it determines (on the basis of the EA) not to prepare a statement. 40 C.F.R. § 1501.4(e).

21. Regulations for the Corps incorporate these requirements by reference. 33 C.F.R. § 325, App. B.
II. CLEAN WATER ACT

22. Congress enacted the Clean Water Act in order to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a). To help accomplish this goal, the Clean Water Act prohibits the discharge of any pollutant, including dredged spoil or other fill material, into waters of the United States unless authorized by a permit. *Id.*, § 1311(a). Unless statutorily exempt, all discharges of dredged or fill material into waters of the United States must be authorized under a permit issued by the Corps. *Id.*, §§ 1344(a)–(e).

23. The Corps issues individual permits under § 404(a) on a case-by-case basis after taking “all appropriate and practicable steps to avoid and minimize adverse impacts to waters of the United States.” *Id.*, § 1344(a); see also 40 C.F.R. § 230.91(c)(2). Such permits are issued after a review involving, among other things, site-specific documentation and analysis of waters and wetlands and potential effects to them, public interest analysis, and a formal determination pursuant to the statutory and regulatory criteria. 33 C.F.R. § 322.3, Parts 323, 325.

24. The Environmental Protection Agency’s 404(b)(1) Guidelines require the Corps to avoid any adverse impacts to waters of the United States. 40 C.F.R. § 230.91(c)(2). The Corps shall not issue a Section 404 permit “if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.” 40 C.F.R. § 230.10(a). Practicable alternatives include “[a]ctivities which do not involve a discharge of dredged or fill material.” *Id.* at § 230.10(a)(1)(i). “An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.” *Id.* § 230.10(a)(2).
III. ENDANGERED SPECIES ACT

25. Congress passed the ESA in 1973 in response to the extinction crisis to “provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered species and threatened species.” 16 U.S.C. § 1531(b). Congress defined “conservation” under the ESA as “the use of all methods and procedures which are necessary to bring any endangered species to the point at which the measures provided pursuant to this act are no longer necessary,” that is, when the species have recovered and no longer need the protection of the ESA. 16 U.S.C. § 1532(3).

26. In broad strokes, the ESA seeks to protect and recover imperiled species and populations by first listing them as threatened or endangered based on enumerated statutory factors, 16 U.S.C. § 1533(a)(1)(A)-(E). Later sections of the Act provide for specific protection and recovery procedures and standards for listed species and their designated critical habitat.

27. Congress charged each and every federal agency with the affirmative duty to further conservation of listed species; the ESA explicitly elevates threatened and endangered species protection over the primary missions of federal agencies. 16 U.S.C. § 1536(a). Section 7 of the ESA prohibits agency actions that may jeopardize the survival and recovery of listed species or adversely modify designated critical habitat. 16 U.S.C. § 1536(a)(2).

28. Section 7(a)(2) and its implementing regulations set forth a detailed process that must be followed before agencies take or approve actions that “may affect” threatened or endangered species or critical habitat. Fulfillment of this process is the only means by which an agency ensures that its affirmative duties under Section 7(a)(2) are satisfied. In fulfilling the
requirements of Section 7(a)(2) and the procedural requirements set forth in 50 C.F.R. Part 400, agencies must “use the best scientific and commercial data available.” 16 U.S.C. § 1536(a)(2).

29. If agency action “may affect” listed species in the action area, the agency must prepare a “biological assessment” that “evaluate[s] the potential effects of the action” on listed species and their habitat. Id. §§ 402.02, 402.12. The biological assessment must include a description of the proposed action, its effects, and the relevant scientific evidence. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a).

30. If the action agency concludes in its biological assessment that an action is “not likely to adversely affect” listed species, and the Service concurs with that determination in writing, the action agency typically relies on the biological assessment and concurrence (known as “informal consultation”) to satisfy its ESA obligations. See id. § 402.13(a); 402.14(a)-(b).

31. If an action agency determines in its biological assessment that an action “may affect” and is “likely to adversely affect” listed species or their critical habitat, or if the Service does not concur in the action agency’s determination in its biological assessment that the action is “not likely to adversely affect” listed species or their critical habitat, the action agency must enter into a more extensive consultation process with the Service on the action’s threats to listed species and their critical habitat (known as “formal consultation”). See 50 C.F.R. §§ 402.14(a)-(b), 402.12(k). The threshold for triggering this formal consultation requirement is “very low.” 51 Fed. Reg. 19,949, 19,949-50 (June 3, 1986).

32. At the conclusion of a formal consultation, the expert fish and wildlife agency issues a biological opinion assessing the effects of the action on the species and its critical habitat, determining whether the action is likely to jeopardize the continued existence of the
species or adversely modify its critical habitat. 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(g)-(h).

33. Section 9 of the ESA prohibits “take” of endangered species by any person, which includes federal agencies. 16 U.S.C. § 1538(a)(1). “Take” means to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect.” 16 U.S.C. § 1532(19). NMFS has defined “harm” to include “significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding or sheltering.” 50 C.F.R. § 222.102.

34. If a federal action undergoing consultation will take a listed species, the biological opinion must include an incidental take statement that specifies the amount and extent of incidental take of listed species that may occur without causing jeopardy or adverse modification of critical habitat. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i). The incidental take statement provides a safe harbor, insulating from take liability activities undertaken in compliance with the incidental take statement’s terms and conditions. 16 U.S.C. § 1536(o)(2); see 16 U.S.C. § 1536(b)(4)(C). An incidental take statement also serves as a check on the biological opinion’s assumptions and conclusions and provides for monitoring. 50 C.F.R. § 402.14(i)(3). It must set out a “trigger” that specifies an unacceptable level of take that invalidates the safe harbor and requires the agencies to immediately reinitiate consultation. Id. § 402.14(i)(4). The ESA implementing regulations require reinitiation of consultation when the amount of take exceeds that specified in the incidental take statement. 50 C.F.R. § 402.16(a).
FACTUAL BACKGROUND

I. THE KALAMA METHANOL PROJECT

A. Proponents, Location, and Project Details

35. The proposed Kalama Project includes the refinery, marine export terminal, and the pipeline, referred to as the Lateral Project. The Kalama Project’s stated objective is to manufacture and ship methanol to China for use as feedstock to manufacture olefins used in the production of plastics and other materials. EA at 34. The Corps acknowledges that the Export Terminal and Lateral Project do not have independent utility from the Refinery and would not be built without the Refinery. Id. at 3.

36. The Kalama Project’s proponents include NWIW, the Port of Kalama (“Port”), and Northwest Pipeline LLC (“Northwest Pipeline”).

37. NWIW is a U.S. registered company ultimately owned entirely by the Chinese Government and its officials. NWIW has proposed to build and operate the Refinery on Port of Kalama property. NWIW also proposed two other nearby methanol refineries, including one in Tacoma that was withdrawn and another pending in Port Westward, Oregon.

38. The Port of Kalama is a port district created under Washington state law and run by elected commissioners. It owns the upland property where NWIW proposes to build the Refinery. The Port would build the Export Terminal. The Port applied to the Army Corps for a CWA § 404 and Rivers and Harbors Act § 10 permit for the Export Terminal. The Port also prepared—in cooperation with Cowlitz County—the related state environmental impact statements under the State Environmental Policy Act (“SEPA”).

