UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT TACOMA

UNITED STATES OF AMERICA, ON BEHALF OF THE UNITED STATES DEPARTMENT OF THE INTERIOR; STATE OF WASHINGTON THROUGH THE WASHINGTON DEPARTMENT OF ECOLOGY; JAMESTOWN S'KLALLAM TRIBE; LOWER ELWHA KLALLAM TRIBE; PORT GAMBLE S'KLALLAM TRIBE; SKOKOMISH INDIAN TRIBE; and SUQUAMISH INDIAN TRIBE OF THE PORT MADISON RESERVATION, Plaintiffs, v. POPE RESOURCES, a DELAWARE LIMITED PARTNERSHIP; OPG PROPERTIES LLC; and OPG PORT GAMBLE LLC, Defendants.	Case No. 3:24-cv-5470 CONSENT DECREE

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I. INTRODUCTION

The United States of America ("United States"), on behalf of the United States Department of the Interior ("DOI"); the State of Washington (the "State") through the Washington State Department of Ecology; the Jamestown S'Klallam Tribe; the Lower Elwha Klallam Tribe; the Port Gamble S'Klallam Tribe; the Skokomish Indian Tribe; and the Suquamish Indian Tribe of the Port Madison Reservation ("Suquamish Indian Tribe") (collectively, "Plaintiffs"), have filed a complaint (the "Complaint") in this case against Defendants Pope Resources, a Delaware Limited Partnership; OPG Properties LLC; and OPG Port Gamble LLC (collectively "Defendants"), pursuant to Section 107(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. § 9607(a); the Model Toxics Control Act ("MTCA"), Wash. Rev. Code § 70A.305.040(2); and Section 311(f) of the Clean Water Act ("CWA"), 33 U.S.C. § 1321(f), for Covered Natural Resource Damages as a result of injury to, loss, or destruction of natural resources from releases of hazardous substances into Port Gamble Bay, located in Kitsap County, Washington. This Consent Decree (the "Decree") addresses the claims asserted in the Complaint against the Defendants.

II. BACKGROUND

A. The United States Department of the Interior; the Washington State Department of Ecology on behalf of the State of Washington; the Jamestown S'Klallam Tribe; the Lower Elwha Klallam Tribe; the Port Gamble S'Klallam Tribe; the Skokomish Indian Tribe; and the Suquamish Indian Tribe (collectively, "the Trustees" and, individually, a "Trustee"), under the authority of Section 107(f) of CERCLA, 42 U.S.C. § 9607(f); Section 311(f)(5) of the CWA, 33 U.S.C. § 1321(f)(5); 40 C.F.R. Part 300, subpart G; and Wash. Rev. Code § 70A.305.040(2), serve as trustees for natural resources for the assessment and recovery of damages for injury to, destruction of, or loss of natural resources under their trusteeship.

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B. Pope and Talbot, Inc. ("P&T") continuously operated a sawmill facility on uplands adjacent to Port Gamble Bay from approximately 1853 to 1995. Logs for the mill were stored, rafted and sorted in-water throughout the Bay. In 1985, P&T transferred ownership of the sawmill, uplands and adjacent tidelands to Pope Resources L.P. ("Pope"). P&T continued wood products manufacturing at the site until 1995 under a lease with Pope. OPG Properties LLC ("OPG Properties"), formerly known as Olympic Property Group I, LLC, was formed in 1998 to manage Pope's real estate in Kitsap County and managed the property until 2020. In May 2020, Pope transferred ownership of the sawmill site and adjacent properties to OPG Port Gamble LLC ("OPG Port Gamble"). OPG Port Gamble is the current owner of these properties, some of which have been assessed for natural resource damages and some of which are intended to be sites for agreed natural resource damage restoration.

C. Investigations conducted by the Trustees and others have detected hazardous substances in the surface water, sediments, biota, soils or groundwater of Port Gamble Bay and adjacent riparian areas, including but not limited to polychlorinated dibenzodioxins and furans ("dioxins"), polychlorinated biphenyls ("PCBs"), organochlorine pesticides and related products, polycyclic aromatic hydrocarbons ("PAHs"), metals (including lead, mercury, copper, chromium, and arsenic), volatile and semivolatile organic compounds (including 4-methylphenol), perchlorate, herbicides, organic solvents, antifouling agents such as tributyltin and other butyltins, and wood waste degradation products (including phenol, benzoic acid, hydrogen sulfide and ammonia). Plaintiffs allege that these hazardous substances are attributable to releases at the properties or facilities owned and/or operated by Defendants, and the releases of these hazardous substances have resulted in damages to natural resources in Port Gamble Bay.

D. Plaintiffs allege in the Complaint that Defendant OPG Port Gamble is a current owner and/or operator of, and all Defendants owned and/or operated at the time of the release of hazardous substances, facilities on, adjacent to, or near Port Gamble Bay within the meaning of 42 U.S.C. § 9607; Section 311(a)(6) of the CWA, 33 U.S.C. § 1321(a)(6); and Wash. Rev. Code

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§ 70A.305.040(1). Plaintiffs allege that hazardous substances have been released to Port Gamble Bay from the facilities owned and/or operated by Defendants, and those releases were into, or flowed to, "navigable waters" or "adjoining shorelines" within the meaning of Section 311(b)(3) of the CWA, 33 U.S.C. § 1321(b)(3). Plaintiffs also allege that hazardous substances released from the properties or facilities owned and/or operated by Defendants are found in Port Gamble Bay, and have caused injury to, destruction of and loss of natural resources in the Bay under Plaintiffs' trusteeship, including fish, shellfish, invertebrates, birds, surface water and sediments, and resources of cultural significance. Plaintiffs allege that each of them and the public have suffered the loss of natural resource services (including ecological services as well as direct and passive human use losses) as a consequence of those injuries.

E. Through a collaborative assessment process completed for purposes of settlement, the Trustees and the Defendants (collectively "the Parties") developed an estimate of the amount of injury to natural resources that occurred as a result of releases of hazardous substances to Port Gamble Bay. The Trustees quantified the effects of the injuries in terms of the losses of ecological services over time, discounted to a present value. Plaintiffs used the term discounted ecological service acre-years ("DSAYs") to describe both the scale of the alleged injuries, and the amount of habitat restoration they are seeking to compensate for those injuries.

F. Through the collaborative process described in Paragraph E, the Parties evaluated options for restoration projects to compensate for the alleged loss of those natural resources and identified a preferred restoration alternative to address the Trustees' claim for alleged damages to natural resources. In settlement of this action, Defendants agree, in lieu of and as equivalent to monetary damages, to construct, implement, maintain, and monitor the habitat restoration project described in the Statement of Work (or alternatively, "Port Gamble Bay Natural Resource Damages Restoration Project" or the "Project") at a location in Port Gamble Bay and adjacent riparian areas further described and illustrated in Appendix B1 ("the Project Site"). As required by this Decree, Defendants will take measures to ensure that the Project Site remains available

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for, and its use dedicated to, the Project. Defendants also agree (1) to provide monetary amounts to fund additional long-term maintenance and monitoring, and permanent Stewardship, of the Project (Section VII.B & C); (2) to compensate the Trustees for their estimated restoration implementation costs for implementation and oversight of the Project (Section XI); and (3) to compensate the Trustees for natural resource damage assessments costs incurred and estimated to be incurred through the Effective Date (Section X).

G. The Trustees have prepared a Restoration Plan and Environmental Assessment ("RP/EA") that identifies the Project as the preferred restoration alternative. As provided by 42 U.S.C. § 9611(i) and 43 C.F.R. § 11.93, the RP/EA identifies how the preferred restoration alternative will restore, rehabilitate, replace, or acquire the equivalent of the natural resources allegedly injured. The RP/EA also identifies how the preferred restoration alternative will address services lost to the public until restoration, rehabilitation, replacement, and/or acquisition of equivalent resources is completed. The RP/EA is attached as Appendix G to this Consent Decree.

H. Resolving Defendants' liability in this Consent Decree through construction, implementation, maintenance and monitoring of the Project provides substantial benefits to natural resources earlier than otherwise would be realized through litigation, thereby allowing for earlier recovery of allegedly injured natural resources in Port Gamble Bay. The Project will restore and, through the recording of a conservation easement, protect in perpetuity approximately 14 acres of intertidal and riparian habitat in the former mill site area and 21 acres of intertidal and subtidal marine habitat along the western shoreline of the Bay. The restored habitat will be highly beneficial to the allegedly injured natural resources and resources of cultural significance in Port Gamble Bay and surrounding areas, including salmonids, invertebrates, birds, and other fish and wildlife. Considering the value of the proposed restoration, the Trustees have determined that the Project will provide sufficient restoration value to compensate for Defendants' alleged liability.

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I. Defendants do not admit any liability to Plaintiffs arising out of the transactions or occurrences alleged in the Complaint or described in this Consent Decree.

J. The Parties agree, and this Court by entering this Consent Decree finds, that this Decree has been negotiated by the Parties in good faith, that settlement of this matter will avoid prolonged and complicated litigation between the Parties, that this Decree will expedite the restoration and protection of natural resources at and near Port Gamble Bay, that the timely implementation of the Project and payments to be provided under this Decree constitute appropriate actions necessary to protect and restore the natural resources allegedly injured by releases or threatened releases of hazardous substances by Defendants, and that this Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, it is hereby Ordered, Adjudged and Decreed:

III. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331, 1345 and l367, 42 U.S.C. § 9613(b), and 33 U.S.C. § 2717(b). The Court has personal jurisdiction over the Parties. Solely for the purposes of this Decree and the underlying Complaint, the Parties waive all objections and defenses that they may have to jurisdiction of the Court or to venue in this District. The Parties may not challenge the terms of this Decree or this Court's jurisdiction to enter and enforce this Decree.

2. For purposes of this Decree, Defendants agree that the Complaint states claims against the Defendants upon which relief may be granted pursuant to CERCLA Section 107, 42 U.S.C. § 9607; MTCA, Wash. Rev. Code § 70A.305.040(2); and CWA Section 311(f), 33 U.S.C. § 1321(f).

IV. APPLICABILITY

3. This Decree is binding upon the Plaintiffs, and upon Defendants and their successors and assigns. Any change in ownership or corporate or other legal status, including but

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not limited to any transfer of assets or real or personal property, shall in no way alter the status or responsibilities of Defendants under this Decree.

4. Defendants shall provide a copy of this Consent Decree to each contractor hired by Defendants to perform any of the work required by this Consent Decree, and to each person representing Defendants with respect to any such work, and shall condition all future contracts entered into by Defendants hereunder upon performance of the work in conformity with the terms of this Consent Decree. Defendants or their contractors shall provide written notice of the Consent Decree to all subcontractors hired by Defendants' contractors to perform any portion of the work. Defendants shall nonetheless be responsible for ensuring that all work performed by their contractors and subcontractors is performed in accordance with this Consent Decree.

5. In any action to enforce this Consent Decree, Defendants shall not raise as a defense the failure by any of their officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

V. DEFINITIONS

6. Unless otherwise expressly provided, terms used in this Decree that are defined in CERCLA or in regulations promulgated under CERCLA have the meanings assigned to them in CERCLA or in such regulations. Whenever the terms listed below are used in this Decree or in any attached appendix, the following definitions will apply:

a. "As-Built Drawings" means the set of drawings submitted by Defendants upon completion of the Project, which will reflect all changes made in the specifications and working drawings during the construction process, and show the dimensions, geometry, and location of all elements of the work completed pursuant to the Statement of Work.

b. "CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. § 9601, et seq.

c. "Complaint" means the complaint filed in this action by Plaintiffs against Defendants.

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d. "Consent Decree" or "Decree" means this Consent Decree and all attached appendices identified in Section XXIV (Integration/Appendices), and any final plans approved hereunder. In the event of a conflict between this Consent Decree and any Appendix or plan, the Consent Decree will control.

e. "Covered Natural Resource Damages" means damages, including costs of damage assessment, recoverable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a); MTCA, Wash. Rev. Code § 70A.305.040(2); and Section 311(f) of the Clean Water Act ("CWA"), 33 U.S.C. § 1321(f), and any other statutory or common law, for injury to, destruction of, loss of, loss of use of, or impairment of natural resources and/or resource services in Port Gamble Bay, including, but not limited to: (i) the costs of assessing such injury, destruction, or loss or impairment of natural resources and/or resource services; (ii) the costs of restoration, rehabilitation, or replacement of injured or lost natural resources or of acquisition of equivalent resources and/or resource services; (iii) the costs of planning such restoration activities; (iv) compensation for injury, destruction, loss, impairment, diminution in value, or loss of use of natural resources; and (v) each of the categories of recoverable damages described in 43 C.F.R. § 11.15, and applicable State or tribal law, resulting from releases or discharges of hazardous substances at or from the bounded area identified in Appendix B2, where such release or discharge occurred on or before the Effective Date. Damages, injury to, destruction of, loss of, loss of use of, or impairment of natural resources resulting from releases of hazardous substances originating from Defendants' operations or activities outside of the property identified in Appendix B2 are not included in Covered Natural Resource Damages.

f. "Day" means a calendar day unless expressly stated to be a business day. In computing any period of time for a deadline under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period runs until the close of business of the next business day.

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g. "Defendants" means Pope Resources, a Delaware Limited Partnership; OPG Properties LLC; and OPG Port Gamble LLC.

h. "Discounted Service-Acre Year" or "DSAY" means the amount of a specific suite of ecological services determined to be produced per acre of a given type of habitat over a period of years, the total of which are discounted to a present value.

i. "DOI" means the United States Department of the Interior and its successor departments, agencies and instrumentalities.

j. "Effective Date" means the date on which this Decree is entered by the Court, or, if the Court instead issues an order approving the Decree, the date of such order.

k. "Final Design Package" has the meaning set forth at Section 2.4 of the Statement of Work.

l. "Force Majeure" has the meaning provided in Section XIV.

m. "MTCA" means the Model Toxics Control Act, Chapter 70A.305 Wash. Rev. Code.

n. "Parties" means the Plaintiffs and the Defendants.

o. "Plaintiffs" means the United States, the State, the Jamestown S'Klallam Tribe, the Lower Elwha Klallam Tribe, the Port Gamble S'Klallam Tribe, the Skokomish Indian Tribe, and the Suquamish Indian Tribe.

p. "Port Gamble Bay" or "the Bay" means any portion of Port Gamble Bay below the ordinary high water mark (including the intertidal and subtidal areas and bottom sediments) in Kitsap County, Washington that is shown in the map attached as Appendix B3 to this Decree.

q. "Port Gamble Bay Natural Resource Damages Restoration Project" or "the Project" means all of the work and other commitments as described in the Statement of Work.

r. "Project Site" means the areas identified for the Project in the Statement of Work.

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s. "State" means the State of Washington.

t. "Statement of Work" means the plan for the Project included as Appendix A, and any subsequently approved modifications or additions thereto.

u. "Stewardship" means actions intended to preserve, protect or maintain the Project and the Project Site as identified in the Statement of Work, including (a) maintaining, restoring or replacing the ecological function of the Project; and (b) maintaining, restoring or replacing physical components of the Project.

v. "Success Criteria" are the standards for performance of the Project as specified in the Statement of Work.

w. "Trustees" means the United States Department of the Interior; the Washington State Department of Ecology, on behalf of the State of Washington; the Jamestown S'Klallam Tribe; the Lower Elwha Klallam Tribe; the Port Gamble S'Klallam Tribe; the Skokomish Indian Tribe; and the Suquamish Indian Tribe.

x. "United States" means the United States of America and each department, agency and instrumentality of the United States, including the United States Department of the Interior.

VI. GENERAL PROVISIONS

7. This Decree is not, and shall not be construed to be, a permit issued pursuant to any law. All activities undertaken by Defendants pursuant to this Decree shall be performed in accordance with the requirements of all applicable laws and permits. Where any portion of the activities undertaken pursuant to this Decree requires a federal, state or local permit or approval, including a State use authorization for aquatic lands, Defendants shall submit timely and complete applications and take all other actions necessary to obtain such permits or approvals. Defendants may seek relief under the provisions of Section XIV (Force Majeure) for any delay in or prevention of the performance of the obligations of this Decree resulting from a failure to obtain, or a delay in obtaining, any federal or state permit or approval required for such

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performance, including but not limited to the deadlines set forth in Paragraph 12 and in the Statement of Work, provided that they have submitted timely and complete applications and taken all other actions necessary to obtain all such permits or approvals.

8. Defendants shall ensure that all work performed under this Decree shall be conducted as set forth in the Statement of Work to achieve the objective of constructing and maintaining the Project to meet the Success Criteria. If the Trustees determine that Defendants are not complying with the requirements set forth in the Decree and Statement of Work, the Trustees shall provide written notice to Defendants specifying the basis for their determination of noncompliance. Defendants may correct the alleged noncompliance or invoke the dispute resolution procedures set forth in Section XV. The Trustees may demand that Defendants take actions to alter, suspend or cease ongoing activities, and to alter, postpone or refrain from taking proposed actions, as are necessary to ensure compliance with the terms of this Decree and any plans or proposals adopted hereunder. If Defendants dispute any such demands imposed by the Trustees, Defendants may invoke the dispute resolution procedures set forth in Section XV.

9. While Plaintiffs agree that compliance with this Consent Decree will resolve Defendants' liability for Covered Natural Resource Damages as alleged in the Complaint, Plaintiffs do not, by their consent to the entry of this Decree, warrant or aver in any manner that Defendants' compliance with this Decree or construction and maintenance of the Project will comply with CERCLA or any other law. The Parties agree that Defendants are responsible for complying with all applicable federal, state, tribal and local laws, regulations and permits.

10. All approvals and disapprovals made by the Trustees under this Consent Decree shall be communicated to Defendants by one of the Trustees on behalf of all the Trustees. Except as specifically provided otherwise herein, all such communications shall be in writing and shall indicate that the communication is on behalf of all Trustees.

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VII. RESTORATION PROJECTS

11. Defendants shall fund and perform all activities for the Project in accordance with the schedule and requirements set out below and in the Statement of Work.

A. Design and Construction Activities for the Project

12. Construction Schedule and Contingencies.

a. After the Trustees' approval in writing of the Final Design Package for the Project, Defendants shall commence construction of the Project in accordance with the Schedule set forth in Table 5 of the Statement of Work and Paragraphs 12-14 below.

b. Within thirty (30) months after the Trustees' approval of the Final Design Package, Defendants shall accomplish all tasks related to the Southern Mill Site Restoration described in Section 2.1 of the Statement of Work and the Western Bay Nearshore Thin Layer Sand Cover described in Section 2.2 of the Statement of Work, both of which will be identified in the construction drawings attached as Appendix XX to the Final Design Package ("Completed Construction").

c. The 30-month schedule set forth in Paragraph 12.b above does not apply to the Western Bay Nearshore Eelgrass Transplanting and Monitoring described in Section 2.3 of the Statement of Work, which will continue beyond that time period. Likewise, Paragraph 14 below does not apply to this portion of the Project.

13. Within sixty (60) Days after Defendants have Completed Construction pursuant to the approved Final Design Package, such that the Project has been placed in operation and is expected to perform and function as designed, Defendants shall submit As-Built Drawings and a Construction Completion Report, along with a written notice ("Notice of Completion of Construction"), to the Trustees. Within ninety (90) Days of receiving the Notice of Completion of Construction, the Trustees shall submit to Defendants either: (a) a written notice identifying specific deficiencies the Trustees determine must be satisfied for the Project to be completed in accordance with the Statement of Work ("Notice of Deficiencies"); or (b) a written notice of the

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Trustees' determination that the Project has been so completed ("Notice of Approval of Completion of Construction"). The date of the Trustees' Notice of Approval of Completion of Construction shall constitute the "Construction Completion Date." Within thirty (30) Days following the issuance of a Notice of Deficiencies, or as otherwise agreed to in writing by the Parties, the Trustees shall confer informally with Defendants concerning the identified deficiencies. Within ten (10) Days of the conference with Trustees, Defendants shall either initiate dispute resolution under Section XV below or formulate a plan to correct the identified deficiencies. Once Defendants have corrected the identified deficiencies, they will submit to the Trustees an amended Notice of Completion of Construction for review and response in accordance with this Paragraph. Notwithstanding the foregoing, the time required for Plaintiffs to review and respond to Defendants' Notice of Completion of Construction shall not be included in calculating Defendants' compliance with the requirement to pay compensation under Paragraph 14.

The schedule above is summarized as follows:

Timeline	Event
Trustees provide written approval of Final Design Package	Defendants commence construction of the Project
Within 30 months of written approval of Final Design Package	Defendants complete construction of the Project
Within 60 Days of Completed Construction	Defendants submit Notice of Completion of Construction
Within 90 Days of Notice of Completion of Construction	Trustees provide Notice of Deficiencies or Notice of Approval of Completion of Construction
Within 30 Days following issuance of a Notice of Deficiencies	Trustees confer with Defendants concerning the identified deficiencies
Within 10 Days of the conference with Trustees	Defendants initiate dispute resolution or formulate a plan to correct identified deficiencies

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14. If Defendants have not Completed Construction within forty-two (42) months after the Trustees' approval of the Final Design Package, then Defendants shall either (i) pay to the Trustees the sum of $200,000 as compensation for the additional delay in restoration of natural resources, or (ii) perform additional restoration work outside of the Project Site agreed upon in writing by Defendants and the Trustees. For each subsequent twelve-month period in which Defendants have not Completed Construction of the Projects, Defendants shall either (i) pay to the Trustees the sum of $200,000 as compensation for the additional delay in restoration of natural resources, or (ii) perform additional restoration work outside of the Project Site agreed upon in writing by Defendants and the Trustees. Defendants' obligations under this paragraph are in addition to any other obligations or applicable penalties under this Decree, including Section XIII (Stipulated Penalties) and remain subject to Sections XV (Dispute Resolution) and XIV (Force Majeure).

B. <u>Eelgrass Work and Maintenance & Monitoring of the Project</u>

15. For ten (10) years following the Construction Completion Date and in accordance with the schedule set forth in Paragraph 16, Defendants shall (a) conduct Western Bay Nearshore Eelgrass Transplanting and Monitoring as set forth more fully in Section 2.3 of the Statement of Work; and (b) maintain vegetation and other habitat attributes, control invasive vegetation and remove debris, and undertake corrective actions to address any negative impacts to the Project that affect the ecological services provided by the Project, as set forth more fully in Section 3 of the Statement of Work and the Initial Maintenance & Monitoring Plan approved by the Trustees. For an additional twenty (20) years thereafter and in accordance with the schedule set forth in Paragraph 17, Defendants shall monitor and maintain the intertidal stability and intertidal substrate of the Project, as set forth more fully in Table 4 of the Statement of Work.

16. **Eelgrass Work and Initial Maintenance & Monitoring.** Defendants shall develop and submit to the Trustees for their review and approval (a) a "Western Bay Nearshore Eelgrass Transplanting Scope of Work" (Eelgrass Work Plan), as further described in the

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Statement of Work and in accordance with the deadline set forth in Table 5 of the Statement of Work, to conduct the Western Bay Nearshore Eelgrass Transplanting and Monitoring; and (b) an Initial Maintenance & Monitoring Plan, as further described in the Statement of Work and in accordance with the deadlines set forth in Table 5 of the Statement of Work, to monitor and maintain the vegetation and habitat of the Project to meet the Success Criteria set forth in Table 3 of the Statement of Work. Defendants shall implement the Eelgrass Work Plan and the Initial Maintenance & Monitoring Plan for a period of ten (10) years from the Construction Completion Date. Upon completion of the ten-year period, Defendants shall provide written "Notice of Completion of Eelgrass Work and Initial Maintenance & Monitoring" to the Trustees in accordance with Section XXII (Notices and Submissions). Within ninety (90) Days of receiving the Notice of Completion of Eelgrass Work and Initial Maintenance & Monitoring, the Trustees shall submit to Defendants either (a) a written notice identifying specific deficiencies the Trustees determine must be satisfied for Eelgrass Work and Initial Maintenance & Monitoring to be completed in accordance with the Statement of Work ("Notice of Deficiencies"); or (b) a written notice of the Trustees' determination that Eelgrass Work and Initial Maintenance & Monitoring is completed ("Notice of Approval of Completion of Eelgrass Work and Initial Maintenance & Monitoring"). Within thirty (30) Days following the issuance of a Notice of Deficiencies, or as otherwise agreed to in writing by the Parties, the Trustees shall confer informally with Defendants concerning the identified deficiencies. Within ten (10) Days of the conference with Trustees, Defendants shall initiate dispute resolution pursuant to Section XV below or formulate a plan to correct any remaining identified deficiencies. Once Defendants have corrected the identified deficiencies, they will submit to the Trustees an amended Notice of Completion of Eelgrass Work and Initial Maintenance & Monitoring for review and response in accordance with this Paragraph. The date of the Trustees' Notice of Approval of Completion of Eelgrass Work and Initial Maintenance & Monitoring for the Project shall constitute the "Eelgrass Work and Initial Maintenance & Monitoring Completion Date."

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The schedule above is summarized as follows:

Timeline	Event
Concurrent with Final Design Package	Defendants submit Eelgrass Work Plan and Initial Maintenance & Monitoring Plan
Upon completion of the ten-year Eelgrass Work and Initial Maintenance and Monitoring period	Defendants submit a Notice of Completion of Eelgrass Work and Initial Maintenance & Monitoring
Within 90 Days of receiving Notice of Completion of Eelgrass Work and Initial Maintenance & Monitoring	Trustees provide Notice of Deficiencies or Notice of Approval of Completion of Eelgrass Work and Initial Maintenance & Monitoring
Within 30 Days following issuance of a Notice of Deficiencies Within 10 Days of the conference with Trustees	Trustees confer with Defendants concerning the identified deficiencies Defendants initiate dispute resolution or formulate a plan to correct any remaining identified deficiencies

17. **Long-Term Maintenance & Monitoring.** Defendants and the Trustees each shall implement certain long-term maintenance and monitoring tasks, as set forth in Section 3.4 and Table 4 of the Statement of Work, for a period of twenty (20) years following the Eelgrass Work and Initial Maintenance & Monitoring Completion Date.

a. Within forty-five (45) Days of the Trustees' approval of the Final Design Package, Defendants shall make a payment in the amount of $838,657 to fund the Trustees' long-term maintenance and monitoring tasks as set forth in Section 3.4 and Table 4 of the Statement of Work. Defendants shall pay this amount to the United States via the payment instructions in Paragraph 38.a. The funds shall be deposited in the DOI Natural Resource Damage Assessment and Restoration ("NRDAR") Fund. Defendants shall provide notice and proof of such payment, in accordance with Section XXII (Notices and Submissions). Any funds paid pursuant to this Paragraph that are not utilized by the Trustees to fund long-term

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maintenance and monitoring tasks may be applied by the Trustees toward permanent Stewardship of the Project Site in accordance with Section VII.C.

b. Defendants shall fund Defendants' long-term maintenance and monitoring tasks as set forth in Section 3.4 and Table 4 of the Statement of Work and shall provide financial assurance for such funding in accordance with Paragraph 28.b.

18. The Project Site may include some property that is owned by other parties including, but not limited to, the State. While Defendants remain responsible for securing the cooperation of other property owners needed to successfully complete and maintain the Project in accordance with the Statement of Work and in accordance with the deadlines set forth in the Statement of Work, the Parties will work together to secure the cooperation of any other property owners, including but not limited to the State. Except as provided in Paragraph 7, any inability of Defendants to successfully complete or maintain the Project in accordance with the Statement of Work resulting from disputes with other property owners, including but not limited to the State, shall not constitute a "force majeure" event.

19. If Defendants transfer ownership of any property within the Project Site prior to the expiration of Defendants' obligations in Paragraph 16, such transfer shall not affect or lessen Defendants' obligations under that Paragraph, or any other provision of this Decree, and as a condition of any such transfer, the entity to which any property is transferred shall be required to provide Defendants with all access necessary for Defendants to fulfill their responsibilities under Paragraph 16. Within sixty (60) Days prior to any proposed transfer of property within the Project Site, Defendants shall provide the Trustees with written notice of the proposed transfer, identifying the entity that will own the property, certifying that Defendants provided a copy of this Decree to such entity and providing a copy of the proposed access agreement for review and approval by the Trustees.

C. Permanent Stewardship of the Project Site

20. The Parties' intention is that the ecological functions provided by the Project be maintained in perpetuity through the grant of a conservation easement that will ensure the permanent preservation of the Project Site and funding to ensure permanent Stewardship of the Project.

21. To achieve permanent preservation of the Project Site, and ensure all ecological functions provided by the Project are maintained in perpetuity, Defendants shall grant and record a conservation easement for the portion of the Project Site owned by Defendants in the approved form set forth in Appendix C within ninety (90) Days of the Construction Completion Date for the Project. The Parties shall work together to ensure that all other owners, including but not limited to the State, grant and record conservation easement(s) for the portion(s) of the Project Site those other entities own, in a form reviewed and approved by the Trustees. As described in Section 3.1 of the Statement of Work, Defendants shall take other appropriate actions necessary to ensure that the Project Site will not be used in a manner inconsistent with the requirements of this Decree.

22. Within forty-five (45) Days of the Trustees' approval of the Final Design Package, Defendants shall make a payment in the amount of $1,474,524 to fund permanent Stewardship of the Project as set forth in the Statement of Work. Defendants shall pay this amount to the United States via the payment instructions in Paragraph 38.a. The funds shall be deposited in the DOI NRDAR Fund. Defendants shall provide notice and proof of such payment, in accordance with Section XXII (Notices and Submissions). Any funds paid pursuant to this Paragraph that are not utilized by the Trustees to fund permanent Stewardship of the Project Site may be applied by the Trustees to further maintain the conservation values of the Project.

D. General Project Development Provisions

23. Defendants shall not take any action that is inconsistent with this Decree and that would adversely affect the Project.

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24. The Parties recognize that Defendants performed activities to address cultural resources during previous remediation work at the Project Site and agree that duplication of that effort is not required during the Project. Defendants shall undertake all activities required by applicable law to address cultural resource issues associated with the Project, including, as applicable, consultation with tribes and the Washington State Department of Archaeology and Historic Preservation, conducting a background and project review by an archaeologist who meets the Department of the Interior's professional qualification standards at 36 C.F.R. Part 61, and conducting cultural resource surveys or monitoring activities.

25. The Trustees may conduct additional work themselves, at their own expense, on the Project Site. If such work is conducted prior to completion of initial construction by Defendants, the Trustees will conduct any such work in a manner that does not hinder Defendants' timely completion of the Project or otherwise interfere with the performance of Defendants' obligations under this Decree.

E. Financial Assurances

26. Purpose of Financial Assurances. Defendants shall provide the financial assurances described in this Section to ensure that there are sufficient funds to properly construct the Project and to conduct initial and long-term maintenance and monitoring as set forth in Section 3 of the Statement of Work. These financial assurances are further intended to provide sufficient funds to the Trustees to complete, maintain, and monitor the Project in the event of noncompliance by Defendants.

27. Construction of the Project. Within thirty (30) Days of the Effective Date, Defendants shall establish and maintain a surety bond in an amount of $5,060,000, and in the form set forth in Appendix D, to construct the Project, specifically the Southern Mill Site Restoration described in Section 2.1 of the Statement of Work and the Western Bay Nearshore Thin Layer Sand Cover described in Section 2.2 of the Statement of Work.

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28. Financial Assurances for Maintenance & Monitoring of the Project.

a. **Eelgrass Work and Initial Maintenance & Monitoring.** Within sixty (60) Days of the Effective Date, Defendants shall establish and maintain a surety bond in the amount of $1,510,000, and in the form set forth in Appendix E, to fund the Western Bay Nearshore Eelgrass Transplanting and Monitoring described in Section 2.3 of the Statement of Work, as well as the Initial Maintenance & Monitoring of the Project.

b. **Long-Term Maintenance & Monitoring.** To ensure funding for Defendants' Long-Term Maintenance & Monitoring responsibilities according to the requirements set forth in Table 4 of the Statement of Work, prior to the submission of the Notice of Completion of Construction, Defendants shall establish and maintain a surety bond in the amount of $864,683 and in the form set forth in Appendix F, to fund their portion of the Long-Term Maintenance & Monitoring of the Project.

29. Defendants shall diligently monitor the adequacy of the financial assurance mechanisms required by Paragraphs 27 and 28. If Defendants become aware of any information indicating that the amount, form, or terms of the financial assurance mechanisms required by Paragraphs 27 and 28 are inadequate or otherwise no longer satisfy the requirements of this Section, Defendants shall notify the Trustees of such information within thirty (30) Days. If the Trustees determine that the amount, form, or terms of any financial assurance mechanism required by Paragraphs 27 and 28 are inadequate or otherwise no longer satisfy the requirements of this Section, the Trustees will provide written notice to the Defendants of such determination. Following issuance of such a notice, the Parties will confer informally concerning the alleged deficiencies. Defendants shall, within thirty (30) Days after conferring with the Trustees regarding such a notice, either initiate dispute resolution pursuant to Section XV below or secure and submit to the Trustees for approval a proposal for a revised financial assurance mechanism that satisfies the requirements of this Section. The Trustees may extend this deadline for such time as is reasonably necessary for the Defendants, in the exercise of due diligence, to secure and

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submit to the Trustees a proposal for a revised financial assurance mechanism, but in any event not to exceed sixty (60) Days. Defendants shall follow the procedures of Paragraph 30 in seeking approval of, and submitting documentation for, the revised financial assurance mechanism. Defendants' inability to secure financial assurance in accordance with this Section does not excuse performance of any other obligation under this Decree.

30. Modification of Amount, Form, or Terms of Financial Assurance Mechanisms. Defendants may submit, on any anniversary of the Effective Date or at any other time agreed to by the Parties, a request to reduce the amount, or change the form or terms, of the financial assurance mechanisms required by Paragraphs 27 and 28. Any such request must be submitted to the Trustees in accordance with this Section, and must include an estimate of the cost of the remaining work, an explanation of the bases for the cost calculation, and a description of the proposed changes, if any, to the form or terms of the financial assurance mechanism. Within ninety (90) Days of receipt of the request, the Trustees will notify Defendants in writing of their decision to approve or disapprove a requested reduction or change pursuant to this Paragraph. Defendants may reduce the amount of or change the form or terms of the financial assurance mechanism only in accordance with: (a) the Trustees' approval; or (b) if there is a dispute, the agreement or final judicial decision resolving such dispute under Section XV (Dispute Resolution). Within thirty (30) Days after receipt of the Trustees' approval of, or the agreement or decision resolving a dispute relating to, the requested modifications pursuant to this Paragraph, Defendants shall submit to the Trustees documentation of the reduced, revised, or alternative financial assurance mechanism.

31. Trustee Access to the Financial Assurance Mechanisms.

a. If the Trustees determine that Defendants have ceased, or are more than six (6) months late or materially deficient in performing or completing, the construction, monitoring, or maintenance obligations for the Project set forth in Paragraphs 12 through 17 of this Decree then, in accordance with Paragraphs 27 and 28, the Trustees are entitled to:

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(1) require Defendants to implement or complete the construction, monitoring, and maintenance obligations for the Project set forth in this Decree, or (2) require that any funds required and established under Paragraphs 27 and 28 be paid in accordance with Paragraph 31.e.

b. If the Trustees make such determination under Paragraph 31.a, the Trustees may issue a written notice ("Access to Financial Assurance Notice") to Defendants. Any Access to Financial Assurance Notice issued by the Trustees will specify the grounds upon which the Notice was issued and will provide Defendants an opportunity to remedy the deficiencies specified in the Notice. Absent Defendants' submittal of an alternative plan, approved by the Trustees, to address deficiencies, within thirty (30) Days of the receipt of the Notice Defendants shall remedy the deficiencies to the Trustees' satisfaction.

i. If Defendants have not remedied the deficiencies set forth in the Notice within thirty (30) Days of Defendants' receipt of the Notice or absent an alternative plan to address deficiencies approved by the Trustees, the Trustees may at any time thereafter exercise their right of access to the financial assurance mechanism(s) required by this Section to implement or complete the construction, monitoring, or maintenance obligations for the Project.

ii. Except as specifically provided elsewhere in this Decree, Defendants may invoke the procedures set forth in Section XV (Dispute Resolution), to dispute the Trustees' exercise of their right of access to the financial assurance mechanism(s). However, notwithstanding Defendants' invocation of such dispute resolution procedures, and during the pendency of any such dispute, the Trustees may in their sole discretion commence and continue to exercise their right of access to the financial assurance mechanism(s) until the earlier of (1) the date that Defendants remedy, to the Trustees' satisfaction, the circumstances giving rise to the Trustees' issuance of the Access to Financial Assurance Notice, or (2) the date that a final decision is rendered in accordance with Section XV (Dispute Resolution) requiring the Trustees to terminate such exercise of their right of access to the financial assurance mechanism(s). Following either event, the Trustees shall cease obligating any further funds from the financial

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assurance mechanism(s), unless the final Dispute Resolution decision allows the Trustees to continue obligating or spending funds, but shall not be required to repay any funds already obligated or spent by the Trustees.

c. If the Trustees are notified by the agent or guarantor of a financial assurance mechanism required by this Section, that it intends to resign and/or cancel the financial assurance mechanism, and the Defendants fail to provide an alternative financial assurance mechanism in accordance with Paragraph 29 at least fifteen (15) Days prior to the cancellation date, the funds guaranteed under such mechanism must be paid in full to the Trustees, in accordance with Paragraph 31.e, prior to cancellation.

d. If, upon issuance of an Access to Financial Assurance Notice by the Trustees, the Trustees are unable for any reason to promptly secure the resources guaranteed under the financial assurance mechanism, whether in cash or in kind, to implement or complete construction, monitoring, or maintenance obligations for the Project set forth in this Decree, then the Trustees are entitled to demand an amount sufficient to cover the cost of the remaining work to be performed. Defendants shall, within thirty (30) Days of such demand, initiate dispute resolution pursuant to Section XV or pay the amount demanded as directed by the Trustees.

e. Any amounts required to be paid under this Paragraph shall be, as directed by the Trustees: (i) paid to the Trustees in order to facilitate the completion of the work by the Trustees or by another person; or (ii) deposited into an interest-bearing account, established at a duly chartered bank or trust company that is insured by the FDIC, in order to facilitate the completion of the work by another person. Upon issuance of an Access to Financial Assurance Notice by the Trustees, the Trustees may use any and all funds obtained from such Access to Financial Assurance Notice to complete the obligation(s) identified in the Access to Financial Assurance Notice. In addition, the Trustees may use their own funds to complete such obligations and may seek reimbursement of any such expended funds from Defendants. For any and all work conducted by the Trustees and their contractors pursuant to this Paragraph,

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Defendants shall provide the Trustees and their contractors with relevant information and access to the Project Site as requested by the Trustees and their contractors.

32. Release, Cancellation, or Discontinuation of Financial Assurance Mechanisms. Defendants shall not release, cancel, or discontinue the financial assurance mechanisms required by this Section, except as provided pursuant to this Paragraph and as set forth in Appendices D-E.

a. Defendants may release, cancel, or discontinue the financial assurance mechanisms only as follows:

i. If the Trustees provide a Notice of Approval of Completion of Construction as described in Paragraph 13, Defendants may thereafter release, cancel or discontinue the financial assurance mechanism required by Paragraph 27;

ii. If the Trustees provide a Notice of Approval of Completion of Eelgrass Work and Initial Maintenance & Monitoring as described in Paragraph 16, Defendants may thereafter release, cancel or discontinue the financial assurance mechanism required by Paragraph 28.a;

iii. After the expiration of the time period set forth in Paragraph 17, Defendants may thereafter release, cancel or discontinue the financial assurance mechanism required by Paragraph 28.b.

b. In the event of a dispute concerning the continuation of any financial assurance mechanism, Defendants may release, cancel, or discontinue the financial assurance mechanism only in accordance with the final administrative or judicial decision resolving such dispute under Section XV (Dispute Resolution) and in accordance with the terms and conditions of the financial assurance mechanism.

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VIII. ACCESS TO INFORMATION AND PROJECT SITE

33. To facilitate the Trustees' oversight responsibilities, and in accordance with Appendix C, Defendants will provide the Trustees full access to the Project Site for purposes of inspecting or observing Defendants' progress in implementing the Project.

34. Commencing upon the date of lodging of this Decree, and in accordance with Appendix C, Defendants agree to provide the Trustees and their contractors access at all reasonable times to the Project Site. Defendants also agree to provide the Trustees and their contractors access at all reasonable times to any other property under the control of Defendants, but only to the extent access to the other property is required for the Trustees' oversight or implementation of this Decree. This right of access does not include a right to enter buildings. The Trustees shall give not less than twenty-four (24) hours' notice prior to access whenever practicable. Each Trustee shall have the authority to enter freely and move about such property at all reasonable times for purposes of overseeing the requirements of this Decree, including, but not limited to:

a. Monitoring and assessing progress on the planning, development, maintenance and monitoring of the Project;

b. Verifying any data or information submitted to the Trustees;

c. Inspecting and copying records, operation logs, contracts or other documents maintained or generated by Defendants or their contractors hereafter retained to perform work undertaken pursuant to this Decree;

d. Conducting such tests, investigations or sample collections as deemed necessary to monitor compliance with this Decree, investigate or assess contamination at or near the Project Site, or to assist in further identifying and quantifying injuries to natural resources requiring restoration actions and in planning and carrying out further restoration actions; and

e. Performing work at the Project Site in accordance with Paragraph 25.

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35. The Trustees may direct that Defendants use a camera, sound recording device or other equipment to record work done under this Decree by Defendants, or associated injury to natural resources, and provide copies of any such recordings to the Trustees. Trustees may also use their own camera, sound recording device, or other equipment to record the work done under this Decree or injury to natural resources. Defendants may request a copy of any such recordings made by the Trustees provided it is not otherwise privileged.

36. Defendants shall have the right to accompany any Trustee or its contractor on the Project Site and to any property under the control of Defendants, and the Trustees and their contractors shall comply with any applicable health and safety precautions. Defendants shall have the right to (a) copies of the results of all tests, recordings, or investigations conducted by the Trustees pursuant to this Decree; and (b) to split samples taken by the Trustees pursuant to this Decree.

IX. SELECTION OF CONTRACTORS

37. The selection of any contractor hereafter retained by Defendants to perform any of the work required under this Consent Decree shall be subject to Trustee approval, which shall not be unreasonably withheld. Defendants shall notify the Trustees in writing of the name, title, and qualifications of any contractor Defendants propose to retain. The Trustees will notify Defendants in writing of the approval or disapproval of a proposed contractor. The Trustees' assent to the proposed selection or change of a contractor may be presumed unless the Trustees notify Defendants in writing of their objection to the proposed selection or change within thirty (30) Days of Defendants' written notice to Trustees of the proposed selection or change.