39. Northwest Pipeline LLC would be the owner of a pipeline system that will supply gas from Canada to the Refinery. It proposes to build and operate the 3.1 mile Lateral Project.
received a certificate of public convenience and necessity from FERC authorizing the Lateral Project under the Natural Gas Act. EA at 2. Prior to issuing the certificate, FERC reviewed the environmental impacts of approving the Lateral Project in a 2015 Environmental Assessment (“FERC EA”). EA at 2, 30. The Corps was a cooperating agency in the FERC EA. Id.

Northwest Pipeline applied to the Army Corps for a separate CWA § 404 permit for the Lateral Project.

40. NWIW plans to build the Refinery on 90 acres of Port property at River Mile 72. The proposed Refinery includes the methanol manufacturing equipment, storage tanks, a new dock and related equipment, and a new fracked gas-fired power plant to provide some of the electricity needed for the manufacturing facility, among other components. The Refinery would receive fracked gas from the Lateral Project and convert it to methanol by adding steam and a catalyst, and then distilling it into a liquid. The Refinery plans to have storage tanks that will hold methanol to be transported through pipelines connected to the Export Terminal.

41. The Port will build the Export Terminal, which includes a new dock and new berth created by dredging. An estimated 72 ships per year would then take the methanol from the Export Terminal to China for the production of olefins. The anticipated yearly production at full capacity is estimated to be 3.6 million metric tons of methanol.

42. The Kalama Project’s energy demands will be met using a combination of grid electric power and onsite power generation. Power derived from the electric grid will be made possible by upgrades to the electric transmission lines to the Kalama Project site. The remaining power will be generated by an onsite 125-megawatt gas power generation facility.

43. The greenhouse gas emissions attributable to the Refinery are massive. The emissions associated with the manufacturing process alone will easily exceed 1,000,000 tons of...
carbon dioxide equivalent per year. This does not include the substantial upstream and
downstream emissions caused by the project, such as emissions associated with the extraction
and transport of the large volumes of gas the Refinery will use, or the transport of the methanol
to China and the conversion of methanol into olefins. It also fails to include induced or indirect
effects that will be the likely and foreseeable result of the large new gas pipeline that the
Refinery will cause to be built.

44. NWIW has applied to the U.S. Department of Energy (“DOE”) for a $2 billion
loan guarantee to insure its projected $2 billion investment in the Refinery. DOE is a co-author
of the EA and intends to rely on the EA as its NEPA review of issuing the loan guarantee to
NWIW. Upon information and belief, DOE has not yet acted on NWIW’s loan application.

B. State Environmental Impact Statements and Prior Litigation

45. The State of Washington required permits for the Kalama Project and an
environmental review under SEPA. In September 2016, Cowlitz County and the Port of Kalama
issued the Final EIS, in which they concluded the project will not result in any unavoidable
significant adverse impacts to the environment.

46. In a challenge brought by plaintiffs Columbia Riverkeeper, Sierra Club, and
Center for Biological Diversity, the Washington Shorelines Hearings Board, a state adjudicatory
body, found that the Final EIS failed to adequately analyze greenhouse gas impacts of the
Kalama Project.

47. On appeal, the Washington Superior Court in July 2018 upheld the Board’s
summary judgment finding that the County and Port failed to adequately analyze the greenhouse
gas impacts of the project in the Final EIS and directed them to prepare a supplemental EIS that
does so.
48. The Port issued a draft supplemental EIS on November 13, 2018.

49. The Port shared the Final EIS and the draft supplemental EIS with the Corps. EA at 145. The Corps reviewed and relied on the Final EIS and draft supplemental EIS in its analysis of greenhouse gas impacts. Id. at 113, 145, 164, 167, 168. The Corps published its EA before the Port and County published the Final Supplemental EIS on August 30, 2019.

50. The Washington Department of Ecology must review and approve the necessary state shoreline permits for the Project, relying on the state environmental reviews. On November 2, 2019, Ecology informed Cowlitz County, the Port of Kalama, and NWIW that the Final Supplemental EIS was inadequate and additional environmental review was needed on greenhouse gas impacts and climate change issues before it could make final permit decisions. Letter from Perry J. Lund, Ecology, to Dr. E. Elaine Placido, Cowlitz County, Notice of Determination for a Second Supplemental EIS (Nov. 2, 2019). Because the environmental review is incomplete and the shoreline permit decisions are not yet final, litigation over Project permits before the Washington Shorelines Hearings Board brought by several of the plaintiffs has been stayed.

C. The Corp’s Environmental Assessment

51. In 2015, the Port and Northwest Pipeline applied to the Corps for a permit to dredge and fill under CWA § 404 to build the Export Terminal. Also in 2015, NWIW applied to DOE for a $2 billion loan guarantee to insure its entire investment in the refinery.

52. The Corps led the NEPA review and preparation of the EA for the Kalama Project. According to the EA, the scope of review under NEPA includes the entire Kalama Project, including the refinery. EA at 31. The geographic assessment area for the Corps’ cumulative impacts review includes the boundaries in the Lower Columbia Clatskanie
Watershed described in paragraph 9.2 of the EA. *Id.* at 160. According to the Corps, the
document it prepared includes the Environmental Assessment, Section 404(b)(1) Guidelines
Evaluation, Public Interest Review, and Statement of Findings for the Export Terminal and
Lateral Project permits. *Id.* at 3.

53. The Corps also participated in the 2015 FERC EA for the Lateral Project as a
cooperating agency. *Id.* at 2. The FERC EA evaluates, among other things, the Lateral Project’s
greenhouse gas impacts in Washington State. *Id.* at 54, 113; FERC EA at 62, 64-66, 83-84. The
FERC EA does not consider the upstream impacts from additional fracking of gas in Canada or
the downstream impacts from shipping to China or production from methanol to olefins. FERC
EA at 62, 64-66, 83-84.

54. DOE participated in the EA for its NEPA review in considering the loan
guarantee to support construction and startup of the proposed Refinery. EA at 3-4. The EA
constitutes DOE’s environmental assessment in consideration of the potential loan guarantee. *Id.*

55. The Corps issued the EA on January 18, 2018, and CWA § 404 and Rivers and
Harbor Act section 10 permit for the Export Terminal on April 1, 2019. DOE has not yet issued
a loan guarantee for the Refinery.

II. THE CORPS’ REVIEW OF DIRECT, INDIRECT, AND CUMULATIVE EFFECTS
UNDER NEPA

56. In its scope of review for cumulative effects, the Corps considered the whole
Kalama Project. EA at 158-59. However, the Corps limited the geographic scope of the
cumulative effects assessment area to the Lower Columbia Clatskanie Watershed (the
“Assessment Area”). *Id.* at 160.

57. The Corps did not describe any direct effects of greenhouse gas emissions from
the Kalama Project. *Id.* at 158-59.
58. In identifying the Kalama Project’s indirect effects, the Corps acknowledged that the Project would cumulatively increase the volume of greenhouse gases emitted into the atmosphere. *Id.* at 164, 113-14. It asserted that the majority of greenhouse gas emissions would be caused by the Refinery, which would contribute nearly 1,000,000 metric tons of greenhouse gases per year for a project lifetime of 40 years. *Id.* This represents a 1% increase in statewide greenhouse gas totals from 2013. *Id.*

59. The EA also referenced generally the effects of the Export Terminal and Lateral Project, which for greenhouse gas emissions included construction, increased vessel traffic, and fracked gas leakage in the Assessment Area. *Id.* at 112-13.

60. The Corps claimed that the increase in greenhouse gas emissions would be reduced by several measures. First, the EA stated that the increase in vessel greenhouse gas emissions will be reduced by vessels docked at the Export Terminal using electricity from onshore rather than on-board fuel fossil-fueled engines or generators, although the EA noted that on-shore power would not always be used. *Id.* at 112-13. Second, the EA stated that NWIW’s use of Ultra Low Emission technology—a process that reuses heat and uses gas boilers—was itself mitigation for increased greenhouse gas emissions. *Id.* at 113-14, 167. Third, the EA stated that NWIW would voluntarily mitigate 100% of all greenhouse gas emissions in the State of Washington from the Refinery by purchasing carbon credits or paying the amount of carbon credits into a greenhouse gas fund. *Id.* at 114, 164, 167. No mitigation was proposed for the Lateral Project’s greenhouse gas emissions because it “would contribute a negligible increase to regional GHG emissions.” *Id.* at 167; FERC EA at 83-84.

61. The EA did not describe the greenhouse gas emissions or climate impacts beyond Washington State, for example, vessel traffic to China, manufacturing of olefins in China, or
increased gas extraction in Canada. Yet, it claimed greenhouse gas emission reductions from displacing coal-based methanol production in China due to alleged future cost advantages. EA at 164.

   62. The Corps disclaimed its ability to consider end use of methanol as too attenuated and far removed. Id. at 54. However, the state draft supplemental EIS, on which the Corps relied for its greenhouse gas findings, did analyze downstream emissions associated with shipping of methanol. Draft Supplemental EIS at 3-23. However, the draft omitted 420,000 tons of greenhouse gas emissions from turning methanol into olefins. Id., Draft Supplemental EIS App. A at 92. The Corps did not include any of this analysis in its EA.

   63. Though the Corps did not analyze the downstream emissions of greenhouse gas emissions, the Corps claimed—based on the Draft Supplemental EIS—that due to the speculative future cost advantages, producing methanol in Kalama would displace methanol production from existing coal-based plants in Asia that have approximately 5.5 to 6.2 times higher greenhouse gas emissions and would therefore result in a “net global reduction of GHGs.” EA at 164, 167. This estimate is based on projections for coal and gas prices for the next 40 years of the Project’s lifecycle. Draft Supplemental EIS 3-13, 3-23, App. A at 112.

   64. The Corps did not analyze or discuss upstream induced effects of fracked gas extraction, including the development of a new regional gas pipeline to meet the increased demand.

III. PUBLIC INTEREST BALANCING UNDER THE CLEAN WATER ACT

   A. Public Interest

   65. In balancing the public interest of the Kalama Project, the Corps’ regulations implementing the CWA require that it base the decision to issue a permit on “an evaluation of
the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest.” 33 C.F.R. § 320.4. The Corps must balance “the benefits which reasonably may be expected to accrue from the proposal” against “its reasonably foreseeable detriments.” Id. A permit will be granted unless the Corps determines it would be contrary to the public interest. Id.

1. Greenhouse Gas Impacts

66. The Corps excluded the Refinery’s greenhouse gas emissions from review under the public interest analysis by claiming that the Refinery was outside the Corps’ jurisdiction, even though the Corps acknowledged that most greenhouse gas emissions result from the Refinery. EA at 148. At the same time, the Corps acknowledged that the Refinery was part of one overall project, that the Export Terminal had no independent utility from the Refinery, and even imputed the Refinery’s benefits to the Export Facility to conclude that the Project was not contrary to the public interest.

67. The Corps discussed the short term economic benefits of employment and revenue from the construction of the Kalama Project and long-term economic benefits of employment and revenue from the Export Terminal and Refinery. Id. at 109-10. The Corps stated that even though the Lateral Project would be automated in the long term, it would provide economic benefit by supporting the operation of the Refinery. Id. Additionally, the Corps described that one of the benefits from the Lateral Project was that it would supply energy to the Refinery. Id. at 139.

68. In considering the reasonably foreseeable detriments, the Corps asserted on the basis of the Final EIS, Draft Supplemental EIS, and FERC EA, that the Export Facility and Lateral Project would result in a negligible release of greenhouse gases into the atmosphere when
compared to global greenhouse gas emissions. *Id.* at 112-13; 145. The Corps claimed that they are not expected to generate quantities of greenhouse gases beyond that which is typical for export facilities or gas pipelines of a similar size. *Id.* at 112-13. The EA included greenhouse gas emissions from construction, loss of aquatic sinks, increased vessel traffic in the Export Terminal, and “minor amounts of fugitive methane emissions which would have a minor adverse effect on greenhouse gas emissions” from the Lateral Project. *Id.* at 145-148, 112-13. The Corps described the detriments from the Export Terminal and Lateral Project as minimal and permanent. *Id.* at 147-48.

2. **Other Public Interest Factors**

69. In its public benefit analysis, the Corps did little to explain the economic benefits of the Export Terminal other than describe the unemployment rate in Cowlitz County and claim that it would temporarily increase jobs and revenue from construction and in the long run generate jobs for the Export Terminal and Refinery. *EA* at 109. The Corps did not discuss the number of jobs, length of time of expected jobs, or expected revenue to the region.

70. The Corps found that the Project will have a negligible effect on aesthetics, largely because the site is already zoned for industrial use. *Id.* at 110-11. However, the refinery and terminal would dominate views of the North Port site, substantially changing the visual character of this area. The 245-foot flare stack—required to dispose of flammable gases—would be one of the tallest structures in the entire county, looming 100 feet taller than Kalama’s iconic totem pole. In addition to buildings and smokestacks, vapor plumes from the refinery’s cooling towers could extend thousands of meters into the air.
71. The Corps also minimized the effect the project will have on recreation at the site and along the relevant stretch of the Columbia River. *Id.* at 132–134. The public is currently able to access, park, and recreate at this location.

IV. IMPACTS TO ENDANGERED AND THREATENED SPECIES

72. As required under the Endangered Species Act, the Corps consulted with NMFS to assess whether the Kalama Project would jeopardize endangered or threatened species or adversely modify their critical habitat. 16 U.S.C. § 1536(a)(2). NMFS prepared a biological opinion, finding, among other things, “no jeopardy” to various populations of salmon and steelhead, Southern Resident killer whales, and leatherback sea turtles and “no adverse modification” to critical habitat. NMFS did not consider the Refinery as part of the Proposed Action it reviewed.

73. As required, NMFS included an Incidental Take Statement as part of its biological opinion. NMFS regulations require that the ITS specify the amount or extent of allowed take, provide reasonable and prudent measures necessary to minimize the impact of that take, and set forth terms and conditions that must be followed to implement such measures. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i)(1), (3). The failure to make those measures mandatory is a violation of the ESA and the implementing regulations.

A. Failure to Set Valid Incidental Take Limits

74. NMFS concluded that the Proposed Action was not likely to jeopardize the continued existence of several populations of endangered and threatened salmon and eulachon because (1) only small numbers of salmon, most likely Chinook, would be affected by wake stranding from ships in the Columbia River transiting to and from the Export Terminal and the Pacific Ocean and (2) the impact of the increase in vessel traffic from the Proposed Action was
unlikely to increase bank erosion or shoreline armoring to an extent that it would have an impact on salmon and eulachon.