X. PAYMENT OF ASSESSMENT COSTS

38. Within thirty (30) Days of the Effective Date, Defendants will pay a total of $1,418,600 for the balance of past assessment costs already incurred by the Trustees (including all pre-Phase A, Phase A, Phase B, and Phase C costs pursuant to the Parties' Funding and

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Participation Agreement and amendments thereto), and for all additional assessment costs estimated to be incurred by the Trustees through the Effective Date, as described below.

a. Payment for Assessment Costs Incurred by the United States. Within thirty (30) Days after the Effective Date, Defendants shall pay a total of $448,830 to the United States for assessment costs incurred and estimated to be incurred by the United States through the Effective Date, which shall be deposited in the DOI NRDAR Fund, to be applied toward natural resource damage assessment costs incurred by DOI. Payment shall be made by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice account, in accordance with instructions provided to Defendants by the Financial Litigation Program ("FLP") of the United States Attorney's Office for the Western District of Washington after the Effective Date. The payment instructions provided by the FLU will include a Consolidated Debt Collection System ("CDCS") number, which Defendants shall use to identify all payments required to be made in accordance with this Decree. The FLU will provide the payment instructions to:

Jonathan Boswell, CRM
Director, Treasury & Assistant Controller
Rayonier, Inc.
1 Rayonier Way
Wildlight, FL 32097
Jonathan.boswell@rayonier.com

on behalf of Defendants. Defendants may change the individual(s) to receive payment instructions on their behalf by providing written notice of such change to the United States in accordance with Section XXII (Notices and Submissions).

b. Payment for Assessment Costs Incurred by the State. Within thirty (30) Days after the Effective Date, Defendants shall pay a total of $247,923 to the State of Washington for assessment costs incurred and estimated to be incurred by the State through the Effective Date. Payment shall be made by certified check, bearing the notation "Assessment Costs for Port Gamble Bay NRD Restoration Project – No. 84NN" and made payable and addressed as follows:

Payee: State of Washington/Department of Ecology

Address: State of Washington/Department of Ecology
Attention: Cashiering Unit
P.O. Box 47611
Lacey, WA 98504-7611

c. Payment for Assessment Costs Incurred by the Jamestown S'Klallam Tribe. Within thirty (30) Days after the Effective Date, Defendants shall pay a total of $30,574 to the Jamestown S'Klallam Tribe for assessment costs incurred and estimated to be incurred by the Tribe through the Effective Date. Payment shall be made by check to the Jamestown S'Klallam Tribe bearing the notation "Assessment Costs for Port Gamble Bay NRD Restoration Project" and mailed to the address as follows:

Payee: Jamestown S'Klallam Tribe
Address: Accounting – Charlene Dick
Jamestown S'Klallam Tribe
1033 Old Blyn Highway
Sequim, WA 98382

d. Payment for Assessment Costs Incurred by the Lower Elwha Klallam Tribe. Within thirty (30) Days after the Effective Date, Defendants shall pay a total of $6,165 to the Lower Elwha Klallam Tribe for assessment costs incurred and estimated to be incurred by the Tribe through the Effective Date. Payment shall be made by check to the Lower Elwha Klallam Tribe bearing the notation "Assessment Costs for Port Gamble Bay NRD Restoration Project" and mailed to the address as follows:

Payee: Lower Elwha Klallam Tribe
Address: Lower Elwha Klallam Tribe
Attention: Jessica Wright
2851 Lower Elwha Road
Port Angeles, WA 98363

e. Payment for Assessment Costs Incurred by the Port Gamble S'Klallam Tribe. Within thirty (30) Days after the Effective Date, Defendants shall pay a total of $647,312 to the Port Gamble S'Klallam Tribe for assessment costs incurred and estimated to be incurred by the Tribe through the Effective Date. Payment shall be made by check to the Port Gamble S'Klallam Tribe bearing the notation "Assessment Costs for Port Gamble Bay NRD Restoration Project" and mailed to the address as follows:

Payee: Port Gamble S'Klallam Tribe
Address: Port Gamble S'Klallam Tribe
Attention: Accounting
31912 Little Boston Road NE
Kingston, WA 98346

f. Payment for Assessment Costs Incurred by the Skokomish Indian Tribe. Within thirty (30) Days after the Effective Date, Defendants shall pay a total of $2,579 to the Skokomish Indian Tribe for assessment costs incurred and estimated to be incurred by the Tribe through the Effective Date. Payment shall be made by check to the Skokomish Indian Tribe bearing the notation "Assessment Costs for Port Gamble Bay NRD Restoration Project" and mailed to the address as follows:

Payee: Skokomish Indian Tribe
Address: Skokomish Indian Tribe
Attention: Accounting
N. 80 Tribal Center Road
Skokomish, WA 98584

g. Payment for Assessment Costs Incurred by the Suquamish Indian Tribe. Within thirty (30) Days after the Effective Date, Defendants shall pay a total of $35,217 to the Suquamish Indian Tribe for assessment costs incurred and estimated to be incurred by the Tribe through the Effective Date. Payment shall be made by check to the Suquamish Indian Tribe bearing the notation "Assessment Costs for Port Gamble Bay NRD Restoration Project" and mailed to the address as follows:

Address: Suquamish Indian Tribe
Attention: Finance Director
P.O. Box 498
Suquamish, WA 98392

39. At the time of each payment pursuant to Paragraph 38, Defendants will send notice that payment has been made to the Trustees and DOJ in accordance with Section XXII (Notices and Submissions). Such notice will reference Port Gamble Bay NRDA, DOJ case number 90-11-3-11025 and the civil action number.

XI. PAYMENT OF RESTORATION IMPLEMENTATION COSTS

40. Within thirty (30) Days of the Effective Date, Defendants will pay a total of $714,366, which constitutes the net present value of the Trustees' estimated costs of implementing and overseeing the Project described in the Statement of Work, from the Effective Date through the ending date of Defendants' responsibility for maintenance and corrective action, as set forth in Paragraph 17.

a. The amounts for estimated restoration implementation costs to be paid to each Trustee are as follows:

i. United States: $249,836

ii. State: $148,887

iii. Jamestown S'Klallam Tribe: $34,500

iv. Lower Elwha Klallam Tribe: $0

v. Port Gamble S'Klallam Tribe: $234,343

vi. Skokomish Indian Tribe: $16,800

vii. Suquamish Indian Tribe: $30,000

b. Defendants shall pay the amounts listed in subsection a above in accordance with the procedures set forth in Paragraphs 38 and 39, except that payments made by check shall bear the notation "Restoration Implementation Costs for Port Gamble Bay NRD Restoration Project" instead of the notations identified in Paragraph 38.

XII. INTEREST ON LATE PAYMENTS

41. If Defendants fail to make any payment pursuant to this Decree by the required due date, in addition to the stipulated penalties as set forth in Section XIII, interest shall be assessed at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest is the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

Interest on late payments shall accrue beginning on the date of lodging of the Decree through the date on which the payment is made.

XIII. STIPULATED PENALTIES

42. Late Payments by Defendants. Defendants shall pay a stipulated penalty of $2,000 per Day that each payment pursuant to Section X (Payment of Assessment Costs) or Section XI (Payment of Restoration Implementation Costs) is not made by the required due date.

43. Failure to Meet Deadlines or Satisfy Requirements of the Decree. The Parties stipulate that the time period for implementing the Project is a significant factor in the settlement reached in this Decree and that delay in carrying out the activities required in this Decree may diminish the compensatory value attributable to those activities. Consequently, in the event that Defendants fail to meet a deadline or satisfy other requirements in this Decree (subject to any modifications agreed to under Section XXV (Modification)), and any delay is not excused through operation of the provisions of Section XIV (Force Majeure), then Defendants shall pay stipulated penalties as follows:

a. For each week that Defendants fail to comply with any requirement in the Decree (other than payments due pursuant to Sections XI and X, addressed in Paragraph 42 above), Defendants shall pay a stipulated penalty in the amount of $1,000 per week;

b. Where the delay or noncompliance extends beyond two weeks, the stipulated penalty of $1,000 shall apply per Day to each additional day of delay or noncompliance for each such missed requirement.

c. For purposes of this Subparagraph, a week shall equal a continuous period of seven (7) Days.

44. Nothing in this Decree prevents the simultaneous accrual of separate penalties for separate violations of this Decree. Stipulated penalties under Paragraph 43 are in addition to the remedies available under Paragraph 14 and Paragraph 31.

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45. All penalties shall begin to accrue on the day after the complete performance or payment is due or the day a violation occurs, and shall continue to accrue through the final day of the payment, correction of the noncompliance or completion of the activity. Following the Trustees' determination that Defendants have failed to comply with a requirement of this Decree, the Trustees shall give Defendants written notification of the same and describe the noncompliance. The Trustees shall send Defendants a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether the Trustees have notified Defendants of the violation.

46. Payments under this Section shall be divided equally among the Trustees. All payments for stipulated penalties shall be paid in accordance with the procedures set forth in Paragraph 38. At the time of each payment, Defendants will send notice that payment has been made to the Trustees and DOJ in accordance with Section XXII (Notices and Submissions). This notice will reference Port Gamble Bay NRDA, DOJ Case Number 90-11-3-11025, and the civil action number.

47. All penalties accruing under this Section shall be due and payable within 30 Days of Defendants' receipt from the Trustees of a demand for payment of the penalties, unless Defendants invoke the Dispute Resolution procedures under Section XV (Dispute Resolution).

48. Defendants may dispute the Trustees' right to the penalties identified under Paragraph 43 above by invoking the procedures of Section XV (Dispute Resolution). Penalties identified for late payments under Paragraph 42 above are not subject to Section XV (Dispute Resolution).

49. If Defendants fail to pay stipulated penalties when due, Plaintiffs may institute proceedings in this Court to collect the penalties, as well as interest. Defendants shall pay interest on the unpaid balance, which shall begin to accrue on the Day after payment or complete performance is due.

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50. Stipulated penalties shall continue to accrue as provided in Paragraph 43 during any dispute resolution, but need not be paid until the following:

a. If the dispute is resolved by agreement of the Parties or by a decision of the Trustees that is not appealed to the Court, Defendants shall pay accrued penalties determined to be owing, together with interest, within 30 Days of the effective date of the agreement or the receipt of the Trustees' decision or order;

b. If the dispute is appealed to the Court and the Trustees prevail in whole or in part, Defendants shall pay all accrued penalties determined by the Court to be owing, together with interest, within 60 Days of receiving the Court's decision or order, except as provided in Subparagraph (c) below;

c. If any Party appeals the District Court's decision, Defendants shall pay all accrued penalties judicially determined to be owing, together with interest, within thirty (30) Days of receiving the final appellate court decision.

51. Payments made under this Section are in addition to any other remedies or sanctions available to Plaintiffs by virtue of Defendants' failure to comply with the requirements of this Decree.

52. Notwithstanding any other provision of this Section, Plaintiffs may, in their unreviewable discretion, waive payment of any portion of the stipulated penalties that have accrued pursuant to this Decree. The payment of penalties shall not alter in any way Defendants' other obligations under this Decree.

XIV. FORCE MAJEURE

53. "Force majeure," for purposes of this Consent Decree, means any event arising from causes beyond the control of Defendants, of any entity controlled by Defendants, or of Defendants' contractors that delays or prevents the performance of any obligation under this Decree despite Defendants' best efforts to fulfill the obligation. Given the need to protect public health and welfare and the environment, the requirement that Defendants exercise "best efforts to

fulfill the obligation" includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (1) as it is occurring and (2) following the potential force majeure such that any delay is, and any adverse effects of the delay or non-performance are, minimized to the greatest extent possible. The requirement that Defendants exercise "best efforts to fulfill the obligation" also includes, where necessary, the filing of legal actions to compel contract performance in accordance with the design and schedule approved by the Trustees herein. "Force majeure" does not include financial inability to perform any obligation under this Decree or a failure to achieve Success Criteria for the Project.

54. If any event occurs for which Defendants will or may claim a force majeure, Defendants shall notify the Trustees by email. The deadline for the initial notice is 14 Days after the date Defendants first knew or should have known that the event would likely delay or prevent performance. Defendants shall be deemed to know of any circumstance of which any contractor of, subcontractor of, or entity controlled by Defendants knew or should have known. Within 30 Days thereafter, Defendants shall send a further notice to the Trustees that includes: (i) a description of the event and its effect on Defendants' completion of the requirements of the Decree; (ii) a description of all actions taken or to be taken to prevent or minimize the adverse effects or delay; (iii) if applicable, the proposed extension of time for Defendants to complete the requirements of the Decree; (iv) a statement as to whether, in the opinion of Defendants, such event may cause or contribute to an endangerment to public health or welfare, or the environment; and (v) all available proof supporting their claim of force majeure.

55. The Trustees will notify Defendants of their determination whether Defendants are entitled to relief under Paragraph 53, and, if so, the excuse of, or duration of the extension of time for, performance of the obligations affected by the force majeure. An excuse of, or extension of the time for, performance of the obligations affected by the force majeure does not, of itself, excuse or extend the time for performance of any other obligation. Defendants may invoke the dispute resolution procedures set forth in Section XV (Dispute Resolution) regarding

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the Trustees' determination within 15 Days after receipt of the determination. In any such proceeding, Defendants have the burden of proving that they are entitled to relief under Paragraph 53 and that their proposed excuse or extension was or will be warranted under the circumstances.

56. The failure by the Trustees to timely complete any activity under the Decree is not a violation of the Decree, provided, however, that if such failure prevents Defendants from timely completing a requirement of the Decree, Defendants may seek relief under this Section.

XV. DISPUTE RESOLUTION

57. Unless otherwise expressly provided for in this Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree.

58. Informal Dispute Resolution. Any dispute subject to dispute resolution under this Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when one Party sends the other Party a written notice specifying the nature of the dispute and requested relief ("Notice of Dispute"). The period for informal negotiations shall not exceed twenty-one (21) Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by Plaintiffs shall be considered binding unless, within twenty-one (21) Days after the conclusion of the informal negotiation period, Defendants invoke formal dispute resolution procedures as set forth below.

59. Formal Dispute Resolution. Defendants shall invoke formal dispute resolution procedures within the time period provided in the preceding Paragraph by sending Plaintiffs a written Statement of Position on the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis or opinion supporting Defendants' position and any supporting documentation relied upon by Defendants.

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60. Plaintiffs will send Defendants their Statement of Position within thirty (30) Days of receipt of Defendants' Statement of Position. Plaintiffs' Statement of Position shall include, but need not be limited to, any factual data, analysis or opinion supporting that position and any supporting documentation relied upon by Plaintiffs. Plaintiffs' Statement of Position is binding on Defendants, unless Defendants file a motion for judicial review of the dispute in accordance with the following Paragraph. An administrative record of the dispute shall be maintained by the Trustees and shall contain all Statements of Position, including supporting documentation, submitted pursuant to this Section.

61. Judicial Dispute Resolution.

a. Defendants may seek judicial review of the dispute by filing with the Court and serving on the Trustees a motion requesting judicial resolution of the dispute. The motion (a) must be filed within fourteen (14) Days of receipt of the Trustees' Statement of Position pursuant to the preceding Paragraph; (b) may not raise any issue not raised in informal dispute resolution pursuant to Paragraph 58, unless Plaintiffs raise a new issue of law or fact in the Statement of Position; (c) shall contain a written statement of Defendants' position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and (d) shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Decree.

b. Plaintiffs shall respond to Defendants' motion within the time period allowed by the Local Rules of this Court. Defendant may file a reply memorandum, to the extent permitted by the Local Rules.

c. The Court may rule based on the administrative record (including Plaintiffs' and Defendants' Statements of Position and replies), with or without oral argument, and shall review the Plaintiffs' Statements of Position or its resolution of the dispute under the standards of the Administrative Procedures Act.

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d. Except as expressly stated elsewhere in this Decree, any matter in dispute shall be reviewable by this Court.

62. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Defendants under this Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 50. If Defendants do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XIII (Stipulated Penalties).

XVI. INDEMNIFICATION; INSURANCE

63. Indemnification.

a. Plaintiffs do not assume any liability by entering into this Decree. Defendants shall indemnify and hold harmless each of the Plaintiffs and/or their agents, employees and representatives from any and all damage claims or causes of action arising from negligent or other wrongful acts or omissions of Defendants and/or their officers, employees, agents, contractors, subcontractors, representatives and any persons acting on their behalf or under their control in carrying out activities pursuant to this Decree. Further, Defendants agree to pay Plaintiffs all reasonable costs they incur, including but not limited to attorneys' fees and other expenses of litigation and settlement, arising from or on account of claims made against Plaintiffs based on negligent or other wrongful acts or omissions of Defendants or their officers, employees, agents, contractors, subcontractors, representatives and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Decree.

b. None of the Plaintiffs shall be held out as a party to any contract entered into by or on behalf of Defendants in carrying out activities pursuant to this Decree. Neither Defendants nor any contractor or representative of Defendants shall be considered an agent of any Plaintiff, and Defendants shall require any contractor hereafter retained by Defendants who

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performs work for Defendants in carrying out activities pursuant to this Consent Decree to affirmatively acknowledge that it is not acting as an agent of any Plaintiff.

c. Plaintiffs shall give Defendants written notice of any claim for which one or more Plaintiffs plan to seek indemnification pursuant to Paragraph 63.a, and shall consult with Defendants (including, but not limited to, responding to Defendants' reasonable requests for information regarding any proposed settlement of that claim) prior to settling such claim.

64. Defendants waive all claims against Plaintiffs for damages or reimbursement or for set-off of any payments made or to be made to Plaintiffs, arising from or on account of any contract, agreement, or arrangement between Defendants and any person for performance of activities pursuant to this Decree, including, but not limited to, claims on account of construction delays. In addition, Defendants shall indemnify and hold harmless Plaintiffs with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between any Defendant and any person for performance of activities pursuant to this Decree, including, but not limited to, claims on account of construction delays.

65. No later than fifteen (15) Days before commencing any work on the Project Site, Defendants shall cause to be maintained commercial general liability insurance and automobile liability insurance, with a combined single limit of $10,000,000 (ten million dollars), which may be satisfied through a combination of primary and excess policies. The Trustees shall be included as additional insureds on such policies with respect to liability arising out of the activities performed by or on behalf of Defendants pursuant to this Decree. In addition, for the duration of this Decree Defendants shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing any work involved in implementing this Decree.

a. No later than fifteen (15) Days before commencing any work involved in implementing this Decree, Defendants shall provide to the Trustees certificates of such

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insurance. Defendants shall resubmit such certificates each year on the anniversary of the Effective Date.

b. Upon request, the United States Department of Justice may examine such insurance policies at one of Defendants' corporate headquarters, for the limited purpose of verifying that such insurance policies provide the coverage required by this Consent Decree. The Department of Justice will not copy the insurance policies during its review; however, in the event of a dispute regarding the adequacy of such insurance policies, Defendants will provide a confidential copy of the disputed policies to the Court and to the Department of Justice. Following the resolution of any such dispute, the copies provided will be destroyed or returned to Defendants.

c. If Defendants demonstrate by evidence satisfactory to the Trustees that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then, with respect to that contractor or subcontractor, Defendants need provide only that portion of the insurance described above that is not maintained by the contractor or subcontractor.

XVII. COVENANT NOT TO SUE BY PLAINTIFFS

66. Except as specifically provided in Section XVIII (Reservations of Rights) below, Plaintiffs covenant not to sue or to take administrative action against Defendants pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a); MTCA, Wash. Rev. Code § 70A.305.040(2); Section 311(f) of the Clean Water Act (CWA), 33 U.S.C. § 1321(f); Section 1002(a) of the Oil Pollution Act of 1990 (OPA), 33 U.S.C. § 2702(a); or any applicable tribal law, to recover Covered Natural Resource Damages. This covenant not to sue will take effect upon Defendants' payment of costs pursuant to Section X (Payment of Assessment Costs) and is conditioned upon the satisfactory performance by Defendants of their obligations under this Consent Decree. This covenant not to sue extends only to Defendants and does not extend to any other person except to

successors and assigns of Defendants, but only to the extent that liability is based solely on such person's status as the successor or assign of a Defendant.

XVIII. RESERVATIONS OF RIGHTS

67. Plaintiffs reserve, and this Decree is without prejudice to, all rights against Defendants with respect to all matters not expressly included within the Covenant Not to Sue by Plaintiffs in Section XVII. Notwithstanding any other provision of this Consent Decree, Plaintiffs reserve all rights against Defendants with respect to:

a. liability for any other costs, including without limitation, costs of response incurred or to be incurred by the Plaintiffs under any federal or State statute or tribal law that are not within the definition of Covered Natural Resource Damages;

b. liability for damages to natural resources (including assessment costs) as defined in 42 U.S.C. §§ 9601(6) & (16) that are not within the definition of Covered Natural Resource Damages;

c. liability for damages to natural resources (including assessment costs) as defined in 42 U.S.C. §§ 9601(6) & (16) within Port Gamble Bay resulting from new releases of hazardous substances from Defendants' property and/or operations after the Effective Date;

d. liability for damages to natural resources (including assessment costs) as defined in 42 U.S.C. §§ 9601(6) & (16) based upon Defendants' transportation, treatment, storage, or disposal, or the arrangement for the transportation, treatment, storage, or disposal of hazardous substances at or in connection with Port Gamble Bay, after the Effective Date;

e. liability for injunctive relief or administrative order enforcement under any federal or State statute;

f. liability under 42 U.S.C. § 9607(a)(4)(D) for costs of any health assessment or health effects study carried out under 42 U.S.C. § 9604(i);

g. additional claims for Covered Natural Resource Damages if conditions, factors or information in Port Gamble Bay, not known to the Trustees as of the Effective Date,

are discovered that, together with any other relevant information, indicate that there is a threat to the environment, or injury to, destruction of, or loss of natural resources of a type unknown, or of a magnitude significantly greater than was known, as of the Effective Date (for purposes of this Subparagraph, information known to the Trustees shall consist of any information in the files of, or otherwise in the possession of, any one of the individual Trustees, or their contractors or consultants who worked on the Trustees' natural resource damages assessment);

h. criminal liability to the United States or State; and

i. liability for failure of a Defendant to satisfy the requirements of this Decree.

XIX. COVENANT NOT TO SUE AND RESERVATION OF RIGHTS BY DEFENDANTS

68. Defendants covenant not to sue and agree not to assert any claims or causes of action against any of the Plaintiffs, or their contractors or employees, relating to Covered Natural Resource Damages, including, but not limited to:

a. any direct or indirect claim for reimbursement of any payment for Covered Natural Resource Damages from the Hazardous Substance Superfund based on CERCLA Sections 107, 111, 112, 113, or any other provision of law;

b. any claim against Plaintiffs pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to Covered Natural Resource Damages; or

c. any claims arising out of activities related to the Project, including, without limitation, claims based on the Trustees' approval of the Project, oversight and monitoring of the Project, and/or approval of plans for such activities.

69. Defendants reserve, and this Decree is without prejudice to, all rights, including defenses and counterclaims, with respect to all matters reserved in Section XVIII (Reservation of Rights).

XX. EFFECT OF SETTLEMENT; CONTRIBUTION PROTECTION

70. Nothing in this Decree shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Decree. Each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action each Party may have with respect to any matter, transaction, or occurrence relating in any way to Port Gamble Bay against any person not a Party hereto. Nothing in this Decree diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional relief (including response action, response costs, and natural resource damages) and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

71. The Parties agree, and by entering this Decree this Court finds, that this settlement constitutes a judicially-approved settlement pursuant to which Defendants have, as of the Effective Date, resolved their liability to Plaintiffs within the meaning of Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2), and are entitled, as of the Effective Date, to protection from contribution actions or claims as provided by CERCLA, 42 U.S.C. § 96l3(f)(2), Wash. Rev. Code § 70A.305.040(4)(d), or as may be otherwise provided by law, for Covered Natural Resource Damages. However, if Plaintiffs exercise their rights under the reservations in Section XVIII, other than in Paragraphs 67.h (criminal liability) and 67.i (failure to satisfy a requirement of this Decree), the contribution protection afforded by this Decree will no longer include those natural resource damages that are within the scope of the exercised reservation.

72. Defendants shall not bring a suit or claim for contribution for Covered Natural Resource Damages without first notifying Plaintiffs.

73. In any subsequent administrative or judicial proceeding initiated by a Plaintiff(s) against any Defendant for injunctive relief, recovery of response costs, or other appropriate relief other than Covered Natural Resource Damages, Defendants shall not assert, nor may they

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maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by Plaintiffs in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the covenants not to sue set forth in Sections XVII and XIX.

XXI. RETENTION OF RECORDS

74. Until ten (10) years after Defendants' receipt of the Trustees' notification pursuant to Paragraph 16 (Notice of Approval of Completion of Eelgrass Work and Initial Maintenance & Monitoring), Defendants shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) in their possession or control as of the Effective Date or which come into their possession or control that relate in any manner to their liability or the liability of any other person for Covered Natural Resource Damages with respect to Port Gamble Bay. Defendants must also retain, and instruct their respective contractors and agents to preserve, for the same period of time specified above all non-identical copies of the last draft or final version of any documents or records (including documents or records in electronic form) now in their possession or control or which come into their possession or control that relate in any manner to the performance of the Project, provided, however, that Defendants (and their contractors and agents) must respectively retain, in addition, copies of all data generated during the performance of the work and not contained in the aforementioned documents required to be retained. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.

75. At the conclusion of this document retention period, Defendants shall notify Plaintiffs at least ninety (90) Days prior to the destruction of any such records or documents, and except as provided in Paragraph 76 (Privileged and Protected Claims), upon written request by the Trustees, Defendants shall deliver any such non-privileged records or documents to the Trustees.

76. Privileged and Protected Claims. Defendants may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If a Defendant asserts such a privilege, it shall provide Plaintiffs with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Defendants. However, no documents, reports or other information created or generated pursuant to the requirements of the Decree, or any data regarding Port Gamble Bay, including, but not limited to, all sampling, analytical, monitoring, scientific, chemical, or engineering data, or the portion of any other record that relates to the Project or conditions within or around Port Gamble Bay, shall be withheld on the grounds that they are privileged.

77. Defendants each hereby certify individually that, to the best of their knowledge and belief, after a thorough inquiry that fully complies with the Federal Rules of Civil Procedure, they have not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to their potential liability regarding the Project Site since notification of potential liability by any Trustee.

XXII. NOTICES AND SUBMISSIONS

78. Whenever notice is required to be given or a document is required to be sent by one Party to another under the terms of this Decree, it will be directed to the individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other Parties in writing. Written notice by regular or electronic mail as specified constitutes complete satisfaction of any written notice requirement of the Decree for Plaintiffs and Defendants.

As to the United States and as to DOJ:

U. S. DEPARTMENT OF JUSTICE
P.O. Box 7611
Washington, DC 20044

EES Case Management Unit
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
(DJ #90-11-3-11025)

Danica Anderson Glaser
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
danica.glaser@usdoj.gov

As to the United States Department of the Interior:

Deirdre Donahue
U.S. Department of the Interior
Office of the Solicitor
601 SW 2nd Avenue, Suite 1950
Portland, OR 97204
Deirdre.donahue@sol.doi.gov

Jeff Krausmann
U.S. Fish & Wildlife Service
510 Desmond Dr. SE, Suite 102
Lacey, WA 98503-1263
Jeff_krausmann@fws.gov

As to the State:

Susannah Edwards
Toxics Cleanup Program
State of Washington
P.O. Box 47600
Olympia, WA 98504-7600
sued461@ecy.wa.gov

Jonathan Thompson
Assistant Attorney General
Ecology Division
Office of the Attorney General of Washington
PO Box 40128
Olympia, WA 98504-0128
Jonathan.Thompson@atg.wa.gov

As to the Jamestown S'Klallam Tribe:

Hansi Hals, Natural Resources Department Director
Jamestown S'Klallam Tribe
1033 Old Blyn Highway
Sequim, WA 98382
hhals@jamestowntribe.org

As to the Lower Elwha Klallam Tribe:

Matt Beirne, Natural Resources Director
Lower Elwha Klallam Tribe
760 Stratton Road
Port Angeles, WA 98363
matt.beirne@elwha.org

As to the Port Gamble S'Klallam Tribe:

Port Gamble S'Klallam Tribe
Natural Resources
31912 Little Boston Road NE
Kingston, WA 98346
romac@pgst.nsn.us

Port Gamble S'Klallam Tribe
Tribal Attorney
31912 Little Boston Road NE
Kingston, WA 98346
smoe@pgst.nsn.us

With a copy to:

Kanji & Katzen P.L.L.C.
Attention: Reed Bienvenu
811 First Ave., Suite 630
Seattle, WA 98104
rbienvenu@kanjikatzen.com

As to the Skokomish Indian Tribe:

Skokomish Tribal Attorney's Office
N. 80 Tribal Center Road
Skokomish, WA 98584
elees@skokomish.org

As to the Suquamish Indian Tribe:

Alison O'Sullivan
Natural Resources Department
Suquamish Indian Tribe
P.O. Box 498
Suquamish, WA 98392-0498
aosullivan@suquamish.nsn.us

With a copy to:

Maryanne Mohan
Office of Tribal Attorney
Suquamish Indian Tribe
P.O. Box 498
Suquamish, WA 98392
mmohan@suquamish.nsn.us

As to Defendants:

Pope Resources
1 Rayonier Way
Wildlight, FL 32097
Attn: Jaime Northrup or Legal Department
jaime.northrup@rayonier.com

Perkins Coie LLP
Katie Page
1201 Third Avenue, Suite 4900
Seattle, WA 98101
kpage@perkinscoie.com

XXIII. RETENTION OF JURISDICTION

79. This Court retains jurisdiction over both the subject matter of this Decree and the Parties for the duration of the performance of the terms and provisions of this Decree for the purpose of enabling any of the Parties to apply to the Court at any time for such further order, direction, and relief as may be necessary or appropriate for the construction or modification of this Decree, or to effectuate or enforce compliance with its terms, or to resolve disputes in accordance with Section XV (Dispute Resolution) hereof.

XXIV. INTEGRATION/APPENDICES

80. This Consent Decree, including deliverables that are subsequently approved pursuant to this Decree, constitutes the entire agreement among the Parties regarding the subject matter of the Decree and supersedes all prior representations, agreements, or understandings, whether oral or written, concerning the subject matter of the Decree herein. The terms "Consent Decree" and "Decree" as used herein include the appendices to this Decree, unless expressly indicated to the contrary. The following appendices are attached to and incorporated into this Decree:

Appendix A: Port Gamble Bay Natural Resource Damages Restoration Project Statement of Work
Appendix B1: Map of the Project Site
Appendix B2: Locations of Releases Resulting in Covered Natural Resource Damages
Appendix B3: Map of Port Gamble Bay
Appendix C: Conservation Easement(s)
Appendix D: Financial Assurance for Project Construction
Appendix E: Financial Assurance for Eelgrass Work and Initial Maintenance & Monitoring
Appendix F: Financial Assurance for Long-Term Maintenance & Monitoring
Appendix G: Restoration Plan/Environmental Assessment

XXV. MODIFICATION

81. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court.

82. Any disputes concerning modification of this Decree shall be resolved pursuant to Section XV (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 61, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

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XXVI. ENFORCEMENT

83. The requirements of this Decree, including but not limited to deadlines, schedules and Project designs, are independently enforceable. Any delay or failure of the Trustees to enforce any requirement will not preclude or prejudice the subsequent enforcement of the same or another requirement.

XXVII. 26 U.S.C. SECTION 162(F)(2)(A)(II) IDENTIFICATION

84. For purposes of the identification requirement of Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. §162(f)(2)(A)(ii), and 26 C.F.R. § 1.162-21(b)(2), performance of Paragraph 4; Paragraphs 7-8; Section VII (Restoration Projects), Paragraphs 11-22, 24, and 26-30 and related Statement of Work; Section VIII (Access To Information And Project Site), Paragraphs 33-35; Section IX (Selection of Contractors), Paragraph 37; Section XVI (Indemnification; Insurance), Paragraphs 63-65; and Section XXI (Retention of Records), Paragraphs 74, 75, and 77; and the payments and Interest required by Section X (Payment of Assessment Costs), Paragraph 38, and Section XI (Payment of Restoration Implementation Costs), Paragraph 40, and is restitution, remediation, or required to come into compliance with law.

XXVIII. LODGING AND OPPORTUNITY FOR PUBLIC COMMENT

85. This Decree will be lodged with the Court for a period of not less than thirty (30) Days for public notice and comment. Plaintiffs each reserve the right to withdraw or withhold their consent if the comments regarding the Decree disclose facts or considerations that indicate this Decree is inappropriate, improper, or inadequate. Defendants consent to the entry of this Decree without further notice.

86. If for any reason this Court does not approve this Decree in the form presented, this Decree may be voided at the sole discretion of any Party, and the terms of the agreement may not be used as evidence in any litigation among the Parties.

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XXIX. SIGNATORIES/SERVICE

87. The Assistant Attorney General for the Environment and Natural Resources Division of the United States Department of Justice and each undersigned representative of the State, the Jamestown S'Klallam Tribe, the Lower Elwha Klallam Tribe, the Port Gamble S'Klallam Tribe, the Skokomish Indian Tribe, the Suquamish Indian Tribe, and Defendants certifies that they are authorized to enter into the terms and conditions of this Decree and to execute and bind legally the Party that they represent to this document.

88. Defendants agree not to oppose entry of this Decree by this Court or to challenge any provision of this Decree unless any Plaintiff has notified Defendants in writing that it no longer supports entry of the Decree.

89. Defendants will identify on the attached signature page the name and address of an agent who is authorized to accept service of process by mail on behalf of each of them with respect to all matters relating to this Decree. Defendants agree to accept service in that manner and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including but not limited to service of a summons. Defendants need not file an answer to the Complaint in this action unless or until the Court expressly declines to enter this Decree.

XXX. FINAL JUDGMENT

90. Upon approval and entry of this Decree by the Court, this Decree shall constitute a final judgment between and among the United States, the State, the Jamestown S'Klallam Tribe, the Lower Elwha Klallam Tribe, the Port Gamble S'Klallam Tribe, the Skokomish Indian Tribe, the Suquamish Indian Tribe, and Defendants. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

SO ORDERED THIS DAY OF , 2024.

_____

United States District Judge

U. S. DEPARTMENT OF JUSTICE
P.O. Box 7611
Washington, DC 20044

Signature Page for Decree regarding Port Gamble Bay
U.S., et al., v. Pope Resources, L.P., et al.

FOR THE UNITED STATES OF AMERICA:

TODD KIM
Assistant Attorney General
Environment & Natural Resources Division
U.S. Department of Justice
Washington, D.C. 20530

Date: 5/30/2024

DANICA ANDERSON GLASER
Senior Counsel
Environmental Enforcement Section
Environment & Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, DC 20044

Signature Page for Decree regarding Port Gamble Bay
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FOR DEFENDANTS POPE RESOURCES, L.P.; OPG PROPERTIES LLC, and OPG PORT GAMBLE LLC:

Date: 3/28/24

David L. Nunes
President
Pope Resources, a Delaware limited partnership

Date: 3/29/24

Mark R. Bridwell
Senior Vice President and Corporate Secretary
OPG Properties LLC, a Delaware limited liability company

Date: 3/29/24

Mark R. Bridwell
Senior Vice President and Corporate Secretary
OPG Port Gamble LLC, a Delaware limited liability company

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FOR THE STATE OF WASHINGTON:

Date: 5/16/2024

BARRY ROGOWSKI
Toxic Cleanup Program Manager
Department of Ecology

Date: 5/20/2024

JONATHAN THOMPSON
Assistant Attorney General
State of Washington

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Washington, DC 20044

Signature Page for Decree regarding Port Gamble Bay
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FOR THE JAMESTOWN S'KLALLAM TRIBE:

Date: 5-13-2024

W. Ron Allen, Tribal Chairman/CEO

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Signature Page for Decree regarding Port Gamble Bay
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FOR THE LOWER ELWHA KLALLAM TRIBE:

Date: 05.22.24

Frances Charles, Chairwoman

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Washington, DC 20044

Signature Page for Decree regarding Port Gamble Bay
U.S., et al., v. Pope Resources, L.P., et al.

FOR THE PORT GAMBLE S'KLALLAM TRIBE:

Date: 5/1/2024

Amber Caldera
Chairwoman Amber Caldera

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Washington, DC 20044

Signature Page for Decree regarding Port Gamble Bay
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FOR THE SKOKOMISH INDIAN TRIBE:

Date: 5-13-24

Charles Miller, Chairman

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P.O. Box 7611
Washington, DC 20044

Signature Page for Decree regarding Port Gamble Bay
U.S., et al., v. Pope Resources, L.P., et al.

FOR THE SUQUAMISH INDIAN TRIBE:

Date: 4-18-24

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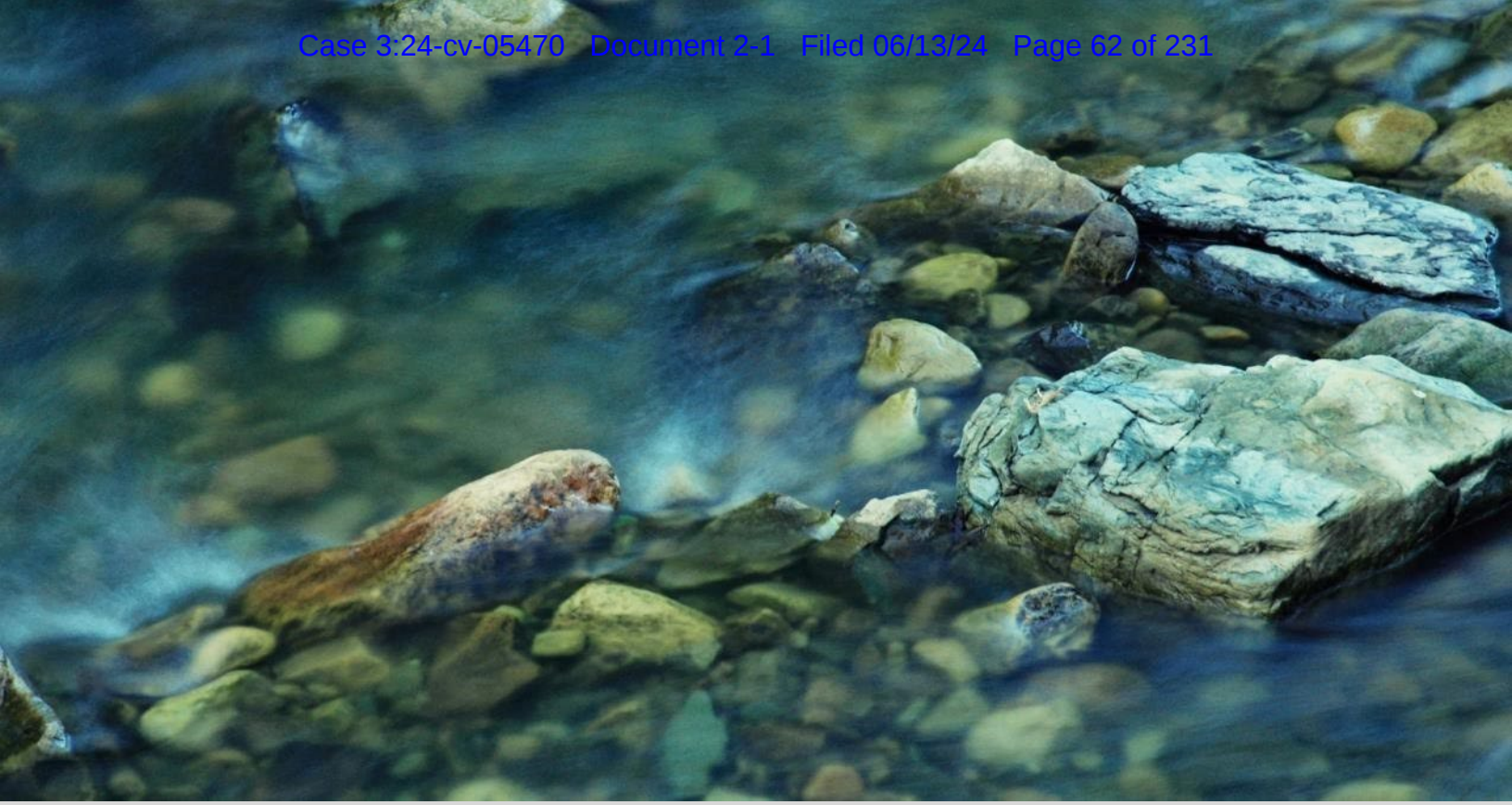
Washington, DC 20044

Appendix A



April 2024
Port Gamble Bay Habitat Restoration

ANCHOR QEA

Statement of Work

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TABLES

FIGURES

APPENDICES

ABBREVIATIONS

>	greater than
<	less than
CAP	Cleanup Action Plan
Companies	OPG Port Gamble LLC; Pope Resources, a Delaware Limited Partnership; and OPG Properties LLC
cy	cubic yard
d_{50}	median particle size
DNR	Washington State Department of Natural Resources
Ecology	Washington State Department of Ecology
EDR	*Port Gamble Bay Engineering Design Report*
H_2S	hydrogen sulfide
H:V	horizontal to vertical
m^2	square meter
Mill Site	Port Gamble Mill Site
MLLW	mean lower low water
ng/kg	nanograms per kilogram
NRD	natural resource damage
OMMP	Operations, Maintenance, and Monitoring Plan
PGST	Port Gamble S'Klallam Tribe
PSAR	photosynthetically available radiation
RI/FS	remedial investigation/feasibility study
SOW	Statement of Work
TEQ	toxic equivalents quotient
Trustees	Jamestown S'Klallam Tribe, Lower Elwha Klallam Tribe, Port Gamble S'Klallam Tribe, Skokomish Indian Tribe, Suquamish Tribe, U.S. Department of the Interior, and the Washington State Department of Ecology
WDFW	Washington State Department of Fish and Wildlife

1 Introduction

This Statement of Work ("SOW") describes habitat restoration projects in Port Gamble Bay ("Bay"), Kitsap County, Washington. These projects are to be performed as part of a natural resource damage (NRD) settlement agreement memorialized in a Consent Decree ("NRD Consent Decree") between Pope Resources L.P., OPG Properties LLC, and OPG Port Gamble LLC (collectively, "the Companies"); and the U.S. Department of the Interior, the Washington State Department of Ecology (Ecology), the Jamestown S'Klallam Tribe, the Lower Elwha Klallam Tribe, the Port Gamble S'Klallam Tribe ("PGST"), the Skokomish Indian Tribe, and the Suquamish Tribe (collectively, "the Trustees"). The restoration projects described in this SOW will restore shoreline processes and enhance habitat for benthos, forage fish, shellfish, and juvenile salmonids in the Bay. This SOW is the outcome of a cooperative effort between the Companies and the Trustees.

1.1 Site Background

Port Gamble Bay encompasses more than two square miles of subtidal and shallow intertidal habitat just south of the Strait of Juan de Fuca (Figure 1). The Bay and surrounding areas support diverse aquatic and upland habitats, as well as resources for fishing, shellfish harvesting, and many other aquatic uses. The area surrounding the Bay is rural. The PGST Reservation is located east of the Bay. Tribal members use the Bay for shellfish harvesting, fishing, and other resources. A detailed site history is provided in the NRD Consent Decree.

In 2013, the Companies and Ecology entered a Consent Decree ("2013 Consent Decree") to implement the Bay Cleanup Action Plan ("CAP") that included the following actions completed in early 2017 (Ecology 2013, Anchor QEA 2015 and 2021):

- Removal and off-site landfill disposal of 8,592 decayed piling, mostly creosote-treated
- Removal and off-site landfill disposal of 110,000 cubic yards (cy) of wood debris/sediment
- Removal and off-site landfill disposal of 1.3 acres of overwater and derelict structures
- Improvement of 3,485 linear feet of shoreline
- Placement of clean-engineered caps over 13 acres
- Placement of clean sand layers over 79 acres

In 2018, the Companies and Ecology entered an Agreed Order to complete a supplemental remedial investigation/feasibility study ("RI/FS") and develop a CAP for the former sawmill facility that included the following actions (Anchor QEA 2020):

- Excavation and disposal at approved off-site landfills of approximately 7,500 to 10,500 tons of soils in the northeast portion of the former sawmill facility with dioxin/furan concentrations above remediation levels

- Capping of approximately six acres in four areas of the former sawmill facility with dioxin/furan soil concentrations below remediation levels but exceeding soil cleanup levels
- Restrictive covenants were established to preclude use of the shallow aquifer throughout the former sawmill facility for future drinking water supply and to ensure that soil caps maintain their protectiveness

In 2020, the Companies and Ecology entered a Consent Decree ("2020 Consent Decree") to implement the CAP for the former sawmill facility. Remedial design is underway, with construction currently targeted for summer/fall 2024. Habitat restoration and redevelopment actions at the former sawmill facility must meet cleanup requirements described in the Bay and former sawmill site CAPs to ensure protectiveness. As practicable, implementation of final upland cleanup actions will be coordinated with habitat restoration and redevelopment to achieve a protective and cost-effective integrated remedy.

The restoration projects described in this SOW are intended to be implemented concurrent with the former sawmill facility cleanup to achieve efficiencies and maximize protection. These restoration projects will restore shoreline processes and enhance habitat for benthos, forage fish, shellfish, and juvenile salmonids in the Bay. Restoration objectives include increasing the functional value of habitat for these resource species as follows:

- Increasing the amount of intertidal habitat acreage
- Restoring shorelines in the southern portion of the former sawmill facility to more natural intertidal substrates and more gently sloped conditions supported by riparian vegetation to provide habitat for forage fish, shellfish, and juvenile salmonids
- Restoring functional shallow subtidal habitat substrate in woody debris areas and transplanting eelgrass in the western Bay

1.2 Purpose

The purpose of this SOW is to describe the following:

- Habitat restoration project designs (Section 2)
- Maintenance/monitoring plans and success criteria (Section 3)
- Implementation and schedule of required deliverables (Section 4)

2 Habitat Restoration Project Designs

The Companies shall be responsible for implementing the habitat restoration projects described in this section. The restoration projects in Port Gamble Bay include the following:

- **Southern Mill Site Shoreline Restoration.** This nine-acre project includes laying back intertidal slopes of the southern portion of the former sawmill facility shoreline to restore near-natural beach grades. Restored intertidal caps will include a lower layer of angular cobble-sized armor, a middle layer of rounded cobble/gravel beach substrate, and an upper layer of sand/gravel habitat substrate to optimize habitat functions and concurrently remain protective. Near-surface hardscape will be removed within a 150-foot shoreline buffer, followed by soil treatments and native plantings.
- **Western Bay Nearshore Thin Layer Sand Cover.** This project includes placing a sand cover layer over a minimum of 11 acres of lower intertidal to shallow subtidal zones (approximately -2 to -15 feet mean lower low water [MLLW]) within former log rafting areas in the western Bay to restore benthic habitat functions and concurrently provide suitable substrate in areas where eelgrass is absent or growing at very sparse densities. As practicable, the sand cover will be constructed using clean dredge material from the nearby Driftwood Key navigation channel, or other similar marine source which is expected to contain eelgrass seed and maximize restoration potential.
- **Western Bay Nearshore Eelgrass Transplanting.** Eelgrass will be transplanted into western Bay areas where there is currently little or no eelgrass, including on and adjacent to the thin layer sand cover. Eelgrass transplanting will be performed following placement and consolidation of the cover, informed by monitoring and adaptive management methods patterned after those used successfully at other western Washington sites.