75. As described in the biological opinion, wake stranding occurs when large, deep-draft vessels produce wakes that strand juvenile salmon on beaches. BiOp at 96. Wake stranding has been identified as a threat to recovery of several salmon species on the Columbia River. Id. The increase in vessel traffic from the Proposed Action will likely increase stranding and death of certain species of salmon. Id. Wake stranding is identified as a limiting factor in listings or recovery plans several salmon species, including Chinook, which are particularly vulnerable because of their small size. Id.

76. NMFS considered in its analysis a study of the Proposed Action area finding that 36% of vessel traffic led to strandings. Id. at 97. During 126 observed vessel passings, 426 Chinook, 8 chum, and 7 coho were identified as stranded. Id. at 97.

77. Even though the biological opinion stated that “the effects [] likely to result in measurable effects to listed fish are … wake stranding and erosion from ship traffic,” Id. at 106, NMFS concluded that the increased number of ship passages from the Proposed Action (72 per year) would not increase mortality caused by wake stranding enough to have an observable impact on the long-term abundance trends of any of the affected species or their populations. Id. at 98.

78. The increased vessel traffic will also cause river bank erosion and will likely promote bank or shoreline armoring to protect the property. Id. at 99. The biological opinion stated that shoreline armoring “removes existing off channel habitat or precludes the formation of off channel habitat that is important for rearing juvenile salmon.” Id. at 99. NMFS concluded that bank erosion and shoreline armoring effects were expected to be minor due to the low
number of vessels expected from the Proposed Action (72 per year), though it did not provide any analysis of the amount of erosion expected. *Id.* at 81; *cf. id.* at 116.

79. Predicted incidental take of various populations of Chinook and steelhead caused by the Proposed Action includes increased in-water predation from the dock’s overwater coverage and elevated sound levels from construction. *Id.* at 125-26; Revised ITS at 1-2.

80. In the Incidental Take Statement, NMFS used the limits of the proposed action itself as take limitations. NMFS set the dock’s square footage—10,925 square feet—as the extent of take for overwater coverage. BiOp at 126; Revised ITS at 2. It set the expected number of pile strikes for driving steel piles for the dock as a surrogate for incidental take caused by elevated sound levels. BiOp at 126; Revised ITS at 2-3. NMFS did not explicitly call stranding or shoreline armoring incidental take, but used the number of the Proposed Action’s vessel trips (72 per year) as a surrogate for extent of take caused by stranding because, according to NMFS, there is limited understanding of the variables that contribute to wake stranding, and little data to provide a take estimate. BiOp at 125-26; Revised ITS at 2.

81. Southern Resident killer whales are highly endangered. There are 73 wild individuals. According to NMFS, the loss of a single individual, or the decrease in reproductive capacity of a single individual, is likely to appreciably reduce the likelihood of survival and recovery of the Southern Residents.

82. For Southern Resident Killer Whales, NMFS concluded that the risk of ship strikes was minimal because the increase in vessel traffic in the action area was small, ship strikes are a rare event, and the Proposed Action area is a small portion of available marine mammal habitat. BiOp at 109.
83. NMFS acknowledged that due to overlap of heavy shipping traffic and high whale density, Oregon and Washington waters are a high-risk area for ship strike events. *Id.* at 108. Ship strikes have an equal chance of affecting individuals of different species, so NMFS did not conduct an individual analysis of each species of marine mammal. *Id.* at 108. Eighty-seven percent of fatal ship strikes involved ships more than 250 feet long and the greatest probability of lethal injury to a large whale occurs between speeds of 8.6 to 15 knots. *Id.* at 109.

84. The ships used in the Proposed Action will be 600-900 feet long and will travel up to 20 knots. *Id.* at 109. There are no regulations in place to restrict ship activity in the vicinity of the whales in the Proposed Action Area, although NOAA Fisheries West Coast Region has voluntary Recommendations to Avoid Collisions. *Id.* at 109. NMFS assumes that any whales struck by ships from the Proposed Action will likely die as a result of collision. *Id.* at 109.

85. NMFS acknowledged that the Proposed Action will lead to increased vessel traffic, which will result in some increased risk of ship strike and a high likelihood of death if struck. *Id.* at 109. However, it did not analyze the potential for strike events, claiming it had limited information on the incidence of ship strikes to determine how a particular number of ship transits would increase ship strike events. *Id.* at 109. Nonetheless, it qualitatively determined that the relative number of ship transits in the Proposed Action was small compared to the total, and therefore the risk was small. *Id.* at 109.

86. In reviewing the impacts to Southern Resident killer whale populations specifically, NMFS found one collision in 2005 that resulted in minor injury, one fatal collision in 2006, and no mortality or serious injuries between 2007 and 2011. *Id.* at 130. NMFS did not include in its analysis the 2016 fatal collision of J34 (“DoubleStuf”), an 18-year-old male...
member of J pod. NMFS acknowledged that Southern Residents overlap with the Proposed
Action area—NMFS tagging data shows the presence of Southern Residents in the Proposed
Action area at the mouth of the Columbia River—but discounted the risk of collision because
Southern Resident killer whales are not reported to interact with large ships. *Id.* at 130.

87. The biological opinion did not set an incidental take limit for Southern Resident
killer whales.

88. Leatherback sea turtles have been listed as endangered since 1970 and their
numbers continue to decline in the Pacific. *Id.* at 60-61. They have been documented to forage
in the Columbia River Basin and have critical habitat in the Kalama Project action area. *Id.* at
60, 61, 85. Ship strikes are likely to occur in the action area, are a significant source of mortality
to sea turtles, and go largely unreported. *Id.* at 82, 85.

89. NMFS did not provide for take exemption for third-party incidental take of the
leatherback sea turtles in the Incidental Take Statement, claiming that it would be difficult to
provide reasonable and prudent measures, terms and conditions, or a meaningful reinitiation
trigger. *Id.* at 126.

B. NMFS’s “Revised” Incidental Take Statement

90. After Plaintiffs commenced this case, but before the federal defendants filed an
answer or initial responsive pleading, NMFS issued a “Revised” Incidental Take Statement,
dated March 5, 2020. NMFS did not reinitiate ESA § 7 consultation; indeed, NMFS claimed that
the Biological Opinion remained valid and that none of the revisions to the ITS altered its
analysis or conclusions. Cover Letter from Kim W. Kratz, Assistant Regional Administrator for
NMFS to William D. Abadie, Regulatory Branch Chief for the Corps (March 5, 2020).
91. The Revised ITS deleted a general take exemption for the action agency, Revised ITS at 1; added a take exemption for eulachon, id.; added a surrogate take limit for leatherback sea turtles equal to the amount of take that the Project as planned will cause due to 72 vessel round trips per year, id. at 2; and added terms and conditions for monitoring incidental take, id. at 5.

92. NMFS insisted that its Revised Incidental Take Statement provided no new rationales, and that the agency was “just revising the ITS to make these rationales more explicit.” Revised ITS Cover Letter at 1. “The October 10, 2017 biological opinion remains valid and none of the revisions to the ITS alter in any way the analyses or conclusions contained in the biological opinion.” Id.

93. NMFS required the Port and NWIW to submit a wake stranding monitoring plan within six months of the Washington Department of Ecology’s final determination on the pending state shoreline permits. Revised ITS at 3-4.

94. On March 10, 2020, in response to the Revised ITS, the Corps modified its “Special Condition C” in the original permit pertaining to authorized incidental take of threatened or endangered species in part to include the wake stranding monitoring plan. All other terms and conditions of the original permit remain the same. Permit Modification Letter, William D. Abadie, Chief Regulatory Branch, to Tabitha Reeder, Port of Kalama, Corps No. NWP-2014-177-2 (March 10, 2020).
CLAIMS FOR RELIEF

FIRST CLAIM FOR RELIEF

Corps’ Violation of National Environmental Policy Act
and Administrative Procedure Act: Failure to Prepare an EIS

95. Under NEPA, federal agencies are required to prepare an EIS for “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C).

96. CEQ regulations further define whether impacts are “significant” enough to warrant a full EIS, requiring consideration of both “context” (i.e., the various scales, regions, and interests affected by the action) and “intensity” (i.e., the “severity of the impact”). 40 C.F.R. § 1508.27. With respect to the latter, the regulations lay out ten factors that are to be considered. Examples of these criteria include: the degree to which the proposed action affects public health or safety; the degree to which the possible effects on the human environment are likely to be highly controversial; the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks; the degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration; whether the action is related to other actions with individually insignificant but cumulatively significant impacts; and the degree to which the action may adversely affect an endangered or threatened species or its habitat. Id.

97. The Corps issued an EA and Finding of No Significant Impact in violation of NEPA’s requirement to prepare an EIS where, as here, the action would have significant environmental impacts. The Refinery alone would emit more than 1,000,000 tons of greenhouse gases per year at an estimated 40 year project lifespan. Upstream, it would create additional greenhouse gas emissions from increased demand for fracked gas from Canada, induced development of additional pipeline infrastructure, increased gas leakage, and increased
consumption of electricity and fossil fuels from operation and construction. Downstream, it
would cause additional greenhouse gas emissions from shipping methanol to China, production
of olefins from methanol, and potential use as fuel. These increases in greenhouse gas emissions
impact climate change, which affects public health and safety, are highly controversial, involve
known risks, may establish precedent for future actions, and have cumulative impacts. The
Kalama Project adversely affects endangered and threatened species by wake stranding,
shoreline armoring, vessel strikes, and degraded habitat.

98. The Corps acted arbitrarily, capriciously, and contrary to the evidence before it, in
violation of NEPA and CEQ regulations, and contrary to the APA, 5 U.S.C. § 706(2)(A), in
failing to prepare a full EIS on the Kalama Project.

SECOND CLAIM FOR RELIEF

Corps’ Violation of National Environmental Policy Act
and Administrative Procedure Act

A. Improper Segmentation of Project Components and Limited of Scope of Review

99. NEPA requires consideration of separate components of a single project in a
single NEPA review. 40 C.F.R. § 1508.25. NEPA regulations state that connected actions
should be considered in a single EIS, defining connected actions as one that “cannot or will not
proceed unless other actions are taken previously or simultaneously,” and “are interdependent
parts of a larger action and depend on the larger action for their justification.” Id.

100. The Corps mixed and matched the three project components--refinery, marine
vessel terminal, and lateral pipeline—as conveniently suited its stage of analysis. Although the
EA includes the Refinery in the scope of review, it ignores greenhouse gas emissions from the
Refinery in its alternatives review; it excludes the Refinery from the CWA Public Interest
review; it improperly limits the geographic assessment area; and it excludes significant upstream and downstream greenhouse gas emissions from its cumulative impacts review.

101. By improperly segmenting the Refinery from the Export Terminal and Lateral Project, the Corps severely underestimates the Kalama Project’s greenhouse gas emissions and has acted in a manner that is arbitrary, capricious, and not in accordance with law, in violation of NEPA and the APA, 5 U.S.C. § 706(2)(A).

B. Failure to Take a Hard Look at Indirect Impacts

102. NEPA requires agencies to take a hard look at the direct, indirect, and cumulative impacts of a proposed action. Indirect effects of a project are those that are caused by the project and reasonably foreseeable, which may be later in time or farther removed in distance. Agencies cannot avoid their responsibility to consider future effects by claiming they are uncertain, because NEPA requires some element of predictive behavior. Courts have generally recognized downstream greenhouse gas pollution and upstream induced growth of extraction activities as indirect effects of fossil fuel projects. Agencies must use high quality, accurate scientific information to ensure the scientific integrity of the analysis. 40 C.F.R. §§ 1500.1(b), 1502.24.

103. To the extent that the Corps discussed the indirect and cumulative effects of the project’s emissions, the Corps relied on the flawed and incomplete state Draft Supplemental EIS. The Draft Supplemental EIS relies on faulty assumptions and NWIW’s theory that methanol will displace higher greenhouse gas emissions of coal for producing olefins for plastics based on future speculative market forces. These are the same invalid assumptions and errors that caused the Washington Department of Ecology to undertake further environmental review and delay issuance of state shoreline permits.
104. The EA fails to consider combustion of methanol for fuel as a downstream end-use of the project’s methanol that would have additional greenhouse gas impacts. NWIW’s leadership has given presentations stating that that methanol produced by the project may entirely or partially be used for fuel. The inclusion of a requirement that methanol from the Project cannot be used for fuel does not cure the Corps’ failure to consider this end use. Moreover, inclusion of the requirement raises questions about the County and Port’s interest and ability to enforce the requirement, including potential jurisdictional issues and privity of contract.

105. The EA fails to consider the upstream induced growth caused by the Project. The Corps considered the upstream impact of its own additional fracked gas use, but ignored the impact the Project would have on the regional gas infrastructure and the demand for fracked gas extraction. NWIW itself acknowledged that current infrastructure is overtaxed and will need to be expanded in the near future, particularly because of its own projects. Similarly, public comments from regional gas associations state that gas prices are increasing because of infrastructure constraints. Yet, the Corps excluded expansion of the pipeline system as hypothetical, speculative, and not reasonably foreseeable. The EA also failed to consider the impacts that the project would have on increased demand for fracked gas, in part because the Corps limited the scope of review to the impacts in Washington State and the source of the Project’s gas is Canada. Courts have recognized that increasing demand for gas will at the very least increase the quantity consumed and increase production which may affect the price relative to other energy sources.

106. The Corps’ failure to consider reasonably foreseeable indirect and cumulative upstream and downstream impacts, and its finding that the Kalama Project has no significant
impact based on an inadequate EA is arbitrary, capricious, not in accordance with the law, and in

C. Improper Reliance on Mitigation

107. NEPA requires agencies to disclose and analyze measures to mitigate the impacts
of proposed actions. 40 C.F.R. §§ 1502.14(f), 1502.16(h). Mitigation measures include
avoiding the impact by not taking a certain action or parts of an action, limiting the degree or
magnitude of the action, restoring the affected environment, preserving the environment or
maintaining operations during the life of the action, or compensating for the impact by replacing
or providing substitute resources or environments. 40 C.F.R. § 1508.20. The EA only presented
this last form of mitigation—compensation through a greenhouse gas bank to offset the
greenhouse gas emissions in Washington State alone.

108. The Corps described that NWIW would voluntarily purchase mitigation credits or
make the equivalent contribution to greenhouse gas banks to offset 100% of the greenhouse gas
emissions from the Refinery in Washington State. The Corps concluded on this basis that the
Refinery will have an adverse effect that will be neutralized by mitigation. However, this
mitigation plainly does not offset the Kalama Project’s total greenhouse gas emissions because it
ignores the upstream and downstream greenhouse gas emissions outside of the Refinery and
Washington State. Mitigation is not proposed for the Export Terminal or Lateral Project because
the EA described those emissions as reduced or de minimis.