Designs of the restoration projects are described in the following sections.

2.1 Southern Mill Site Shoreline Restoration

Habitat restoration objectives for the Southern Mill Site shoreline restoration project include returning shoreline processes and enhancing habitat for forage fish, shellfish, and juvenile salmonids. Intertidal beach substrate specifications will support resident shellfish species including but not limited to cockles, littleneck clams, Manila clams, mussels, and oysters. Based on information provided by the Washington Department of Fish and Wildlife ("WDFW"), typical habitat requirements for representative forage fish and shellfish species are summarized in Table 1.

Shoreline restoration will include excavating approximately 27,000 cy of fill over 1,450 lineal feet of the Southern Mill Site shoreline, as depicted in Figures 2 and 3, to lay back upper intertidal slopes to achieve an average slope of approximately 8 horizontal to 1 vertical ("8H:1V"). Slopes will achieve smooth tie-ins with adjacent grades to optimize both habitat functions and protection, including

dioxin/furan removal (see Figure 3). The intertidal cap and habitat layers will be constructed in three layers totaling a minimum of three feet thick, as follows:

- Lower angular cobble-sized armor (minimum one-foot thick)
- Middle rounded cobble/gravel beach substrate (minimum one-foot thick)
- Upper sand/gravel habitat substrate (minimum one-foot thick)

The basis for cap and habitat substrate designs is described in the following paragraphs.

The *Port Gamble Bay Engineering Design Report* ("EDR"; Anchor QEA 2015) presents criteria for engineering design of sediment cleanup actions in Port Gamble Bay as required by the 2013 Consent Decree. Appendix M of the EDR describes one possible approach to integrate habitat restoration with cleanup requirements but allows for other options to optimize overall habitat functions and protectiveness as practicable. Wave modeling and engineering evaluations described in the EDR reveal that armor materials placed on a 8H:1V slope would need to have a median particle size (d_{50}) of approximately five to six inches (cobble/gravel size) to remain in place and protective over the long term (e.g., stable during a 100-year recurrence interval event). Consistent with Bay cleanup requirements, the lower portion of the two-foot intertidal cap required by the 2013 Consent Decree will consist of a minimum one-foot-thick layer of salvaged armor rock and imported angular cobble-sized materials with a d_{50} of approximately six inches and a maximum size of 12 inches (Figure 4).

Although angular cap materials provide greater resistance to wave forces and are preferred for protectiveness, rounded materials are preferred for habitat substrate functions and are more suitable for restoration. Appendix M of the EDR projected that natural beach profile changes of rounded substrate will occur within the surf zone during peak storm events. For example, during large (e.g., greater than 20-year recurrence interval) wave conditions, rounded gravel-sized materials placed on a 8H:1V intertidal slope are projected to locally move up and down the slope, developing profiles with troughs extending above and below the post-construction surface grade (see Appendix A of this SOW). Balancing cap protection and habitat objectives, the upper portion of the two-foot cap layer required by the 2013 Consent Decree (and the middle layer of the combined cap/habitat substrate) will consist of a minimum one-foot-thick layer of rounded cobble/gravel beach substrate with a d_{50} of approximately two to three inches (Figure 4).

Though cap designs must remain protective under peak wave conditions, restored beach habitat functions are determined by median wave conditions and associated sediment transport patterns. Appendix M of the EDR includes an evaluation of net littoral drift rates into the Southern Mill Site shoreline, defined as the annual net volume of sediment that moves along the beach. Littoral drift (also called longshore transport) occurs in the surf and swash zones for gravel or mixed sand/gravel beaches and is caused by breaking waves. The amount of littoral drift is dependent on wave height, wave period, beach slope, sediment size, and gradation, and the angle of approach of the waves in

relation to shoreline orientation. It is also related to sediment supply and downdrift characteristics. The Southern Mill Site shoreline receives sediment input from approximately 0.6 miles of the Bay shoreline to the south of the Southern Mill Site with relatively steep slopes or weak bank material, along with three streams that empty into the western shoreline of the Bay. These natural inputs nourish the southern shoreline. Based on analytical calculations and comparisons with reference sites, approximately 300 cy per year of sediment is transported through littoral drift into the Southern Mill Site shoreline area from the south.

Beach sampling data collected in 2015 by PGST immediately south of the former sawmill site, along with similar Anchor QEA sampling in 2020 of materials that have accreted on the surface of the intertidal caps, reveals that local littoral drift materials entering the Southern Mill Site shoreline area are a mixture of sand, gravel, and silt with a d_{50} of approximately 0.05 inch (medium sand; Figure 4). Under typical wave conditions, these littoral drift materials will settle onto and mix into the rounded cobble/gravel beach substrate layer, improving and sustaining shoreline processes and habitat functions. Since completion of cleanup construction in early 2017, approximately 0.5 to one-foot of littoral drift materials have steadily deposited on top of angular caps placed in lower intertidal areas of the Southern Mill Site shoreline (with slopes of roughly 6H:1V or flatter), restoring beach habitat and functions (Anchor QEA 2021). Moreover, oyster populations have been concurrently expanding into these cap areas, providing further evidence of improving habitat functions that also help to stabilize the enhanced and restored beach and improve overall water quality conditions.

To rapidly restore shoreline processes and enhance habitat for forage fish, shellfish, and juvenile salmonids along the Southern Mill Site shoreline, the rounded cobble/gravel beach substrate described in the previous paragraphs will be overlaid with a minimum one-foot-thick surface layer of sand/gravel habitat substrate (d_{50} of approximately 0.3 inch; Figure 4). The habitat substrate layer will support resident shellfish species including cockles, littleneck clams, Manila clams, mussels, and oysters (see general burial depth requirements summarized in Table 1). A minimum 0.25-acre, 1,500-2,000 cy habitat feeder berm (approximately five years of littoral drift supply, conservatively assuming no new incoming sources) comprised of sand/gravel habitat substrate (d_{50} of approximately 0.3 inch; Figure 4) will also be placed at the southern end of the Southern Mill Site shoreline in the beach backshore (approximately + 11 feet MLLW) to further ensure that shoreline processes and habitat functions are sustained during the initial post-construction period (Figure 2).

Restoration of nearshore riparian habitat includes removal of surface hardscape within the 150-foot shoreline buffer, followed by placement of a minimum of two feet of clean sand. Soil treatments will include placing four inches of compost rototilled into the top 12 inches of clean sandy soil, overlaid with three inches of mulch. The 150-foot-wide riparian area will then be planted with a combination of native plants including deciduous or coniferous trees (one-gallon pots on average nine-foot centers and/or five-gallon pots on average 12-foot centers), and shrubs (one-gallon pots on average

six-foot centers). Beachgrass (ten-cubic-inch tubes on average two-foot centers) will be planted at elevations between approximately +11.8 to +13.3 feet MLLW in unamended sand/gravel soils. Subject to availability, plantings will include:

- Trees
  - Western Red Cedar (*Thuja plicata)*
  - Grand Fir (*Abies grandis*)
  - Douglas Fir (*Psuedotsuga menziesii*)
  - Shore Pine (*Pinus contorta, var. contorta*)
  - Red Alder (*Alnus rubra*)
  - Big Leaf Maple (*Acer macrophyllum*)
  - Black Cottonwood (*Populous balsamifera ssp. Trichocarpa*)
  - Pacific Madrone (*Arbutus menziesii*)
- Shrubs (medium to tall height)
  - Scouler Willow (*Salix scouleriana*)
  - Hooker Willow (*Salix hookeriana*)
  - Beaked Hazelnut (*Coryuis cornuta*)
  - Salmonberry (*Rubus spectabilis*)
  - Nootka Rose (*Rosa nutkana*)
  - Oceanspray (*Holodiscus discolor*)
  - Red Elderberry (*Sambucus racemose*)
  - Snowberry (*Symphoricarpos alba*)
  - Indian Plum (*Oemleria cerasiformis*)
  - Thimbleberry (*Rubus parviflorus*)
  - Salal (*Gaultheria shallon*)
  - Tall Oregon Grape (*Mahonia aquifolium*)
- Beach backshore
  - American Dune Grass (*Leymus mollis*)
  - Puget Sound Gumweed (*Grindelia integrefolia*)
  - Yellow Sand Verbena (*Abronia latifolia*)

To protect the woody riparian plant stems (trees, willows, and shrubs) from small mammals such as mice, voles, and rabbits, plastic or galvanized metal mesh tubes/cylinders will be buried at least three inches below grade and extend two feet above grade for shrubs and three feet above grade for trees. The tubes will be attached to rebar for stability. In the beach backshore, protection will include waterfowl exclusion fencing, consisting of a perimeter of three-foot high chicken-wire fencing attached to rebar stakes, with polypropylene rope tied between. The rope will also include Mylar reflective tape to discourage birds from landing within the backshore planted area. Exclusion fencing

will be removed once plants are well-established. Plant irrigation, weeding, and maintenance will be performed as described in Section 3.1.

Following shoreline excavation to design grades as generally depicted in Figures 2 and 3, the excavated surface will be sampled consistent with Bay cleanup requirements as directed by Ecology under the 2013 Consent Decree to document sediment conditions prior to backfill with intertidal cap and habitat layers. Soils and sediments excavated from the Southern Mill Site shoreline will be stockpiled and profiled (one ten-point composite sample every 1,500 cy, consistent with 2015 to 2017 Port Gamble Bay cleanup project protocols to characterize dioxin/furan concentrations. Additional testing of excavated stockpiles may be required by entities with jurisdiction over disposal of the material or as directed by Ecology for cleanup purposes. Subject to Kitsap County permit conditions, Kitsap County Health District Port Gamble Model Airplane Field limited purpose disposal facility permit conditions, and Ecology approval, approximately 27,000 cy of stockpiles containing dioxin/furan concentrations greater than the 12-nanogram-per-kilogram (ng/kg) toxic equivalents quotient ("TEQ") soil cleanup level, but less than 45 ng/kg TEQ will be disposed at the Port Gamble Model Airplane Field limited purpose disposal facility. Subject to approval by entities with jurisdiction over disposal, stockpiles containing dioxin/furan concentrations greater than 45 ng/kg TEQ will be disposed at appropriate off-site landfill facilities. 300 cy or more of excavated hardscape materials will be processed and disposed of at approved off-site landfills or recycling facilities, as appropriate.

Following completion of construction, the Southern Mill Site restoration area will be protected under a NRD conservation easement or restrictive covenant (Appendix C to the NRD Consent Decree). Habitat restoration construction footprints and conservation easement areas are summarized in Table 2.

2.2 Western Bay Nearshore Thin Layer Sand Cover

The complementary dual goals of the western Bay nearshore thin layer sand cover project are to provide suitable substrate to restore benthic habitat functions and to provide an opportunity for eelgrass restoration (Section 2.3). Placing a sand cover layer in shallow subtidal zones of former log rafting areas will restore benthic habitat functions and provide suitable substrate in areas where there is currently little or no eelgrass. Eelgrass is a critical nearshore habitat for a wide range of fish, waterfowl, and invertebrates, and is crucial to the success of migrating juvenile salmon, spawning Pacific herring, and other key species in the region.

Pre-design surface sediment characterization performed in August 2021 (Anchor QEA and Grette 2021) identified two surface sediment areas in former shallow subtidal log rafting areas in the western Bay with persistent concentrations of wood debris degradation products (e.g., hydrogen

sulfide; [H_2S]) that currently degrade habitat functions[1] (Figure 5). A 4.9-acre healthy native eelgrass (*Zostera marina*) meadow is growing in substrate between these two areas, along with a smaller northern patch of 1.7 acres. Placement of a six-inch sand cover over at least 11 acres of sediments with elevated porewater H_2S concentrations and non-optimal grain size and organic content within the -2 to -15 feet MLLW depth range will restore benthic habitat functions in this shallow subtidal zone. Constructing the nearshore wood debris cover using materials with low percent fines and organic content will promote consolidation and concurrently provide a better substrate for eelgrass within the optimal transplanting zone (approximately -3 to -6 feet MLLW, subject to refinement; see Section 2.3). The northern and southern sand cover placement areas depicted in Figure 5 incorporate approximate 100-foot offsets of cover placement from the edges of the meadow and northern patch to avoid potential impacts to existing eelgrass beds.[2]

Using the design and construction approach described in the EDR (Anchor QEA 2015) and successfully implemented from 2015 to 2017, an average of six inches of clean material will be placed over a minimum of 11 acres of the western Bay nearshore area depicted in Figure 5, as summarized below (within the -2 to -15 feet MLLW elevation range). As practicable, the sand cover will be constructed using clean dredge material from the nearby Driftwood Key navigation channel, which is expected to contain eelgrass seed and an optimal bacterial community to maximize restoration function development. Otherwise, clean marine (preferred) or local upland quarry sources will be used. If an alternative to Driftwood Key is necessary, the material will be tested and be approved by Ecology and other applicable regulatory parties prior to placement. Substrate with a grain size and total organic carbon content similar to sediments in the existing eelgrass beds in Port Gamble Bay will be targeted.

Materials will be placed using a clamshell bucket or equivalent by slightly opening the bucket and spreading the material over the area to be covered, releasing it above the water surface. Building on the successful program used during Bay cleanup project (Anchor QEA 2015 and 2021), the tolerance for thin layer sand placement will be an average thickness of 6 +/- 2 inches. Tolerance will be confirmed based on comparing pre- and post-placement bathymetric surveys, supplemented as necessary with contractor placement records, steel probe surveys, and other methods as described in the Port Gamble Bay Habitat Restoration: Western Bay Nearshore Eelgrass Transplanting and Thin Layer Sand Cover Scope of Work (Grette Associates) ("Eelgrass Scope of Work"), which will be approved by DNR and the Trustees, and final (January 2024) Port Gamble Integrated Cleanup and Habitat Restoration Engineering Design Report. Other measurement methods may be used, with advance approval from the Trustees.

[1] Based on the risk-based benchmark of 0.07 mg/L hydrogen sulfide developed by Ecology for the Port Gamble Bay Cleanup Site.

[2] Taking into account the accuracy of construction in the shallow subtidal zone, during the 2015 to 2017 Port Gamble Bay cleanup action, cap and cover materials were successfully placed closer to the edge of eelgrass meadows without impacts to these beds, optimizing overall habitat development.

A 21-acre western Bay nearshore area (see Figure 5) will be protected under a Washington State Department of Natural Resources ("DNR") conservation easement or restrictive covenant. Habitat restoration construction footprints and conservation easement areas are summarized in Table 2. The 21-acre easement will encompass the thin layer sand cover and eelgrass restoration projects and approximately 10 acres of aquatic land that will provide a buffer to minimize human disturbance and an area for natural expansion of the restored habitats.

2.3 Western Bay Nearshore Eelgrass Transplanting and Monitoring

A pre-design dive survey performed in July 2021 (Anchor QEA and Grette 2021) identified areas of the western Bay that contain habitat suitable for common eelgrass (*Zostera marina*), as evidenced by the communities thriving in approximately 4.9 acres within the primary meadow, along with a smaller northern patch of 1.7 acres (Figure 5). While eelgrass was observed outside of these two beds, the other patches observed were mostly small and sparse, typically consisting of only a few shoots. Substrate conditions within the meadow and northern patch were firmer and more consolidated than outside of these two eelgrass beds. Eelgrass distributions within the western Bay appear to be primarily correlated with a relatively narrow euphotic zone depth range (-2 to -8 feet MLLW) and with sediment conditions (e.g., relatively lower percent fines and organic content) promoting a more consolidated substrate.

Environmental sensors that measure parameters including temperature, depth, and photosynthetically available radiation (PSAR) will be deployed prior to the first eelgrass transplanting event, as described in the Eelgrass Scope of Work. Data from the sensors will aid in planting location selection. Sensors will also be deployed periodically during the initial ten years following completion of construction of the sand cover as summarized in Table 3 to track environmental conditions that affect eelgrass health and aid in identifying the most suitable transplant locations. The sensors will be inspected and cleaned regularly during deployment to prevent fouling and loss of data. The target depth range, locations, and planting design for eelgrass restoration, and for deployment and maintenance of the sensors, will be described in work plans to be approved by the Trustees prior to each transplanting event.[3] Each work plan will also describe eelgrass survey data objectives, methods, and reporting requirements. Monitoring data will be collected with sufficient time to plan for the next transplanting event. The Companies will submit an annual monitoring report to the Trustees beginning with the preconstruction survey through Year 10, documenting the methods and results of monitoring for each year. The annual report will include a summary of sensor data and extreme weather events (temperature, storms, etc.) for each year. Raw monitoring data will be

[3] Transplant areas will be delineated with stationary markers (e.g., buoy attached to helical anchor in the sediment) to ensure accurate transplant depths.

provided to the Trustees. Annual monitoring reports will be used to document conditions and inform adaptive management decisions.

Prior to sand cover placement, eelgrass and macrovegetation will be delineated within the sand cover placement area using the methods and protocols described in the Eelgrass Scope of Work. The survey will be conducted no more than one survey season (June 1 through October 1) prior to sand cover placement to incorporate temporal changes in growth into the sand cover design and avoid smothering existing eelgrass patches.

Eelgrass plantings will not begin until approximately one year after completion of sand cover construction, unless the Companies and Trustees agree that an earlier planting date is preferable, after which a ten-year adaptive management program will be implemented to optimize eelgrass restoration and sand cover success, as described below.

Within one year after completion of sand cover construction, and after the winter season, a post-construction survey will be conducted to inspect the placed thin layer sand cover. The survey, described in the Eelgrass Scope of Work, will address three objectives: 1) verify that there were no construction-related impacts to the existing eelgrass meadow and northern patch; 2) determine the compaction level of the thin sand cover placed within the Bay, and 3) identify the most promising locations within cover placement areas for test transplants to occur in Year 1. Characteristics of suitable test transplant areas include:

- Smooth, flat substrate
- Depths between approximately -3 to -6 feet MLLW
- Consolidated sediment

Eelgrass will be sourced from local donor beds (or other agreed-upon healthy donor beds) as described in the Eelgrass Scope of Work. If donor beds are unable to provide enough eelgrass material, or if DNR does not approve harvesting of the amount of eelgrass shoots needed, other donor beds will be located and used. Eelgrass will be harvested from donor beds at the same depths targeted for transplanting (-3 to -6 feet MLLW). Transplanting will follow methods and protocols established by DNR at similar Puget Sound transplant sites (e.g., Joemma Beach State Park). Planting unit preparation will include attaching eelgrass to lengths of metal rod or landscape staples using jute twine. A shore team will assemble eelgrass transplant units for divers, who will plant the shoots at a density of approximately 70 shoots per square meter. Planting details and methods will be approved by the Trustees prior to each planting event.

As described below, the overall schedule and level of adaptive management of eelgrass planting will be as follows, and as more specifically directed by the final planting plan for each planting event:

- Year 0: placement of sand cover material
- Year 1: 1,800 shoots planted in 3 plots
- Year 3: 4,200 shoots planted in 7 plots
- Year 6: 3,000 shoots planted in 5 plots
- Year 9 1,800 shoots planted in 3 plots

Year 1 test transplants will focus on the three most promising transplant locations within the covered areas, as described in the Eelgrass Scope of Work. The three test transplant plots, each approximately 8.6 square meters (m^2), will be planted at a density of approximately 70 shoots/m^2, totaling approximately 1,800 shoots.

Eelgrass transplant success will initially be monitored approximately three weeks after transplanting, and again at approximately six and 12 months (Year 2) after transplanting. Monitoring will track survival, infilling/patch spread, reproductive shoots, and volunteer patches, and will be performed along representative transects using methods developed and refined at other similar Puget Sound transplant sites, and in consultation with DNR and the Trustees. The monitoring data will be used to identify the most promising locations and methods for larger-scale transplanting in Year 3, as described in a work plan to be approved by the Trustees.

In Year 3, seven transplant plots, each approximately 8.6 m^2, will be planted at a density of approximately 70 shoots/m^2, resulting in transplanting 4,200 shoots onto the covered areas. Where possible, plots will be established near planted plots or volunteer patches to encourage plots merging and creating larger seed banks to aid in natural site recruitment. In Years 4 and 5, the plots will be monitored for survival, infilling or patch spread, reproductive shoots, and volunteer patches. Based on the results of the monitoring, a third planting will be performed in Year 6, focusing on the five most promising transplant plot locations across the restoration areas, totaling an additional 3,000 shoots. After monitoring in Years 7 and 8, a fourth and final planting will be performed in Year 9, focusing on the three most promising transplant plot locations across the restoration areas, totaling an additional 1,800 shoots. Monitoring will continue in Year 10 to document the outcome of eelgrass restoration. Upon completion of the Year 10 monitoring, the Companies will prepare a draft report summarizing the transplanting efforts and monitoring data from Year 0 through Year 10 for Trustee review and comment. The report will include an assessment of factors that influenced the outcome of the restoration project. The Companies will incorporate Trustee comments into a final report and submit it to the Trustees for approval.

2.4 Final Design and Permitting Process

As discussed in Section 1.1, the restoration projects described in this SOW are intended to be implemented concurrent with the former sawmill facility cleanup to achieve efficiencies and

maximize protection. After receiving permits required for construction of the restoration projects and working with Ecology to develop integrated cleanup and restoration designs to optimize both habitat functions and protection as outlined in Section 2.1, the Companies will submit draft and final design packages to the Trustees for approval. The design package will include the following:

- Detailed 90 percent and final engineered design drawings depicting restoration elements
- Description of construction sequencing
- Planting plans
- Maintenance and monitoring plans as described in Sections 3.1 and 3.2

Permit applications and supporting documents will be submitted to the regulatory agencies. The restoration projects must comply with all relevant laws. Anticipated permits may include, but are not limited to:

- U.S. Army Corps of Engineers Nationwide Permit 27 – Aquatic Habitat Restoration, Enhancement, and Establishment Activities, including a Biological Assessment and Cultural Resources Assessment
- Ecology Water Quality Certification and Construction Stormwater General Permit
- WDFW Hydraulic Project Approval
- DNR Easement
- DNR Right-of-Entry Permit
- Kitsap County State Environmental Policy Act review, Shoreline Substantial Development Permit, and Grading Permit

Permit requirements may require changes to the final design. To achieve efficiencies and maximize protection, final restoration project designs will be developed by the Companies and Ecology concurrent with the former sawmill site upland cleanup design outlined in Section 1.1, also consistent with the EDR and Port Gamble Bay Operations, Maintenance, and Monitoring Plan (OMMP; Anchor QEA 2018) requirements. Designs of the restoration projects will optimize both habitat functions and protection considering cost-benefit analyses, while providing sufficient ecological value to resolve the Companies' assessed natural resource damages. Designs must be approved by the Trustees and Ecology before the Companies are authorized to begin construction (Section 4).

3 Maintenance and Monitoring and Permanent Stewardship

This section describes the initial maintenance and monitoring plans that will be developed during final design and implemented for ten years following completion of construction, as described in the NRD Consent Decree ("Establishment Period") to ensure successful habitat restoration projects. As described in more detail in Sections 3.1 to 3.4, and in Tables 2 and 3, during the Establishment Period, the Companies will be responsible for performing initial maintenance and monitoring activities for the Southern Mill Site Shoreline Restoration, the Western Bay Nearshore Eelgrass Transplanting, and the Western Bay Nearshore Thin Sand Layer Cover.

This section also describes the long-term maintenance and monitoring requirements for the Southern Mill Site Riparian Vegetation Area and Southern Mill Site Intertidal and Beach Backshore Areas for the years 11 through 30, after the completion of the Establishment Period. For years 11 through 30 after the Establishment Period, the Companies will be responsible for conducting long-term maintenance and monitoring of Intertidal substrate size and stability as defined in Tables 2 and 3. A designated Trustee will perform long-term maintenance and monitoring for the Southern Mill Site Riparian Vegetation Area and the footprint of the South Mill Site Beach Backshore as defined in Tables 2 and 3. These long-term maintenance and monitoring requirements are discussed in Section 3.5.

Lastly, Section 3.5 describes the permanent stewardship requirements for maintaining the habitat restoration projects in perpetuity. The Companies will be responsible for funding permanent stewardship. A designated Trustee or an entity mutually agreed upon by all the Trustees will perform permanent stewardship activities.

3.1 Initial Maintenance Plan

The primary goal of the initial maintenance plan is to ensure that the restoration projects' conservation values are maintained. The Companies will conduct adaptive management actions during the Establishment Period to ensure that the restoration projects meet their goals and provide the anticipated ecological services per this SOW and the terms of the NRD Consent Decree. For example, during the Establishment Period, adaptive management actions may include work to ensure that newly planted vegetation within the 150-foot-wide mill site riparian shoreline buffer area becomes established and is not outcompeted by invasive species or destroyed by herbivores. Adaptive actions will also consider intertidal stability and substrate grain size. The maintenance plan, its implementation, and adaptive management are key factors for successful restoration.

The initial maintenance plan will include methods, frequencies, and duration for the following activities, such as:

- **Intertidal Substrate Size and Stability.** Placement of a feeder berm and ensuring that intertidal elevations remain stable and beach substrate remains within the size range suitable for target species.
- **Public Access Restriction.** Signage, fencing, and deterrent vegetation will be installed to discourage trespassing and protect restoration benefits. A split rail fence will be installed along the north and west perimeter of the Southern Mill Restoration Area. At the southern end of the Restoration Area, fencing will not extend all the way to the bluff, to leave a corridor for wildlife. Nootka rose will be planted along the fence to provide an additional deterrent to public access. Signs will be installed every 100-200 feet along the fence identifying the "Protected Habitat Restoration Area" and explicitly restricting public entry. Signs will be spaced more closely (i.e., 100 feet) in areas that are more accessible by foot or seacraft, such as along the beach, and close to public trails or open recreation areas. Weatherproof placards will be installed near both ends of the fence, to educate the public about the Mill Site, NRD process and the restoration project's habitat values. The Companies will collaborate with, and secure approval from, the Trustees on placard design, materials, and placement. Fencing and signage installation will be completed prior to removal of the existing chain link fence.
- **Watering.** Watering will be necessary depending on the date of planting and the amount of rainfall throughout the year. Monitoring of rainfall and soil moisture will be used to determine the need for watering during the first two years after plant installation. Watering will be accomplished using a watering truck or temporary irrigation.
- **Mulching.** Mulching will occur during initial plant installation. Supplemental mulching may occur during weeding activities, as necessary.
- **Weeding.** Weeding around shrubs and trees will be particularly important during the summers of the first two years of the Establishment Period to ensure establishment and prevent stress to the plants from competition for resources. Weeding will also be considered throughout the entire Establishment Period to ensure the site meets vegetation performance standards. Weeding frequency can be gauged by necessity but will occur at least twice during the spring (ideally May and June), and then once more during the summer months (August or September). Common weed species that will be removed include noxious plants listed on the Washington State Noxious Weed List (https://www.nwcb.wa.gov/printable-noxious-weed-list) or any similar list developed by the Kitsap County Noxious Weed Control Board. Native plant natural colonization by trees, shrubs, and herbs will be allowed to occur and incorporated into the monitoring success criteria. Weeds will be removed by hand and mechanical means (including possible use of tools like "weed wrenches"), to the extent practicable. If some weeds persist despite these hand and mechanical methods, and they prevent meeting

establishment criteria for the native plants, then selected herbicide use by a licensed herbicide applicator will be used, in consultation with the Trustees.

- **Dead Plant Removal.** Dead native plant material will be left in place unless it poses a hazard and will only be removed after scheduled monitoring to allow for the accurate assessment of planting success needed for the monitoring program. Replacement planting will be detailed under contingency measures in the monitoring plan. This will include species recommendations to maintain the desired diversity in the plant communities of the buffer areas.
- **Debris Removal.** Anthropogenic material that potentially impairs habitat functions will be removed from the sites on an as-needed basis.

3.2 Monitoring Plan

The primary objective of the initial monitoring plan is to verify that the goals and objectives of the habitat projects are being achieved. Implementation of the monitoring plan will determine if restoration objectives are being met, or whether maintenance needs to be modified. It will also determine whether contingency measures or adaptive management strategies need to be implemented, and if they are implemented, whether they are successful.

The initial monitoring plan will include the following elements:

- **Goals and Objectives.** The overall goal of the habitat restoration projects described in this SOW is to create self-sustaining habitats that will restore and enhance ecosystem processes that support the array of key species groups the Trustees believe may have been injured due to contamination in the Bay. The proposed projects are intended to restore shoreline processes and enhance habitat for benthos, forage fish, shellfish, and juvenile salmonids in the Bay.
- **Success Criteria.** Success criteria and monitoring methods and frequency summarized in Table 3 are the result of a cooperative effort between the Companies and Trustees. The success criteria will be used during the monitoring period to determine if the project goals are being met. These criteria are adapted from monitoring guidelines used successfully at other similar Puget Sound restoration projects. Each criterion can be measured and has contingency or adaptive management measures that can be applied during the monitoring period.
- **Performance Monitoring.** An initial round of post-construction monitoring will be performed immediately following completion of construction (Year 0) and will serve as the baseline for future comparisons. Restoration project monitoring will be performed concurrent with OMMP monitoring (summer sampling; Anchor QEA 2018) to maximize overall efficiencies (Table 3).
- **Contingency Measures.** Contingency measures will be developed as part of the OMMP for each success criterion to describe response measures if a success criterion is not met.

Contingency measures are activities designed to help meet success criteria, such as replanting upland vegetation or installing supplemental irrigation (Table 3). Prior to any contingency measure being implemented, an investigation as to why the criterion was not met will be conducted. If a success criterion is not met because of installation flaws or lack of routine maintenance, then contingency measures will be implemented. If the success criterion is not met because of changed environmental conditions or insufficient routine maintenance, then an adaptive management approach will be used as described in the next section.

- **Adaptive Management.** As monitoring data are collected, they will be examined and interpreted relative to the overall success criteria in Table 3. Prior to any adaptive management measures being implemented, the cause for the failure to meet a success criterion will be investigated. If any success criterion is not met in Year 4 or subsequent years, the Companies and the Trustees will evaluate the following:
  - Whether the cause of not meeting success criteria be identified?
  - Whether it is technically feasible to modify or adjust the physical, chemical, or biological features of the restoration project such that a parameter could subsequently achieve an acceptable level of development?
  - Whether the cost of the proposed modification is proportionate to the projected success of the effort?

The Companies and Trustees will meet in good faith and use their best efforts to reach consensus on appropriate adaptive management actions, and the Companies will implement those actions. If no agreement can be reached, the Companies shall, at a minimum, implement the contingency measures described in Table 3. If needed, adaptive management measures may occur at any time during the Establishment Period.

3.3 Initial Maintenance and Monitoring Reports

After each monitoring event, as described in Section 3.2, the Companies will prepare and submit to the Trustees a draft data summary memorandum within 90 days of receiving all validated laboratory data for each monitoring event. The memorandum will include the following:

- Summary of maintenance activities that were conducted
- Summary of monitoring (sampling and analysis)
- A narrative description of methods and contingency measures taken
- Data tables and species lists
- Photographs and/or maps showing extent of vegetation coverage with dominant vegetation types
- Identification of planted versus naturally recruited vegetation
- Interpretation of results, evaluation relative to success criteria
- Recommendations

The Trustees will review the submitted draft data summary memorandum. The Trustees shall either provide comments and request additional information or approve the draft data summary memorandum, at which point it becomes final. Within 90 days of completion of the Establishment Period, the Companies will provide a Notice of Completion of Habitat Development and Initial Monitoring Obligations to the Trustees for review and approval in accordance with the NRD Consent Decree.

3.4 Long-Term Maintenance and Monitoring

After the completion of the Establishment Period, long-term maintenance and monitoring will be conducted during Years 11 to 30, as described in Table 4, to ensure that habitat functions of the restoration projects are maintained at the Southern Mill Site. This includes, but is not limited to, maintaining the Southern Mill Site upland riparian vegetation and beach area, among other habitat attributes. The division of responsibility for performing long-term maintenance and monitoring is set forth in Table 4.

3.5 Permanent Stewardship

The intention of the parties is that ecological functions provided by the habitat projects will be maintained in perpetuity. The provisions of the NRD Consent Decree address permanent stewardship and require assurance that the properties will not be used in a manner inconsistent with this intent. Conservation Easement(s) attached to the NRD Consent Decree are intended to support permanent stewardship by protecting ecologic functions provided by the habitat projects. A permanent stewardship plan will be developed to be implemented after Year 30 of the long-term maintenance and monitoring is completed, to ensure that the project continues to function as intended. The permanent stewardship plan will be developed by the Trustees, the Companies, and the long-term steward, then submitted for Trustee review and approval during Year 12 (Year 2 of the long-term maintenance and monitoring performance period). The permanent stewardship plan shall detail actions that will prevent the degradation of project habitat and the projects' associated ecological services from invasive species, debris, and other impacts. Subject to available funding, the Trustees intend to perform activities necessary to prevent and address degradation, such as inspections, maintenance, monitoring, and management, as identified in the permanent stewardship plan. The permanent stewardship plan will also set forth schedules and funding sources.

4 Construction Completion and Schedule of Required Deliverables

4.1 Construction Completion Report

Within 60 days of completion of the upland and in-water construction activities, excluding eelgrass transplanting, the Companies will prepare a construction completion report that describes the as-built condition of the restoration projects. The Companies will then submit this report as part of the Notice of Completion of Construction under the NRD Consent Decree and the report will serve as the baseline for monitoring that will be conducted as described in Section 3.2.

4.2 Schedule of Required Deliverables

Table 5 summarizes the schedule of required deliverables and deadlines for the work components outlined in this SOW.

5 References

Anchor QEA, 2015. *Engineering Design Report – Port Gamble Bay Cleanup Project*. Prepared for Washington State Department of Ecology and Pope Resources, LP/OPG Properties LLC. May 2015.

Anchor QEA, 2018. *Operations, Maintenance, and Monitoring Plan – Port Gamble Bay Cleanup Project*. Prepared for Washington State Department of Ecology and Pope Resources, LP/OPG Properties LLC. January 2018.

Anchor QEA, 2020. *Cleanup Action Plan – Upland Area of the Port Gamble Bay and Mill Site*. Prepared for Washington State Department of Ecology. September 2020.

Anchor QEA, 2021. *2020 Post-Construction Monitoring Report – Port Gamble Bay Cleanup Project*. Prepared for OPG Port Gamble, LLC and Rayonier, Inc. March 2021.

Anchor QEA and Grette, 2021. *Supplemental Pre-Design Data Summary Memorandum: Western Port Gamble Bay Restoration*. Prepared for Port Gamble Bay Natural Resource Trustees and Washington State Department of Ecology Toxic Cleanup Program. September 2021.

Ecology, 2013. *Cleanup Action Plan, Port Gamble Bay*. Exhibit A to the Port Gamble Bay Consent Decree No. 13-2-02720-0.

Tables

Table 1

Representative Forage Fish and Shellfish Species Habitat Requirements

Target Species	Burial Depth (inches)	Substrate			Approximate Port Gamble Bay Elevation (feet MLLW)
		Gravel[1]	Sand[2]	Silt[3]	
Surf Smelt	Surface to 3	X	X	--	+12 to +5
Pacific Sand Lance	Surface to 3	X	X	--	+10 to +5
Manila Clam	2 to 4	X	X	X	+6 to -1
Littleneck	4 to 6	X	X	X	+4 to -1
Cockle	1 to 2	--	X	X	+4 to -2
Mussel	Surface	N/A			+4 to -1.5
Oyster	Surface	N/A			+4 to-1.5

Notes:
1. Gravel grain sizes typically range between 0.2 and 2.5 inches.
2. Sand grain sizes typically range between 0.03 and 0.2 inch.
3. Silt grain sizes typically range between 0.0002 and 0.03 inch.
MLLW: mean lower low water
N/A: not applicable
X: predominant substrate type in productive beaches

Table 2

Minimum Habitat Restoration Areas

Habitat Strata	Elevation Range (feet MLLW)	Southern Mill Site Shoreline Restoration		Western Bay Nearshore Restoration	
		Construction Footprint (acres)	Conservation Easement (acres)	Construction Footprint (acres)	Conservation Easement (acres)
Vegetative Riparian	Above +12	6.8	7.6	0	0
Backshore	+12 to +10	0.4	0.5	0	0
Intertidal	+10 to -4	1.5	5.1	1	2
Shallow Subtidal	-4 to -15	0.0	0.6	10	19
Deep Subtidal	Below -15	0.0	0.3	0	0

Notes:
MLLW: mean lower low water

Table 3

Restoration Project Success Criteria

	Southern Mill Site Shoreline Restoration				Western Bay Nearshore Thin Layer Sand Cover			Western Bay Nearshore Eelgrass Transplanting
	Intertidal Stability	**Intertidal Substrate**	**Riparian Vegetation**	**Backshore Vegetation**	**Cover Stability**	**Porewater Protection**	**Benthic Invertebrates**	
Performance Standard	Relative to Year 0, < 0.5-foot mean elevation loss and < 10% transects > 1.0-foot mean elevation loss over time, averaged across restoration area (top of bank to MLLW)	Relative to Year 0, no significant (P > 0.05) increase in mean grain size over time, averaged across intertidal restoration area	Native* riparian vegetation > 75% survival in Years 1, 2 and 4, percent cover stable or increasing over time, and not less than 80% areal coverage at Year 10, and <5% invasive[a] plant coverage in Years 1, 2, 4, 7 and 10, averaged across riparian shoreline buffer area. A diversity of species should be present – a minimum of 5% cover each of six native tree species shall be present	< 5% invasive[a] plant coverage, averaged across backshore area	Mean cover thickness > design thickness (6 to 12 inches) and < 10% of cover area with < 70% of design thickness (4 to 8 inches), averaged across cover area	Mean porewater hydrogen sulfide concentration no different (P > 0.05) from regional reference area or below 0.07 milligrams per liter, averaged across cover area	Mean abundance of Crustacea, Mollusca, and Polychaeta no different (P > 0.05) from regional reference area, averaged across cover area(s)	Restore eelgrass meadows as per schedule as listed in Section 2.3
Monitoring Tasks	Post-construction shoreline slope elevation profiles along transects established as part of Year 0 (as-built) survey	Substrate sampling and analysis along transects established as part of the Year 0 (as-built) survey	Percent cover and survival of native* species; percent cover of invasive[a] species	Percent cover and survival of native* species; percent cover of invasive[a] species	Sediment core sampling through cover	Sediment grab sampling	Sediment grab sampling	Surveys of survival, infilling/patch spread, density, reproductive shoots, and volunteer patches
Monitoring Methods	Beach transect surveys (at 15 established profile locations) performed perpendicular to the slope direction along the shoreline from the top of	0- to 2-foot composite sediment samples collected at 8 established sampling locations aligned along every other	Permanent statistically-based surveys (line intercept, point intercept-spherical densitometer, and/or quadrats), and photo points); transects will encompass project areas suitable for riparian vegetation	Permanent statistically based surveys (line intercept, point intercept-spherical densitometer, and/or	Five > 18-inch sediment cores advanced on grid to determine interface depth between cover and underlying sediment	Five surface sediment (0- to 4 inch) grab samples collected on cover grid and at regional reference area; ex situ diffuse gradient in thin film porewater	Five surface sediment (0- to 4inch) grab samples collected on cover grid and at regional reference area; benthic invertebrates identified to	Towed video monitoring surveys in transplant areas and reference** location from MLLW to -20 feet MLLW; diver surveys in and adjacent to transplant plots and at reference location; photosynthetically

	Southern Mill Site Shoreline Restoration				Western Bay Nearshore Thin Layer Sand Cover			Western Bay Nearshore Eelgrass Transplanting
	Intertidal Stability	**Intertidal Substrate**	**Riparian Vegetation**	**Backshore Vegetation**	**Cover Stability**	**Porewater Protection**	**Benthic Invertebrates**	
	the bank down to -2 feet MLLW	transect); grain-size distribution analysis	establishment; data analysis will include an estimate of the areal extent of riparian cover and changes over time; surveys will be conducted by foot through Year 4 and through Year 10 unless both the Trustees and Companies agree to replace foot surveys with aerial photography surveys after Year 4	quadrats) and photo points); transects will encompass project areas suitable for backshore vegetation establishment; surveys will be conducted by foot through Year 4 and through Year 10 unless both the Trustees and Companies agree to replace foot surveys with aerial surveys after Year 4		hydrogen sulfide analysis	lowest practical taxonomic level and enumerated	available radiation (PSAR), temperature, and depth monitoring at three representative stations and one reference station
Monitoring Schedule	Summer surveys in Years 0, 1, 2, 4, 7, and 10 (during the same month);	Summer surveys in Years 0, 1, 2, 4, 7, and 10	Summer surveys in Years 0, 1, 2, 4, 7, and 10; survival surveys only through Year 4	Summer surveys in Years 0, 1, 2, 4, 7, and 10	Summer surveys in Years 0, 1, 2, 4, 7, and 10	Summer surveys in Years 0, 1, 2, 4, 7, and 10; potential need for contingency actions first considered in Year 4	Summer surveys in Years 0, 1, 2, 4, 7, and 10; potential need for contingency actions first considered in Year 4	Transplanting in Years 1, 3, 6, and 9; sensors for PSAR, depth, and temperature monitoring May – August (minimum 4-month duration) and summer dive and/or July towed video or ROV surveys in Years 0, 1, 1.5, 2, 4, 5, 7, 8, and 10

	Southern Mill Site Shoreline Restoration				Western Bay Nearshore Thin Layer Sand Cover			Western Bay Nearshore Eelgrass Transplanting
	Intertidal Stability	**Intertidal Substrate**	**Riparian Vegetation**	**Backshore Vegetation**	**Cover Stability**	**Porewater Protection**	**Benthic Invertebrates**	
Contingency Measures	Evaluate reasons for loss of elevation and implement contingency actions such as replacing the feeder berm or adding additional material with different specifications	Evaluate reasons for increased grain size and implement contingency actions such as replacing the feeder berm or adding additional material with different specifications	Evaluate reasons for lower native cover and/or survival and/or exceedance of invasive criterion and implement contingency actions such as replanting with alternate species, installing supplemental irrigation, or weeding	Evaluate reasons for lower native cover and/or survival and implement contingency actions such as replanting with alternate species, installing supplemental irrigation, or weeding	Evaluate reasons for loss of cover and implement contingency actions such as adding additional material with different specifications	Evaluate reasons for elevated hydrogen sulfide levels and implement contingency actions such as adding additional material with different specifications	Evaluate reasons for lower benthic invertebrate density and implement contingency actions such as adding additional material with different specifications	Modify transplanting in Years 3, 6, and 9, using information from eelgrass surveys and sensors to inform transplant locations and methods

Notes:
MLLW: mean lower low water
P: statistical probability
*Native: Natural distribution in Western Washington including the Puget Sound Lowlands, and inclusive of planted and naturally colonized plants on the site.
**Reference location will be established within the larger existing eelgrass bed adjacent to sand cover placement/transplant areas.
[a]Invasive: Current Washington State Noxious Weed List developed by the Washington State Noxious Weed Control Board and any similar list developed by the Kitsap County Noxious Weed Control Board.

Table 4

Long-Term Maintenance and Monitoring Activities

"Long-Term Maintenance and Monitoring" means the maintenance and monitoring activities that will be performed with oversight by the Trustees during the twenty years after completion of Initial Maintenance and Monitoring period (activities detailed in Table 3) in the Southern Mill Site Shoreline (i.e., during Years 11-30 from completion of the restoration projects' implementation).

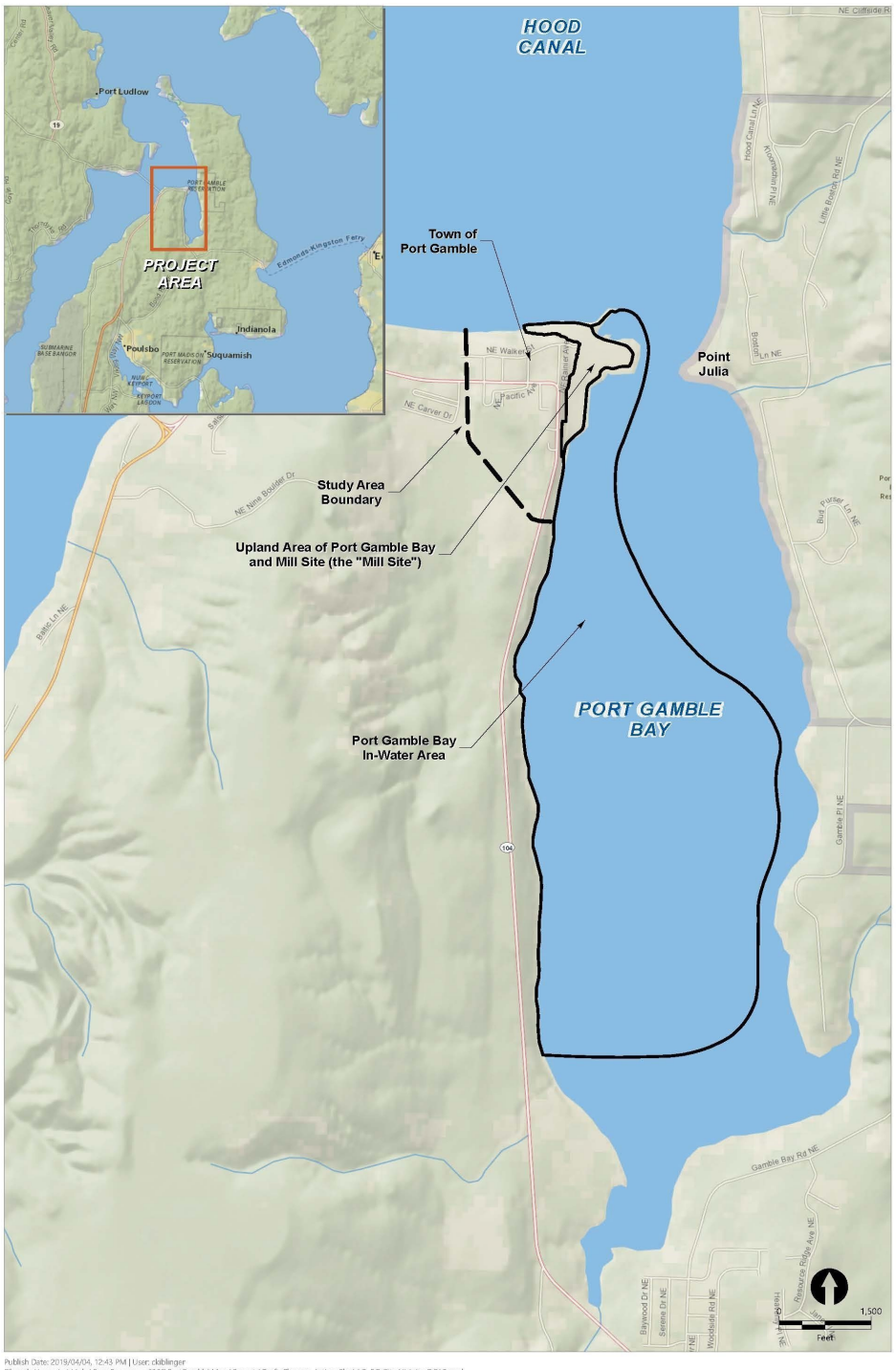
Long-Term Maintenance and Monitoring	
Annual Monitoring and Maintenance (Years 11 through 30) To be performed by the Trustees	Activities that will occur annually in the Southern Mill Site Riparian Vegetation Area: • Invasive species management • Trash removal (also applies to beach and backshore of Southern Mill Site) • Maintenance of signage and fencing Annual site inspection will be conducted on the Southern Mill Site to evaluate and correct any issues relating to the presence of invasive species, condition of fencing and signage, and trash/debris accumulation. A designated Trustee or their designated representatives(s) shall prepare and submit to each Trustee a brief annual report detailing site conditions and the corrective actions taken or proposed for invasive species management, signage and fencing repair, and trash/debris removal.
Five-Year Monitoring and Maintenance (Monitoring schedule: Summer surveys in years 15, 20, 25, and 30) To be performed by the Companies	Activities that will occur every five years in the Southern Mill Site Beach Area (overlaps with MTCA cleanup requirement to maintain sediment caps): • Monitoring and maintenance of intertidal stability • Monitoring and maintenance of intertidal substrate The same performance standards, monitoring tasks, monitoring methods, and contingency measures or adaptive management shall apply as in Years 0-10 (detailed in Table 3) for Intertidal Stability and Intertidal Substrate. The Companies or their designated representative(s) shall prepare monitoring reports and submit them to the Trustees or their designated representative(s) regarding the foregoing every five years. The monitoring reports at Years 20 and 30 shall also include (1) photographs and maps with polygons of subtidal, mudflat, marsh, and upland habitat and a summary of acreage of each type of habitat, documenting any changes since the previous monitoring event, and (2) a description of the feeder berm and whether it continues to help maintain the habitats.

Table 5

Schedule of Required Deliverables

Deliverables and Implementation Steps	Completion Schedule
Submit 90-100% Design Package to Trustees for Review (Companies)	Complete
Submit JARPA Permit Application (Companies)	Complete
Submit Final Design Package to Trustees for Review (Companies)	Complete
Prepare Construction Bid Documents (Companies)	Complete
Engage Contractor and Implement Construction (Companies)	Upon entry of Consent Decree
Submit Construction Completion Report and Notice of Completion of Construction to Trustees (Companies)	Within 60 days of Completion of Construction
Submit Eelgrass Scope of Work and Supplemental Eelgrass Transplanting Work Plans to Trustees for Review and Approval (Companies)	April 30, 2024 and in accordance with Section 2.3
Submit Eelgrass Annual Monitoring Reports to Trustees for Review and Approval (Companies)	Annually and in accordance with Section 2.3
Submit Eelgrass Draft Report to Trustees for Review and Comment (Companies)	Within 60 days of the end of Year 10
Submit Southern Mill Site Shoreline Restoration Initial Maintenance and Monitoring Plan to Trustees for Review and Approval (Companies)	Draft within 60 days of Completion of Construction; Final within 30 days of receiving Trustees' comments on Draft
Implement Initial Monitoring and Maintenance Plans (Companies)	Following Completion of Construction – "Year 0"
Submit Initial Maintenance and Monitoring Data Summary Memorandum after Each Event to Trustees for Review (Companies)	Within 90 days of receipt of all validated laboratory data
Submit Initial Maintenance and Monitoring Report to Trustees for Review (Companies)	Within 90 days of completion of the Establishment Period
Submit written Notice of Completion of Initial Habitat Development and Initial Monitoring Obligations for Trustee Approval (Companies)	Within 90 days of completion of the Establishment Period
Implement Long-Term Maintenance and Monitoring for the Southern Mill Site (See Table 4 for division of responsibility)	Following Completion of the Establishment Period (Year 11) through Year 30
Submit Long-Term Maintenance and Monitoring Reports for the Southern Mill Site (See Table 4 for division of responsibility)	Five-year intervals, years 15, 20, 25, and 30 and per the requirements in Table 5
Submit Permanent Stewardship Plan to Trustees for Review and Approval (Companies, Trustees, long-term steward)	Within 120 days of the completion of year 11 of Long-Term Maintenance and Monitoring
Implement Permanent Stewardship (Trustees)	After the 30-year long-term monitoring period is complete

Figures



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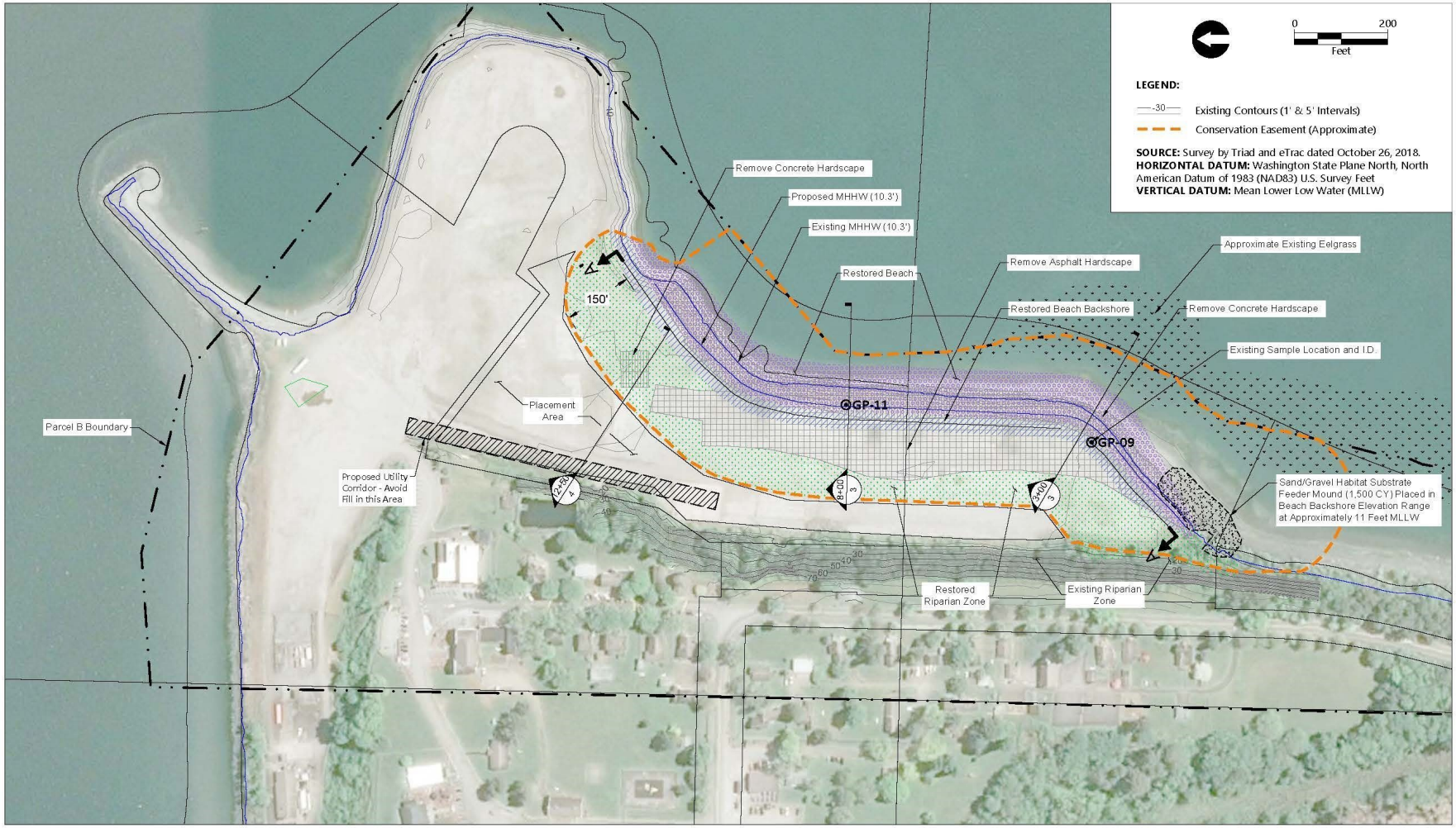
ANCHOR QEA

Figure 1
Site Vicinity Map
Port Gamble Bay Habitat Restoration



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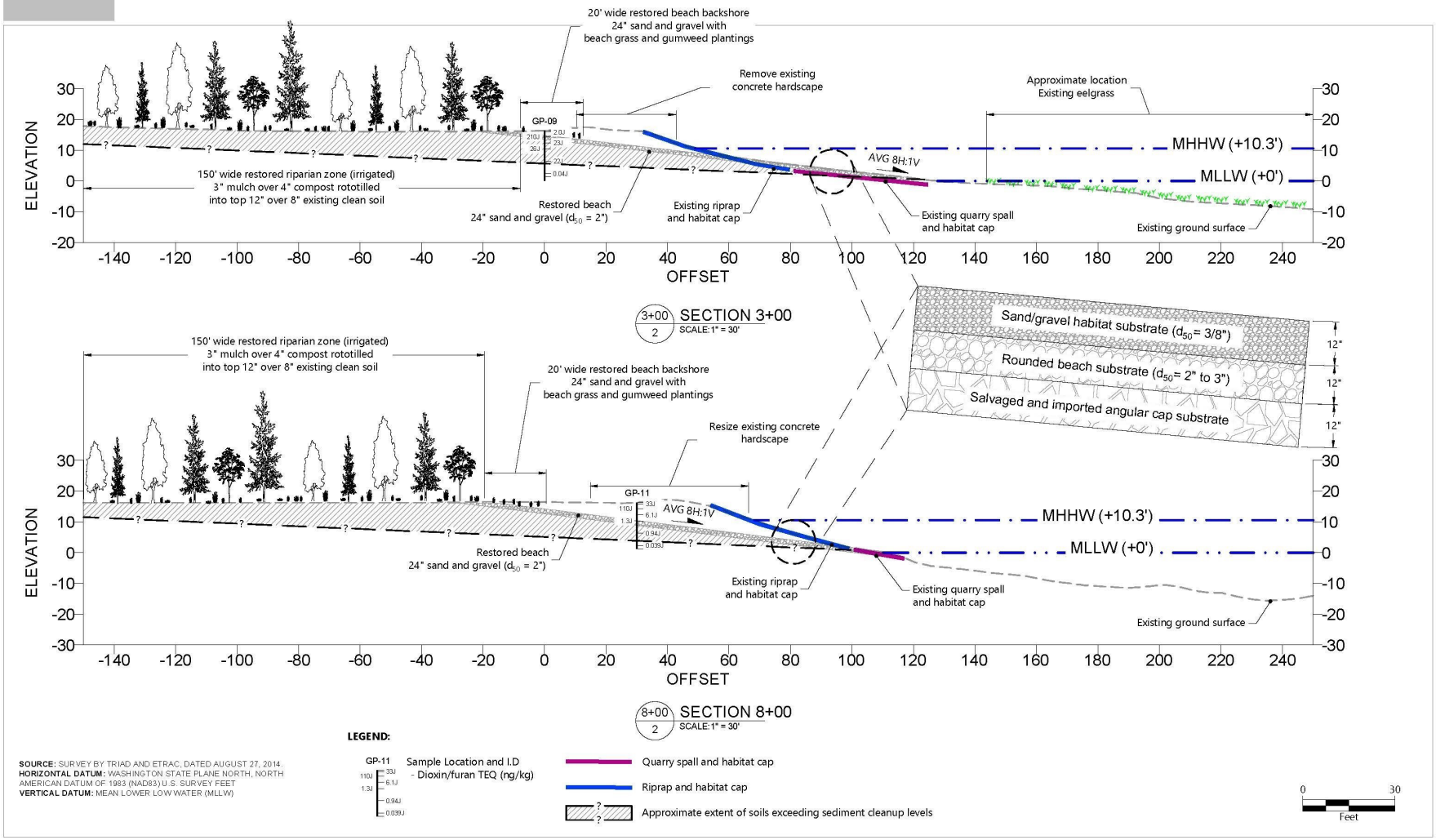
ANCHOR QEA

Figure 2
Southern Mill Site Shoreline Restoration Plan View
Port Gamble Bay Habitat Restoration



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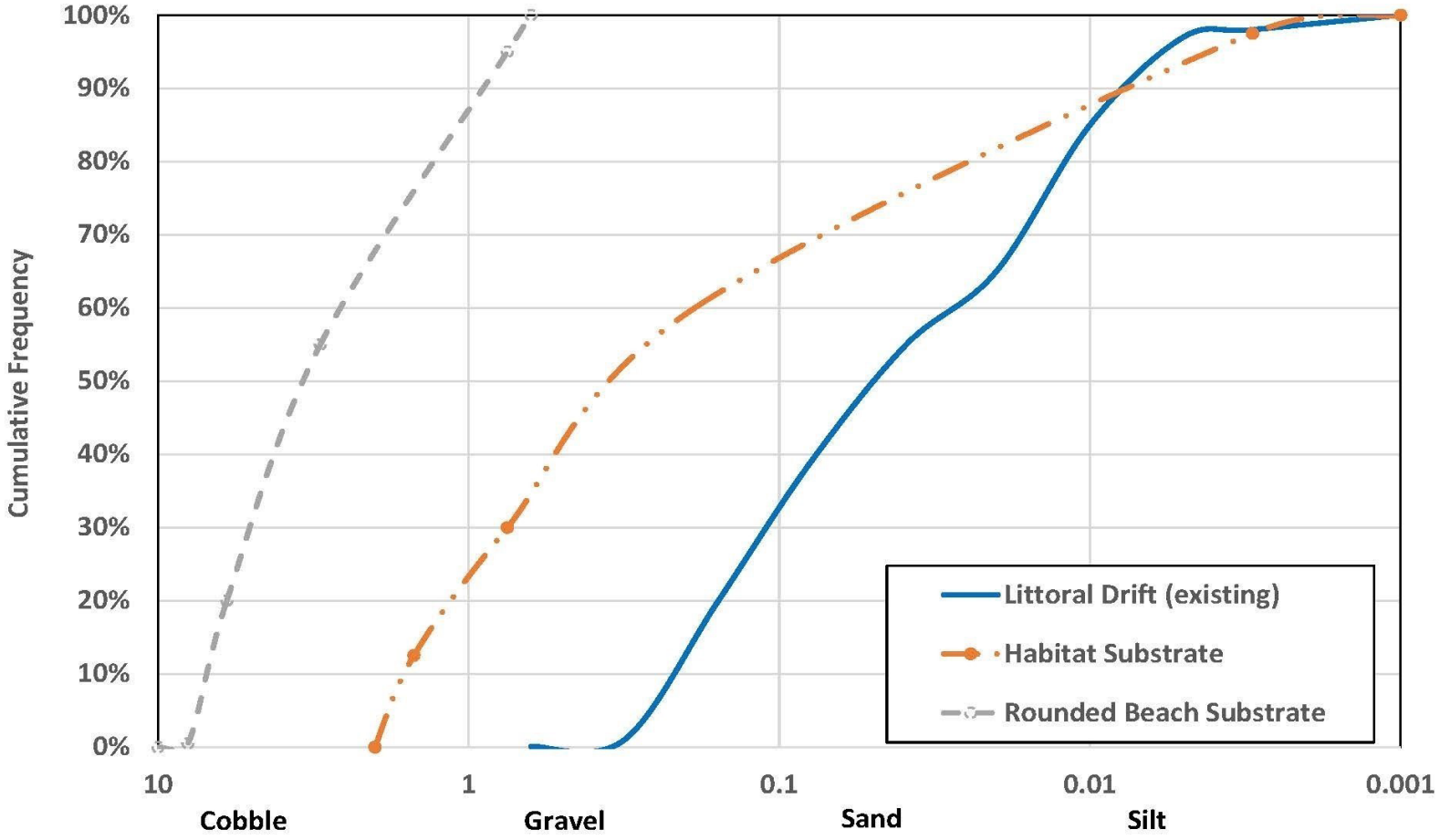
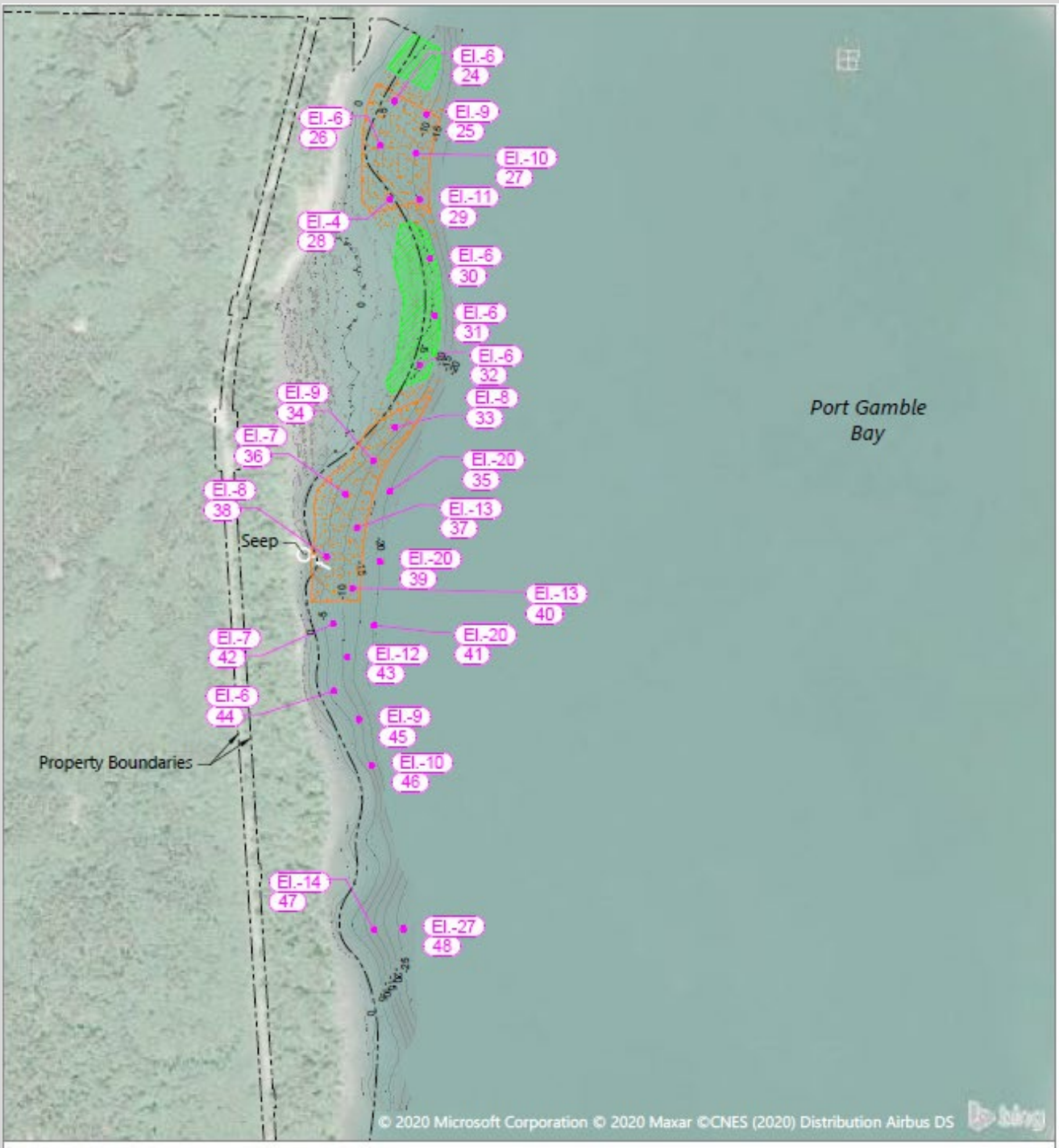
ANCHOR QEA

Figure 3
Southern Mill Site Shoreline Restoration Cross-Sections
Port Gamble Bay Habitat Restoration

Figure 4. Habitat Gradation Specifications: Southern Mill Site Beach





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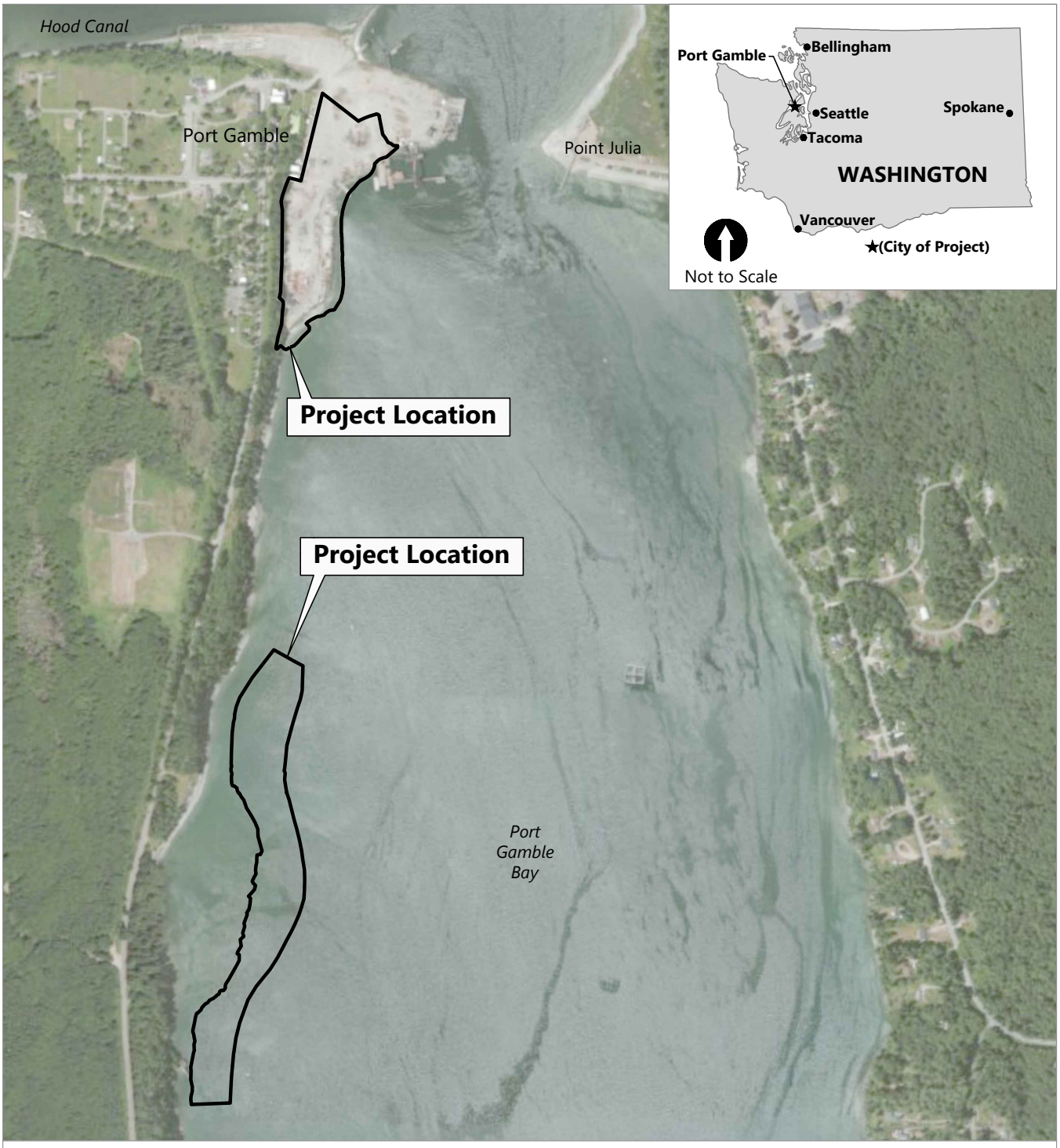
ANCHOR QEA

Figure 5
Western Port Gamble Bay Restoration Plan
Port Gamble Bay Habitat Restoration

Appendix B1



SOURCE: Aerial courtesy Esri et al.
HORIZONTAL DATUM: Washington State Plane North Zone, NAD83, U.S. Survey Feet

0 1000
Feet

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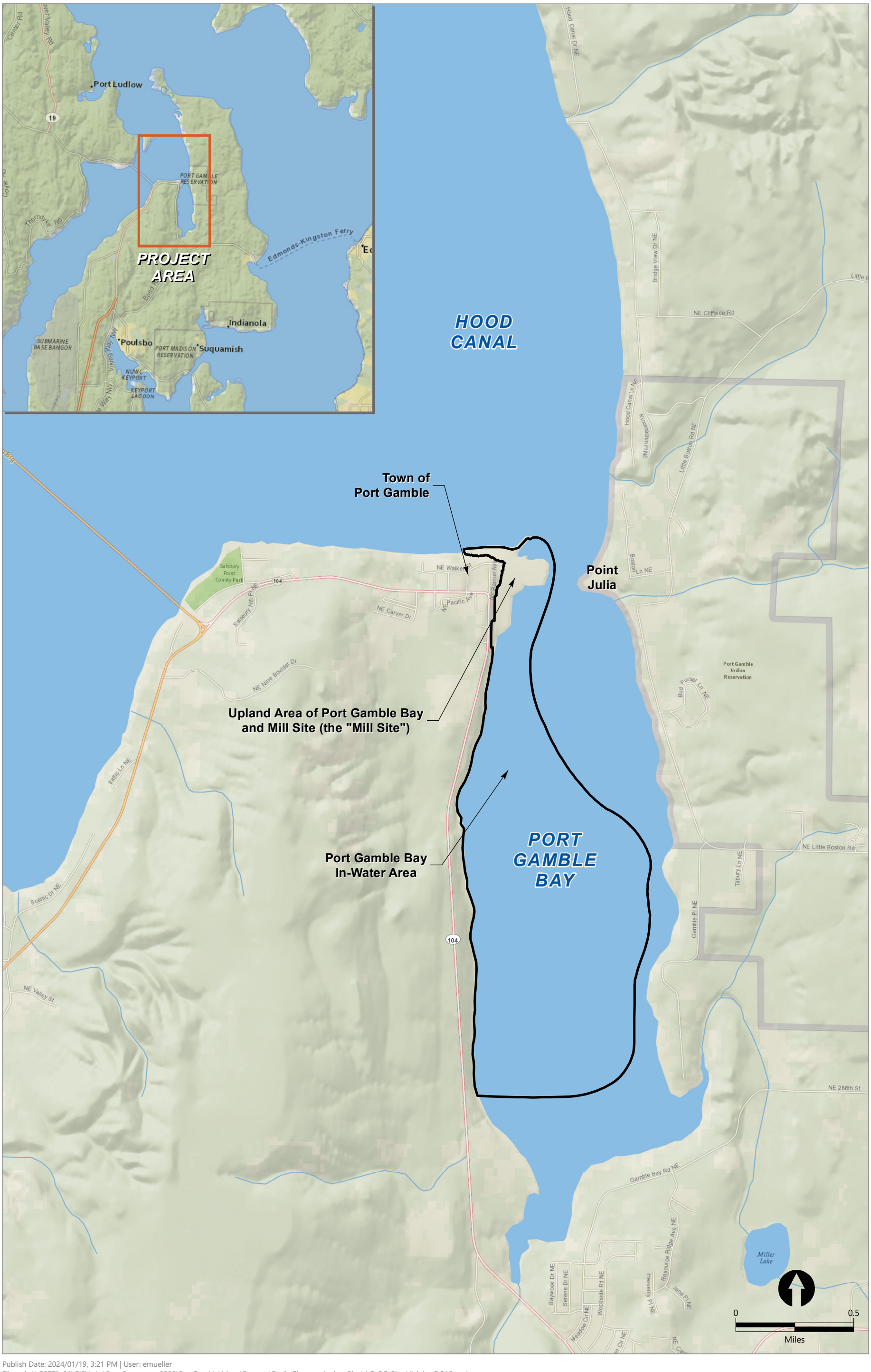
ANCHOR QEA

Exhibit B-1
Vicinity Map
Port Gamble Natural Resource Damage Settlement Consent Decree

Appendix B2



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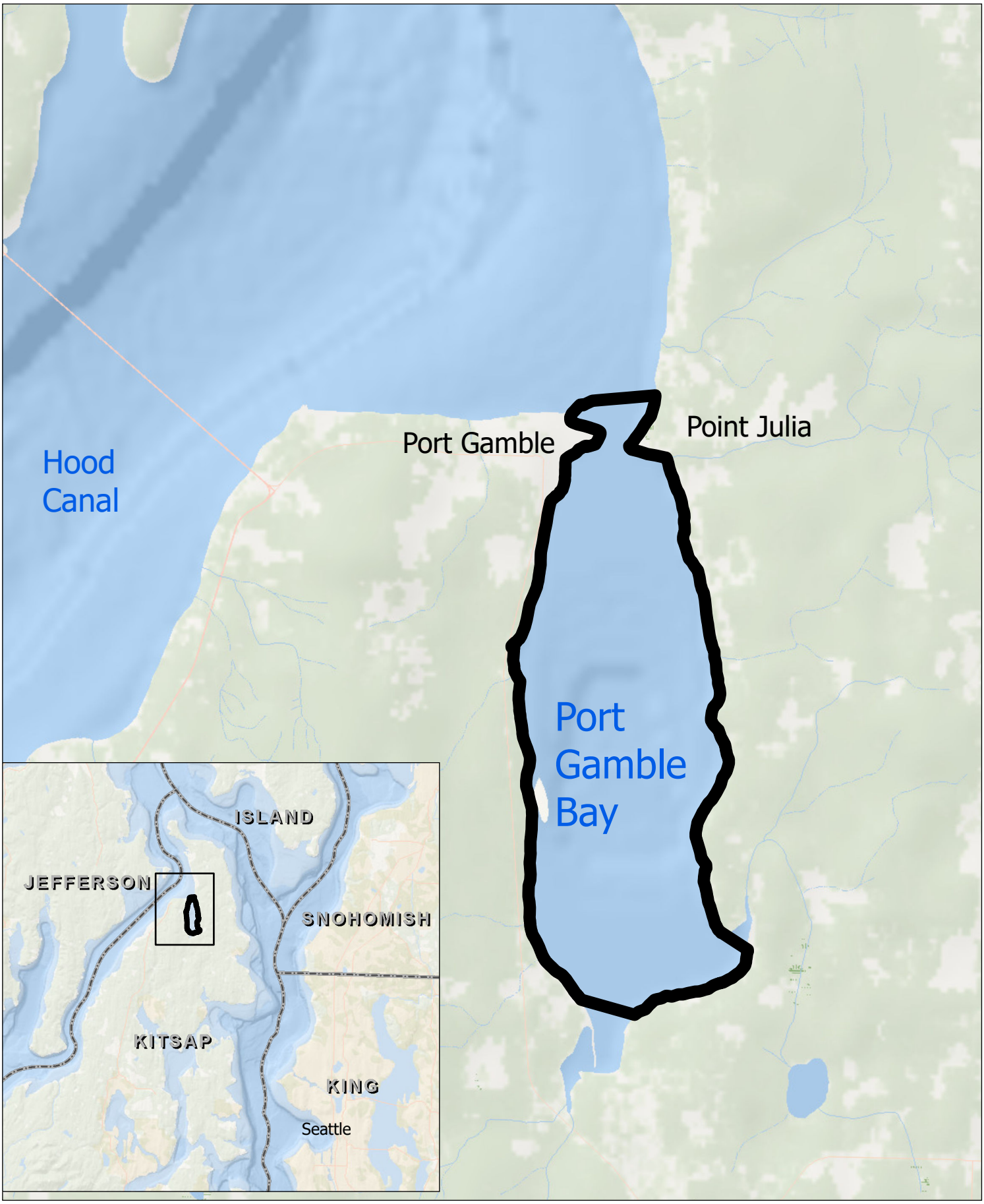
ANCHOR QEA

Figure B-2
Locations of Releases Resulting in Covered Natural Resource Damages
Port Gamble Natural Resource Damage Settlement Consent Decree

Appendix B3



0 0.5 1 Miles

0 0.3 0.6 1.2 Kilometers

N

Appendix C

Return Address Roma Call Port Gamble S'Klallam Tribe Natural Resources 31912 Little Boston Road NE Kingston, WA 98346
Document Title(s) (or transactions contained therein): Grant Deed of Conservation Easement
Reference Number(s) of Documents Assigned or Released: (on page N/A of document(s))
Grantor(s) (Last name first, then first name and initials): 1. OPG PORT GAMBLE LLC, a Washington limited liability company
Grantee(s) (Last name first, then first name and initials): 1. PORT GAMBLE S'KLALLAM TRIBE, a federally recognized Indian tribe
Legal Description (abbreviated): Ptn of Pcls A and B, Kitsap Co BLA, Rec No. 201706210123 as dptd on ROS, Rec No. 201706210124 ☒ Full legal description and figure are provided in Exhibits A and B, respectively.
Assessor's Property Tax Parcel/Account Number(s): Portions of 052702-3-004-2008 and 052702-3-003-2009.

GRANT DEED OF CONSERVATION EASEMENT

This Grant Deed of Conservation Easement ("Conservation Easement") is made by OPG Port Gamble LLC, a Washington limited liability company ("Grantor"), for the benefit of the Port Gamble S'Klallam Tribe, a federally recognized Indian Tribe ("Grantee"), acting on behalf of itself and the Jamestown S'Klallam Tribe; the Lower Elwha Klallam Tribe; the Port Gamble S'Klallam Tribe; the Skokomish Indian Tribe; and the Suquamish Tribe; the United States Department of the Interior; and the Washington Department of Ecology (collectively, the "Trustees"); named in the Consent Decree, which is defined below. (Grantor and Grantee shall hereinafter be referred to as the "Parties" and individually as a "Party.")

RECITALS

A. This Conservation Easement is made pursuant to and in accordance with the Consent Decree, Civil Case No. _____, _____, 20__ (the "Consent Decree"), by and among the Plaintiffs: the Trustees; and the Defendants: Grantor; Pope Resources, a Delaware Limited Partnership; and OPG Properties LLC.

B. The Trustees, under the authority of Section 107(f) of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9607(f); 40 C.F.R. Part 300, subpart G; and Wash. Rev. Code. § 70A.305.040(2), serve as natural resource trustees for the assessment and recovery of damages for injury to, destruction of, or loss of natural resources and natural resource services under their trusteeship located in or proximate to Port Gamble Bay, in Kitsap County, Washington.

C. Grantor owns the property described in Exhibits A and B, which consists of portions of Kitsap County Assessor's Tax Parcel Numbers 052702-3-004-2008 and 052702-3-003-2009, and which is the subject of the Consent Decree (hereinafter referred to as the "Property"). The Property was conveyed to Grantor pursuant to a Quit Claim Deed recorded on May 8, 2020 (Instrument No. 202005080091) in the Kitsap County Official Records. In the event of any differences or conflicts between the legal description in Exhibit A and the depiction in Exhibit B, the legal description in Exhibit A shall govern and control. The Consent Decree

requires the Companies to perform certain restoration projects ("Projects," as described in the Statement of Work attached as Exhibit C) on the Property and to dedicate the Property as habitat to be maintained in perpetuity. The values of existing and potential future habitat, existing and enhanced fish, wildlife, and plant populations, open space, natural processes preservation and restoration, and scenic opportunities are the "Conservation Values" to be protected and advanced by this Conservation Easement.

D. This Conservation Easement is being executed and delivered pursuant to the Consent Decree and the Statement of Work, which were both developed for the Property in cooperation with the Trustees. Documents supporting this Conservation Easement include the Consent Decree for Port Gamble Bay, No. 13-2-02720-0 (December 2013), the Cleanup Action Plan for Port Gamble Bay (December 2013), the Consent Decree for Port Gamble Bay Upland Area, No. 20-2-01674-18 (November 2020), and the Cleanup Action Plan for the Upland Area of the Port Gamble Bay and Mill Site (September 2020) (collectively, the "Cleanup Consent Decrees and Orders").

E. Grantee is a federally recognized Indian tribe, possessed of the full inherent sovereign powers of a government, is a signatory of the Treaty of Point No Point, and has organized under a Constitution and By-laws approved under the Indian Reorganization Act on September 7, 1939. This conveyance to Grantee in its sovereign status as an Indian tribe is further authorized pursuant to RCW 64.04.130. This Conservation Easement shall not be interpreted as in any way modifying, relinquishing, or restricting the rights of Grantee or Grantee's members under the Treaty of Point No Point.

COVENANTS, TERMS, CONDITIONS, AND RESTRICTIONS

NOW THEREFORE, in consideration of the recitals set forth above, which are true and correct and incorporated here by reference, and the mutual covenants, conditions, and promises contained in this Conservation Easement and the Consent Decree, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Grantor hereby voluntarily grants and conveys to Grantee this Conservation Easement in perpetuity over

the Property of the nature and character consistent with the Consent Decree and Statement of Work.

I. Purpose

The purpose of this Conservation Easement is to preserve, enhance, and protect the ecological functions provided by the Projects and to prevent any use of the Property that will impair or interfere with the Conservation Values of the Property. Grantor intends that this Conservation Easement will confine the use of the Property to activities consistent with such purposes, including, without limitation, those involving the preservation and enhancement of ecological values, native species, and their habitats in a manner consistent with the conservation purposes of this Conservation Easement.

II. Baseline Documentation

Grantee shall document specifically the Conservation Values of the Projects in an inventory of relevant features of the Property, which Grantee shall maintain on file at its offices, and which shall be incorporated into this Conservation Easement by reference ("Baseline Documentation"). The Baseline Documentation shall consist of reports, maps, photographs, and other documentation that provide, collectively, an accurate representation of the Property as of the Effective Date of this Conservation Easement. The Baseline Documentation is intended to serve as an objective, although nonexclusive, information baseline for monitoring compliance with the terms and conditions of this Conservation Easement. Ten years after the Effective Date of the Conservation Easement, Grantee shall prepare an update to the Baseline Documentation ("Baseline Documentation Addendum") to document any changes to the relevant features of the Property. Grantee shall timely provide Grantor with a copy of the Baseline Documentation and the Baseline Documentation Addendum.

III. Conveyance and Covenants

Grantor hereby binds itself, its successors, and assigns to the land use restrictions and conditions and such other rights conveyed in this Conservation Easement concerning the Property owned by the Grantor and described in Exhibits A and B. This instrument grants a valid

and enforceable conservation easement pursuant to Washington law and imposes certain conditions and restrictions on the Property. Grantor conveys to the Grantee full rights provided by this Conservation Easement and Washington law to enforce the restrictions, conditions, or other rights set forth herein.

Grantor certifies to the Grantee and its successors and assigns that Grantor owns the Property in fee simple and has the exclusive right to convey the Property or any interest therein, subject to matters of record and matters that would be disclosed by an accurate ALTA/NSPS land title report (including a list of exceptions/encumbrances).

Grantor makes the following covenants as to restrictions, conditions, and other rights concerning the Property and specifies that such covenants shall run with the land and shall be perpetual and binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property:

1. The Property is designated to be used for the Projects, as set forth in Exhibit C (and in any amendments to Exhibit C approved by the Trustees pursuant to the Consent Decree). Any authorized uses of the Property shall be consistent with the function, purpose, and requirements of the Projects.
2. Grantor and its successors and assigns are prohibited from doing or authorizing the following activities: any activity that interferes with, damages or disturbs the integrity or maintenance of the Projects; any activity that would damage, degrade, or diminish the Conservation Values of the Property; any activity that causes the release or exposure to the environment of any hazardous substances, including any aquaculture activities that could cause significant damage to any caps or habitat layers/substrate, except as may be legally required pursuant to the Consent Decree and the Cleanup Consent Decrees and Orders; or any activity that would otherwise interfere with the Projects such that it would adversely affect the likelihood of success of the Projects located on the Property.
3. Grantor shall undertake the reasonable actions of a prudent landowner to

discourage unlawful or unauthorized third-party activities that degrade or harm the Conservation Values of the Property or are inconsistent with this Conservation Easement. If Grantor has knowledge or is informed by Grantee that such activities are occurring on the Property, Grantor shall promptly take reasonable actions to stop such activities.

4. Grantor shall restore any Conservation Values of the Property that have been damaged by a breach of this Conservation Easement by the Grantor.

5. Grantee (including its employees, agents, and contractors) has the right, at its sole discretion, to monitor, maintain, and repair the Property to preserve the Conservation Values of the Property, which includes but is not limited to the right to control invasive species, maintain signage and fencing, and remove trash, debris, or other waste. After the Long-Term Monitoring and Maintenance Period identified in the Statement of Work has been completed, Grantee (including its employees, agents, and contractors) also has the right, at its sole discretion, to monitor, maintain, and repair the intertidal stability and intertidal substrate of the Property, but prior to taking any actions to maintain or repair the intertidal stability or intertidal substrate, Grantee shall first notify Grantor and provide Grantor with at least ninety (90) days to decide whether Grantor will complete the maintenance or repair. Grantee's rights under this Paragraph shall be subject to the requirements of any environmental covenant or conservation easement recorded by Grantor pursuant to the Cleanup Consent Decree and Orders.