109. Reliance on mitigation measures is not a substitute for the Corps compliance with
NEPA’s mandate to examine potential significant environmental impacts. An agency cannot
rely on mitigation measures to avoid performing a detailed analysis of the environmental impacts

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810 Third Ave., Suite 610
Seattle, WA 98104
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of an action. Mitigation must also be enforceable, and because the mitigation is voluntary, the
Corps cannot ensure compliance with mitigation through monitoring or other means.

110. By improperly relying on mitigation promises and failing to analyze mitigation
measures, the Corps severely underestimates the Kalama Project’s greenhouse gas emissions and
has acted in a manner that is arbitrary, capricious, and not in accordance with law, in violation of

THIRD CLAIM FOR RELIEF
Corps’ Violation of Clean Water Act
and Administrative Procedure Act: Inadequate Public Interest Review

111. Prior to issuing any CWA permit, the Corps must conduct a “public interest”
review consistent with its governing regulations. 33 C.F.R. § 320.4(a). In conducting a public
interest review, the Corps must consider the probable impacts of the proposed action and
reasonably foreseeable detriments, while weighing “all those factors which become relevant in
each particular case.” Id.

112. The Corps excluded the Refinery from its public interest review, claiming that it
was outside the Corps’ jurisdiction. However, the Corps imputed the benefits from the Refinery
to the Export Terminal and Lateral Project in balancing the public interest in those projects. It
should not then be allowed to exclude the foreseeable detriments from the Refinery of
greenhouse gas emissions, especially where NEPA requires that the Corps review connected
projects together when they are simultaneous and interdependent.

113. The Corps’ public interest review, as described above, overestimated the
economic benefit and profitability of the Kalama Project, failed to consider loss of property
values and degraded aesthetic value, and underestimated recreation value.
114. It is in the public interest to reduce greenhouse gas emissions and Washington State has codified greenhouse gas reduction targets through 2050. RCW Chapter 70.235.

115. The Corps public interest review is inadequate, arbitrary, not in accordance with law and in violation of the CWA, the Rivers and Harbors Act, and the APA, 5 U.S.C. § 706(2)(A).

FOURTH CLAIM FOR RELIEF

NMFS Violation of Endangered Species Act and Administrative Procedure Act: Failure to Quantify Take in the Incidental Take Statement and Revised Incidental Take Statement

116. The ESA requires that federal agencies ensure that their actions are not likely to jeopardize the continued existence of threatened and endangered species or result in the destruction or adverse modification of critical habitat. 16 U.S.C. § 1536(a)(2).

117. ESA § 7(b)(4) requires FWS to issue an incidental take statement whenever a proposed federal agency action will not jeopardize a protected species but will result in incidental take of members of the species. 16 U.S.C. § 1536(b)(4). The incidental take statement must specify “those reasonable and prudent measures that the Secretary considers necessary or appropriate to minimize such impact” and “the terms and conditions … that must be complied with by the Federal agency … to implement the measures.” Id.

118. The incidental take statement must also “specif[y] the impact, i.e., the amount or extent, of such incidental taking on the species.” 50 C.F.R. § 402.14(i)(i).

119. In both the Biological Opinion with the original Incidental Take Statement and the Revised Incidental Take Statement, NMFS has violated Section 7(b)(4) of the ESA, 16 U.S.C. § 1536(b)(4), by issuing an incidental take statement with the Biological Opinion that fails to adequately quantify take. For populations of fish in the action area, NMFS set the take
limit equal to the amount of take that the project as planned will cause—the amount stranded by
an increase 72 vessels per year and the amount harmed from noise by the number of pile strikes
required to build the dock. BiOp at 125-26; Revised ITS at 1-2.

120. Although the biological opinion confirms that the increased vessel traffic
threatens injury and death to southern resident killer whales from vessel strikes and prey
limitations, NMFS did not evaluate the likelihood of take or provide a limitation on take for this
highly imperiled population. Id. at 130-31.

121. For leatherback sea turtles, the biological opinion confirms that project will
increase the risks to sea turtles from ship strikes, and NMFS estimated the frequency with which
leatherback sea turtles might interact with the number of ships in the Proposed Action area
(based on coastal population numbers in California). NMFS set the take limit equal to the
amount of take that the project as planned will cause—the amount stranded by an increase 72
vessels per year. Revised ITS at 2.

122. NMFS’s belated attempt to provide better explanation for its final action through
the Revised ITS is invalid post hoc rationalization. As the Corps stated in response, “NMFS just
revised the ITS to make its rationales more explicit than in the previous ITS.” Memorandum for
the Record, Corps No. NWP-2014-177-2 (March 10, 2020). If NMFS’s Revised ITS replaced
the original ITS, the provisions suffer from the same failings and are subject to the same
challenges.

123. NMFS’s actions and omissions in its Biological Opinion, Incidental Take
Statement, and Revised Incidental Take Statement are arbitrary, capricious, an abuse of
discretion, and otherwise not in accordance with law and are reviewable under the APA, 5
PRAYER FOR RELIEF

WHEREFORE, the plaintiffs respectfully request that the Court:

1. Declare that the Corps’ CWA 404 permit NWP-2014-177/2 for the Kalama Project violates the CWA, its implementing regulations, and the APA;

2. Declare that the EA and FONSI issued by the Corps for the Kalama Project violate NEPA, its implementing regulations, and the APA;

3. Vacate Corps’ permit NWP-2014-177/2 and the underlying EA and FONSI;

4. Declare that the Biological Opinion, Incidental Take Statement, and Revised Incidental Take Statement issued by NMFS for the Kalama Project violate the ESA, its implementing regulations, and the APA;

5. Order NMFS to rescind the Incidental Take Statement and re-engage in consultation to issue a valid Incidental Take Statement;

6. Award plaintiffs their reasonable fees, costs, expenses, and disbursements, including attorneys’ fees, associated with this litigation; and

7. Grant such further declarative and injunctive relief as the Court may deem just and proper.

DATED this 26th day of March, 2020.

Respectfully submitted,

/s/ Paulo Palugod
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Attorneys for Plaintiffs
CERTIFICATE OF SERVICE

I hereby certify that the foregoing was electronically filed with the Clerk of the Court on March 26, 2020, using the Court’s electronic filing system, which will send notification of said filing to the attorneys of record that have, as required, registered with the Court’s system.

/s/ Paulo Palugod
PAULO PALUGOD
Attachment C

William D. Abadie  
Regulatory Branch Chief  
U.S. Army Corps of Engineers, Portland District  
Post Office Box 2946  
Portland, Oregon 97208-2946

Re: Revised ITS for the Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Kalama Manufacturing and Marine Export Facility, Cowlitz County, Washington (Sixth Field HUC 170800030804 Lower Columbia River) (Corps No.: NWP-2014-1772)

Dear Mr. Abadie:

On October 10, 2017, NMFS issued a biological Opinion (Opinion) for the Kalama Manufacturing and Marine Export Facility.

NMFS is revising the ITS to provide more overt explanations as to why certain identified surrogates function as effective checks on the ongoing validity of the jeopardy analysis and conclusion and/or reinitiation triggers. These are not new rationales; NMFS is just revising the ITS to make these rationales more explicit. Relatedly, while it was implicit that the surrogates would need to be tracked, we now include express terms and conditions requiring monitoring and reporting of each surrogate. We have also now applied the same surrogate we used for wake stranding to incidental take associated with the increased risk of turtle strikes. The original ITS said it would be difficult to provide meaningful reasonable and prudent measures/terms and conditions or to develop a meaningful reinitiation trigger because it is not possible to identify the third parties, and it is not clear who and under what authority would monitor the impacts of the third party incidental take. Upon closer reflection, it is apparent that our surrogate for wake stranding (72 vessel round trips per year) overcomes these issues for turtle strike risk just as it does for wake stranding. We do not have to identify the third parties because it is the number of vessel trips that is causally linked to the take and the applicant can monitor the number of vessels round trips per year. Thus, we now apply that same surrogate to both take pathways.

In light of delays in state permitting for the project, we have also modified the timing for submission, but not implementation, of the wake stranding monitoring plan. The deadline was tied to issuance of the Corps permit but it now triggers from issuance of the project’s State Shoreline Substantial Development Permit and Shoreline Conditional Use Permit. These permits are expected to issue well after the Corps permit, which has already been issued. This will allow for the monitoring plan to reflect the latest information available and will not affect timing of the implementation of the wake stranding monitoring plan.
The October 10, 2017 biological opinion remains valid and none of the revisions to the ITS alter in any way the analyses or conclusions contained in the biological opinion. The opinion analyzed the effects of incidental take associated with each take pathway. The revised ITS does not anticipate or exempt any higher levels of incidental take than the Opinion analyzed. Thus, there are no implications for the effects analysis in the biological opinion.

Additionally, no new information has revealed effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered in the biological opinion, nor has the action evaluated in the biological opinion been modified in any way that causes an effect to listed species or critical habitat that was not considered in the opinion. Therefore, reinitiation of consultation is not required, consistent with 50 C.F.R. § 402.16.

Below is the Incidental Take Statement that will be appended to the biological opinion (NMFS-2015-3594) in place of the prior ITS.

If you have any questions please feel free to contact Scott Hecht, Chief, Washington Coast-Lower Columbia Branch of the Oregon Washington Coastal Area Office at (360) 534-9306 or Scott.Hecht@noaa.gov.

Sincerely

Kim W. Kratz, Ph.D
Assistant Regional Administrator
Oregon Washington Coastal Office
2.8 Incidental Take Statement

Section 9 of the ESA and Federal regulations pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species, respectively, without a special exemption.

“Take” is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. “Harm” is further defined by regulation to include significant habitat modification or degradation that actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding, or sheltering (50 CFR 222.102). “Incidental take” is defined by regulation as takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or applicant (50 CFR 402.02). Section 7(b)(4) and section 7(o)(2) provide that taking that is incidental to an otherwise lawful agency action is not considered to be prohibited taking under the ESA if that action is performed in compliance with the terms and conditions of this incidental take statement.

2.8.1 Amount or Extent of Take

The proposed dock upgrades will take place in locations where ESA-listed fish will be present. Incidental take caused by the adverse effects of the proposed action will include the following for ESA-listed fish: (1) Nearshore overwater coverage will increase the opportunity for in-water predation, (2) elevated sound levels during construction may injure or kill a few fish, and (3) eulachon eggs may be entrained during dredging.1 This take cannot be accurately quantified as a number of ESA-listed fish because the distribution and abundance of fish that occur within the action area is affected by dam and reservoir operations, habitat quality, interactions with other species, harvest programs, and other influences that cannot be precisely determined by observation or modeling. There is no practicable means to monitor for the number of fish taken through increased predation (fish cannot be counted once consumed), elevated sound levels (fish will move in and out of affected area and harm is not necessarily visible), or egg entrainment (miniscule eulachon eggs cannot be practically distinguished from dredge material). Therefore, we will not identify the amount of take, but will identify habitat indicators that will serve as surrogates for incidental take. Each of these surrogates (described below) is proportionally related to the numbers of fish expected to be taken and may be effectively monitored, and thus will serve as a meaningful reinitiation trigger.

In addition, the proposed methanol will increase vessel traffic on the Columbia River by up to 72 OGV round trips per year. In turn the additional OGV trips are expected to proportionally increase the risk of wake stranding events (see Section 2.4.1 of this opinion) and are expected to

1 The NMFS has not yet promulgated an ESA section 4(d) rule prohibiting take of threatened eulachon. Anticipating that such a rule may be issued in the future, we have included a prospective incidental take exemption for eulachon. The elements of this ITS for eulachon would become effective on the date on which any future 4(d) rule prohibiting take of eulachon becomes effective. Nevertheless, the amount and extent of eulachon incidental take, as specified in this statement, will serve as one of the criteria for reinitiation of consultation pursuant to 50 C.F.R. § 402.16(a), if exceeded.
result in injury and death to juvenile salmonids and eulachon. At this time, there is limited understanding of the variables that contribute to wake stranding events, the limited data associated with wake stranding are considered insufficient to provide an exact take estimate, and current sampling methods would not allow for effective monitoring of a quantified take amount. NMFS’ analysis and no jeopardy determination are based on potential wake stranding assuming the maximum number of ship trips associated with the methanol facility. NMFS is using the number of methanol OGV trips (which translates to potential wake stranding incidents) as a surrogate for quantifying take consistent with 50 CFR § 402.14(h)(i)(1). Using methanol OGV trips as a surrogate establishes a clear standard for determining when the level of anticipated take has been exceeded. For example, if the methanol OGV round trips supported by the new facility exceeds 72 per year then we expect that anticipated effects and resulting take would also be exceeded. Thus, even though the surrogate mirrors the maximum amount of assumed vessel traffic, it nevertheless functions as an effective check on the ongoing validity of the jeopardy analysis (which underpins the take exemption) because it is an annual measurement that can be monitored by the applicant. That means there is an opportunity each year to check whether the assumption of maximum 72 vessels round trips per year has been exceeded. Thus, we believe that OGV trips is an easily assessed, effective and reliable take surrogate that meets the legal standards as they relate to a reinitiation trigger.

For leatherback sea turtles, NMFS is using the same surrogate as for wake stranding, i.e., a maximum of 72 methanol OGV round trips per year. This surrogate is causally linked to the incidental take because the risk of ship strike increases as the number of vessel trips does. In addition, for the reasons set out above with respect to wake stranding, this surrogate establishes a clear standard for determining when the level of anticipated take has been exceeded and functions as an effective check on the ongoing validity of the jeopardy analysis, which underpins the take exemption.

The best available indicators for the extent of take are:

1. For harm associated with predation on salmon and steelhead, we used the area of nearshore that would be shaded as a habitat surrogate. The extent of take is the coverage by a structure of 10,925 square feet of nearshore habitat. If the portion of the proposed structure in the nearshore (20 feet below the Ordinary High Water Mark to the shore) is larger than 10,925 square feet, the extent of take will be exceeded. This surrogate is causally linked to incidental take by in-water predation because the extent of nearshore shaded coverage correlates with the number of predatory fish that may occupy shaded nearshore areas and thus the amount of incidental take by predation. It functions as an effective reinitiation trigger because it establishes a quantified and measurable surrogate that may be readily monitored to identify any exceedances. Additionally, the Corps has authority to conduct compliance inspections and to take actions to address exceedances of the structure size in the nearshore, including post-construction. 33 CFR 326.4.