6. The Grantor must restrict the scope of future leases and easements to those uses and activities consistent with this Conservation Easement, notify any future lessees or easement grantees on the Property of the use restrictions and make their compliance with the restrictions in this Conservation Easement a condition of that lease or easement.

7. Except where necessary to abate an emergency situation or where required by

law, no major maintenance or repairs—i.e., maintenance or repairs that would disturb greater than one half (1/2) of an acre—shall be permitted on the Property after construction of the Projects without seventy-two (72) hours prior written notice to the Grantee. In the event of an emergency, or where actions are taken as required by law, Grantor shall notify Grantee as soon as practical but not later than within twenty-four (24) hours of the discovery of the event necessitating the emergency maintenance or repairs.

8. The Grantor shall allow authorized representatives of the Grantee the right to enter the Property, via public rights of way to the extent practicable, to undertake the following activities:

   a. Evaluation or inspection of the Projects, including but not limited to monitoring and assessing compliance with this Conservation Easement, as well as monitoring and assessing progress on the maintenance, monitoring, and performance of the Projects. Such evaluation or inspection may involve the taking of photographs or video;
   b. Verification of any data or information submitted to the Grantee;
   c. Inspection and copying records, operation logs, contracts, or other documents maintained or generated by the Grantor or its contractors hereafter retained to perform work undertaken pursuant to the Projects;
   d. Conducting such tests, investigations or sample collections as deemed necessary to monitor compliance with this Conservation Easement or the Projects, investigate or assess contamination at or near the Property, or to assist in further identifying and quantifying natural resource injuries requiring restoration actions and in planning and carrying out further restoration actions; and

e. Any other activities required or permitted by the Grantee under this Conservation Easement.

9. Grantee's access includes reasonable access to adjacent properties owned and/or controlled by the Grantor but only to the extent access is required to perform the activities in Paragraph 8 above, and only if access to adjacent properties will not create undue risk of physical injury or harm and will not seriously interfere with operations on the adjacent properties.

10. Grantee shall provide 24-hour notice of Grantee's intent to access the Property, except in cases where Grantee determines that immediate entry is required to prevent, terminate, or mitigate a violation of the Conservation Easement. Subject to Grantor's health and safety requirements, and Grantor's option to have a representative accompany Grantee, representatives of Grantee have authority to enter such Property at all reasonable times and for purposes of overseeing requirements of the Projects and compliance with this Conservation Easement.

11. If requested, Grantee shall promptly provide Grantor with copies of any video, photographs, sampling analyses, and other unprivileged documentary evidence obtained during the evaluation or inspection of the Projects or Property.

IV. Reservation of Rights

Grantor hereby reserves unto itself, its representatives, heirs, successors, and assigns all rights accruing from ownership of the Property that are not conditioned, restricted, or prohibited by Section III. Subject to the restrictions of Section III, Grantor's rights include the right to undertake the following activities:

1. Manage and maintain the Property consistent with the function, purpose, and requirements of the Projects;

2. Maintain and repair any utilities and facilities;

3. Perform emergency maintenance and repairs pursuant to Section III.8 above; and

4. Install new utilities and related facilities if such utilities and facilities are required to comply with the Consent Decree.

V. Enforcement

Compliance with this Conservation Easement may be enforced pursuant to a civil action filed in a court of competent jurisdiction. The Grantee, acting on behalf of all Trustees, shall have full enforcement rights. Failure by the Grantee to enforce compliance with this Conservation Easement in a timely manner shall not be deemed a waiver of their rights to take subsequent enforcement actions. The remedies for breach of this Conservation Easement shall be specific performance, injunctive relief and/or other equitable relief, including but not limited to the restoration of the Conservation Values of the Property. Monetary damages shall not be recoverable in any action to enforce this Conservation Easement, except for an action to enforce a breach of Section IX.5, but the prevailing party may recover all attorney's fees and costs expended in connection with such action. Nothing in this Conservation Easement shall limit the remedies that are available to the Trustees under the Consent Decree.

VI. Recordation

Grantor shall record this instrument in the official records of Kitsap County, Washington and shall pay the costs associated with recording. Grantee may re-record this instrument at any time as may be required to preserve its rights in this Conservation Easement.

VII. Termination and Modification

This Conservation Easement may only be amended or terminated by mutual written agreement signed and notarized by the Grantor and the Grantee and with advanced notice provided to the Trustees. Any such amendment shall be consistent with the purposes of this Conservation Easement and shall not affect its perpetual duration. In the event that the Projects are significantly altered, revised or otherwise changed pursuant to a modification or amendment of the Consent Decree or its appendices, the Grantor will record a description of the modified Projects along with an amended Conservation Easement.

VIII. Warranty

This Conservation Easement, the covenants made by Grantor here, and the rights conveyed by Grantor herein are subject to all matters of record and matters that would be disclosed by an accurate ALTA/NSPS land title report (including a list of exceptions/encumbrances).

IX. Miscellaneous

1. Effective Date. This Conservation Easement is effective on the date of recording.

2. Validity. This Conservation Easement shall be valid and enforceable even if: it is not appurtenant to an interest in real property; it can be or has been assigned to a person other than the original Grantee; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes an affirmative obligation on a person having an interest in real property or on the Grantee; the benefit or burden does not touch or concern real property; there is no privity of estate or contract; the Grantee ceases to exist, resigns, or is replaced; or the owner of the interest subject to the Conservation Easement and the Grantee are the same person. Additionally, no law or rule of construction favoring temporal limitations over permanent limitations shall be used in the interpretation of this Conservation Easement.

3. Costs and Liabilities. Except as otherwise specifically provided by this Conservation Easement or the Consent Decree, Grantor, or its successors or assigns, retains all responsibilities and shall bear all costs and liabilities of any kind related to the ownership and operation of the Property, including transfer costs, costs of title and documentation review, and maintenance of adequate liability insurance coverage. Grantor, or its successors or assigns, remains responsible for obtaining any applicable permits and approvals required for any activity or use permitted on the Property by this Conservation Easement, and any such activity or use shall be undertaken in accordance with all applicable federal,

state, local, and administrative agency laws, statutes, ordinances, rules, regulations, orders, and requirements.

4. Taxes; No Liens. Grantor, or its successors or assigns, shall pay before delinquency all real estate taxes, assessments, fees, or charges of whatever description levied on or assessed against the Property by any competent taxing authority and any real estate excise taxes imposed upon, or incurred as a result of, this Easement, and shall furnish Grantee with satisfactory evidence of payment upon request. Grantor shall keep Grantee's interest in the Property free from any liens, including those arising out of any obligations incurred by Grantor for any labor or materials furnished or alleged to have been furnished at or for use on the Property.

5. Hold Harmless.

5.1 By Grantor. Grantor shall hold harmless, indemnify, and defend Grantee and its members, directors, officers, employees, agents, and contractors and their heirs, personal representatives, successors, and assigns of each of them (collectively, the "Grantee Indemnified Parties), from and against any and all liabilities, penalties, costs, losses, damages, expenses, causes of action, claims, demands, orders, liens, or judgments, including, without limitation, reasonable attorneys' fees (collectively "Losses") arising from or in any way connected with: (a) injury to or the death of any person, or physical damage to or occurring on or about the Property caused by Grantor and/or Grantor's agents, representatives, officers, partners, members, shareholders, employees, contractors and/or subcontractors, except to the extent due to the negligence of any of the Grantee Indemnified Parties; (b) Grantor's failure to perform its obligations under this Conservation Easement; and (c) Grantor's breach of its obligations, covenants, representations, and warranties of this Conservation Easement relating to Costs and Liabilities of Section IX.3.

5.2 By Grantee. Grantee shall hold harmless, indemnify, and defend Grantor and its members, directors, officers, employees, agents, and contractors and their heirs, personal

representatives, successors, and assigns of each of them (collectively, the "Grantor Indemnified Parties), from and against any and all liabilities, penalties, costs, losses, damages, expenses, causes of action, claims, demands, orders, liens, or judgments, including, without limitation, reasonable attorneys' fees (collectively "Losses") arising from or in any way connected with: (a) injury to or the death of any person, or physical damage to or occurring on or about the Property caused by Grantee and/or Grantee's agents, representatives, officers, partners, members, shareholders, employees, contractors and/or subcontractors, except to the extent due to the negligence of any of the Grantor Indemnified Parties; (b) Grantee's failure to perform its obligations under this Conservation Easement; and (c) Grantee's breach of its obligations, covenants, representations, and warranties of this Conservation Easement relating to Costs and Liabilities of Section IX.3.

6. No Hazardous Materials Liability. Grantor represents and warrants that it has no knowledge of any release or threatened release of hazardous materials in, on, under, about, or affecting the Property, except as stated in the Cleanup Consent Decrees and Orders. Without limiting the obligations of Grantor as otherwise provided in this instrument, Grantor agrees to indemnify, protect, and hold harmless the Indemnified Parties against any and all Claims arising from the presence or release in, on, from, or about the Property, at any time, of any substance now or hereafter defined, listed, or otherwise classified pursuant to any federal, state, or local law, regulation, or requirement as hazardous, toxic, polluting, or otherwise contaminating the air, water, or soil, or in any way harmful or threatening to human health or the environment, except to the extent caused by any of the Grantee Indemnified Parties.

7. Covenant Limitations. This Conservation Easement shall not be used as evidence of the Grantor's alleged liability in any action or proceeding other than an action or proceeding to enforce the terms of this Conservation Easement, the Consent Decree, or the Statement of Work.

8. Enforcement by Trustees; Third-Party Beneficiaries. All rights and remedies conveyed under this Conservation Easement to Grantee, including but not limited to rights of access and enforcement, shall extend to and are enforceable by any of the Trustees. Other than the Trustees, there are no other third-party beneficiaries of this Conservation Easement.

9. Acts Beyond Grantee's or Grantor's Control. Nothing contained in this Conservation Easement shall be construed to entitle Grantee or Grantor to bring any action for any injury to or change in the Property resulting from causes that are not reasonably foreseeable and which are beyond the control of Grantee or Grantor (including their agents, employees, or contractors), including, without limitation, naturally-occurring wildfire, flood, storm, or earth movement, or from any prudent action taken by Grantee or Grantor under emergency conditions to prevent, abate, or mitigate significant injury to the Property resulting from such causes, or from any action taken by Grantee or Grantor that they reasonably believe to be imminently necessary to protect human health or safety. In the event of any emergency action being taken on the Property, Grantee and Grantor shall make reasonable efforts to avoid or minimize material and adverse impacts to the Conservation Values to the extent feasible. Nothing in this paragraph shall modify or supersede Grantee's, Trustees', or Grantor's rights or obligations under the Consent Decree.

10. Notices. Whenever notice is required to be given or a document is required to be sent by one Party to another under the terms of this Conservation Easement, it will be directed to the individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other Parties in writing. Notice shall be provided by first-class mail with return receipt requested, or hand delivery, and notice shall be deemed to have occurred on the date of delivery. Notice of Grantee's intent to access the Property under Section III may

be provided by email only. Written notice as specified constitutes complete satisfaction of any written notice requirement of the Conservation Easement for the Parties:

As to the Grantee:

Port Gamble S'Klallam Tribe
Natural Resources Department
31912 Little Boston Road NE
Kingston, WA 98346
romac@pgst.nsn.us

Port Gamble S'Klallam Tribe
Tribal Attorney
31912 Little Boston Road NE
Kingston, WA 98346
smoe@pgst.nsn.us

With a copy to:

Kanji & Katzen, P.L.L.C.
Attention: Reed Bienvenu
811 First Ave., Suite 630
Seattle, WA 98104
rbienvenu@kanjikatzen.com

As to Grantor OPG Port Gamble LLC, a Washington limited liability company:

OPG Port Gamble LLC
1 Rayonier Way
Wildlight, FL 32097
legalnotice@rayonier.com

As to the Trustees (where specifically required under this Conservation Easement):

As to the Jamestown S'Klallam Tribe:

Hansi Hals, Natural Resources Department Director
Jamestown S'Klallam Tribe
1033 Old Blyn Highway
Sequim, WA 98382
hhals@jamestowntribe.org

As to the Lower Elwha Klallam Tribe:

Matt Beirne
Natural Resources Director
Lower Elwha Klallam Tribe
760 Stratton Rd
Port Angeles, WA 98363
matt.beirne@elwha.org

As to the Skokomish Tribe:

Skokomish Tribal Attorney's Office
N. 80 Tribal Center Road
Skokomish, WA 98584
elees@skokomish.org

As to the Suquamish Tribe:

Alison O'Sullivan
Natural Resources Department
Suquamish Indian Tribe
P.O. Box 498
Suquamish, WA 98392-0498
aosullivan@suquamish.nsn.us

Maryanne Mohan
Office of Tribal Attorney
Suquamish Indian Tribe
P.O. Box 498
Suquamish, WA 98392
mmohan@suquamish.nsn.us

As to the United States Department of the Interior:

Deirdre Donahue
U.S. Department of the Interior
Office of the Solicitor
601 SW 2nd Avenue, Suite 1950
Portland, OR 97204
Deirdre.donahue@sol.doi.gov

Jeff Krausmann
U.S. Fish & Wildlife Service
510 Desmond Dr. SE, Suite 102
Lacey, WA 98503-1263
Jeff_krausmann@fws.gov

As to the Washington Department of Ecology:

Susannah Edwards
Toxics Cleanup Program
State of Washington
P.O. Box 47600
Olympia, WA 98504-7600
sued461@ecy.wa.gov

Jonathan Thompson
Assistant Attorney General
Ecology Division
Office of the Attorney General of Washington
PO Box 40128
Olympia, WA 98504-0128
Jonathan.Thompson@atg.wa.gov

11. Entire Agreement. This Conservation Easement, inclusive of all Exhibits (including any future amendments to Exhibit C that are validly made under the Consent Decree), contains the entire agreement between the Parties as to the subject matter hereof and supersedes all other agreements between them, whether written or oral, with respect to that subject matter, except for the existing conservation easement on the Property, described in Section IX.12 of this Conservation Easement, and the other agreements specifically referenced in this Conservation Easement.

12. Existing Conservation Easement. The Property and adjoining property remain subject to an existing conservation easement between the Parties, recorded with the Kitsap County Auditor on June 30, 2021, Document 202106300212 ("Existing Conservation Easement"). Section 2.2 of the Existing Conservation Easement establishes that one of its purposes is to provide for and manage restoration of the Property in coordination with other restoration activities, including restoration to address alleged injuries to natural resources. Section 4.2 of the Existing Conservation Easement states that nothing in the Existing Conservation Easement

shall be interpreted to relieve Grantor of any liability or obligation to restore natural resources or to mitigate any natural resource damage, as may be required by law or under "Restoration Consent Decrees and Orders." Further, Section 10.1 of the Existing Conservation Easement provides that, in the event of an irreconcilable conflict between the Existing Conservation Easement and its implementing plans, on the one hand, and such Restoration Consent Decrees and Orders, i.e., the Consent Decree, on the other hand, the latter shall govern the rights and obligations of the Parties under the Existing Conservation Easement.

13. Governing Law. This Conservation Easement shall be interpreted and governed by the laws of the State of Washington, without regard to the conflict or choice of law provisions thereof.

14. Captions. The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon its construction or interpretation.

15. Liberal Construction. This Conservation Easement shall be liberally construed in favor of the purposes of this Conservation Easement. If any provision of this Conservation Easement is found to be ambiguous, an interpretation consistent with the purposes of this Conservation Easement that would render the provision valid shall be favored over any interpretation that would render it invalid.

16. Severability. If any covenant, condition, provision, term, or agreement of this Conservation Easement is to any extent held invalid or unenforceable, the remaining provision thereof and all others shall remain in full force and effect.

17. Limitation. Nothing in this Conservation Easement shall be construed as obligating the United States, the State of Washington, the Indian tribe Trustees, or any other of their officers, agents or employees to expend any funds in excess of appropriations authorized by law.

18. Transfer by Grantee. This Conservation Easement may be assigned or transferred by the Grantee or any successor in interest upon written approval of the Grantor and the other Trustees, which approval shall not be unreasonably withheld. Grantee shall give Grantor and the Trustees at least thirty (30) days prior written notice of the transfer. Grantee or any successor in interest may assign or transfer its rights and obligations under this Conservation Easement only to an entity or organization that is authorized to acquire and hold easements under applicable law, including RCW 64.04.130.

19. Transfer by Grantor. The Grantor shall provide sixty (60) days advance written notice to the Grantee and the Trustees of the Grantor's intent to convey or transfer its fee title interest in the Property. Such notice shall include the name and address of the proposed transferee. The Grantor must notify all potential Property purchasers of the restrictions, conditions and other rights set forth in this Conservation Easement and make compliance with the Conservation Easement a condition of any conveyance of title. Any person who acquires any right, title, or interest in or to any portion of the Property is and shall be conclusively deemed to have consented and agreed to every covenant, condition, restriction, and provision contained in this Conservation Easement.

20. Estoppel Certificates. Grantee shall, within thirty (30) days after receiving Grantor's request therefore, execute and deliver to Grantor a document certifying, to the best knowledge of the person executing the document, that Grantor is or is not in compliance with any obligation of Grantor contained in this Conservation Easement, or otherwise evidencing the status of such obligation to the extent of Grantee's knowledge thereof, as may be reasonably requested by Grantor.

21. Involuntary Succession. If the Trustees, other than the Grantee, determine that the Grantee is unable or unwilling to carry out its responsibilities under this Conservation Easement, the Trustees shall notify the Grantee of this

determination and the reason therefore. The Grantee shall have thirty (30) days to cure the disability or if the disability cannot be cured within this period, the Grantee shall take reasonable steps towards curing the disability within the time period. If Grantee is unwilling or unable to establish its capacity to carry out the Conservation Easement responsibilities, the Conservation Easement shall be assigned by the Grantee to a qualified successor selected and approved by the Trustees.

22. Rights and Obligations Upon Transfer. A Party's rights and obligations under this Conservation Easement terminate upon transfer of the Party's interests in the Conservation Easement or Property, except that liability for acts, omissions, or breaches occurring prior to the transfer shall survive transfer.

X. Agreement By Grantor to Add Restrictive Covenants, Conservation Easements, or Other Restrictions or Conditions on Use or Development Upon Request

If the Grantee, on behalf of the Trustees, determines that the Property covered by this Agreement require protections in addition to those afforded under this Conservation Easement, then the Grantee shall provide the Trustees and Grantor with written notice detailing the additional protections being considered and Grantor and the Trustees shall have thirty (30) days to approve, which approval shall not be unreasonably denied. Once approved, Grantor shall implement such protections requested by the Grantee.

XI. Signature and Acknowledgements

Grantor covenants that it is authorized to grant this Conservation Easement and shall warrant and defend the same against all claims and demands challenging such authority. The undersigned parties represent and certify that they are authorized to execute this Conservation Easement. This Conservation Easement may be executed in a number of identical counterparts, each of which will be deemed an original for all purposes and all counterparts will collectively constitute one agreement. In the event of a disparity between the counterparts, the recorded counterpart shall be controlling.

IN WITNESS WHEREOF, OPG Port Gamble LLC, a Washington Limited Liability Company, has executed and delivered this Conservation Easement on this _____ day of _____, _____.

OPG PORT GAMBLE LLC, a Washington Limited Liability Company

_____

By:

Printed Name:

Title:

STATE OF WASHINGTON)
) ss.
COUNTY OF _____)

On this _____ day of _____, _____, before me, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence be the person who signed this instrument, on oath stated that he was authorized to execute this instrument as _____ of OPG Port Gamble LLC, a Washington Limited Liability Company, the limited liability company that executed this instrument, and acknowledged this instrument to be the free and voluntary act and deed of said limited liability company for the uses and purposes therein mentioned.

IN WITNESS WHEREOF I have hereunto set my hand and official seal the day and year first above written.

By: _____

Print Name:_____

NOTARY PUBLIC in and for

Residing at _____

My appointment expires: _____

The PORT GAMBLE S'KLALLAM TRIBE, a federally recognized Indian tribe, does hereby enter into and accept the above Conservation Easement on this _____ day of _____, _____.

By:

Printed Name: _____

Title: _____

STATE OF WASHINGTON)
) ss.
COUNTY OF _____)

On this _____ day of _____, _____, before me, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence be the person who signed this instrument, on oath stated that he was authorized to execute this instrument as _____ of the Port Gamble S'Klallam Tribe, a federally recognized Indian tribe, the tribe that executed this instrument, and acknowledged this instrument to be the free and voluntary act of said tribe for the uses and purposes mentioned in the instrument.

IN WITNESS WHEREOF I have hereunto set my hand and official seal the day and year first above written.

By: _____

Print Name:_____

NOTARY PUBLIC in and for

Residing at _____

My appointment expires: _____

EXHIBIT A

Legal Description of the Property

Port Gamble **POPE0000-8029**
Legal Description for Conservation Easement Area **January 17, 2024**

Those portions of Parcels A and B of the Boundary Line Adjustment in Kitsap County recorded under Auditor's File No. 201706210123 and depicted on the Boundary Line Adjustment and Record Of Survey filed in Volume 84 of Surveys, at page 153, and recorded under Auditor's File No. 201706210124, all records of Kitsap County, for conservation easement area purposes, more particularly described as follows:

Commencing at the Northeast Corner of Parcel C of said Boundary Line Adjustment in Kitsap County, said corner also being a point on the west line of said Parcel B;
Thence southerly along the line common to said Parcels B and C, South 01°19'09" West, 391.77 feet to the south line of Government Lot 1, Section 5, Township 27 North, Range 2 East, W.M.;
Thence easterly along said south line, South 88°07'36" East, 97.92 feet to the True Point of Beginning;
Thence northerly, North 02°16'19" East, 173.36 feet;
Thence continuing northerly, North 06°33'19" East, 100.29 feet;
Thence northeasterly along a curve to the right, having a radius of 422.00 feet, through a central angle of 36°59'19", an arc distance of 272.43 feet;
Thence continuing northeasterly, North 43°32'38" East, 135.37 feet;
Thence North 55°23'58" East, 127.36 feet;
Thence southeasterly along a non-tangent curve to the right, whose center bears South 43°51'03" East, having a radius of 155.44 feet, through a central angle of 109°00'09", an arc distance of 295.72 feet;
Thence southerly, South 10°10'09" East, 9.83 feet;
Thence South 20°31'34" West, 90.02 feet;
Thence southeasterly along a non-tangent curve to the left, whose center bears South 15°00'13" East, having a radius of 52.28 feet, through a central angle of 87°18'25", an arc distance of 79.66 feet;
Thence continuing southeasterly, South 34°24'19" East, 130.30 feet to the southeasterly line of said Parcel B;
Thence southwesterly along said southeasterly line, South 49°39'27" West, 345.17 feet to the line of Extreme Low Water;
Thence southerly and southwesterly, approximately following the line of Extreme Low Water the following courses:

South 02°51'04" West, 3.32 feet;
South 07°38'37" West, 31.21 feet;
South 07°50'48" West, 22.42 feet;
South 02°19'31" West, 24.80 feet;
South 02°30'10" East, 44.67 feet;
South 02°16'40" East, 34.56 feet;
South 02°15'48" East, 84.72 feet;

DAVID EVANS AND ASSOCIATES INC
20300 Woodinville Snohomish Rd NE
Suite A | Woodinville, WA 98072
p: 425.415.2000
f: 425.486.5059
www.deainc.com
p:\p\pope00008029\0600info\sv\legal descriptions\draft\24-0117 revised ld for conservation esmt area\24-0117 revised pope00008029 ld for conservation esmt area.docx

South 08°58'51" East, 22.35 feet;
South 08°56'02" East, 30.69 feet;
South 10°07'11" East, 17.20 feet;
South 08°52'37" East, 11.14 feet;
South 11°22'30" East, 15.27 feet;
South 16°55'19" East, 8.57 feet;
South 31°23'06" East, 5.16 feet;
South 26°05'37" East, 6.74 feet;
South 14°20'52" East, 9.09 feet;
South 05°45'25" East, 17.22 feet;
South 02°02'05" West, 9.11 feet;
South 04°26'10" East, 15.62 feet;
South 04°47'53" East, 19.27 feet;
South 03°49'06" East, 16.23 feet;
South 02°49'17" East, 22.65 feet;
South 12°50'21" East, 10.65 feet;
South 05°36'40" East, 7.61 feet;
South 05°11'19" West, 6.93 feet;
South 09°04'33" West, 4.23 feet;
South 11°56'50" West, 8.31 feet;
South 11°29'16" West, 7.10 feet;
South 15°57'08" West, 38.70 feet;
South 17°55'28" West, 32.73 feet;
South 22°08'58" West, 15.65 feet;
South 22°13'47" West, 12.10 feet;
South 35°21'44" West, 9.13 feet;
South 27°07'14" West, 7.22 feet;
South 21°23'46" West, 8.54 feet;
South 22°10'26" West, 18.16 feet;
South 41°19'01" West, 5.12 feet;
South 22°06'50" West, 10.81 feet;
South 24°29'28" West, 9.70 feet;
South 28°59'20" West, 14.72 feet;
South 16°15'25" West, 10.38 feet;
South 15°15'32" West, 3.72 feet;
South 22°23'51" West, 6.04 feet;
South 28°53'54" West, 6.38 feet;
South 22°10'29" West, 10.66 feet;
South 19°40'37" West, 6.50 feet;
South 14°46'13" West, 8.86 feet;
South 51°32'20" West, 21.88 feet;
South 49°24'58" West, 34.63 feet;
South 43°12'43" West, 22.84 feet;
South 30°02'50" West, 29.62 feet;

DAVID EVANS AND ASSOCIATES INC.

20300 Woodinville Snohomish Rd NE
Suite A | Woodinville, WA 98072
p: 425.415.2000
f: 425.486.5059
www.deainc.com

South 31°45'31" West, 44.14 feet;
South 02°49'28" West, 33.18 feet;
South 13°37'46" West, 37.13 feet;
South 18°18'32" West, 19.33 feet;
South 03°48'07" West, 32.89 feet;
South 16°24'34" West, 26.21 feet;
South 12°41'31" West, 45.78 feet to a point on the line of Extreme Low Water which bears South 49°13'01" East, 329.83 feet from the southeast corner of said Parcel C;
Thence southwesterly and leaving said line, along a non-tangent curve to the right, whose center bears North 55°58'15" West, having a radius of 182.44 feet, through a central angle of 22°23'39", an arc length of 71.31 feet;
Thence northwesterly, along a compound curve to the right, having a radius of 110.00 feet, through a central angle of 54°35'24", an arc length of 104.81 feet;
Thence continuing northwesterly, North 68°59'12" West, 39.14 feet;
Thence North 62°14'08" West, 35.20 feet;
Thence along a curve to the right, having a radius of 150.00 feet, through a central angle of 35°15'17", an arc distance of 92.30 feet;
Thence northerly, North 00°34'01" West, 138.68 feet;
Thence continuing northerly, North 11°42'49" East, 44.34 feet to the south line of said Parcel C;
Thence easterly and along said south line, North 88°07'36" East, 24.70 feet to the southeast corner of said Parcel C;
Thence northerly along the east line of said Parcel C, North 01°19'09" East, 111.66 feet;
Thence continuing northerly and leaving said east line, North 14°58'28" East, 6.20 feet;
Thence North 04°20'25" East, 78.31 feet;
Thence North 06°12'23" East, 53.14 feet;
Thence North 14°53'17" East, 54.89 feet;
Thence North 10°17'50" West, 9.52 feet;
Thence northeasterly, North 49°42'56" East, 101.99 feet;
Thence northerly, North 02°16'19" East, 290.86 feet to the True Point of Beginning.

EXCEPT therefrom any portion lying below Extreme Low Water.
Containing an area of 596,197 SF or 13.69 AC

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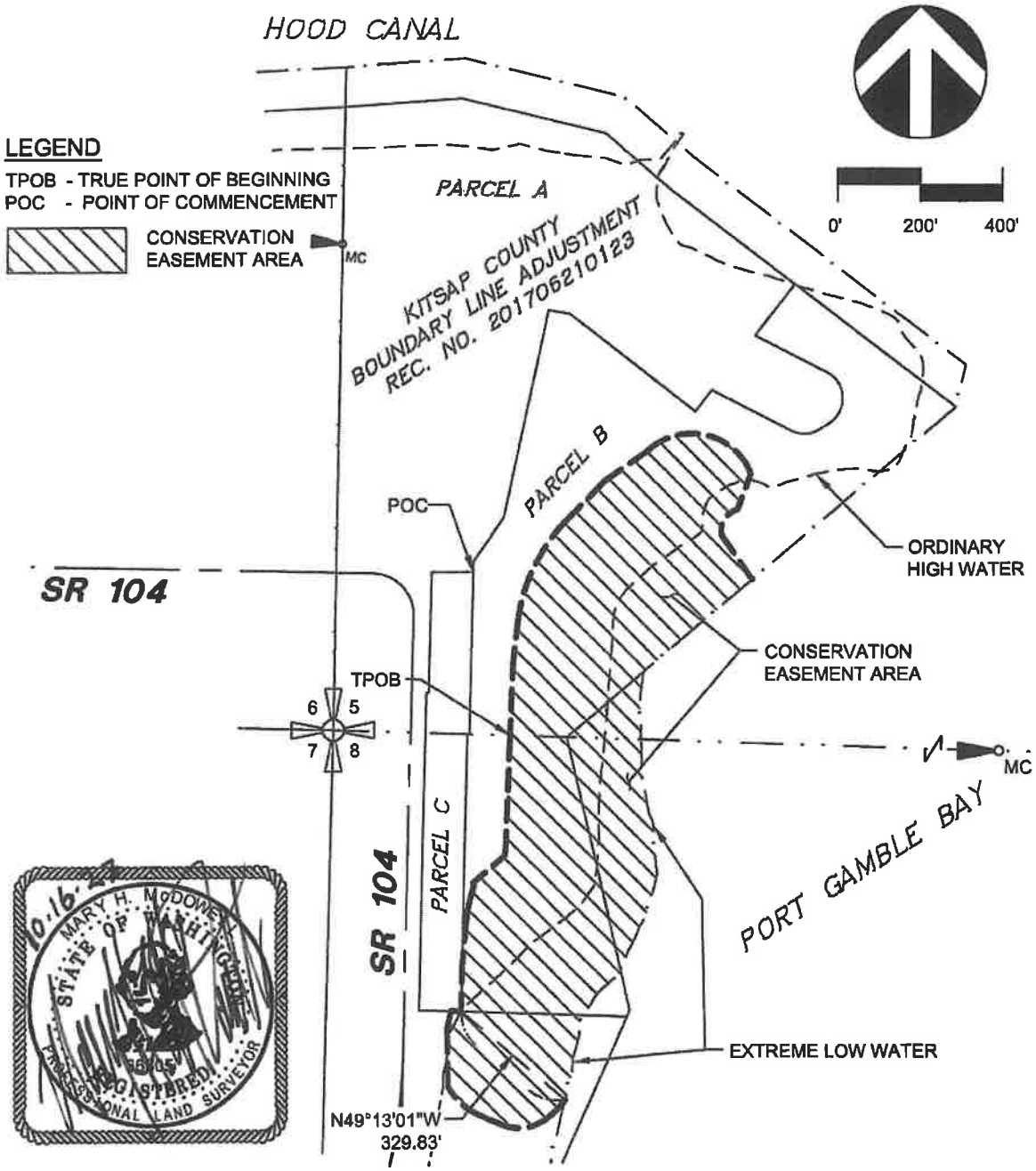
EXHIBIT B

Property Figure

EXHIBIT B
PORT GAMBLE
CONSERVATION EASEMENT

JOB # POPE00008029
OCTOBER 16, 2023



THIS EXHIBIT HAS BEEN PREPARED TO ASSIST IN THE INTERPRETATION OF THE ACCOMPANYING LEGAL DESCRIPTION. IF THERE IS A CONFLICT BETWEEN THE WRITTEN LEGAL DESCRIPTION AND THIS SKETCH, THE LEGAL DESCRIPTION SHALL PREVAIL

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EXHIBIT C

Statement of Work

Replace this page with the Statement of Work when recording this Grant Deed of Conservation Easement

Appendix D

APPENDIX D
FINANCIAL ASSURANCE BOND

Surety's Bond Number:	[**insert number**]
Date of Execution of Bond:	[**insert date**]
Effective Date of Bond:	[**insert date**]
Total Dollar Amount of Bond:	$5,060,000

PRINCIPAL:

Legal Name:	Pope Resources, a Delaware limited partnership; OPG Properties LLC; and OPG Port Gamble LLC, collectively
Address:	1 Rayonier Way, Wildlight, Florida 32097
Contact Person(s)/Information:	Josh Stancliff, 904-357-9836, josh.stancliff@rayonier.com

SURETY:

Legal Name:	Liberty Mutual Insurance Company
Address:	175 Berkeley Street, Boston, MA 02116
Contact Person(s)/Information:	[**insert name and contact information (phone, email)**]

BENEFICIARY:

Legal Name:	The United States Department of the Interior; the Washington State Department of Ecology on behalf of the State of Washington; the Jamestown S'Klallam Tribe; the Lower Elwha Klallam Tribe; the Port Gamble S'Klallam Tribe; the Skokomish Indian Tribe; and the Suquamish Indian Tribe (collectively, "the Trustees")
Address/Contact Information:	31912 Little Boston Road NE, Kingston, WA 98346

SITE INFORMATION: Financial Assurance for Project Construction (hereinafter the "Work")
Name and Location of Site: Port Gamble Bay Natural Resource Damages Restoration Project
Agreement Governing Site Work: That certain "Consent Decree" dated ____ ("Agreement").

KNOW ALL PERSONS BY THESE PRESENTS, THAT:

WHEREAS, said Principal is required, under the Agreement entered pursuant to Section 107 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. § 9607; the Model Toxics Control Act ("MTCA"), Wash. Rev. Code § 70A.305.040(2); and Section 311(f) of the Clean Water Act ("CWA"), 33 U.S.C. § 1321(f), to perform the "Work" as defined in such Agreement (hereinafter, the "Work") and to fulfill its other obligations as set forth therein; and

WHEREAS, said Principal is required by the Agreement to provide financial assurance to ensure completion of the Work.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration the receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. The Principal and Surety hereto are firmly bound to theTrustees, in the above Total Dollar Amount of this Bond, for the payment of the Work, which we, the Principal and Surety, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, subject to and in accordance with the terms and conditions hereof.

2. The conditions of the Surety's obligation hereunder are such that if the Principal shall promptly, faithfully, fully, and finally complete the Work in accordance with the terms of the Agreement, the Surety's obligation hereunder shall be null and void; otherwise it is to remain in full force and effect.

3. Pursuant to and in accordance with the terms of the Agreement, and except as specifically provided in Paragraph 5 below, the Surety shall become liable on the obligation evidenced hereby only upon the Principal's failure to perform all or any portion(s) of the Work, the Trustees' subsequent Access to Financial Assurance Notice, and the Principal's failure to remedy to the Trustees' satisfaction the circumstances giving rise to the Trustees' issuance of such notice. If the Principal fails to remedy the deficiencies set forth in the Access to Financial Assurance Notice as permitted under Paragraph 31(b) of the Agreement, the Surety shall, up to the Total Dollar Amount of this bond, promptly (and in any event within 15 days after receiving such notification), pay to the Trustees funds in such amounts and to such person(s), account(s), or otherwise as the Trustees may direct.

If the Surety does not render such payment set forth above within a required 15-day period, the Surety shall be deemed to be in default of this Bond and the Trustees shall be entitled to enforce any remedy available to them at law, in equity, or otherwise; provided, however, that if such default is susceptible of cure but cannot reasonably be cured within such 15-day period and provided further that Surety shall have commenced to cure such default within such 15-day period and thereafter diligently proceeds to perform the same, such 15-day period shall be extended for such time as is reasonably necessary for Surety in the exercise of due diligence to cure such default, such additional period not to exceed 90 days.

4. The liability of the Surety shall not be discharged by any performance, payment, or succession of payments hereunder, unless and until such performance, payment, or payments shall amount in the aggregate to the Total Dollar Amount of this Bond, but in no event shall the aggregate obligation of the Surety hereunder exceed the amount of said sum.

5. The Surety may cancel this Bond only by sending notice of cancellation to the Principal and to the Beneficiary, provided, however, that no such cancellation shall be effective during the 90-day period beginning on the date of receipt of the notice of cancellation by both the Principal and the Beneficiary, as evidenced by return receipts. If after 60 days of such 90-day period, the Principal has failed to provide alternative financial assurance to the Trustees in accordance with the terms of the Agreement, the Trustees shall have the right to (up to the Total Dollar Amount of this Bond) draw on the guaranteed funds.

6. The Principal may terminate this Bond only by sending written notice of termination to the Surety and to the Beneficiary and as permitted under Paragraph 32 of the Agreement.

7. Any modification, revision, or amendment that may be made to the terms of the Agreement or to the Work to be done thereunder, or any extension of the Agreement, or other forbearance on the part of either the Principal or Beneficiary to the other, shall not in any way release the Principal and the Surety, or either of them, or their heirs, executors, administrators, successors, or assigns from liability hereunder. The Surety hereby expressly waives notice of any change, revision, or amendment to the Agreement or to any related obligations between the Principal and the Beneficiary.

8. The Surety will immediately notify the Beneficiary of any of the following events: (a) the filing by the Surety of a petition seeking to take advantage of any laws relating to bankruptcy, insolvency, reorganization, winding up or composition or adjustment of debts; (b) the Surety's consent to (or failure to contest in a timely manner) any petition filed against it in an involuntary case under such bankruptcy or other laws; (c) the Surety's application for (or consent to or failure to contest in a timely manner) the appointment of, or the taking of possession by, a receiver, custodian, trustee, liquidator, or the like of itself or of all or a substantial part of its assets; (d) the Surety's making a general assignment for the benefit of creditors; or (e) the Surety's taking any corporate action for the purpose of effecting any of the foregoing.

9. Any provision in this Bond that conflicts with CERCLA, MTCA, CWA or any other applicable statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or legal requirement shall be deemed incorporated herein.

10. All notices, elections, consents, approvals, demands, and requests required or permitted hereunder shall be given in writing to (unless updated from time to time) the addressees shown on the first page of this Bond, identify the Site, and provide a contact person (and contact information). All such correspondence shall be: (a) effective for all purposes if hand delivered or sent by (i) certified or registered United States mail, postage prepaid, return receipt requested or (ii) expedited prepaid delivery service, either commercial or United States Postal Service, with proof of attempted delivery, to the relevant address shown on the first page of this Bond; and (b) effective and deemed received upon the earliest of (i) the actual receipt of the

same by personal delivery or otherwise, (ii) one business day after being deposited with a nationally recognized overnight courier service as required above, or (iii) three business days after being deposited in the United States mail as required above. Rejection or other refusal to accept or the inability to deliver because of changed address of which no notice was given as herein required shall be deemed to be receipt of the notice, election, consent, approval, demand, or request sent.

11. The Surety hereby agrees that the obligations of the Surety under this Bond shall be in no way impaired or affected by any winding up, insolvency, bankruptcy, or reorganization of the Principal or by any other arrangement or rearrangement of the Principal for the benefit of creditors.

12. No right of action shall accrue on this Bond to or for the use of any person other than the Beneficiary or the executors, administrators, successors, or assigns of the Beneficiary.

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the Principal and Surety have executed this Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby represent, warrant, and certify that they are authorized to execute this Bond on behalf of the Principal and Surety, respectively.

FOR THE PRINCIPAL:

Date: _____ By [signature]: _____
Printed name: _____
Title: _____

State of [**insert state**]
County of [**insert county**]

On this [**insert date**], before me personally came [**insert name of PRP/Settling Defendant's signatory**] to me known, who, being by me duly sworn, did depose and say that she/he is [**insert title**] of [**insert name of PRP/Settling Defendant**], the entity described in and which executed the above instrument; and that she/he signed her/his name thereto.

_____
[Signature of Notary Public]

FOR THE SURETY:

Date: _____ By [signature]: _____
Printed name: _____
Title: _____

State of [**insert state**]
County of [**insert county**]

On this [**insert date**], before me personally came [**insert name of Surety's signatory**] to me known, who, being by me duly sworn, did depose and say that she/he is [**insert title**] of [**insert name of Surety**], the entity described in and which executed the above instrument; and that she/he signed her/his name thereto.

_____
[Signature of Notary Public]

Appendix E

APPENDIX E
FINANCIAL ASSURANCE BOND

Surety's Bond Number:	[**insert number**]
Date of Execution of Bond:	[**insert date**]
Effective Date of Bond:	[**insert date**]
Total Dollar Amount of Bond:	$1,510,000

PRINCIPAL:

Legal Name:	Pope Resources, a Delaware limited partnership; OPG Properties LLC; and OPG Port Gamble LLC, collectively
Address:	1 Rayonier Way, Wildlight, Florida 32097
Contact Person(s)/Information:	Josh Stancliff, 904-357-9836, josh.stancliff@rayonier.com

SURETY:

Legal Name:	Liberty Mutual Insurance Company
Address:	175 Berkeley Street, Boston, MA 02116
Contact Person(s)/Information:	[**insert name and contact information (phone, email)**]

BENEFICIARY:

Legal Name:	The United States Department of the Interior; the Washington State Department of Ecology on behalf of the State of Washington; the Jamestown S'Klallam Tribe; the Lower Elwha Klallam Tribe; the Port Gamble S'Klallam Tribe; the Skokomish Indian Tribe; and the Suquamish Indian Tribe (collectively, "the Trustees")
Address/Contact Information:	31912 Little Boston Road NE, Kingston, WA 98346

SITE INFORMATION: Financial Assurance for Eelgrass Work and Initial Maintenance & Monitoring (hereinafter the "Work")
Name and Location of Site: Port Gamble Bay Natural Resource Damages Restoration Project
Agreement Governing Site Work: That certain "Consent Decree" dated ____ ("Agreement").

KNOW ALL PERSONS BY THESE PRESENTS, THAT:

WHEREAS, said Principal is required, under the Agreement entered pursuant to Section 107 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. § 9607; the Model Toxics Control Act ("MTCA"), Wash. Rev. Code § 70A.305.040(2); and Section 311(f) of the Clean Water Act ("CWA"), 33 U.S.C. § 1321(f), to perform the "Work" as defined in such Agreement (hereinafter, the "Work") and to fulfill its other obligations as set forth therein; and

WHEREAS, said Principal is required by the Agreement to provide financial assurance to ensure completion of the Work.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration the receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. The Principal and Surety hereto are firmly bound to the Trustees, in the above Total Dollar Amount of this Bond, for the payment of the Work, which we, the Principal and Surety, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, subject to and in accordance with the terms and conditions hereof.

2. The conditions of the Surety's obligation hereunder are such that if the Principal shall promptly, faithfully, fully, and finally complete the Work in accordance with the terms of the Agreement, the Surety's obligation hereunder shall be null and void; otherwise it is to remain in full force and effect.

3. Pursuant to and in accordance with the terms of the Agreement, and except as specifically provided in Paragraph 5 below, the Surety shall become liable on the obligation evidenced hereby only upon the Principal's failure to perform all or any portion(s) of the Work, the Trustees' subsequent Access to Financial Assurance Notice, and the Principal's failure to remedy to the Trustees' satisfaction the circumstances giving rise to the Trustees' issuance of such notice. If the Principal fails to remedy the deficiencies set forth in the Access to Financial Assurance Notice as permitted under Paragraph 31(b) of the Agreement, the Surety shall, up to the Total Dollar Amount of this bond, promptly (and in any event within 15 days after receiving such notification), pay to the Trustees funds in such amounts and to such person(s), account(s), or otherwise as the Trustees may direct.

If the Surety does not render such payment set forth above within a required 15-day period, the Surety shall be deemed to be in default of this Bond and the Trustees shall be entitled to enforce any remedy available to them at law, in equity, or otherwise; provided, however, that if such default is susceptible of cure but cannot reasonably be cured within such 15-day period and provided further that Surety shall have commenced to cure such default within such 15-day period and thereafter diligently proceeds to perform the same, such 15-day period shall be extended for such time as is reasonably necessary for Surety in the exercise of due diligence to cure such default, such additional period not to exceed 90 days.

4. The liability of the Surety shall not be discharged by any performance, payment, or succession of payments hereunder, unless and until such performance, payment, or payments shall amount in the aggregate to the Total Dollar Amount of this Bond, but in no event shall the aggregate obligation of the Surety hereunder exceed the amount of said sum.

5. The Surety may cancel this Bond only by sending notice of cancellation to the Principal and to the Beneficiary, provided, however, that no such cancellation shall be effective during the 90-day period beginning on the date of receipt of the notice of cancellation by both the Principal and the Beneficiary, as evidenced by return receipts. If after 60 days of such 90-day period, the Principal has failed to provide alternative financial assurance to the Trustees in accordance with the terms of the Agreement, the Trustees shall have the right to (up to the Total Dollar Amount of this Bond) draw on the guaranteed funds.