2. For harm associated with hydroacoustic impacts to salmon and steelhead from the driving of steel pile with an impact hammer, we used the amount of impact pile
driving of steel piles that is expected to occur. Specifically, if more than 8,200 pile strikes/day with an impact hammer occur the anticipated take will be exceeded. This number is based on the proposed action including installation of 8 steel piles, and that impact driving of each single steel pile would not likely require more than 1025 strikes. This surrogate is causally linked to incidental take by hydroacoustic impacts because the amount of take increases incrementally with each pile strike. It functions as meaningful reinitiation trigger because it is a daily limit and can be readily monitored, and so reinitiation could be triggered on any day of pile driving.

3. For harm associated with entrainment of eulachon eggs we use the area that will be dredged, which is expected to be proportional to the number of eggs entrained. The extent of take would be the 16 acres of deep water habitat that is proposed for dredging. This surrogate functions as an effective reinitiation trigger because it is a clear limit that is easily monitored for exceedance. Additionally, as soon as it was exceeded, reinitiation would trigger and that would be well before the completion of construction.

4. For harm associated with wake stranding events and increased risk of turtle strike, we used the number of vessels that will access the NWIW facility per year. In this case take will be exceeded if there are more than 72 vessels round trips at the NWIW operational facility to load methanol per year.

These features coherently integrate the likely take pathways associated with this action, are proportional to the anticipated amount of take, and are practical and feasible indicators to measure.

2.8.2 Effect of the Take

In Section 2.7, NMFS determined that the level of anticipated take, coupled with other effects of the proposed action, is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

2.8.3 Reasonable and Prudent Measures

“Reasonable and prudent measures” are nondiscretionary measures to minimize the amount or extent of incidental take (50 C.F.R. § 402.02). The Corps or the Port shall minimize incidental take by:

1. Applying permit conditions regarding terminal construction to avoid or minimize harm to ESA-listed species considered in this opinion.
2. The applicant will (individually or in partnership with others joining to fund implementation of the Wake Stranding Rate Monitoring Plan (“Monitoring Plan”)) prepare and submit for NMFS approval a monitoring plan as described in Appendix I within 6 months of the issuance of a final determination on the Kalama Manufacturing and Marine Export Facility’s State Shoreline and
Substantial Development Permit and Shoreline Conditional Use permit, and will subsequently implement that plan.

3. Monitoring incidental take.

2.8.4 Terms and Conditions

The terms and conditions described below must be complied with by the entity to whom they are directed in order to implement the RPMs (50 CFR 402.14). There is a continuing duty to monitor and report the impacts of incidental take as specified in this ITS (50 CFR 402.14). If the entity to whom a term and condition is directed does not comply with such terms and condition, their exemption under section 7(o)(2) of the ESA would lapse.

1. To implement reasonable and prudent measure No. 1, the COE shall ensure that:
   a) **Timing of In-water Work.** Piling installation will be completed during the period of September 1-January 31. Dredging will be completed August 1 - December 31.
   b) **Pile Driving.**
      When installing the steel piles the applicant, when using an impact hammer to proof steel piles, use one of the following sound attenuation methods:
      (1) If water velocity is 1.6 feet per second (1.1 miles per hour) or less for the entire installation period, surround the pile being driven by a confined or unconfined bubble curtain that will distribute small air bubbles around 100 percent of the pile perimeter for the full depth of the water column.
      (2) If water velocity is greater than 1.6 feet per second (1.1 miles per hour) at any point during installation, surround the pile being driven by a confined bubble curtain (e.g., a bubble ring surrounded by a fabric or non-metallic sleeve) that will distribute air bubbles around 100 percent of the pile perimeter for the full depth of the water column.

2. To implement reasonable and prudent measure No. 2, the applicant shall ensure that:
   • The monitoring plan should be designed to provide details as described in Appendix I to this opinion.
   • The applicant must submit a draft of the plan within 6-months of a final determination on the Kalama Manufacturing and Marine Export Facility’s State Shoreline and Substantial Development Permit and Shoreline Conditional Use permit. The applicant must begin implementation of the plan in the first March following the first shipment from the new facility.
   • If any stranded fish are observed alive during implementation of the plan, they should be returned to the water as soon as possible.

3. To implement reasonable and prudent measure No. 3, the applicant shall:
   a) Monitor the number of impact pile strikes per day and report immediately to NMFS if the number exceeds 8,200.
b) Monitor the number of acres of deep water habitat that is dredged and report immediately to NMFS if the number exceeds 16.

c) Monitor the number of square feet of nearshore habitat coverage by overwater structure(s) and report immediately to NMFS if the number exceeds 10,925.

d) Provide an annual report prepared pursuant to the monitoring plan. The report will be submitted to NMFS by December 31 each year during the duration of the monitoring, and a final report at the conclusion of the monitoring plan. The annual monitoring report shall include:

   1. An estimate of stranding rates of juvenile Lower Columbia River Chinook, chum and coho salmon occurring in the monitoring year.
   2. A table summarizing the data collected for RPM 2;

e) Monitor the number of methanol OGV round trips per year supported by the facility and report immediately to NMFS if the number exceeds 72.

The applicant must submit monitoring reports to:
National Marine Fisheries Service
Oregon Washington Coastal Office
Attn: WCR-2015-3594
510 Desmond Drive SE, Suite 103
Lacey, Washington 98503
Attachment D

Letter from William D. Abadie, Regulatory Branch Chief, U.S. Army Corps of Eng’rs, Portland Dist., to Tabitha Reeder, Port of Kalama (March 10, 2020)
Regulatory Branch
Corps No. NWP-2014-177-2

Ms. Tabitha Reeder
Port of Kalama
110 West Marine Drive
Kalama, WA 98625
treeder@portofkalama.com

Dear Ms. Reeder:

The National Marine Fisheries Service (NMFS) provided a revised incidental take statement (ITS) dated March 5, 2020 for your Department of the Army (DA) permit, Corps No. NWP-2014-177-2. The project is in the Columbia River at River Mile (RM) 72, at the Port of Kalama, at the terminus of Tradewinds Road, Kalama, Cowlitz County, Washington at Latitude/Longitude: 46.043235°, -122.87678°

In response to NMFS' revised ITS, the Corps is modifying "special condition c" in the original permit authorization. Special condition c is modified to include the following language:

c) This Corps permit does not authorize you to take an endangered species, in particular, those listed in the attached biological opinions (BO). In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a BO under ESA Section 7, with "incidental take" provisions with which you must comply). The enclosed BOs prepared by the National Marine Fisheries Service (NMFS) dated October 10, 2017 and the revised ITS dated March 5, 2020 (Attachment 3).and the U.S. Fish and Wildlife Service (USFWS) dated November 14, 2016 (Attachment 4) contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BOs (NMFS Reference Number WCR-2015-3594, USFWS Reference Number 01EWFW00-2016-F-0065). Your authorization under this Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take of the attached BOs, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BOs, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute noncompliance with your Corps permit. The USFWS/NMFS is the appropriate authority to determine compliance with the terms and conditions of its BO, and with the ESA.
The original permit has been amended to include the above special condition. All other terms and conditions of the original permit remain in full force and effect. This letter and enclosure must be attached to the original permit.

If you have any questions regarding this permit modification, please contact Mr. Brad Johnson at the letterhead address, by telephone at (503) 808-4383, or email at Brad.A.Johnson2@usace.army.mil.

FOR THE COMMANDER, AARON L. DORF, COLONEL, CORPS OF ENGINEERS, DISTRICT COMMANDER:

For: William D. Abadie
Chief, Regulatory Branch

cc:
Washington Department of Ecology (Rebecca Rothwell, rebs461@ecy.wa.gov)