6. The Principal may terminate this Bond only by sending written notice of termination to the Surety and to the Beneficiary and as permitted under Paragraph 32 of the Agreement.

7. Any modification, revision, or amendment that may be made to the terms of the Agreement or to the Work to be done thereunder, or any extension of the Agreement, or other forbearance on the part of either the Principal or Beneficiary to the other, shall not in any way release the Principal and the Surety, or either of them, or their heirs, executors, administrators, successors, or assigns from liability hereunder. The Surety hereby expressly waives notice of any change, revision, or amendment to the Agreement or to any related obligations between the Principal and the Beneficiary.

8. The Surety will immediately notify the Beneficiary of any of the following events: (a) the filing by the Surety of a petition seeking to take advantage of any laws relating to bankruptcy, insolvency, reorganization, winding up or composition or adjustment of debts; (b) the Surety's consent to (or failure to contest in a timely manner) any petition filed against it in an involuntary case under such bankruptcy or other laws; (c) the Surety's application for (or consent to or failure to contest in a timely manner) the appointment of, or the taking of possession by, a receiver, custodian, trustee, liquidator, or the like of itself or of all or a substantial part of its assets; (d) the Surety's making a general assignment for the benefit of creditors; or (e) the Surety's taking any corporate action for the purpose of effecting any of the foregoing.

9. Any provision in this Bond that conflicts with CERCLA, MTCA, CWA or any other applicable statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or legal requirement shall be deemed incorporated herein.

10. All notices, elections, consents, approvals, demands, and requests required or permitted hereunder shall be given in writing to (unless updated from time to time) the addressees shown on the first page of this Bond, identify the Site, and provide a contact person (and contact information). All such correspondence shall be: (a) effective for all purposes if hand delivered or sent by (i) certified or registered United States mail, postage prepaid, return receipt requested or (ii) expedited prepaid delivery service, either commercial or United States Postal Service, with proof of attempted delivery, to the relevant address shown on the first page of this Bond; and (b) effective and deemed received upon the earliest of (i) the actual receipt of the

same by personal delivery or otherwise, (ii) one business day after being deposited with a nationally recognized overnight courier service as required above, or (iii) three business days after being deposited in the United States mail as required above. Rejection or other refusal to accept or the inability to deliver because of changed address of which no notice was given as herein required shall be deemed to be receipt of the notice, election, consent, approval, demand, or request sent.

11. The Surety hereby agrees that the obligations of the Surety under this Bond shall be in no way impaired or affected by any winding up, insolvency, bankruptcy, or reorganization of the Principal or by any other arrangement or rearrangement of the Principal for the benefit of creditors.

12. No right of action shall accrue on this Bond to or for the use of any person other than the Beneficiary or the executors, administrators, successors, or assigns of the Beneficiary.

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the Principal and Surety have executed this Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby represent, warrant, and certify that they are authorized to execute this Bond on behalf of the Principal and Surety, respectively.

FOR THE PRINCIPAL:

Date: _____ By [signature]: _____
Printed name: _____
Title: _____

State of [**insert state**]
County of [**insert county**]

On this [**insert date**], before me personally came [**insert name of PRP/Settling Defendant's signatory**] to me known, who, being by me duly sworn, did depose and say that she/he is [**insert title**] of [**insert name of PRP/Settling Defendant**], the entity described in and which executed the above instrument; and that she/he signed her/his name thereto.

_____
[Signature of Notary Public]

FOR THE SURETY:

Date: _____ By [signature]: _____
Printed name: _____
Title: _____

State of [**insert state**]
County of [**insert county**]

On this [**insert date**], before me personally came [**insert name of Surety's signatory**] to me known, who, being by me duly sworn, did depose and say that she/he is [**insert title**] of [**insert name of Surety**], the entity described in and which executed the above instrument; and that she/he signed her/his name thereto.

_____
[Signature of Notary Public]

Appendix F

APPENDIX F
FINANCIAL ASSURANCE BOND

Surety's Bond Number:	[**insert number**]
Date of Execution of Bond:	[**insert date**]
Effective Date of Bond:	[**insert date**]
Total Dollar Amount of Bond:	$864,683

PRINCIPAL:

Legal Name:	Pope Resources, a Delaware limited partnership; OPG Properties LLC; and OPG Port Gamble LLC, collectively
Address:	1 Rayonier Way, Wildlight, Florida 32097
Contact Person(s)/Information:	Josh Stancliff, 904-357-9836, josh.stancliff@rayonier.com

SURETY:

Legal Name:	Liberty Mutual Insurance Company
Address:	175 Berkeley Street, Boston, MA 02116
Contact Person(s)/Information:	[**insert name and contact information (phone, email)**]

BENEFICIARY:

Legal Name:	The United States Department of the Interior; the Washington State Department of Ecology on behalf of the State of Washington; the Jamestown S'Klallam Tribe; the Lower Elwha Klallam Tribe; the Port Gamble S'Klallam Tribe; the Skokomish Indian Tribe; and the Suquamish Indian Tribe (collectively, "the Trustees")
Address/Contact Information:	31912 Little Boston Road NE, Kingston, WA 98346

SITE INFORMATION: Financial Assurance for Long-Term Maintenance & Monitoring (hereinafter the "Work")
Name and Location of Site: Port Gamble Bay Natural Resource Damages Restoration Project
Agreement Governing Site Work: That certain "Consent Decree" dated ____ ("Agreement").

KNOW ALL PERSONS BY THESE PRESENTS, THAT:

WHEREAS, said Principal is required, under the Agreement entered pursuant to Section 107 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. § 9607; the Model Toxics Control Act ("MTCA"), Wash. Rev. Code § 70A.305.040(2); and Section 311(f) of the Clean Water Act ("CWA"), 33 U.S.C. § 1321(f), to perform the "Work" as defined in such Agreement (hereinafter, the "Work") and to fulfill its other obligations as set forth therein; and

WHEREAS, said Principal is required by the Agreement to provide financial assurance to ensure completion of the Work.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration the receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. The Principal and Surety hereto are firmly bound to the Trustees, in the above Total Dollar Amount of this Bond, for the payment of the Work, which we, the Principal and Surety, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, subject to and in accordance with the terms and conditions hereof.

2. The conditions of the Surety's obligation hereunder are such that if the Principal shall promptly, faithfully, fully, and finally complete the Work in accordance with the terms of the Agreement, the Surety's obligation hereunder shall be null and void; otherwise it is to remain in full force and effect.

3. Pursuant to and in accordance with the terms of the Agreement, and except as specifically provided in Paragraph 5 below, the Surety shall become liable on the obligation evidenced hereby only upon the Principal's failure to perform all or any portion(s) of the Work, the Trustees' subsequent Access to Financial Assurance Notice, and the Principal's failure to remedy to the Trustees' satisfaction the circumstances giving rise to the Trustees' issuance of such notice. If the Principal fails to remedy the deficiencies set forth in the Access to Financial Assurance Notice as permitted under Paragraph 31(b) of the Agreement, the Surety shall, up to the Total Dollar Amount of this bond, promptly (and in any event within 15 days after receiving such notification), pay to the Trustees funds in such amounts and to such person(s), account(s), or otherwise as the Trustees may direct.

If the Surety does not render such payment set forth above within a required 15-day period, the Surety shall be deemed to be in default of this Bond and the Trustees shall be entitled to enforce any remedy available to them at law, in equity, or otherwise; provided, however, that if such default is susceptible of cure but cannot reasonably be cured within such 15-day period and provided further that Surety shall have commenced to cure such default within such 15-day period and thereafter diligently proceeds to perform the same, such 15-day period shall be extended for such time as is reasonably necessary for Surety in the exercise of due diligence to cure such default, such additional period not to exceed 90 days.

4. The liability of the Surety shall not be discharged by any performance, payment, or succession of payments hereunder, unless and until such performance, payment, or payments shall amount in the aggregate to the Total Dollar Amount of this Bond, but in no event shall the aggregate obligation of the Surety hereunder exceed the amount of said sum.

5. The Surety may cancel this Bond only by sending notice of cancellation to the Principal and to the Beneficiary, provided, however, that no such cancellation shall be effective during the 90-day period beginning on the date of receipt of the notice of cancellation by both the Principal and the Beneficiary, as evidenced by return receipts. If after 60 days of such 90-day period, the Principal has failed to provide alternative financial assurance to the Trustees in accordance with the terms of the Agreement, the Trustees shall have the right to (up to the Total Dollar Amount of this Bond) draw on the guaranteed funds.

6. The Principal may terminate this Bond only by sending written notice of termination to the Surety and to the Beneficiary and as permitted under Paragraph 32 of the Agreement.

7. Any modification, revision, or amendment that may be made to the terms of the Agreement or to the Work to be done thereunder, or any extension of the Agreement, or other forbearance on the part of either the Principal or Beneficiary to the other, shall not in any way release the Principal and the Surety, or either of them, or their heirs, executors, administrators, successors, or assigns from liability hereunder. The Surety hereby expressly waives notice of any change, revision, or amendment to the Agreement or to any related obligations between the Principal and the Beneficiary.

8. The Surety will immediately notify the Beneficiary of any of the following events: (a) the filing by the Surety of a petition seeking to take advantage of any laws relating to bankruptcy, insolvency, reorganization, winding up or composition or adjustment of debts; (b) the Surety's consent to (or failure to contest in a timely manner) any petition filed against it in an involuntary case under such bankruptcy or other laws; (c) the Surety's application for (or consent to or failure to contest in a timely manner) the appointment of, or the taking of possession by, a receiver, custodian, trustee, liquidator, or the like of itself or of all or a substantial part of its assets; (d) the Surety's making a general assignment for the benefit of creditors; or (e) the Surety's taking any corporate action for the purpose of effecting any of the foregoing.

9. Any provision in this Bond that conflicts with CERCLA, MTCA, CWA or any other applicable statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or legal requirement shall be deemed incorporated herein.

10. All notices, elections, consents, approvals, demands, and requests required or permitted hereunder shall be given in writing to (unless updated from time to time) the addressees shown on the first page of this Bond, identify the Site, and provide a contact person (and contact information). All such correspondence shall be: (a) effective for all purposes if hand delivered or sent by (i) certified or registered United States mail, postage prepaid, return receipt requested or (ii) expedited prepaid delivery service, either commercial or United States Postal Service, with proof of attempted delivery, to the relevant address shown on the first page of this Bond; and (b) effective and deemed received upon the earliest of (i) the actual receipt of the

same by personal delivery or otherwise, (ii) one business day after being deposited with a nationally recognized overnight courier service as required above, or (iii) three business days after being deposited in the United States mail as required above. Rejection or other refusal to accept or the inability to deliver because of changed address of which no notice was given as herein required shall be deemed to be receipt of the notice, election, consent, approval, demand, or request sent.

11. The Surety hereby agrees that the obligations of the Surety under this Bond shall be in no way impaired or affected by any winding up, insolvency, bankruptcy, or reorganization of the Principal or by any other arrangement or rearrangement of the Principal for the benefit of creditors.

12. No right of action shall accrue on this Bond to or for the use of any person other than the Beneficiary or the executors, administrators, successors, or assigns of the Beneficiary.

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the Principal and Surety have executed this Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby represent, warrant, and certify that they are authorized to execute this Bond on behalf of the Principal and Surety, respectively.

FOR THE PRINCIPAL:

Date: _____ By [signature]: _____
Printed name: _____
Title: _____

State of [**insert state**]
County of [**insert county**]

On this [**insert date**], before me personally came [**insert name of PRP/Settling Defendant's signatory**] to me known, who, being by me duly sworn, did depose and say that she/he is [**insert title**] of [**insert name of PRP/Settling Defendant**], the entity described in and which executed the above instrument; and that she/he signed her/his name thereto.

_____
[Signature of Notary Public]

FOR THE SURETY:

Date: _____ By [signature]: _____
Printed name: _____
Title: _____

State of [**insert state**]
County of [**insert county**]

On this [**insert date**], before me personally came [**insert name of Surety's signatory**] to me known, who, being by me duly sworn, did depose and say that she/he is [**insert title**] of [**insert name of Surety**], the entity described in and which executed the above instrument; and that she/he signed her/his name thereto.

_____
[Signature of Notary Public]

Appendix G

PORT GAMBLE BAY NATURAL RESOURCE DAMAGE ASSESSMENT AND RESTORATION

DRAFT RESTORATION PLAN AND ENVIRONMENTAL ASSESSMENT

Port Gamble Bay, Kitsap County, Washington

JUNE 2024

PORT GAMBLE BAY NATURAL RESOURCE TRUSTEE COUNCIL

Prepared by the Port Gamble Bay Natural Resource Trustee Council:

Lead Preparer: United States Department of the Interior/U.S. Fish and Wildlife Service

Port Gamble S'Klallam Tribe

Skokomish Tribe

Suquamish Indian Tribe

Jamestown S'Klallam

Lower Elwha Klallam Tribe

State of Washington/Department of Ecology

Cover page photo: Port Gamble Bay shoreline near former mill site – November 2018. Photo credit: J. Krausmann, USFWS, Lacey, Washington.

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ABBREVIATIONS AND ACRONYMS

AET-Apparent Effects Threshold
CEQ-White House Council on Environmental Quality
CERCLA-Comprehensive Environmental Response, Compensation, and Liability Act
cPAHs- Carcinogenic Polyaromatic Hydrocarbons
CWA-Clean Water Act
DOI-U.S. Department of the Interior
EA-Environmental Assessment
Ecology-Washington State Department of Ecology
EPA-U.S. Environmental Protection Agency
ESA-Endangered Species Act
HEA-Habitat Equivalency Analysis
LAT-Lead Administrative Trustee
MBTA-Migratory Bird Treaty Act
MLLW-Mean lower low water
MOA-Memorandum of Agreement
MTCA-Model Toxics Control Act
NEPA-National Environmental Policy Act
NMFS-National Marine Fisheries Service
NRDAR-Natural Resource Damage Assessment and Restoration
PAH-Polycyclic aromatic hydrocarbons
PCBs-Polychlorinated biphenyls
PGST-Port Gamble S'Klallam Tribe
PRP-Potentially Responsible Party
RP/EA-Restoration Plan/Environmental Assessment
SMS-Sediment Management Standards (SMS)
SQS-Sediment Quality Standards (SQS)
SEPA-State Environmental Policy Act
USFWS-U.S. Fish and Wildlife Service
WDNR-Washington State Department of Natural Resources
WDFW-Washington State Department of Fish and Wildlife
WSDOH-Washington State Department of Health

EXECUTIVE SUMMARY

Beginning in the mid-1800s through 1995, Port Gamble Bay was the site of extensive industrial activities that have resulted in the release of hazardous substances to the environment. Port Gamble Bay is in Kitsap County, Washington and encompasses more than two square miles of subtidal and shallow intertidal habitat. Sawmill and logging operations conducted by Pope & Talbot at various locations in and along Port Gamble Bay released hazardous substances including, but not limited to, polychlorinated dibenzodioxins and furans, polychlorinated biphenyls (PCBs), organochlorine pesticides, metals, perchlorate, tributyltin, and wood waste degradation products. Because of these releases, natural resources in Port Gamble Bay have been exposed to and adversely affected by hazardous substances which have been found in Port Gamble Bay sediments, biota, surface water, soils, and groundwater. The physical environment of the Port Gamble Bay has also been altered by other human activities such as filling of former aquatic areas, capping of contaminated sediment, installation of in-water structures, and dredging. Despite contamination in Port Gamble Bay, the site remains an important area used by natural resources such as salmonids, invertebrates, birds, shellfish, and other wildlife. Port Gamble Bay is also an important location for Tribal shellfish harvesting and fishing, and other resources.

Under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 USC §9601, et seq. (CERCLA) and the Clean Water Act, 33 USC §1251, et seq. (CWA) and related legal authorities, the Port Gamble Bay Natural Resource Trustees have been conducting natural resource damage assessment and restoration (NRDAR) activities to assess and address natural resource injuries in Port Gamble Bay caused by releases of hazardous substances. The natural resource trustees for the Port Gamble Bay are the Jamestown S'Klallam Tribe, the Lower Elwha Klallam Tribe, the Port Gamble S'Klallam Tribe (PGST), the Skokomish Indian Tribe, the Suquamish Indian Tribe of the Port Madison Reservation (Suquamish Tribe), the United States Department of the Interior (DOI) represented by the United States Fish and Wildlife Service (USFWS), and the State of Washington represented by the State of Washington Department of Ecology (Ecology) (collectively, the Trustees).

For the purposes of this NRDAR, the Trustees have defined the Port Gamble Bay Assessment Area (the Bay or Assessment Area) to include the entirety of Port Gamble Bay in Kitsap County, Washington just south of the Strait of Juan de Fuca (Figure 1). The Bay is those areas below the ordinary high-water mark, encompassing more than two square miles of subtidal and shallow intertidal habitat.

The Trustees collaborated to assess and address potential injuries to natural resources caused by hazardous releases adjacent to and in the Bay. Once the Trustees determined the extent of potential injuries caused by hazardous releases, they sought damages from potentially responsible parties to compensate for the injuries to natural resources and related lost services. The Trustees also evaluated actions that will restore, replace, or acquire the equivalent of the natural resources and related services potentially injured by the hazardous releases. To restore

injured resources and improve the Bay's ability to support these resources, the Trustees considered habitat creation and enhancement projects. Shoreline habitats are a top priority because of their high value to potentially injured natural resources such as migratory birds (osprey, bald eagle, assorted waterfowl, great blue heron, spotted sandpiper, belted kingfisher), anadromous and resident fish (forage fish included), shellfish, aquatic vertebrates, and aquatic plants (including eelgrass). Wetland and upland habitats, riparian and beach backshore habitat and subtidal habitats are also targeted because they support wildlife, filter runoff, and provide material inputs in the estuarine waters, groundwater, and surface water. The Trustees' primary focus was restoration of mudflats, shorelines, and submerged aquatic vegetation in integrated habitat complexes because these habitat features have been found to have the most direct benefits for those potentially injured resources in the Bay. The Trustees also considered other project types that show clear benefits to those natural resources potentially injured by hazardous releases in the Bay.

Consistent with applicable legal authorities, e.g., Section 111(i) of CERCLA, this Draft Restoration Plan/Environmental Assessment (Draft RP/EA) details the Trustees' planning and analysis to select actions to restore those natural resources potentially injured as the result of hazardous substance releases in the Bay. Additionally, as a federal agency, DOI is required under the National Environmental Policy Act, 42 U.S.C. § 4321, et seq. (NEPA), to identify and evaluate impacts to the environment that may occur due to federal actions. In this Draft RP/EA, the Trustees describe the affected environment and evaluate the following proposed restoration alternatives to identify and evaluate the likely impacts associated with each.

- No Action Alternative (Proposed Alternative A) – Under this proposed alternative, the Trustees would take no action to restore potentially injured natural resources and would not accept restoration actions taken by potentially responsible parties.
- Southern Mill Site Shoreline Restoration (Proposed Alternative B) – Under this alternative, the Trustees would accept potentially responsible parties' implementation of a nine-acre project that would include laying back intertidal slopes of the southern portion of the former sawmill facility shoreline to restore near-natural beach grades. Restored intertidal caps would include a lower layer of angular cobble-sized armor, a middle layer of rounded cobble/gravel beach substrate, and an upper layer of sand/gravel habitat substrate to optimize habitat functions and concurrently prevent exposure to contaminated soils beneath the cap. Near-surface hardscape would be removed within a 150-foot shoreline buffer, followed by soil treatments and native plantings.
- Western Nearshore Restoration (Proposed Alternative C) - The Trustees would accept this project as implemented by potentially responsible parties, which would include placing a sand cover layer over a minimum of 11 acres of lower intertidal to shallow subtidal zones (approximately -2 to -15 feet mean lower low water [MLLW]) within former log rafting areas in the western Bay to restore benthic habitat functions and concurrently provide suitable substrate in areas where eelgrass is absent or growing at very sparse densities. As practicable, the sand cover would be constructed using clean dredge material from the nearby Driftwood Key navigation channel, or other similar

marine source which would be expected to contain eelgrass seed and maximize restoration potential.

- Proposed Preferred Alternative, Combined Southern Mill Site Shoreline and Western Nearshore Restoration (Proposed Alternative D)- The Trustees would accept potentially responsible parties' implementation of the two restoration projects described in Proposed Alternatives B and C, the Southern Mill Site Shoreline and Western Nearshore Restoration. Together, the two restoration projects would be likely to restore the equivalent of the natural resources injured and services lost due to releases of hazardous substances from the former Pope & Talbot operations in the Bay.

The Trustees' Proposed Preferred Alternative, Combined South Mill Site and Western Nearshore Restoration (Proposed Alternative D) presented in this Draft RP/EA has been proposed by potentially responsible parties, Pope Resources, L.P., OPG Properties LLC, and OPG Port Gamble LLC (collectively, the PRPs). The PRPs will implement restoration projects under the proposed Preferred Alternative to resolve their alleged natural resource damages liability for the Bay associated with their operations and ownership of the former Pope & Talbot, Inc. sawmill property. The Trustees and the PRPs have negotiated and signed a consent decree, currently lodged with the United States District Court for the Western District of Washington, under which the Trustees propose to accept implementation of the restoration projects to offset the PRPs' natural resource damages liability.

1. INTRODUCTION

1.1 Background to Port Gamble Bay NRDAR Draft Restoration Plan and Environmental Assessment

This Draft RP/EA has been prepared by the Trustees to analyze restoration actions to restore natural resources and related services potentially injured by releases of hazardous substances from logging and sawmill operations in the Bay (Figure 1). In 2014, the Jamestown S'Klallam Tribe, the Lower Elwha Klallam Tribe, the PGST, the Skokomish Tribe, the Suquamish Tribe, Washington represented by Ecology, and DOI formed the Port Gamble Bay Natural Resource Trustee Council to conduct joint NRDAR activities for the Bay. As established by CERCLA, CWA, and other legal authorities, NRDAR is the process by which state, Tribal, and federal natural resource trustees evaluate injuries to natural resources and losses of related services caused by releases of hazardous materials.[1] The result of a NRDAR is a calculation of the magnitude of injury and, ultimately, the ecological restoration required to compensate the public for the injuries to natural resources. Because this NRDAR is being conducted pursuant to processes established under CERCLA, discussions throughout this document will focus primarily on CERCLA; however, the Trustees will comply with all applicable statutes.

Pope & Talbot, Inc. and its successors operated a sawmill on the northwest shore of the Bay from 1853 to 1995 (Mill Site), with log transfer and rafting activities occurring at various locations adjacent to and in the Bay. This was one of the first sawmills in Puget Sound. Log rafting ceased in 1995 when the sawmill closed. In 1985, Pope & Talbot, Inc. transferred ownership of its sawmill property in and adjacent to the Bay to Pope Resources L.P. Following this transfer, OPG Properties LLC, formerly known as Olympic Property Group I, LLC, operated the property from 1998 to 2020. In 2020, Pope Resources L.P. transferred its property ownership in and adjacent to the Bay to OPG Port Gamble LLC.

Releases of hazardous substances have been detected in the water, sediments, soils, and ground water of the Bay. Substances such as PAHs, metals, phenols, and sulfide are attributable to releases from the Mill Site's Forest product manufacturing operations and log rafting. Over time, these releases have become commingled in the Bay. For a complete list of hazardous substances above injury thresholds detected in the Bay, see Section 2.2.1, "Contaminants of Concern." There are many potential activities that caused the releases, including petroleum product storage, electrical transformer use, wood treatment/end painting, use of hog fuel boilers, and drum storage. Log rafting and timber processing operations resulted in accumulations of wood waste in the marine environment where degradation byproducts such as ammonia and sulfides have the potential to cause toxicity to aquatic receptors (Anchor QEA, LLC 2012 & 2019, State of Washington Department of Ecology 2012).

[1] In the context of NRDAR, services are defined as the physical and biological functions performed by a natural resource, including human uses of those functions. 43 CFR §11.14(nn).

Based on their assessment activities, which are described in more detail in Section 2.0, the Trustees have determined that natural resources and their supporting habitats are potentially injured by the releases of hazardous substances from the Mill Site. Potentially injured natural resources include, but are not limited to, the following: migratory birds such as osprey, bald eagle, assorted waterfowl, great blue heron, belted kingfisher, spotted sandpiper, and other shorebirds; anadromous and resident fish; and aquatic invertebrates. For a complete list of species including State listed, as well as Threatened and Endangered species, see Section 4.1, "Affected Environment."

This Draft RP/EA describes the Trustees' restoration evaluation objectives and screening criteria, application of the criteria to evaluate proposed alternatives, and the Trustees' analysis of the proposed alternatives' likely impacts to the environment as well as the cumulative effects should the alternatives be implemented. Pursuant to legal mandates under both CERCLA and NEPA, the Trustees developed this Draft RP/EA to document their restoration planning analysis and to seek public input on the Trustees' selection of a restoration alternative. The Trustees comply with CERCLA requirements to describe to the public the Trustees' proposed means to restore, and to compensate the public for, natural resource injuries caused by hazardous substance releases to the Bay. Under NEPA, the Trustees prepared this Draft RP/EA to analyze the potential environmental impacts of the proposed alternatives that the Trustees considered to restore, replace, rehabilitate, and/or acquire the equivalent of the injured natural resources. Additionally, the Draft RP/EA informs the public of the Trustees' proposed Preferred Alternative, Combined Southern Mill Site Shoreline and Western Nearshore Restoration (Alternative D), and provides an opportunity for public comment. Following their analysis, which is set forth in this Draft RP/EA, the Trustees have determined that implementation of the Proposed Preferred Alternative (Alternative D) is likely to restore those natural resources potentially injured by hazardous releases from the PRPs' activities to the Bay. The Proposed Preferred Alternative (Alternative D) is the basis of a proposed settlement between the PRPs and the Trustees. The settlement is described in more detail in Section 1.5.

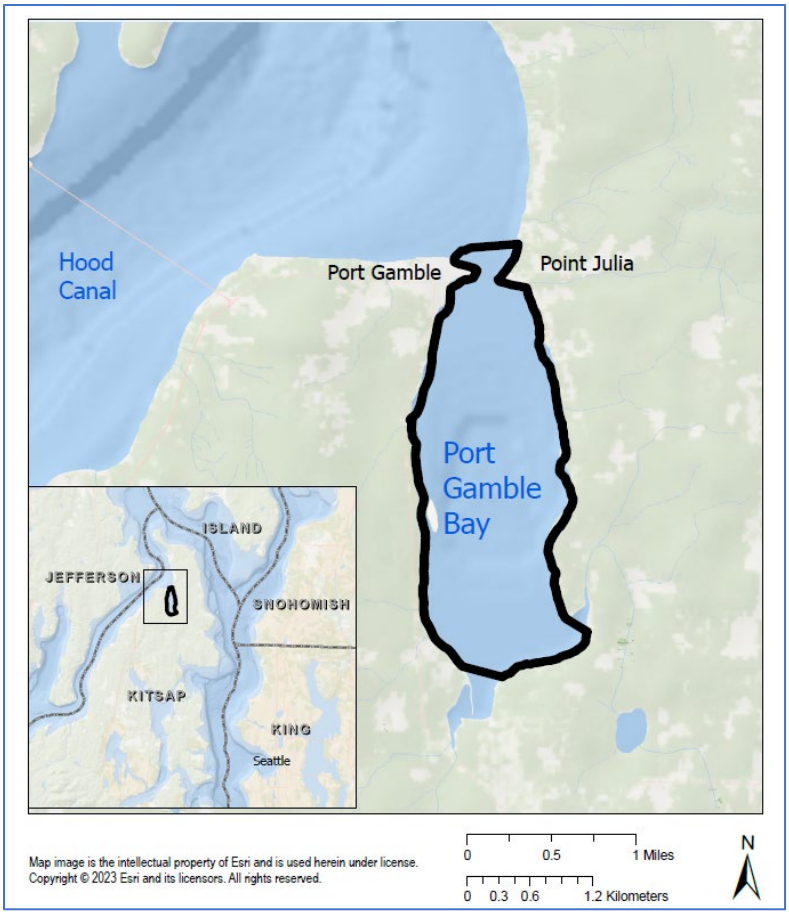

Figure 1: Port Gamble NRDAR Assessment Area map. Credit: Port Gamble Bay Natural Resource Trustee Council

1.2 The Natural Resource Damage Assessment and Restoration Process

This section provides a general overview of the NRDAR process to contextualize the Trustee's activities for the Bay, which are described in more site-specific detail throughout this Draft RP/EA. At its essence, the NRDAR process consists of the following three phases: 1) Preliminary Assessment; 2) Injury Assessment; and 3) Restoration Planning and Implementation. The purpose of the Preliminary Assessment Phase is to provide a rapid review of readily information allowing trustee decisionmakers to determine whether a natural resource damage assessment should be performed. During the Injury Assessment Phase, trustees identify those natural resources that have been injured by releases of hazardous substances and quantify the extent of those natural resource injuries and any related resource service losses. This process is done by conducting activities such as data and literature reviews as well as site-specific economic and scientific studies. In the Restoration Planning and Implementation Phase, trustees use injury determination and quantification results to plan for and implement actions that will restore those resources injured by hazardous substances. Trustees pursue restoration actions that will provide sufficient ecological benefits to offset the lost services provided by the injured resources. Once implemented, the trustees monitor restoration actions for effectiveness. Throughout the NRDAR process, trustees seek public input.

1.3 Relationship Between NRDAR and Response Actions

When performing NRDAR activities, trustees coordinate with agencies responsible for cleanup and remedial actions, such as the Environmental Protection Agency (EPA) and Ecology. Removal and remedial actions (collectively, response actions) are conducted by the response agencies and focus on controlling exposure to released hazardous substances by removing, neutralizing, or isolating the substances to protect human health and the environment. An effective response action may reduce the amount of injury to a natural resource by stopping or reducing the resource's exposure to hazardous substances. Although response actions can reduce the need or amount of restoration, the restoration and response actions are separate and distinct. Trustees work with response agencies to understand the impacts of remedial actions to natural resources and consider the potential for impacts from response actions when planning restoration implementation.

For the Bay, the Trustees have and will continue to closely coordinate their NRDAR activities with Ecology, the agency leading response actions associated with hazardous releases from the PRPs' activities. The Bay is subject to ongoing cleanup activities under Ecology's Toxics Cleanup Program Puget Sound Initiative. Ecology divided the Mill Site into two zones for response actions: upland and aquatics. In the aquatic zone, five sediment management areas were identified: Mill Site North (SMA 1), Mill Site South (SMA 2), Central Bay (SMA 3), Former Lease Area (SMA 4), and Background (SMA 5) as depicted in (Figure 2). The Trustees reviewed and used data collected as part of the response activities to identify and quantify natural resource injuries in the Bay.

Between 2015 and 2017, the PRPs, under Ecology oversight, conducted the following response actions in the aquatic zone: removal of over 8,500 pilings (mostly creosote-treated) and one-acre of derelict structures, removal of over 110,000 cubic yards of wood waste and contaminated sediment, placement of over 200,000 tons of clean cap and habitat materials, and placement of over 113,000 cubic yards of sand to accelerate natural recovery of benthic habitat. Response actions were conducted over about 106 acres of the Bay. Approximately 3,400 feet of shoreline along the mill was improved but is steep and hard-armored following cleanup.

Response actions to address contamination remaining in the Mill Site upland are scheduled to begin mid-2024. Under Ecology oversight, the PRPs will excavate and transport soil from the most contaminated portions of the Site to an off-Site disposal facility. Clean soil will be brought in to fill excavation pits and to create a cap over areas of the Site with lower levels of contamination. Re-grading of the shoreline for the proposed NRDAR action will require redesign of the existing intertidal sediment caps.

The PRPs are required to monitor the upland and aquatic Mill Site following response actions. Ecology uses monitoring data for periodic reviews in which it evaluates long-term compliance with Ecology-defined standards for soil, groundwater, and sediment. The PRPs will maintain remedial components such as soil and sediment caps, to ensure the remedy remains protective of human and ecological health.

The Trustees, Ecology, and the PRPs will continue to work together to ensure that potential restoration implementation in the Bay will be consistent with response requirements and resource needs. Under the Proposed Preferred Alternative, the PRPs will implement both the response and restoration actions in the same period. Given that the Proposed Preferred Alternative and response actions have overlapping physical footprints, the Trustees and Ecology reviewed response and restoration action designs and requirements to ensure that the actions are complimentary while still achieving expected performance. Moreover, the Trustees believe that performing response and restoration construction activities concurrently will result in the least disturbance and greatest benefit to resources.

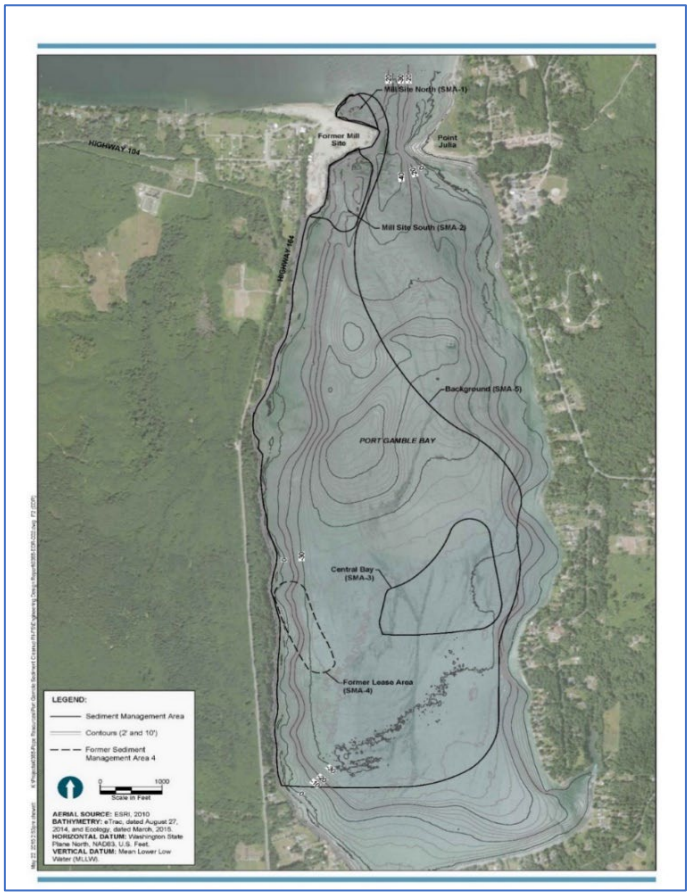

Figure 2: Sediment Management Areas (SMA's) map from 2023 Engineering Design Report, Port Gamble Bay Cleanup. Credit: Ecology

1.4 Purpose and Need for Restoration

Under CERCLA, the Trustees are required to restore, replace, or acquire the equivalent of those natural resources injured by releases of hazardous substances. Accordingly, the purpose of the proposed action is for the Trustees to restore natural resources in the Bay, including habitat and the services they provide, that were and continue to be potentially injured by releases of hazardous substances from the PRPs' activities. The proposed implementation of restoration actions will serve as the basis of a settlement between the Trustees and the PRPs to resolve the

PRPs' natural resources damages liability associated with the releases of hazardous substances to the Bay from their activities at the Mill Site. The Trustees need to develop restoration actions that will provide ecological benefits that offset the natural resource injuries and service losses in the Bay caused by releases of hazardous substances by the PRPs.

Based on their analysis set forth in this Draft RP/EA, the Trustees propose to select Proposed Alternative D, Combined Southern Mill Site Shoreline and Western Nearshore Restoration, as the Proposed Preferred Alternative to restore potentially injured resources. Under this alternative, the PRPs will act under the Trustees' oversight to implement two habitat restoration projects in and adjacent to the Bay to benefit potentially injured resources, including but not limited to fish, shellfish, migratory birds, as well as eelgrass habitat. Both projects were designed by the PRPs with ultimate approval by the Trustees. The Proposed Preferred Alternative would include the PRPs and other landowners restricting the uses of the project properties. Additionally, the PRPs under the Proposed Preferred Alternative would perform and fund actions to maintain, monitor, and steward the projects so that they would benefit potentially injured natural resources in the Bay on a long-term basis.

1.4.1 Restoration Goals and Objectives

To restore those natural resources injured in the Bay as the result of hazardous substance releases from the PRPs' activities, the Trustees propose to restore important intertidal and riparian habitats that support potentially injured resources such as salmonids and other fish, migratory birds, shellfish, and benthic invertebrates. Intertidal and riparian habitats in and adjacent to the Bay are a fraction of their historic acreage, and this lack of habitat is a limiting factor for many potentially injured natural resources and related services within this system. To restore injured resources and improve the Bay's ability to support these resources, the Trustees analyzed restoration actions that rehabilitate, create, and enhance habitat.

The Trustees focused on proposed restoration alternatives located in and adjacent to the Bay. Restoration in and adjacent to the Bay is constrained by industrial uses and other physical developments along the shorelines. Restoring to historical (pre-1850s) conditions is not possible in the Bay due to alteration from human activities. The Bay now supports multiple land use types, including industrial, commercial, and residential uses, and open space. Despite this, important opportunities exist in the Bay to restore ecosystem functions and processes to create and maintain natural habitats over time. Habitat restoration of shoreline processes and intertidal beach substrate enhancements in the Bay will benefit potentially injured fish, shellfish, and salmonids. Also, habitat restoration actions will create suitable substrate to restore benthic habitat functions and an opportunity for eelgrass restoration.

The Trustees' restoration objectives for the Bay are to:

1. Implement restoration with a strong nexus to natural resources injuries caused by releases of hazardous substances in the Bay.

2. Provide a net gain of habitat function beyond existing conditions for injured fish, shellfish, and wildlife by restoring important habitat types and the physical processes that sustain them.

3. Integrate restoration strategies to increase ecosystem structure and function of the Bay.

4. Preserve existing threatened functioning habitats while enhancing or creating new high-value habitats for fish, shellfish, and wildlife.

5. Coordinate restoration efforts with other planning and regulatory activities to maximize restoration potential in a cooperative agreement.

6. Ensure that restoration sites and associated habitat functions are preserved in perpetuity.

1.5 Summary of the Proposed Settlement

Per the terms of the proposed consent decree, a group of PRPs, Pope Resources, L.P., OPG Properties LLC, and OPG Port Gamble LLC, agree to implement the Proposed Preferred Alternative (Proposed Alternative D) to resolve their natural resource damages liability caused by hazardous substance releases from their ownership and operation activities to the Bay. The Proposed Preferred Alternative (Proposed Alternative D) consists of implementation of two restoration projects in and adjacent to the Bay: Southern Mill Site Shoreline Restoration and the Western Bay Nearshore Restoration. Proposed Alternative D encompasses nearly 35 acres of intertidal slopes, shoreline, and subtidal zones of benthic habitat in two locations in the Bay. The fourteen-acre Southern Mill Site Shoreline Restoration at the former mill restores intertidal, backshore, and riparian forest. The Western Bay Nearshore Restoration is a twenty-one-acre intertidal project along the western bay that utilizes sand cover and eelgrass to restore lower intertidal and shallow subtidal habitat. Collectively, these actions are likely to restore the shoreline, soil and native vegetation that will enhance the Bay ecosystems to benefit potentially injured wildlife, fish, and shellfish. Improving native shellfish habitat will help to stabilize and enhance the beach and overall water quality conditions. The planting of the eelgrass will provide habitat and food for wildlife and fish; support fish spawning; maintain water quality; produce oxygen; and absorb carbon.

The PRPs will also be required to fund adaptive management, maintenance and monitoring, and permanent stewardship for the restoration projects to ensure that the projects provide sufficient ecological benefits over time to offset natural resource injuries cause by the hazardous releases to the Bay. During the first ten years after shoreline restoration implementation completion[2], the PRPs will monitor and maintain the restoration projects. After the first ten years following shoreline restoration implementation completion, a designated Trustee or its representative will

[2] Under the terms of the consent decree, this ten-year period begins after the Trustees review and approve the PRPs' as-built drawings and construction completion report for the Southern Mill Site Restoration and placement of sand for the Western Bay Nearshore Restoration.

conduct long-term maintenance and monitoring as well as permanent stewardship for the restoration projects; however, the PRPs will continue to maintain the intertidal substrate and intertidal stability of the South Mill Beach Site for years 11 through 30 after the first ten years following shoreline restoration implementation completion. In return, the Trustees will release the PRPs from liability for natural resource damages in the Bay caused by releases of hazardous substances from the PRPs' prior operations and ownership. The proposed consent decree is subject to a public notice and comment period concurrent with the public notice and comment period for this Draft RP/EA. A copy of the proposed consent decree is available during the public notice and comment period here: https://www.justice.gov/enrd/consent-decrees.

1.6 Natural Resource Trustee Authority

Under CERCLA and related legal authorities, natural resource trustees act on behalf of the public to assess injury to natural resources caused by releases of hazardous substances and seek compensation for such losses. Trustees determine how to restore and compensate the public for such injuries and seek funds to implement restoration projects from potentially responsible parties or reach settlements that require potentially responsible parties to implement restoration. Natural resource trusteeship is often shared among states, Tribes, and designated federal agencies.[3]

In 2014, the Trustees for the Bay established the Port Gamble Bay Natural Resource Trustee Council (Trustee Council) pursuant to a Memorandum of Agreement (MOA). The members of the Trustee Council are the PGST, the Skokomish Tribe, the Suquamish Tribe, the Jamestown S'Klallam Tribe, the Lower Elwha Klallam Tribe, Washington represented by Ecology, and DOI with the USFWS acting as the DOI lead. The PGST initially served as the Lead Administrative Trustee (LAT) succeeded by the current LAT, Ecology.

1.7 Public Participation

Public participation is an important part of the Trustees' restoration planning process and is also called for pursuant to CERCLA, e.g., 42 USC § 9611(i). Under NEPA, federal agencies are also required to comprehensively analyze the impacts of their proposed actions and make information related to their analyses publicly available 42 USC § 4332. The Trustees have provided this Draft RP/EA to the public via announcement and accessible at: http://www.fws.gov/media/port-gamble-bay-draft-restoration-plan-and-environmental-assessment

Accordingly, this Draft RP/EA will be made available for public review and comment for 30 days beginning with the publication of the Notice of Availability in the Federal Register. Before finalizing this Draft RP/EA, the Trustees will review and address public comments. After addressing public comments, should the Trustees select the Proposed Preferred Alternative, the

[3] The designation of natural resource trustees is explained in Section 107 of CERCLA (42 USC § 9607(f)) and the National Contingency Plan, 40 CFR subpart G.

Draft RP/EA will be finalized by the Trustees. The Trustees' responses to public comments will be incorporated in the Final RP/EA. Public comments may be submitted in writing or by email:

Jeff Krausmann
U.S. Fish and Wildlife Service
Washington Fish and Wildlife Office
500 Desmond Drive
Lacey, WA 98503-1263
Jeff_krausmann@fws.gov

After issuing a Final RP/EA, and if the consent decree between the Trustees and the PRPs is entered by the Court, the Trustees will accept and oversee implementation of the Proposed Preferred Alternative described in this document. As the Trustees continue restoration planning, the Trustees may amend the Final RP/EA after it is issued if significant changes are made to the type, scope, or impact of the restoration actions. If there is a significant modification made to the Final RP/EA, the Trustees will provide another public review and comment opportunity related to the modification.

1.7.1 Potentially Responsible Parties' Participation

The PRPs (Pope Resources, OPG Properties LLC, and OPG Port Gamble LLC) participated in a cooperative NRDAR process with the Trustees that informed the proposed settlement between the Trustees and the PRPs.[4] The PRPs for the Bay were initially identified as part of remedial due diligence. Early in the NRDAR process, the Trustees also conducted additional research into the PRPs' corporate ownership and history related to the Bay. In June 2017, the Trustees and the PRPs entered the first phase of a three-part phased cooperative NRDAR process for the Bay. For each phase of the cooperative NRDAR process, the parties' efforts were governed by a funding and participation agreement signed by all the PRPs and Trustees. The funding and participation agreement, with subsequent amendments, established scopes of work that the parties jointly pursued. Under the funding and participation agreement, PRPs funded the Trustees' participation in the cooperative NRDAR as well as a portion to the Trustees' unreimbursed costs for assessment activities in the Bay.

Together the PRPs and Trustees conducted the following activities under the phased cooperative assessment:

- Phase A — Developed a consensus list of contaminants, data, and assessment studies to identify injuries to natural resources in the Bay resulting from hazardous releases.

[4] The CERCLA NRDAR regulations, 43 CFR § 11.32(a)(2), encourage natural resource trustees to invite PRPs to participate in the NRDAR process.

- Phase B — Modeled injury quantity and compensation using Habitat Equivalency Analysis (HEA), reviewed potential restoration projects to offset natural resource injuries in the Bay, and developed conceptual restoration project designs to create mutually agreeable restoration concepts for further refinement.
- Phase C — Drafted technical and legal documents, such as property protections, a technical scope of work, and financial assurances, to support restoration actions as the basis of a natural resource damages settlement between the Trustees and the PRPs.

This Draft RP/EA along with the proposed consent decree that sets forth the settlement between the parties is the culmination of this cooperative assessment process. More information about the proposed settlement is found in Section 1.5.

1.7.2 Administrative Record

This Draft RP/EA references documents prepared or relied on by the Trustees through the NRDAR process. These documents are part of the Administrative Record on file with the LAT and may be viewed at Washington Department of Ecology, 300 Desmond Dr. SE, Lacey, WA 98503 or on the following website:

https://ecology.wa.gov/spills-cleanup/contamination-cleanup/cleanup-sites/puget-sound/port-gamble-baywide/natural-resource-damage-assessment-nrda

1.8 Compliance with Other Authorities

The Trustees need to consider many federal, state, Tribal, and local laws, and regulations during the development of a restoration alternative, as well as regulatory requirements that are typically evaluated during federal and state permitting processes. Appendix A presents a review of the potentially applicable laws and regulations that govern the Trustees' restoration planning and implementation. When implementing the Proposed Preferred Alternative, the project managers will ensure that there is coordination among these programs where possible and that restoration implementation and monitoring follows all applicable laws and regulations.

2.0 POTENTIAL INJURY TO NATURAL RESOURCES

The Trustees reviewed data for the Bay that indicate that there are hazardous substances at levels in the Bay that are potentially injurious to exposed natural resources, including fish, shellfish, and migratory birds.[5] Remedial investigations in the Bay found these hazardous substances, including but not limited to carcinogenic polyaromatic hydrocarbons (cPAHs) and cadmium, in the surface water, biota, and sediments of the Bay. The Trustees' assessment activities that identified and quantified these potential natural resource damage injuries are summarized below.

2.1 Injury Assessment Process for the Bay

This section describes the Trustees' natural resource damage assessment process for the Bay in more detail. Assessment activities to identify and quantify natural resource injuries in the Bay inform the type and magnitude of the restoration that the Trustees considered to compensate for natural resource injuries and associated service losses. As discussed in Section 1.7.1, the Trustees coordinated many of these assessment activities with the PRPs pursuant to a cooperative process. The proposed restoration alternatives that the Trustees analyze in this Draft RP/EA reflect the results of these assessment activities.

2.1.1 Assessment Area

At the commencement of the NRDAR process, the Trustees reviewed existing data to determine the geographic scope, i.e., Assessment Area, for their injury assessment activities.[6] The levels of hazardous substances in sediment and surface water samples collected during remedial investigations indicated that releases of those substances from the PRPs' activities have come to be located in the Bay. Based on their review of that sampling data, the Trustees defined the Port Gamble Bay NRDAR Assessment Area (the Bay or Assessment Area) to be the area depicted in Figure 1, which includes the entirety of Port Gamble Bay in Kitsap County, Washington just south of the Strait of Juan de Fuca. The Bay is those areas below the ordinary high-water mark, encompassing more than two square miles of subtidal and shallow intertidal habitat.

[5] For a complete list of special status species present or potentially present in the Bay, including State listed, Threatened and Endangered species, see Section 4.1, "Affected Environment."

[6] CERCLA NRDAR regulations define the assessment area as "the area or areas in which natural resources have been affected directly or indirectly by the discharge of oil or release of a hazardous substance and that serves as the geographic basis for the injury assessment." 43 CFR § 11.14(c).

Photo 1: 2012 photo of Mill Site prior to clean up and removal of loading pier. Photo credit: J. Krausmann, USFWS.

2.1.2 History of Operations & Releases

From 1853 to 1995, Pope & Talbot, Inc. operated a sawmill along the northwest shore of the Bay. Raw timber was stored in floating rafts within the Bay before it was processed at the sawmill. Bark and wood particles sloughed off the timber and were released to the water column and sediments during temporary storage and transfer to the upland. Accumulations of wood chips and other wood debris from timber operations were several feet thick in some nearshore areas. The sawmill treated and incinerated wood. Related to these activities, the sawmill operations required chemical storage on site and the use of electrical transformers and hog fuel boilers. Infrastructure on and in the Bay was constructed for sawmill operations using creosote treated pilings. Landfilling using contaminated materials also occurred in and around the Bay as part of the sawmill infrastructure.

Remedial investigations found risks associated with cPAHs and cadmium in Bay shellfish exceeded Washington Model Toxic Control Act (MTCA)/Sediment Management Standard human health thresholds (Ecology 2012). Upon closure of the sawmill, thousands of creosote-treated pilings remained in the aquatic environment. Ecology identified the creosote pilings and overwater structures as a source of PAHs to the marine environment (Ecology 2012). Studies conducted by scientists at Washington Department of Fish and Wildlife (WDFW) and National Oceanic and Atmospheric Administration (NOAA) have shown PAHs were present in the sediment and in herring eggs at concentrations that have the potential to cause lethal and sublethal effects (West et al. 2014).

2.2 Injury Determination

To determine potential natural resource injuries, the Trustees reviewed site-specific data to identify those natural resources that were exposed to hazardous substances released to the Bay

from the Mill Site and, as a result, were and continue to be potentially injured by the releases.[7] The Trustees analyzed data to identify those hazardous substances present in the Bay and confirmed a pathway by which those substances from the Mill Site came to be located in the Bay. The Trustees determined that natural resources were and continue to be exposed to hazardous substances in the Bay at potentially injurious levels. Further information on quantifying these injuries is located in Section 2.4.

2.2.1 Contaminants of Concern

The Trustees' injury assessment considered the following hazardous substances that are present and above known injury thresholds in the Bay:

- High and low molecular weight polycyclic aromatic hydrocarbons (PAHs)
- Metals, including arsenic, antimony, cadmium, chromium, copper, lead, nickel, silver and zinc
- Polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans (PCDDs/PCDFs), including 2,3,7,8-tetrachlorodibenzo-p-dioxin and 2,3,7,8-tetrachlorodibenzofuran
- Sulfide
- Ammonia
- Benzoic acid
- Total PCBs
- Phenols, including phenol, pentachlorophenol, and 4-methylphenol, 2,4-dimethylphenol
- Phthalates, including Butyl Benzyl Phthalate and Diethyl Phthalate

In addition to the above hazardous substances, wood waste is a deleterious substance under MTCA. The PRPs' activities generated wood waste, some of which remains in the Bay.

2.2.2. Natural Resources' Exposure to Released Hazardous Substances

After reviewing activities at the Mill Site that are described in Section 2.1.2, the Trustees have found that those activities resulted in releases of the hazardous substances listed in Section 2.3.1 into the Bay through the standard operational practices used by the former mill and the associated docks. Combustion and atmospheric distribution of particulates and storm water and process wastewater discharge resulted in the movement of heavy metals and organic contaminants from land-based activities at the mill into the water column and marine sediments or comingled with wood waste. The distribution of hazardous substances corresponds with the locations of historical sawmill activities and wastewater discharge sites in the Bay.

[7] More information regarding site-specific injury determination methods can be found in the CERCLA NRDAR regulations Type B assessment procedures. *See* 43 CFR §§ 11.60 -11.64.

2.2.3 Potential Injuries to Natural Resources

Sediment samples contain hazardous substances at concentrations that exceed State of Washington standards and federal guidelines, and are known to cause injury in benthic organisms, fish, shellfish, birds, and other resources. Chemical analysis of fish and shellfish tissue have identified metals, dioxin/furans, PCBs, and PAHs at levels with the potential to cause adverse effects.

Scientific literature, technical data, and applicable regulatory standards were reviewed to determine the effects of varying sediment contaminant concentrations on key species or species groups. A series of concentration levels were established for each contaminant, expressed as a percent reduction in ecological services. These were based on the observation that as concentrations of hazardous substances increase, both the number of species adversely affected, and the severity of effects also increase.

Sediment chemistry data were selected to obtain the best representation of the spatial extent of contamination and maximum areal coverage of the Port Gamble Bay area. A protocol was developed for reviewing qualified data, aggregating contaminants, and addressing multiple samples from the same station. To determine the potential for injury to natural resources, contaminant concentrations were preliminarily evaluated based on threshold concentrations developed for the Hylebos Waterway in Commencement Bay (Wolotira 2002).

These threshold concentrations represent contaminant levels associated with reduction in ecological services. Thresholds for metals, such as arsenic, cadmium, chromium, copper, lead, and mercury, are based on benthic community effects and invertebrate bioassays from the Washington State Sediment Management Standards (SMS) and Sediment Quality Standards (SQS). Thresholds for total PAHs and total PCBs are based on biological effects of these chemicals on fish and apparent effects threshold (AET) information on invertebrates from the Washington State SMS and SQS.

PAHs at levels observed in the Bay are injurious to natural resources. From oil or stormwater sources, documented effects of PAHs exposure to Pacific herring (*Clupea pallasii*) embryos are cardiac arrhythmia and reduced growth (Incardona et al. 2009, West et al. 2014, Harding et al. 2020). Fish injury from total PAHs is based on effects observed in English sole studies. English sole is a well-studied fish species for pollution biomonitoring since it is a shallow-water bottom-dwelling flatfish that is particularly likely to take up sediment-associated contaminants through direct contact and diet. Since this species is relatively sedentary and shows high fidelity with the site in which it resides, biological effects in English sole are generally accurate reflections of PAH exposures at sites at which they are collected (Wolotira 2002). Numerous studies show that English sole from PAH-contaminated embayment's is highly susceptible to the development of liver cancer and related lesions, and also appear to be prone to several other adverse health effects, such as reproductive abnormalities, immune dysfunction, and alterations in growth and development (Myers et al. 1994, 1998b; Arkoosh et al. 1996; and Johnson et al. 1998).

Fish injury from total PCBs is based on effects observed in juvenile salmonids (Meador et al. 2002). Invertebrate injury from total PCBs is supplemented by studies on toxic effects observed

in organisms exposed to PCBs and various DDT congeners in the Southern California Bight (MacDonald 1994).

Based on these findings the Washington State Department of Health (WDOH) initiated a closure of a portion of the western shoreline of the Bay because of chemical contamination observed in sediments sampled in 2000 near the landfills. The closure ran along the western shoreline from south of the Mill Site to the northern border of the former leased area and includes shellfish from intertidal sediments to a depth of minus 18 feet. In 2002, the PGST requested that the western shoreline be certified for commercial harvest. In response, WSDOH recommended tissue sampling and analysis for confirmation was conducted by Pope and Talbot, Inc.'s contractor. Data from samples collected mostly by the PGST from 2008 to 2011 and by Ecology in 2011 were used to assess the ongoing closure of the western shoreline. In February 2014, WSDOH reopened the western shoreline to commercial shellfish harvest, however WSDOH advises not to consume shellfish at subsistence levels from this area (WSDOH 2015 Walker 2014, Dunagan 2014).

In the marine environment, wood waste is degraded by bacteria and releases degradation by-products such as sulfides and ammonia, which in sufficient concentrations can result in toxicity to benthic invertebrates and inhibit the growth of eelgrass (*Zostera marina*). Reduced light and low oxygen levels in the water column prevent eelgrass from compensating for the sulfide (Podger 2013). If *Zostera* is in areas with high levels of oxygen in the water column and high photosynthesis rates (clear water, no shading), it can deliver oxygen to the roots and mitigate for sulfide at low levels. However, reduced photosynthesis makes even low concentration levels of sulfide toxic to eelgrass. The presence of sulfide as a wood waste by-product may result in reduced plant growth or plant death (Elliot 2006).

Photo 2: Former Mill Site in 2012 prior to removal of over-water structures and pilings. Photo credit: M. Carlson, USFWS

2.3 Calculating Compensation

To quantify the magnitude and extent of natural resource injuries and calculate compensation, i.e., determine "damages,"[8] the Trustees used a methodology called a habitat equivalency analysis (HEA). HEA is an example of a service-to-service approach to determine the scale of restoration projects that will ensure that the present discounted value of natural resource service gains equals the present discounted value of interim natural resource service losses (NOAA, 2006). The HEA method is used in cases of habitat injury when the service of the injured area is ecologically equivalent to the service that will be provided by the replacement habitat.[9] This is called a service-to-service approach.

Specific to this NRDAR process, a HEA allowed the Trustees to apply a consistent quantification approach, relying on available scientific information, and utilizing existing data sets collected by Ecology, Pope & Talbot, Parametrix, Anchor, Hart Crowser, PGST, and NewFields from 2002 to 2017 (See Appendix B). Because a HEA can assess both injury impacts and beneficial restoration effects, a HEA enabled the Trustees to calculate the necessary amount of restoration to produce sufficient benefits that compensate for the ecological losses caused by the hazardous releases from the PRPs activities. For the Bay, the Trustees used discounted service acre years (DSAYs) as the metric to measure the total amount of ecological services provided by one acre of habitat over a single year. The Trustees calculated both the ecological services lost due to hazardous releases and those ecological services likely to be generated by restoration in DSAYs. Using a common metric helped the Trustees ensure that total compensation provided by the PRPs was commensurate with the potential losses to natural resource and their services associated with hazardous releases from the PRPs' activities.

Sections 2.3.1 and 2.3.2 provide more details about how the Trustees employed a HEA to calculate the amount of natural resource injuries in the Bay and the damages to compensate for those injuries. Information about inputs to the HEA will be discussed as well as the Trustees' rationale for the selection of these inputs.

2.3.1 Injury Quantification

The Trustees' HEA for the Bay incorporated site-specific information to quantify natural resource injuries. Injury quantification was inclusive of impacts caused by unpermitted

[8]The CERCLA NRDAR regulations define "damages" as the "amount of money sought by the natural resource trustees as compensation for the injury, destruction, or loss of natural resources as set forth in section 107(a) or 111(b) of CERCLA." 43 CFR § 11.14(l).

[9] Habitats typically provide many and varied types of ecological services (Strange et al. 2002) and promote a sustainable ecosystem through complex interactions among plants and animals and their habitat (Holmlund and Hammer 1999). Examples of ecological services provided by habitats include providing places for shelter, feeding, and resting for fish and birds.

hazardous releases in the Bay from the PRPs' activities beginning after the enactment of CERCLA in 1980[10] through 2017, when in-water remedial activities were completed.

Sediment contamination was present at the sampling locations throughout the Bay. To estimate the likely distribution of contaminants over the whole Assessment Area, during the cooperative assessment the Trustees and PRPs interpolated between sampling points using a Geographic Information System (GIS). The Trustees' methods resulted in a map of the estimated area of contaminants in the Bay. The Trustees then converted concentrations of contaminants in Bay surface sediments into an estimated percent of natural resource services lost. Trustees based these service loss models on observations of how different aquatic organisms respond to exposure from contaminants at different concentrations. In general, low contaminant concentrations result in little or no loss of ecological services. As concentrations increase so do the natural resource service losses, which are expressed as a percentage of lost ecological services.

For this assessment, the Trustees used ecological service loss models developed from two Superfund sites in Puget Sound: Commencement Bay (Wolotira, 2002) and the Lower Duwamish River (NOAA, 2013). These models describe injuries caused by different sediment concentrations of mercury, zinc, cadmium, PCBs, PAHs, 4-methylphenol, and phenol. In addition, due to the presence of wood waste and its byproducts in the Bay, the effects of sulfides were included in the Trustees' injury quantification modeling (Podger 2013). The degraded habitat conditions present in the Bay were also considered when calculating habitat service loss. Degraded habitat conditions reduce the ecological services that habitat provides prior to contamination. Therefore, contamination of degraded habitats results in lower estimated injuries than if contamination were to occur in high quality habitats. The Trustees' HEA also considered the compounding value of damages over time and discounts the value of future promised restoration by using a 3% discount rate. Using these inputs, the HEA calculated that the total ecological injury caused by releases of hazardous substances to the Bay was approximately 400 DSAYs.

2.3.2 Damages Determination

To calculate the amount of restoration needed to compensate for the natural resource injuries in the Bay, i.e., damages, the Trustees employed a HEA, using the same assumptions described in Section 2.3.1. Because the goal of NRDAR is to compensate for natural resource losses, the Trustees' acceptance of the proposed restoration-based settlement is conditioned on the proposed settlement requiring restoration that is likely to produce ecological service gains that are equivalent to the calculated ecological service losses.

[10] CERCLA prohibits natural resource trustees from recovering damages that wholly occurred before the enactment of CERCLA in December 1980. 42 USC § 9607(f)(1).

To quantify damages and calculate how much compensation is required, the Trustees developed estimates for the duration and level of ecological service losses caused by hazardous releases from the Mill Site to the Bay until the potentially injured resources recover to baseline.[11] Similar to the injury quantification method described in Section 2.3.1, the Trustees also used a HEA to quantify damages. The Trustees' HEA calculated the likely amount of ecological services to be provided by the proposed restoration projects over the lifetime of the projects, which in this case were designed to be in perpetuity. To determine the amount of benefit that the proposed restoration actions will potentially provide, the Trustees compared the amount of ecological services currently provided by the existing habitat and compared it to the amount of ecological services that habitat would be capable of providing following implementation of the proposed restoration actions. The delta between the services provided by the existing habitat and the proposed, restored habitat was then scaled by the Trustees to calculate the damages. For the Bay, the Trustees measured the damages in DSAYs to allow them to compare the total benefits from restoration to the total injury that the Trustees quantify as described in Section 2.3.1. Under this analysis, the Trustees determined the size and scale of the restoration actions that will be needed to produce the amount of ecological services equal to the total losses of ecological services, approximately 400 DSAYs, resulting from the hazardous releases to the Bay. As further described in Section 3, the Trustees evaluated potential restoration alternatives to determine which actions could generated sufficient ecological benefits to offset the total ecological service losses. The Trustees' selection of a Proposed Preferred Alternative is informed by the total estimated DSAYs the action is likely to generate.

[11] Specific to the NRDAR context, baseline is "the condition or conditions that would have existed at the assessment area had the discharge of oil or release of hazardous substance under investigation not occurred." 43 CFR §11.14(e).

3. PROPOSED RESTORATION ALTERNATIVES

Before identifying the Proposed Preferred Alternative, the Trustees reviewed multiple restoration concepts and further analyzed four proposed restoration alternatives:

- No Action Alternative (Proposed Alternative A).
- Southern Mill Site Shoreline Restoration (Proposed Alternative B).
- Western Nearshore Restoration (Proposed Alternative C); and
- Proposed Preferred Alternative, Combined Southern Mill Site Shoreline and Western Nearshore Restoration (Proposed Alternative D).

CERCLA restoration selection directs trustees to consider a reasonable range of alternatives before selecting a preferred alternative(s) to implement. 43 CFR §11.82(b).[12] Section 3 describes the Trustees' CERCLA restoration alternative selection process in more detail.

3.1 Process Used to Identify Proposed Alternatives

Using a binned criteria selection process, the Trustees considered various restoration alternatives and eliminated all but the most highly rated to conduct additional detailed analyses. The preferred selection criteria applied to the proposed alternatives are defined as follows:

1. **Preferred Location** is the extent to which the alternative is either in or near to where the injury occurred, improves landscape connectivity of preferred habitats, or addresses areas that have limiting factors regarding habitat.
2. **Preferred Habitat** is the extent to which the restoration alternative addresses either one or multiple potentially injured natural resources by providing habitats identified as beneficial to those resources, i.e., beach, intertidal mudflat, marsh, or riparian buffer habitat types.
3. **Sustainability/Success** is the extent to which the alternative is based on physical processes, causes no collateral injury, and is expected to function in the long term with little intervention.
4. **Feasibility** is the likelihood that the restoration alternative can be engineered and permitted and causes no harm to human health and safety.
5. **Needs Additional Funding** is the extent that the alternative still requires additional funding to fully implement. Initially, funding sources for these restoration alternatives were not fully identified or finalized until later in the review process.

Table 1 displays the results of the Trustees' application of the five preferred selection criteria to proposed alternatives. The Trustees ranked an alternative as "high" when it clearly met a

[12] Similarly, under NEPA, federal agencies are required to evaluate a reasonable range of alternatives "that are technically and economically feasible and meet the purpose and need of the proposal." 42 USC § 4332(C)(i). The Trustees are simultaneously meeting NEPA and CERCLA NRDAR regulatory requirements by analyzing a range of proposed restoration alternatives in this Draft RP/EA.

criterion, and the text is highlighted green in Table 1. The Trustees ranked an alternative as "medium" where the proposed alternative only partially met a criterion, and the text is highlighted in yellow in Table 1. Finally, where the Trustees determined that a proposed alternative failed to meet a criterion, they ranked the proposed alternative as "low" and that text is highlighted in red in Table 1.

Table 1: Application of Preferred Selection Criteria to Proposed Restoration Alternatives

Proposed Alternative	Preferred Location	Preferred Habitats	Sustainability/Success	Feasibility	Needs Additional Funding
Jetty Removal	High	High	High	Low	High
Southern Mill Site Shoreline Restoration	High	High	Medium	High	High
Landfill Cleanup and Riparian Replanting	Medium	Medium	High	High	Low
Western Bay Nearshore Restoration	High	High	High	High	High
Olympia Oyster Restoration	Low	High	High	High	High
Ladine-Decouteau Creek Culvert Removal and Replacement	Low	Low	High	High	High
Gamble Block Wetlands Preservation and Enhancement	Low	Low	High	High	Low
Gamble Creek Culvert Removal	Low	Low	High	High	High
Port Gamble Marine Center	Low	Low	Medium	Low	High
Purchase Forested Upland Parcels	Low	Medium	High	High	High
Herring Study	Low	Medium	Medium	High	High
Forage Fish Rebuilding	High	Low	High	High	High

Based on their application of the preferred selection criteria, the Trustees selected the two highest rated proposed restoration alternatives, Southern Mill Site Shoreline Restoration (Proposed Alternative B) and the Western Bay Nearshore Restoration (Proposed Alternative C), for further development and then evaluation in this Draft RP/EA.

Accordingly, in this Draft RP/EA the Trustees further analyze the following four proposed restoration alternatives for the Bay:

- Proposed Alternative A: No Action Alternative (Natural Recovery)
- Proposed Alternative B: Southern Mill Site Shoreline Restoration
- Proposed Alternative C: Western Bay Nearshore Restoration
- Proposed Alternative D: Combined Southern Mill Site Shoreline and Western Bay Nearshore Restoration (Proposed Preferred Alternative)

The Trustees used restoration criteria specific to the Bay to further evaluate whether and how each proposed alternative could meet the Trustees' requirements under CERCLA to restore natural resources and services harmed by releases of hazardous substances to the Bay. These criteria are:

- The likelihood that the restoration alternative will restore those natural resources injured by releases of hazardous substances to the Bay consistent with the Trustees' objectives described in Section 1.4.1; and
- The potential for the restoration alternative to provide benefits to multiple natural resources and increase ecological services.

Per the CERCLA NRDAR regulations, 43 CFR §11.82(d), the Trustees also applied the following factors to evaluate each proposed restoration alternative. The Trustees' preferred selection criteria and restoration objectives for the Bay also incorporate these CERCLA NRDAR restoration factors.

1. Technical feasibility;
2. The relationship of the expected costs of the proposed actions to the expected benefits from the restoration, rehabilitation, replacement, and/or acquisition of equivalent resources;
3. Cost effectiveness as that term is used in the CERCLA NRDAR regulations;[13]
4. The results of any actual or planned response actions;
5. Potential for additional injury resulting from the proposed actions, including long-term and indirect impacts, to the injured resources or other resources;
6. The natural recovery period determined in 43 CFR §11.73(a)(1);

[13]Section 11.14(j) of the CERCLA NRDAR regulations defines cost-effectiveness as selecting the least costly activity when considering two or more activities that provide the same or a similar level of benefits. 43 CFR § 11.14(j).

7. Ability of the resources to recover with or without alternative actions;
8. Potential effects of the action on human health and safety;
9. Consistency with relevant federal, state, and Tribal policies; and
10. Compliance with applicable federal, state, and Tribal policies.

The four proposed alternatives are evaluated below under the Trustees' criteria, objectives, and the restoration factors set forth in the CERCLA NRDAR regulations at 43 CFR § 11.82(d). Table 3 provides a combined summary of the Trustees' analysis of each proposed alternative.

3.2 Proposed Alternatives Considered

3.2.1 Proposed Alternative A: No Action Alternative (Natural Recovery)

As required by CERCLA and NEPA regulations, the Trustees analyzed a No Action Alternative as part of their restoration planning. 42 USC § 4332(C)(iii); 43 CFR § 11.82(c)(2). The No Action Alternative would result in the Trustees not working to or coordination with others to restore natural resources and associated services that were lost because of releases of hazardous substances to the Bay. If the Trustees selected the No Action Alternative, the Trustees would not undertake or accept any NRDAR restoration projects. The No Action Alternative is the least costly alternative. Under the No Action Alternative, the PRPs would not implement any restoration actions in the Bay or elsewhere to resolve their natural resource damages liability with the Trustees. The additional habitat to be created under the other proposed alternatives would not be implemented as part of the NRDAR process. There would be no shoreline and intertidal habitat creation and improvement in the vicinity of the Mill Site under the No Action Alternative. Moreover, the PRPs would not cap wood waste or establish eelgrass beds in the western nearshore portion of the Bay. Habitat in the Bay that supports fish and migratory birds would continue to be limited and degraded, with no actions required pursuant to the NRDAR process to benefit injured resources. Any actions to benefit resources injured by hazardous releases to the Bay would take place outside the NRDAR process.

While there would presumably be a natural recovery of injured resources under the No Action Alternative to or near to the baseline conditions that would exist if these releases had not occurred, there would be no restoration actions to compensate for past and ongoing interim losses occurring until resources' recovery to baseline. The lack of restoration would also result in the injured natural resources in the Bay taking longer to recover to baseline.

The Trustees would not meet their mandate under CERCLA to obtain compensation to offset injuries to natural resources caused by the releases of hazardous substances. This No Action Alternative does not address the purpose and need for restoration of lost natural resources and services. Because interim losses of natural resources and services have occurred and continue to occur during the period of recovery, and technically feasible alternatives exist to compensate for these losses, the Trustees determined that restoration actions are required, and the No-Action Alternative is not proposed as the Preferred Alternative.

3.2.2 Proposed Alternative B: Southern Mill Site Shoreline Restoration

The Southern Mill Site Shoreline Restoration Alternative would result in the PRPs implementing a shoreline restoration project on and in the vicinity of the southern portions of the Mill Site with design parameters as pictured in Figure 3. The Trustees calculated that this proposed alternative would likely generate approximately 250 DSAYs of ecological value. Habitat restoration objectives for this restoration project would include returning natural shoreline processes and enhancement of habitat for forage fish, shellfish, and juvenile salmonids. Intertidal beach substrate specifications would support resident shellfish species including cockles, littleneck clams, manila clams, mussels, and oysters. Under the Southern Mill Site Shoreline Restoration Alternative, the restoration footprint would be permanently protected under a conservation easement deed. This protective mechanism would ensure that the restored habitat provides the intended ecological benefits to the Bay's resources into the future.

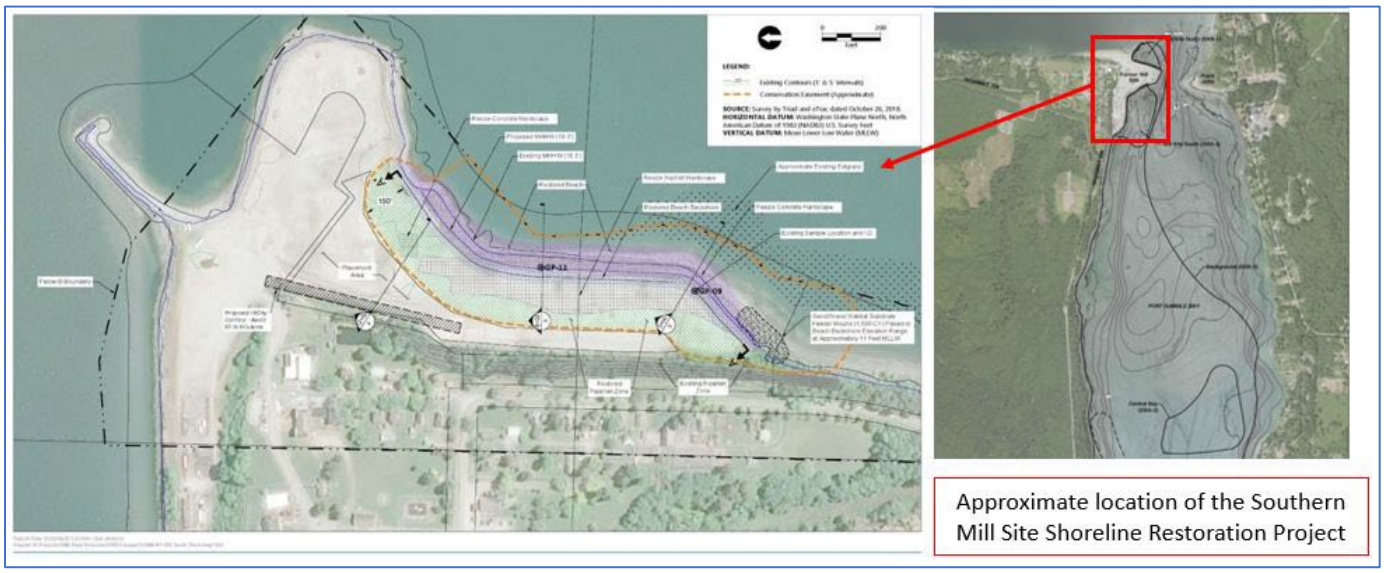

Figure 3: The Southern Mill Site Shoreline Restoration Project Plan View. Figure of left shows a map of the Bay with the project location and habitat focus areas. Figure on the right shows a map of the Bay with the project location highlighted. Credit: Anchor QEA

Shoreline restoration under Proposed Alternative B would commence in the first year and be completed over three to four months. This shoreline restoration would include laying back intertidal slopes over approximately 1,450 lineal feet of the Southern Mill Site shoreline to achieve an average slope of approximately 8 horizontal to 1 vertical (8H:1V) thereby restoring natural or near-natural beach grades. During design, slopes would be refined to optimize dioxin/furan removal, and to achieve smooth tie-ins with adjacent grades. The intertidal cap and habitat layers would be constructed in three layers, with each layer being a minimum one foot thick. The bottom layer would be angular cobble-sized armor, the middle layer rounded cobble/gravel beach substrate, and the upper layer sand/gravel habitat substrate. The intertidal cap would be designed to optimize habitat function and to remain permanent and protective of human and ecological health. The shoreline restoration would also be supplemented with a sand feeder berm placed on the south end of the project area. Slopes of 8H:1V are anticipated to

continue to accumulate sands transported into to the area of the Mill Site from the south during storm events, further sustaining shoreline processes and habitat functions. As described in Section 5.2, the PRPs would conduct adaptive management activities for ten years following restoration implementation completion to maintain habitat functions to support potentially injured resources.

3.2.3 Proposed Alternative C: Western Bay Nearshore Restoration

Under Proposed Alternative C, the PRPs would implement a two-part restoration project near the western shoreline of the Bay. Proposed Alternative C consists of the PRPs first covering the wood waste with clean sand and then transplanting eelgrass within the portions of the sand cover area most promising for eelgrass establishment. The goal of this proposed restoration alternative would be to provide suitable substrate to restore potentially injured benthic habitat functions and provide an opportunity for eelgrass restoration in the Bay. Eelgrass is beneficial to benthic ecosystems because it maximizes water quality, provides habitat and food for wildlife, produces oxygen, and absorbs warming carbon. Proposed Alternative C would likely generate approximately 150 DSAYs of ecological value. Each component of Proposed Alternative C is described in more detail below.

Wood Debris Capping

Proposed Alternative C would consist of the PRPs covering surface wood debris deposits in shallow subtidal areas with clean sand as generally depicted in Figure 4. The cover would restore benthic habitat functions potentially injured by hazardous releases in the Bay and concurrently provide suitable substrate in areas where eelgrass is currently either absent or growing at very sparse densities. In the Bay, limiting factors for eelgrass include suitable substrate (negatively affected by woody debris), energy (wind and current) and light (affected by algal bloom-induced turbidity). To implement Proposed Alternative C, the PRPs first would survey and delineate the current extent of eelgrass in these areas depicted in Figure 4. Subject to refinement based on the surveys, two separate 10-acre areas, including near the former Washington State Department of Natural Resources (WDNR) log-booming lease area south of the former mill site would be selected for restoration (Table 2). In total, approximately 21 acres will be conserved under conservation easement and a minimum of 11 acres will have an average of six inches of clean material would be placed over a minimum of 11 acres of the western Bay nearshore area depicted in Figure 4 and, summarized below (within the -2 to -15 feet MLLW elevation range). This would occur and be completed within the first year of the project. The sand cover capping would be constructed using clean dredge material from the nearby Driftwood Key navigation channel, or other similar marine source which would be expected to contain eelgrass seed and maximize restoration potential. The in-water restoration footprint would require permanent protection under a conservation easement deed, restrictive environmental covenant, or similar restriction with WDNR. This protective mechanism would restrict uses of the restoration footprint to ensure that the restored habitat provides the intended ecological benefits to potentially injured aquatic resources in the Bay into the future.

Eelgrass Restoration

Under Proposed Alternative C, following the completion of the sand cover, the PRPs would transplant eelgrass into the locations along the western shore of the Bay that have the most potential for successful eelgrass establishment. These locations for eelgrass restoration would include wood waste areas covered with sand as well as adjacent areas without any added substrate, where little or no eelgrass is currently growing (Table 2). The PRPs are still further developing the specifics of the eelgrass planting with DNR, which will be memorialized in the Port Gamble Bay Habitat Restoration: Western Bay Nearshore Eelgrass Transplanting and Thin Layer Sand Cover Scope of Work. The PRPs would begin eelgrass planting about one year after, with approval from Trustees, the wood waste cover is completed to allow substrate to consolidate and avoid eelgrass failure due to turbidity. Within the Bay, three 8.6 square meter (100 square feet) transplant plots would each be planted in Year 1 at a density of approximately 70 shoots/m^2 using the rebar or similar method (eelgrass shoots tied to steel rebar). The overall schedule and level of adaptive management of eelgrass planting is anticipated to be as follows, and as more specifically directed by the final planting plan for each planting event:

- Year 1: 1,800 shoots planted in 3 plots
- Year 3: 4,200 shoots planted in 7 plots
- Year 6: 3,000 shoots planted in 5 plots
- Year 9 1,800 shoots planted in 3 plots

Eelgrass transplanting and adaptive management methods described in Section 5.2 would be used like those successfully employed in the early 2000s at the Drayton Harbor eelgrass mitigation site, which had similar conditions as those present in the Bay. Eelgrass would be sourced from local donor beds subject to approval by WDNR. If those donor beds initially identified by the Trustees and PRPs would be unable to provide sufficient eelgrass material or if WDNR would not approve harvesting of the amount of eelgrass shoots needed, other donor beds in the vicinity of the Bay would be located and utilized.

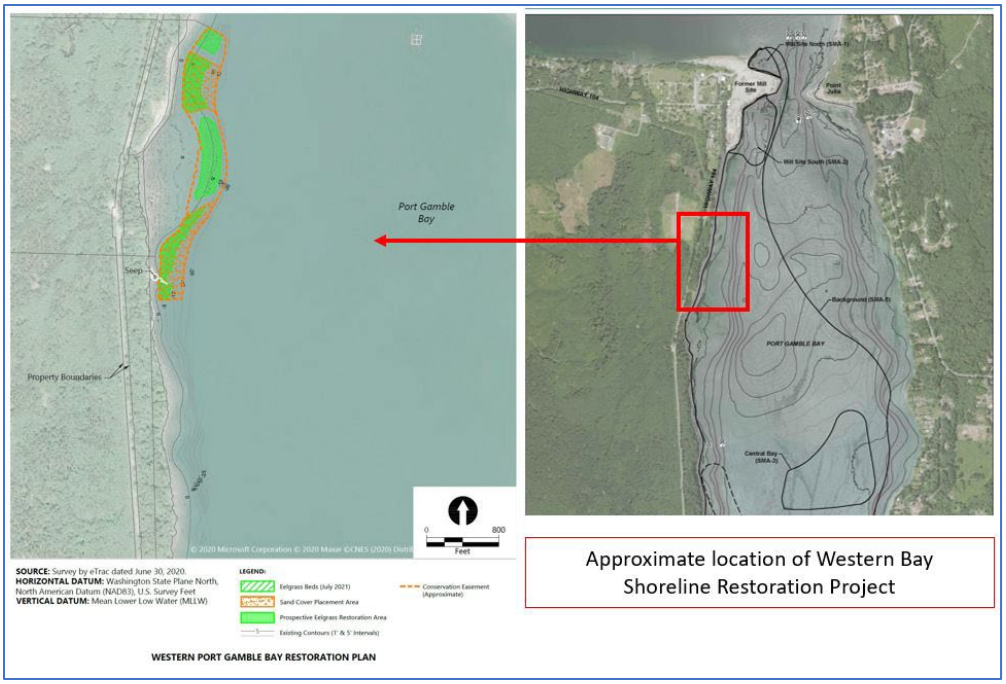

Figure 4: The Western Bay Shoreline Restoration Project Plan View. Figure to left shows a map of the Bay with the project location and habitat focus area. Figure on the right shows a map of the Bay with the project location highlighted. Credit: Anchor QEA

3.2.4 Proposed Alternative D: Combined Southern Mill Site Shoreline and Western Bay Nearshore Restoration (Proposed Preferred Alternative)

The Combined Southern Mill Site Shoreline and Western Bay Nearshore Restoration Alternative (Proposed Alternative D) is the Trustees' Proposed Preferred Alternative. Implementation of Proposed Alternative D would require the PRPs to take or fund all actions associated with Proposed Alternatives B and C as described in Sections 3.2.2 and 3.2.3 of this Draft RP/EA. The restoration that the PRPs would implement under Proposed Alternative D would create or enhance the most habitat of any of the four proposed restoration alternatives analyzed in depth by the Trustees (Table 2).

Under Proposed Alternative D, the PRPs would implement the restoration as well as perform maintenance, monitoring, and adaptive management for at least ten years after the shoreline restoration implementation completion. Close coordination between the PRPs, Trustees, and WDNR would be required to ensure these tasks are being satisfactorily conducted. After the ten years following shoreline restoration implementation completion, the PRPs would then be responsible for maintaining the intertidal stability and substrate at the South Mill Site for an additional 20 years. Long-term monitoring, maintenance, and permanent stewardship for the other habitat elements of the South Mill Site restoration would be performed by the PGST or its contractor. The physical footprint of Proposed Alternative D restoration would be subject to conservation easement deeds that would permanently restrict the uses of the area to those that are protective of the restoration habitat. The PRPs under Proposed Alternative D would be required

to fund all these actions and the Trustees' oversight of the restoration implementation. Collectively, these actions would help ensure that habitat restored under Proposed Alternative D continues to function and provide ongoing ecological benefits to offset potential natural resource injuries in the Bay.

Accordingly, the Trustees have determined that Proposed Alternative D is also likely to provide greater ecological benefits to potentially injured resources than Alternatives A, B, and C. The Proposed Preferred Alternative would likely generate approximately 400 DSAYs of ecological services, thereby providing sufficient compensation to offset the ecological services lost due to the PRPs' releases to the Bay as described in Section 2.3.

Table 2: Habitat Restoration Areas

Habitat Type	Elevation Range (feet MLLW*)	Southern Mill Site Shoreline Restoration (Proposed Alternative B) Construction Footprint/Conservation Easement (acres)	Western Bay Nearshore Restoration (Proposed Alternative C) Construction Footprint/Conservation Easement (acres)	Combined Southern Mill Site Shoreline and Western Bay Nearshore Restoration (Proposed Alternative D) Construction Footprint/Conservation Easement (acres)
Vegetative Riparian	Above +12	6.8/7.6	0/0	6.8/7.6
Backshore	+12 to +10	0.4/0.5	0/0	0.4/0.5
Intertidal	+10 to -4	1.5/5.1	1/2	2.5/7.1
Shallow Subtidal	-4 to -15	0.0/0.6	10/19	10/19.6
Deep Subtidal	Below -15	0.0/0.3	0/0	0/0.3
Totals:		**8.7/14.1**	**11/21**	**19.7/35.1**

**MLLW: mean lower low water*

3.3 Evaluation of Proposed Alternatives Using Restoration Criteria

An evaluation of each proposed alternative under the Trustees' restoration criteria and the CERCLA NRDAR restoration factors set forth in 43 CFR §11.82(d) is presented in Table 3, below. The Trustees have evaluated each proposed alternative under each of the restoration factors in 43 CFR §11.82(d).

Table 3: Proposed Restoration Alternatives Evaluation. Trustee Restoration Criteria is denoted with a gray background.

CRITERIA	ALTERNATIVE A-NO-ACTION (NATURAL RECOVERY)	ALTERNATIVE B-SOUTHERN MILL SITE SHORELINE	ALTERNATIVE C-WESTERN BAY NEARSHORE	ALTERNATIVE D-COMBINED PROJECTS ALTERNATIVE
Potential to meet Trustees' objective to restore injured natural resources in the Bay	This Alternative does not meet the Trustees' objective or obligations under CERCLA. Under a No-Action Alternative there would be no compensation for interim losses. Remedial actions and natural recovery would take much longer to return potentially injured natural resources to baseline conditions.	This Alternative would restore habitat at the site of injury in the Bay and support resources potentially injured by releases of hazardous substances. This Alternative would not restore natural resources and services in the amount calculated by the Trustees to offset natural resource losses.	This Alternative would restore habitat in the Bay, where injury occurred, and support resources potentially injured by releases of hazardous substances. This Alternative would not restore natural resources and services in the amount calculated by the Trustees to offset natural resource losses.	This Alternative would meet the Trustees' objective because it would restore habitat in the Bay, where injury occurred, and would support resources potentially injured by releases of hazardous substances. This Alternative is likely to restore ecological services of a type and amount to provide sufficient compensation to offset natural resource injuries cause by hazardous releases in the Bay. Restoration would be subject to property protections and ongoing actions to ensure ongoing habitat function to benefit potentially injured resources.
Potential to provide benefits to multiple natural resources and services in the preferred habitat	Under this Alternative, no actions would be taken so there would be no benefits provided to any resources.	This Alternative would be likely to restore riparian, upland, and intertidal habitat that would provide benefits to a suite of resources including habitat for birds, salmon, forage fish and other fish, and benthic prey organisms potentially injured by releases of hazardous substances.	This Alternative would likely restore intertidal habitat that would primarily benefit aquatic resources, such as salmon and other fish, injured by hazardous releases. Under this alternative, other potentially injured resources, such as birds, would realize fewer direct benefits than under Alternatives B and D.	This Alternative would likely restore riparian, upland, and intertidal habitat that would provide benefits to a greater number of resources injured by releases of hazardous substances compared to Alternatives A, B, or C. This Alternative would likely benefit a suite of resources including habitat for birds, salmon, forage fish and other fish, and benthic prey organisms potentially injured by releases of hazardous substances.

CRITERIA	ALTERNATIVE A-NO-ACTION (NATURAL RECOVERY)	ALTERNATIVE B-SOUTHERN MILL SITE SHORELINE	ALTERNATIVE C-WESTERN BAY NEARSHORE	ALTERNATIVE D-COMBINED PROJECTS ALTERNATIVE
Technical feasibility	The No Action Alternative would be technically feasible.	Activities included in this Alternative would be technically feasible and likely to result in the restoration of the suite of resources potentially injured or similar to those injured by releases of hazardous substances.	Activities included in this Alternative would be technically feasible and likely to result in the restoration of the suite of resources injured or similar to those injured by releases of hazardous substances.	Activities included in this Alternative would be technically feasible and likely to result in the restoration of the suite of resources potentially injured or similar to those potentially injured by releases of hazardous substances.
Cost to implement the proposed alternative	This Alternative would not restore, replace, or acquire the equivalent of those resources and services injured or lost due to releases of hazardous substances; therefore, the No Action Alternative would not incur any costs.	The costs to carry out this Alternative are estimated to total approximately $4 million which would create and enhance habitat that is likely to partially restore resources potentially injured by hazardous releases.	The costs to implement this Alternative are estimated to total approximately $1 million which would in part create and enhance habitat that is likely to partially restore resources potentially injured by hazardous releases.	The costs to carry out this Alternative are estimated to total approximately $5 million which would create and enhance habitat that is likely to support resources potentially injured by hazardous releases in an amount to sufficiently compensate for ecological losses caused by hazardous releases.
Source control and recontamination potential	This Alternative would not implicate source control measures, nor would it result in recontamination. Environmental and human health risks would likely remain the same as they currently are now.	All source control and onsite remedial actions would be complete and precede implementation of this Alternative. This Alternative would not increase risks to human health or the environment.	All source control and onsite remedial actions would be complete and precede implementation of this Alternative. This Alternative would not increase risks to human health or the environment.	All source control and onsite remedial actions would be complete and precede implementation of this Alternative. This Alternative would not increase risks to human health or the environment.

CRITERIA	ALTERNATIVE A-NO-ACTION (NATURAL RECOVERY)	ALTERNATIVE B-SOUTHERN MILL SITE SHORELINE	ALTERNATIVE C-WESTERN BAY NEARSHORE	ALTERNATIVE D-COMBINED PROJECTS ALTERNATIVE
Consistency with laws and policies	This Alternative would not comply with or be consistent with relevant laws and policies because it does not restore, replace, or acquire the equivalent of the resources and services injured by releases of hazardous substances as required by CERCLA, the CWA, and other relevant natural resource damage authorities.	This Alternative would not meet the goals and requirements of CERCLA because it would not sufficiently compensate the public by restoring, replacing, or acquiring the equivalent of those resources injured by releases of hazardous substances. The amount of resource benefits likely to be produced by this Alternative would not fully offset the resource injuries caused by releases to the Bay.	This Alternative would not meet the goals and requirements of CERCLA because it would not sufficiently compensate the public by restoring, replacing, or acquiring the equivalent of those resources injured by releases of hazardous substances. The amount of resource benefits likely to be produced by this Alternative would not fully offset the resource injuries caused by releases to the Bay.	This Alternative would meet the requirements and goals of CERCLA and the CWA to compensate the public by restoring, replacing, or acquiring the equivalent of resources injured by releases of hazardous substances. The Trustees would comply with all applicable legal requirements.
Time to provide resource benefits	Under the No Action Alternative, it would take longer to provide natural resource benefits than if the Trustees were to pursue the other Alternatives. The No Action Alternative would rely on natural recovery to provide benefits to potentially injured natural resources.	The time for this Alternative to provide natural resource benefits would be less than the No Action Alternative because this Alternative would include affirmative habitat creation and enhancement, which would likely start benefiting resources potentially injured by hazardous releases in a relatively short timeframe.	The time for this Alternative to provide natural resource benefits would be less than the No Action Alternative because this Alternative would include affirmative habitat creation and enhancement, which would likely start benefiting resources potentially injured by hazardous releases in a relatively short timeframe.	The time for this Alternative to provide natural resource benefits would be less than the No Action Alternative because this Alternative would include affirmative habitat creation and enhancement which would likely start benefiting resources potentially injured by hazardous releases in a relatively short timeframe.

CRITERIA	ALTERNATIVE A-NO-ACTION (NATURAL RECOVERY)	ALTERNATIVE B-SOUTHERN MILL SITE SHORELINE	ALTERNATIVE C-WESTERN BAY NEARSHORE	ALTERNATIVE D-COMBINED PROJECTS ALTERNATIVE
Potential effects on human health and safety	The No Action Alternative would not cause further resource injury or pose additional risks to human health and the environment. Environmental and human health risks as they currently exist would likely remain the same under the No Action Alternative	All effects on human health and safety are expected to be short-term and minor construction-related impacts.	All effects on human health and safety are expected to be short-term and minor construction-related impacts.	All effects on human health and safety are expected to be short-term and minor construction-related impacts.

4. ENVIRONMENTAL ASSESSMENT

As required by NEPA, (42 USC § 4321, et seq.), and its implementing regulations (40 CFR §§ 1500-1508), in this section of the Draft RP/EA, the Trustees evaluated the potential impacts of each proposed restoration alternative to the human environment in the vicinity of the Bay to determine whether the proposed alternatives will significantly affect the human environment. To understand the potential impacts of each proposed alternative to the environment, the Trustees' analysis focused on biological, socio-economic, and cultural impacts. The Trustee also issued this Draft RP/EA to inform the public of the basis for their selection of the Proposed Preferred Alternative. Based on their analysis, the Trustees determine that Proposed Alternative D, Combined Southern Mill Site Shoreline and Western Bay Nearshore Restoration, is the Proposed Preferred Alternative.

This Draft RP/EA is now subject to a 30-day public notice and comment period. DOI through the USFWS is acting as the lead federal agency for NEPA compliance for this Draft RP/EA. Once the public comment period closes, the Trustees will review and respond to public comments. The public comments will inform the Trustees' final selection of the Preferred Alternative which will be documented in a Final RP/EA. If a Finding of No Significant Impact is reached for the Preferred Alternative, the Trustees will implement the Preferred Alternative.

The following definitions will be used to describe the environmental impacts evaluated in this Draft RP/EA:

- Short-term or long-term impacts: These characteristics are determined on a case-by-case basis and do not refer to any rigid time. Short-term impacts are those impacts that would occur only with respect to a specific activity or a finite period. Long-term impacts are those that would more likely persist or be chronic.
- Direct or indirect impacts: A direct impact is caused by a proposed action and occurs contemporaneously at or near the location of the action. An indirect impact is caused by a proposed action and might occur later or be farther removed in distance but still be a reasonably foreseeable outcome of the action.
- Negligible, minor, moderate, or major impacts: These relative terms are used to characterize the magnitude of an impact. Negligible impacts are generally not quantifiable and do not have perceptible impacts on the environment. Minor impacts are generally those that might be perceptible but, in their context, are not amenable to measurement because of their relatively inconsequential effect. Moderate impacts are those that are more perceptible and, typically, more amenable to quantification. Major impacts are those that, in their context and due to their intensity (severity), have the potential to meet thresholds for the significance set forth in by NEPA regulations (40 CFR §1508.27) and thus warrant heightened attention and examination for potential means for mitigation to fulfill NEPA requirements.
- Adverse or beneficial impacts: An adverse impact is one having adverse, unfavorable, or undesirable outcomes on the man-made or natural environment. A beneficial impact is one having positive outcomes on the man-made or natural environment. A single act

might result in adverse impacts on one environmental resource and beneficial impacts on another resource.

- Cumulative effects: Cumulative effects are defined as "the effects on the environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR § 1508.1(g)(3). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period within a geographic area.

4.1 Affected Environment

For purposes of this Draft RP/EA, the Trustees focused on Port Gamble, an unincorporated community on northwestern shore of Kitsap peninsula, located in Kitsap County, Washington. This area encompasses the Bay as well as adjacent shoreline areas, which are the locations of the proposed restoration alternatives.

4.1.1 Physical and Biological Environment

The Bay is located south of the Strait of Juan de Fuca at the north end of the Kitsap Peninsula and covers more than two square miles of intertidal and subtidal habitat. The Bay is bounded by Admiralty Inlet and Hood Canal to the north as they come off the strait and by the Kitsap Peninsula to the east, south, and west. Port Gamble Bay is generally shallow with depths up to 60 feet. The climate in and around the Bay is west coast marine type, characterized by cool wet winters and mild summers.

The natural conditions and environment of Port Gamble and the Bay have been increasingly altered over time, beginning with colonial settlements, and followed by industrialization in the nineteenth century. The Pope & Talbot Inc. sawmill operated on the western shore of the Bay until 1995 and was dismantled in 1997. As part of its sawmill operations, Pope & Talbot, Inc. also used portions of the western Bay for log storage and rafting. In 2007, Pope & Talbot, Inc. declared bankruptcy, and Pope & Talbot Inc.'s assets and liabilities were transferred to Pope Resources and the Olympic Property Group. Today the area today is primarily used for residential, municipal, small commercial, open space, and recreational purposes.

Natural resources species affected or potentially affected by the proposed restoration activities in and adjacent to the Bay include but are not limited to: Aquatic-dependent mammals (such as seal, sea lion, and species they depend on as prey items), migratory birds (including osprey, bald eagle, assorted waterfowl, great blue heron, spotted sandpiper), belted kingfisher, and other shore birds. Federally listed species under the Endangered Species Act, 16 USC § 1531, et seq., are known to occur in or may be found in the vicinity of the Bay and include Puget Sound Chinook salmon (*Oncorhynchus tshawytscha*), Hood Canal summer chum salmon (*Oncorhynchus keta*), bocaccio (*Sebastes paucispinis*), bull trout (*Salvelinus confluentus*) and marbled murrelet. The Bay has been included in the area designated as critical habitat for Hood Canal Summer Chum, Puget Sound Chinook salmon, southern resident killer whale (*Orcinus orca*), and Puget Sound

Steelhead trout (*Oncorhynchus mykiss*) in the Hood Canal Subbasin. Under the Magnuson-Stevens Act Fishery Conservation and Management Act, 16 USC §1801, et seq., NOAA identified essential fish habitat in the Bay and its vicinity for pink salmon (*Oncorhynchus gorbuscha*), Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*Oncorhynchus kisutch*), Pacific sardine (*Sardinops sagax*), Pacific mackerel (*Scomber japonicus)*, jack mackerel (*T. Symmetricus*), northern anchovy *(E. Mordax*), market squid (*Doryteuthis opalescens*), krill (*Euphausiacea*), Pacific tunas, swordfish, sharks, and billfish. State-listed species include steller sea lion *(Eumetopias jubatus)*, tufted puffin (*Fratercula cirrhata),* marbled murrelet (*Brachyramphus marmoratus*), fisher (*Pekania pennanti*), southern resident killer whale, and western gray squirrel (*Sciurus griseus*) as threatened and endangered species. Nearshore and intertidal habitats of the Bay are critical to the health of Hood Canal as part of Puget Sound and its marine life. These habitats provide shelter and are used as spawning, rearing, and feeding grounds for species that live in and around the Sound (PSAT 1998).

Other species in and near the Bay that may potentially be affected by implementation of the proposed restoration alternatives include reptiles, amphibians, and aquatic invertebrates. Additional resources in and in the vicinity of the Bay that are likely to be impacted by implementation of the proposed alternatives include aquatic plants (including eelgrass), wetland and upland habitats (including riparian and beach backshore, plants, and habitat), groundwater, and surface water. The current ecological services provided by these natural resources include habitat for various biological resources, which provides these resources with food, shelter, breeding, foraging, and rearing areas, and other factors essential for survival of species.

Photo 3: Bay submerged aquatic vegetation and intertidal habitat conditions, photographed in 2012. Photo credit: M. Carlson, USFWS

The project locations for the Proposed Preferred Alternative (Proposed Alternative D) are in the intertidal and tidal areas of the Bay along the western shoreline and in the shoreline, tidal, and intertidal areas of the southern portion of the Mill Site. Figures 3 and 4 depict the Proposed Preferred Alternative implementation areas. Because Proposed Alternatives B and C are components of the Proposed Preferred Alternative, the physical and biological setting for Alternatives B and C are included in a discussion of the Proposed Preferred Alternative. The Proposed Preferred Alternative would restore and protect approximately 35.1 acres of tidal, intertidal, and riparian habitat along the western shoreline and nearshore areas of the Bay. The Preferred Alternative would create or enhance habitat that would benefit potentially injured natural resources. Habitat creation and enhancement under the Proposed Preferred Alternative would:

- Increase total acres of intertidal habitat in the Bay;
- Restore shorelines within the project footprint with gentler slopes and more natural intertidal substrates to provide habitat for forage fish, shellfish, and juvenile salmonids;
- Establish riparian habitat with native vegetation;
- Cover wood debris areas in the Bay to restore functional shallow subtidal habitat; and
- Transplant eelgrass to intertidal and subtidal areas where it is currently absent.

Under the Proposed Preferred Alternative, the restoration would be subject to adaptive management, monitoring, and maintenance to be performed by the PRPs for the first ten years after shoreline restoration implementation completion. Subsequently, the restoration at the southern Mill Site would be subject to additional maintenance and monitoring for another 20 years followed by permanent stewardship. The physical footprints of the Proposed Preferred Alternative would be placed under property restrictions that would limit the uses of the underlying properties to those uses that would not impair the ecological benefits that the restored habitat was designed to provide. Collectively, these measures would ensure that the Proposed Preferred Alternative would provide long-term habitat that would benefit potentially injured resources in the Bay.

4.1.2 Cultural Resources

The proposed Consent Decree requires the PRPs to undertake activities to address cultural resource issues at the Proposed Preferred Alternative projects sites, including, as appropriate, consulting with the State of Washington Department of Archeology and Historic Preservation and federally recognized Tribes. The area of the project sites is claimed by the Lower Elwha Klallam Tribe, the Jamestown S'Klallam Tribe, the Port Gamble S'Klallam Tribe, the Skokomish Indian Tribe, and the Suquamish Tribe. Each group offers their own account of pre-contact and historic period land use in Port Gamble (Elmendorf 1992; Miller and Snyder 1999; Port Gamble S'Klallam Tribe 2012; Wisniewski 2014) and each Tribal government has Adjudicated Usual and Accustomed Fishing Rights in the Bay.

The earliest documented Native American occupation of the Port Gamble area is from pre-contact archaeological site 45KP252, identified below historic fill deposits at the Mill Site

(Rinck 2016; Rinck et al. 2018). Stratified shell midden deposits occur between 2.1 and 3.1 meters below the contemporary ground surface, with the oldest cultural material dating between AD 29 and 614 (Rinck 2016:23). Three thin cultural strata indicate the area was a seasonal camp that was reoccupied multiple times over hundreds of years. Faunal material recovered from borings includes mammal bone, ratfish (*Hydrolagus colliei*), flatfish (*Order Pleuronectiformes*), butter clams (*Saxidomus gigantea*) littleneck clams (*Leukoma staminea*), cockles (*Clinocardium nuttallii*), razor clams (*Siliqua patula*), macoma clams (*Macoma spp*.), geoduck (*Panopea generosa*), gastropods, and mussel (*Mytilus spp*.) (Rinck et al. 2018:68). These species are harvested today by contemporary Tribal groups. A radiocarbon date from lower stratigraphic levels of the Little Boston archaeological Site (45KP21) on Point Julia had an age range between AD 1203 and 1430 (Hess 1991:8). Shellfish species similar to those at 45KP252 were identified in the archaeological deposits at the site, as well as fish, artiodactyl, and bird bone (Hess 1991:8-9).

Clams, oysters, crab, fin fish, and other marine resources are integral components of Tribal culture, subsistence, and spirituality. All five Tribal governments have reserved rights to these resources in the Bay, guaranteed in treaties signed in 1855. The Suquamish Tribe is a signatory to the Treaty of Point Elliott and the Lower Elwha Klallam Tribe, the Jamestown S'Klallam Tribe, the Port Gamble S'Klallam Tribe, and the Skokomish Tribe are signatories to the Point No Point Treaty. Tribal access to, and use of, the marine resources have been compromised by long-term operation of the Port Gamble Mill. Mill operations introduced PAHs, PCBs, dioxins, heavy metals, woody debris, dioxins/furans, and other contaminants into the watershed, compromising traditional activities such as clamming and fishing. Shellfish are important culturally and economically and are readily susceptible to contamination. Species such as Manila Clams (*Lajonkairia lajonkairii*), horse clams (*Tresus nuttallii*), geoducks (*Panopea generosa*), cockles (*Clinocardium nuttallii*), butter clams (*Saxidomus gigantea*) were affected negatively by mill operations; shellfish habitat was not only destroyed by mill operations, but the remaining shellfish were also rendered unhealthy for human consumption due to high concentrations of contaminants.

4.1.3 Demographics and Socioeconomics

A summary of demographic data for the area in the vicinity of the Proposed Preferred Alternative (Proposed Alternative D), including the Census Block Group, County, and State level is provided in Table 4. Because all the proposed alternatives are in Kitsap County, Washington, the following analysis of demographic and economic impacts for Proposed Alternative D applies to Alternatives A, B, and C, too. The unincorporated community of Port Gamble has 5,621 residents. (https://www.census.gov/programs-surveys/acs/data.html). Kitsap County population grew 0.8% between April 1, 2020, to July 1, 2022.

Table 4: Demographic Data

Demographic Category	Census Block Group[14]	Kitsap County[15]	Washington State
Population	5,621	275,611	7,864,400[16]
People of color (%)	20%	18.4%	27.7%[17]
Median Annual Household Income	$91,736	$94,755	$91,306[18]
Estimated Percentage of Persons Below Poverty Level	2.8%	9.9%	10.0%[19]

4.2 Evaluation of the Proposed Alternatives and Their Environmental Consequences

The Trustees found that adverse environmental impacts from the Trustees' selection of Proposed Preferred Alternative, Alternative D, Combined Southern Mill Site Shoreline Restoration and Western Bay Nearshore Restoration, are expected to be minor in scale and short-term in duration and would result primarily from construction activities. Accordingly, the magnitude of environmental impacts associated with the Proposed Preferred Alternative would generally be a function of the extent and duration of construction. The use of best management practices during construction activities for the Proposed Preferred Alternative is anticipated to minimize these short-term negative impacts. Adverse impacts associated with construction would therefore be expected to be minor. The Trustees' determined that the long-term impacts resulting from the Proposed Preferred Alternative would be beneficial to the Bay's natural resources by providing additional fish habitat, protecting, and improving water quality, and increasing riparian, tidal, and intertidal habitat function in and adjacent to the Bay. The Proposed Preferred Alternative would be developed and implemented to comply with all applicable local, state, Tribal, and federal requirements. Proposed Alternatives B and C are parts of the Proposed Preferred Alternative, but each involve less restoration implementation than the Proposed Preferred

[14] Statistics for Census Block Group (530350902021) was obtained from the United States Census Bureau https://www.census.gov/programs-surveys/acs/data.html .

[15] Statistics for Kitsap County, Washington was obtained from the U.S. Census Bureau QuickFacts: Washington https://www.census.gov/quickfacts/fact/table/kitsapcountywashington,WA/PST045222 .

[16] Washington Office of Financial Management 2022 data accessed at https://ofm.wa.gov/washington-data-research/statewide-data/washington-trends/population-changes/population-race.

[17] Id.

[18] 2020 census information from the U.S. Census Bureau accessed at https://data.census.gov/profile/Washington?g=040XX00US53 .

[19] Id.

Alternative. Accordingly, Proposed Alternatives B and C would result in similar, albeit lesser, impacts as compared to the Proposed Preferred Alternative. In contrast to the other proposed restoration alternatives, the Proposed Alternative A, No-Action Alternative, would have no such short-term adverse construction-related impacts nor would it have the long-term beneficial impacts to natural resources in the Bay.

Pursuant to NEPA requirements, the Trustees' analysis of each proposed restoration alternative and its likely impacts on the environment is presented in further detail below.

4.2.1 Hydrology and Water Quality Impacts

Proposed Alternative A-No Action Alternative: The Proposed Alternative A would not result in any additional hydrological or water quality impacts so the status would remain as-is. The Proposed Alternative A therefore would negatively impact water quality.

Proposed Alternative B-Southern Mill Site Shoreline Restoration: Proposed Alternative B would likely have short-term minor adverse impacts to water quality in the Bay during construction such as an increase in turbidity. The project has received CWA 401 water quality certification that details the best management practices the PRPs must undertake to reduce any impacts. Long-term minor beneficial impacts to water quality would likely result from beach backshore habitat creation.

Proposed Alternative C-Western Bay Nearshore Restoration: This proposed alternative would not result in any long-term negative hydrological impacts. Proposed Alternative C would likely have short-term minor adverse impacts during construction such as an increase in turbidity. Negative water quality impacts under Proposed Alternative C would be potentially greater in magnitude to those for Proposed Alternative B because of increased dredged material placement in the intertidal and subtidal environments. Long-term minor beneficial impacts to water quality would likely result from eelgrass planting.

Proposed Alternative D-Combined Projects (Proposed Preferred Alternative): Hydrological and water quality impacts under the Proposed Preferred Alternative are inclusive of the water quality and hydrology impacts under Proposed Alternatives B and C. The beneficial and negative impacts, both short and long-term, to water quality and hydrology are likely the sum of the impacts under Proposed Alternatives B and C and the avoidance of the negative impacts expected if the No Action alternative is adopted.

4.2.2 Sediment Quality Impacts

Proposed Alternative A-No Action Alternative: The Proposed Alternative A would not result in any additional beneficial sediment quality impacts but does result in negative impacts. The Proposed Alternative A would keep polluted sediment in the ground and therefore continue to harm sediment quality and lead to a larger area of continued contaminated sediment if the sediment shifted over time or materials in the sediment leached to other areas of the way.

Proposed Alternative B-Southern Mill Site Shoreline Restoration: The site for Proposed Alternative B is in a developed/disturbed/filled-in area; therefore, construction of habitat would provide a minor long-term benefit in the quality of soils and sediments.

Proposed Alternative C-Western Bay Nearshore Restoration: Proposed Alternative C is in an area with some wood waste in the sediments: therefore, construction of habitat would result in minor long-term beneficial impacts to sediment quality because a sand cover would be placed to provide a new substrate, more similar to a naturally occurring substrate.

Proposed Alternative D-Combined Projects (Proposed Preferred Alternative): The Proposed Preferred Alternative is likely to provide an overall minor long-term beneficial impact to sediment quality because it is the sum of both Alternatives B and C and their likely beneficial impacts.

4.2.3 Vegetation

Proposed Alternative A-No Action Alternative: Proposed Alternative A would not result in any additional impacts to vegetation, nor likely benefit or harm injured habitat including impacted vegetation.

Proposed Alternative B-Southern Mill Site Shoreline Restoration: Under Proposed Alternative B, long-term minor beneficial impacts would be expected with the planting and establishment of native plantings and recruited plant species, which would produce food and protective cover for wildlife.

Proposed Alternative C-Western Bay Nearshore Restoration: Long-term minor beneficial impacts would be expected under Proposed Alternative C because eelgrass plantings would benefit fish, wildlife, and bird species by providing food and shelter.

Proposed Alternative D-Combined Projects (Proposed Preferred Alternative): The Proposed Preferred Alternative would be expected to provide long-term minor benefits for vegetation as described for both Proposed Alternatives B and C. The combination of vegetation types that would be planted and established under the Proposed Preferred Alternative would provide potentially injured resources with food, shelter, nesting, and perching cover.

4.2.4 Fish and Wildlife Habitat

Proposed Alternative A-No Action Alternative: The Proposed Alternative A would not result in any additional beneficial or adverse impacts to fish and wildlife habitat because no restorations action would be taken.

Proposed Alternative B-Southern Mill Site Shoreline Restoration: Implementation of this proposed alternative would increase the amount of habitat in and adjacent to the Bay. The increase in riparian and gently sloped intertidal habitat would provide a significant increase in fish and wildlife habitat for foraging and rearing. Accordingly, Proposed Alternative B would result in minor long-term beneficial impacts to the Bay's fish and wildlife habitat. There would

be short-term minor negative impacts to wildlife during the construction period and potentially during maintenance actions due to noise and other disturbances associated with construction.

Proposed Alternative C-Western Bay Nearshore Restoration: Proposed Alternative C would result in long-term minor beneficial impacts to the Bay's fish and wildlife habitat because it would likely increase the amount of habitat in the Bay with the planting of eelgrass. Proposed Alternative C is expected to provide foraging and rearing habitat for many species of shellfish and fish. There would be a short-term minor negative impact to wildlife during the construction period and maintenance activities due to noise and other disturbances associated with these actions.

Proposed Alternative D-Combined Projects (Proposed Preferred Alternative): Implementation of Proposed Alternative D would be expected to have long-term beneficial impacts to the fish and wildlife habitat in and adjacent to the Bay. The types of habitats being created by the Proposed Preferred Alternative will support ESA species, fish, birds, and other wildlife in the Bay. The permanent stewardship under the Proposed Preferred Alternative would ensure that beneficial impacts for fish and wildlife habitat associated with the Proposed Preferred Alternative would likely continue into the future. Short-term minor negative impacts to fish and wildlife habitat would be expected during the performance of construction and maintenance activities due to increased noise and other disturbances.

4.2.5 Special Status Species[20]

Proposed Alternative A-No Action Alternative: The Proposed No Action Alternative would not result in any positive or negative impacts to special status species.

Proposed Alternative B-Southern Mill Site Shoreline Restoration: Proposed Alternative B would result in minor long-term beneficial impacts to special species because it would likely provide additional habitat for Chinook salmon and Puget Sound steelhead in the Bay and would benefit other listed species in the area. Through selective scheduling of the construction period to minimize impacts to salmonids and implementation of methods to minimize in-water turbidity, short-term negative impacts to listed species would be minor.

Proposed Alternative C-Western Bay Nearshore Restoration: Special status species impacts of Proposed Alternative C would be similar in type and scale to those that would be likely to result from the Proposed Alternative B.

Proposed Alternative D-Combined Projects (Proposed Preferred Alternative): The Proposed Preferred Alternative would likely result in minor long-term beneficial impacts to special status species. Under the Proposed Preferred Alternative, restoration actions would provide additional habitat for Chinook salmon and Puget Sound steelhead in the Bay and would benefit other listed

[20] "Special Status Species" refers to species listed as threatened or endangered or candidate for Federal protection under the ESA or listed as endangered, threatened, or sensitive under Washington State law.

species in the area. Through selective scheduling of the construction period to minimize impacts to salmonids and implementation of methods to minimize in-water turbidity, short-term negative impacts to listed species would be minor and limited to construction and maintenance activities. Because the Proposed Preferred Alternative is a combination of Proposed Alternatives B and C, beneficial and negative impacts associated with the Proposed Preferred Alternative would likely be greater in magnitude than Proposed Alternatives B and C but still minor. The PRPs have already completed the required consultations under federal laws and regulations pertaining to fish and wildlife and essential fish habitat required for restoration actions under the Proposed Preferred Alternative.

4.2.6 Floodplain and Flood Control

Proposed Alternative A-No Action Alternative: There would be no impacts from the Proposed No Action Alternative on the floodplain and flood control.

Proposed Alternative B-Southern Mill Site Shoreline Restoration: Proposed Alternative B would provide a minor, long-term benefit for flood control by providing an ecological buffer between the Bay and the development in the town of Port Gamble. The revegetation and ecological buffer under Proposed Alternative B would increase permeability with areas changing from pavement to riparian habitat.

Proposed Alternative C-Western Bay Nearshore Restoration: There would be no impacts on the floodplain and flood control.

Proposed Alternative D-Combined Projects (Preferred): Floodplain and flood control impacts of Proposed Alternative D would likely be similar in magnitude and kind as Proposed Alternative B.

4.2.7 Introduction of Non-Indigenous Species

No non-indigenous species would likely be introduced as part of the implementation of any of the proposed alternatives. Under Proposed Alternatives B, C, and D, existing invasive and non-native plant species would be replaced with native species in accordance with the monitoring program and site-specific vegetation plans. There would be no similar replacement of existing non-indigenous species under the Proposed No Action Alternative; however, the Proposed No Action Alternative would not introduce non-indigenous species to the Bay.

4.2.8 Aesthetic, Historic, Cultural, and Socioeconomic Impacts

Proposed Alternative A- No Action Alternative: Under Proposed Alternative A, degraded habitat in the Bay would likely continue and negatively impact cultural practices of nearby tribes—including tribal fishing and shellfish harvesting in the Bay—as well as recreation and tourism opportunities. The No-Action Alternative leaves contamination to continue to leach into shellfish beds and continue to degrade the fish habitat, and as a result a No-Action Alternative would negatively impact the Tribal cultural connection to the Bay and its use of the area.

Proposed Alternative B - Southern Mill Site Shoreline Restoration: Proposed Alternative B would be unlikely to result in job losses in the Bay and its vicinity. There would likely be minor short-term beneficial socioeconomic benefits due to employment and expenditures associated with the construction of the Proposed Alternative B. Although existing remedial requirements and shoreline development regulations limit future development within the physical footprint of Proposed Alternative B, additional use restrictions under Proposed Alternative B would further restrict future development in and adjacent to the Bay, resulting in minor negative socioeconomic impacts.

During the construction phase of Proposed Alternative B, the Bay would have less pleasing aesthetics from disturbed soils, piles of debris, and other construction-related untidiness, resulting in short-term minor negative impacts. Construction could also have short-term negative effects on the cultural practices of nearby tribes, including that construction could cause noise, turbidity, and an increase in vessels in the Bay, which could negatively affect tribal fishing, shellfish harvesting, and other tribal ceremonies or cultural practices in the Bay and adjacent shorelines. Soil excavations could disturb archaeological and cultural resources located within the footprint of the Southern Mill Site Shoreline. Any sediment movement can release harmful particles and cause closure of shellfish areas within the Bay. Sediment displacement caused by soil excavations may result in finfish avoiding the vicinity due to low visibility and noise impacts. Communication with local tribes and development of a vessel management plan during construction could help to minimize impacts to tribal fishing activities, ceremonies, and cultural practices.

With respect to historical and cultural impacts of Proposed Alternative B, there is an archeological site adjacent to the boundary of Proposed Alternative B. Best practices to reduce the negative impact is to include a tribal cultural resource monitor of ground disturbing work, cultural resource training for the contracted workers, and a monitoring and inadvertent discovery plan.

Following construction, Proposed Alternative B would likely improve the Bay's aesthetics by replacing riprap and other shoreline structures with marsh and riparian vegetation. Habitat improvements and containment of toxic materials under Proposed Alternative B would also provide cultural benefits for local tribes by creating a habitat for, and reducing contamination of, marine resources, which would benefit tribal fishing and shellfish harvesting. Long-term minor beneficial socioeconomic impacts would potentially also be realized under Proposed Alternative B with improved aesthetics resulting in increased recreation and tourism in the Bay and related expenditures. These cultural and aesthetic benefits would likely be longer-term, persisting for many years after the implementation of the Proposed Alternative B.

Proposed Alternative C -Western Bay Nearshore Restoration: Impacts to the socioeconomic and aesthetic elements of the Bay's environment would likely result from Proposed Alternative C in nature and magnitude similar to those impacts anticipated for Proposed Alternative B. Construction of Proposed Alternative C could have short-term negative impacts on fishing,

shellfish harvesting, and other cultural practices of nearby tribes, similar to Proposed Alternative B. Tribal fishing and shellfish harvesting in the area near the Western Bay Nearshore Restoration may also be limited or restricted during the sand layer placement and during subsequent planting and monitoring of eelgrass under Proposed Alternative C. Following construction, Proposed Alternative C would likely have long-term benefits on habitat for benthos, forage fish, shellfish, and juvenile salmonids, resulting in long-term benefits to tribal fishing.

Proposed Alternative D - Combined Projects (Proposed Preferred Alternative): The Proposed Preferred Alternative would likely result in similar types of socioeconomic, cultural, and aesthetic impacts as Proposed Alternatives B and C. Because the Proposed Preferred Alternative would incorporate more restoration activities and property restrictions than Proposed Alternatives B or C, the cumulative magnitude of the likely aesthetic, cultural, and socioeconomic impacts of the Proposed Preferred Alternative would be greater. In particular, the aesthetic and cultural beneficial impacts of the Proposed Preferred Alternative would likely be greater due to the larger geographical area and higher level of effort to implement the Proposed Preferred Alternative, but the socioeconomic impacts would likely still be minor. The short-term, adverse aesthetic, cultural, and socioeconomic impacts would be the same as the anticipated impacts of Proposed Alternative B plus those short-term, adverse aesthetic, cultural, and socioeconomic impacts anticipated for Proposed Alternative C. Likewise, the long-term, beneficial aesthetic, cultural, and socioeconomic impacts of the Proposed Preferred Alternative are the sum of the anticipated, long-term benefits to the Bay's aesthetics and socioeconomics for Proposed Alternatives B and C.

4.2.9 Noise Impacts

Proposed Alternative A - Proposed No Action Alternative: The Proposed No Action Alternative would not result in any noise impacts because no restoration actions would be taken.

Proposed Alternative B- Southern Mill Site Shoreline Restoration: Implementation of Proposed Alternative B would result in short-term moderate adverse noise impacts in a small area around the project location from the use of heavy equipment during the construction phase of the project. This noise could cause impacts to Tribal use of the area, and cause wildlife to avoid the area. Outside of the immediate project area, the increase in noise would be short-term, negligible, and adverse. The project would comply with local noise ordinance permitting requirements.

Proposed Alternative C - Western Bay Nearshore Restoration: Noise impacts associated with Proposed Alternative C would be similar in type and magnitude to those for the Proposed Alternative B.

Proposed Alternative D - Combined Projects (Proposed Preferred Alternative): Noise impacts under the Proposed Preferred Alternative would result in short-term minor adverse impacts with increased noise during the implementation and maintenance of the Proposed Preferred Alternative. Any impacts would be limited to periods when construction and maintenance would be actively preformed at the restoration sites within the Bay. The project would comply with

local noise ordinance permitting requirements. Noise impacts under the Proposed Preferred Alternative would likely be the combined impacts under Proposed Alternatives B and C, which are the components that make up the Proposed Preferred Alternative.

4.2.10 Recreational Impacts

Proposed Alternative A – Proposed No Action Alternative: Under the Proposed No-Action Alternative, there would be negative impacts to the future recreational uses in the Bay as there would be continued contamination of the water and fish resources as well as the substrate. The contamination would continue to leach into additional areas, potentially causing shellfish closure areas. Human resource use in and in the vicinity of the Bay include hunting, fishing, and non-consumptive uses such as wildlife viewing, photography, swimming, beach walking, and boating.

Proposed Alternative B - Southern Mill Site Shoreline Restoration: It is anticipated that this proposed alternative would result in minor long-term beneficial impacts to the recreation opportunities in the Bay. Currently, kayaking, and boating take place in the Bay and would be enhanced over the long term by the creation of more natural habitat along the shoreline. Because the Trustees are focused on ecological service gains to offset natural resource injuries, active recreation would be discouraged within the upland restoration footprint under this proposed alternative. Any restrictions on active recreation within the upland restoration would be located at an area currently closed to recreation, therefore, Proposed Alternative B would cause long-term negligible adverse impacts to upland recreation. Although there would be some minor long-term beneficial impacts to recreation under this proposed alternative, there may also be negligible long-term adverse impacts.

Proposed Alternative C - Western Bay Nearshore Restoration: Under Proposed Alternative C, there would likely be minor, long-term beneficial impacts to recreation. Restoration would be covering areas of in-water wood waste and eelgrass planting, improving aesthetics, and having minor, long-term benefits for boaters. Property protections for the in-water restoration areas under Proposed Alternative C may restrict long-term anchoring within the physical restoration footprint which may cause long-term, negligible adverse impacts because long-term anchoring is not currently a common activity in the area.

Proposed Alternative D - Combined Projects (Proposed Preferred Alternative): Overall, impacts to recreation under Proposed Alternative D would likely be minor, long-term, and beneficial, similar to the combined impacts described in Proposed Alternatives B and C above. Restoration actions associated with Proposed Alternative D would create or enhance habitat areas adjacent to or in the Bay that would improve aesthetics for recreators. Some negligible long-term adverse impacts to recreators are also associated with Proposed Alternative D because habitat areas under this alternative would be subject to use restrictions that may limit recreation use as described in the impacts analyses for Proposed Alternatives B and C.

4.2.11 Health and Safety

Proposed Alternative A - Proposed No Action Alternative: The Proposed No Action Alternative would result in negative health and safety impacts because no restoration actions would be taken and subsequently no benefit would be obtained. As a result, contaminated sediment would continue to impact the benthic resources as well as the surrounding environment and community.

Proposed Alternative B - Southern Mill Site Shoreline Restoration: Any adverse health and safety impacts from Proposed Alternative B would likely be short-term and minor construction-related impacts. Risks would be primarily to the PRPs' construction contractors while operating on the Mill Site and to local residents when heavy machinery transits through town. Contaminated soil/sediment excavated from the shoreline would be temporarily stockpiled on the Mill Site until it is characterized for disposal. The PRPs' contractors would be required to develop and implement a project-specific health and safety plan. Thereafter the proposed alternative will provide long-term, minor benefits to humans and natural resources in and around the Bay. Alternative B is expected to result in removal and off-site disposal of contaminated soil/sediment from the shoreline that would otherwise not occur.

Proposed Alternative C - Western Bay Nearshore Restoration: Health and safety impacts under Proposed Alternative C would be short-term and minor construction-related impacts, primarily to the PRPs contractors during the placement of the clean sand cover and eelgrass transplanting.

Proposed Alternative D - Combined Projects (Proposed Preferred Alternative): Negative health and safety impacts associated with the Proposed Preferred Alternative D would still likely be short-term and minor. The Proposed Alternative D provides long-term minor benefits to the areas' human population and natural resources because increased natural areas can directly be linked to overall positive benefits to population health. (USDA 2018).

4.2.12 Transportation, Utilities, and Public Services

Proposed Alternative A - No Action Alternative: The Proposed No Action Alternative would have no impacts on transportation, utilities, and public services because no restoration would be implemented under this proposed alternative.

Proposed Alternative B - Southern Mill Site Shoreline Restoration: During construction of this proposed alternative, there would be short-term adverse minor impacts to transportation or utilities, such as increased vehicle traffic during construction phases, although the impacts would be limited to small areas for brief time periods. In the long-term, implementation of Proposed Alternative B would not burden or increase demand for transportation, public services, and utilities.

Proposed Alternative C - Western Bay Nearshore Restoration: Transportation, utility, and public service impacts associated with Proposed Alternative C are similar to those for Proposed Alternative B.

Proposed Alternative D - Combined Projects (Proposed Preferred Alternative): Transportation, utility, and public service impacts that would result from the Proposed Preferred Alternative

would be greater in magnitude than impacts associated with Proposed Alternatives B and C. Under the Proposed Preferred Alternative, there would be short-term minor adverse impacts to transportation, utilities, and public services because there would be increased demand on infrastructure, e.g., increased traffic, during the implementation of the restoration and subsequent maintenance activities. These impacts are expected to be isolated to those periods during active restoration implementation and maintenance.

4.2.13 Environmental Justice

Executive Order 12898 requires each federal agency to identify and address, as appropriate, disproportionately high, and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations. In the memorandum to heads of departments and agencies that accompanied Executive Order 12898, the President specifically recognized the importance of procedures under NEPA for identifying and addressing environmental justice concerns. The memorandum states that "each federal agency shall analyze the environmental effects, including human health, economic and social effects, of federal actions, including effects on minority communities and low-income communities, when such analysis is required by [NEPA]." The memorandum particularly emphasizes the importance of NEPA's public participation process, directing that "each federal agency shall provide opportunities for community input in the NEPA process." Agencies are further directed to "identify potential effects and mitigation measures in consultation with affected communities, and improve the accessibility of meetings, crucial documents, and notices." Moreover, Executive Order 14096 requires each federal agency, as appropriate and consistent with law, "to identify, analyze, and address disproportionate and adverse human health and environmental effects (including risks) and hazards of Federal activities, including those related to climate change and cumulative impacts of environmental and other burdens on communities with environmental justice concerns." (EO 14096, §3(i)). The White House Council on Environmental Quality (CEQ) has oversight of the federal government's compliance with Executive Orders 12898 and 14096 as well as NEPA.

After reviewing the demographic data for Kitsap County, the census tract containing the Bay, and Washington State, and then analyzing the environmental justice issues associated with the Proposed Preferred Alternative, the Trustees determined that the Proposed Preferred Alternative would be unlikely to have disproportionately high or adverse effects on low income, minority, or disproportionately burdened communities. A comparison of Port Gamble and Kitsap County demographic data to the demographics for the State, is in Section 4.1.4 of this Draft RP/EA. The Proposed Preferred Alternative would be implemented in an area with a slightly higher median income than the state-wide average and a lower percentage of non-white residents than the state-wide average. See Table 4. As described in Section 4 of this Draft RP/EA, the Trustees did not identify any major adverse impacts in or adjacent to the Bay and nearby communities associated with the Proposed Preferred Alternative.

The forgoing demographic data for the census tract and county where the Proposed Preferred Alternative is located as compared to Washington State census data does not fully capture the environmental justice issues associated with the Proposed Preferred Alternative. The Trustees describe in Section 4.1.2 of this Draft RP/EA that the Proposed Preferred Alternative would be implemented in an area claimed by the Lower Elwha Klallam Tribe, the Jamestown S'Klallam Tribe, the PGST, the Skokomish Indian Tribe, and the Suquamish Tribe. Each Tribal government has Adjudicated Usual and Accustomed Fishing Rights in the Bay and the Port Gamble Reservation is located on the eastern shore of the Bay. As part of the Draft RP/EA, the Trustees analyzed the impacts of the Proposed Preferred Alternatives to Tribal cultural uses in and near the Bay. Per their analyses set forth in Section 4.2.8, the Trustees determined that construction implementation would cause minor, short-term negative impacts to Tribal cultural uses; however, the Proposed Preferred Alternative would likely create long-term, positive impacts for Tribal uses such as fishing and shellfish harvesting because habitat creation and enhancement would benefit fish, shellfish, and related habitats.

As set forth in this Draft RP/EA, the Trustees determined that the Proposed Preferred Alternative would not cause any significant adverse impacts to the environment or communities in and around the Bay. Rather, as described in Section 4.2.8, the Trustees found that the Proposed Preferred Alternative would benefit communities and Tribes in the vicinity of the Bay and therefore be consistent with environmental justice goals.

4.2.14 Land and Shoreline Use

Proposed Alternative A – Proposed No Action Alternative: The Proposed No Action Alternative would have no impact on land and shoreline use because no restoration would be implemented on the shorelines and land adjacent to the Bay. The current land and shoreline use would remain.

Proposed Alternative B - Southern Mill Site Shoreline Restoration: This proposed alternative would result in a conversion of unvegetated upland to riparian and intertidal habitat. This is a beneficial impact for resources present near and, in the Bay, and would be minor and long-term because of the relatively small physical footprint of Proposed Alternative B. The conversion of currently unused land into habitat would remove these areas from potential future uses such as housing or industrial development. Additional permanent protections would restrict future uses to those consistent with habitat conservation values.

Proposed Alternative C - Western Bay Nearshore Restoration: Proposed Alternative C would be unlikely to change the shoreline or land use because restoration actions would be implemented in subtidal areas of the Bay. Off-shore intertidal areas with restoration actions under this proposed alternative would be subject to enduring use restrictions allowed by law that would limit uses to those consistent with conservation values. Any impacts to land or shoreline use would likely be minor and long-term given the relatively small physical footprint of the proposed alternative with the Bay and the expectation that use restrictions would be in place for decades.

Proposed Alternative D - Combined Projects (Proposed Preferred Alternative): The Proposed Preferred Alternative consists of the restoration actions in Proposed Alternatives B and C; therefore, the Proposed Preferred Alternative will likely result in similar minor, long-term impacts as Proposed Alternatives B and C. The magnitude of the Proposed Preferred Alternative's impacts to shoreline and land use would likely be the sum of Proposed Alternatives B and C, but the impacts would remain minor. The relatively small physical area of the Proposed Preferred Alternative, approximately 35.1 acres under property restrictions, would not cause major changes to land uses in and adjacent to the Bay.

4.2.16 Wetlands

Proposed Alternative A - No Action Alternative: The Proposed No Action Alternative would have no impacts on wetlands because no restoration would be done. The current condition of wetlands in and around the Bay would remain as-is.

Proposed Alternative B - Southern Mill Site Shoreline Restoration: Proposed Alternative B would likely result in beneficial minor long-term impacts to wetlands by increasing nearshore emergent vegetation and creating habitat conditions to support preexisting eelgrass. Eelgrasses provide food, shelter, and essential nursery areas to commercial and recreational fishery species and to countless invertebrates living in eelgrass communities.

Proposed Alternative C - Western Bay Nearshore Restoration: Proposed Alternative C would likely result in beneficial long-term minor impacts to wetlands with the planting of eelgrass.

Proposed Alternative D - Combined Projects (Proposed Preferred Alternative): Impacts of the Proposed Preferred Alternative are potentially greater in magnitude than those associated with Proposed Alternatives B and C. Under the Proposed Preferred Alternative, restoration would provide long-term minor beneficial impacts to wetlands by establishing protected nearshore emergent vegetation including eelgrass.

4.2.17 Air Quality

Proposed Alternative A – Proposed No Action Alternative: The Proposed No Action Alternative would not result in any air quality impacts because no restoration would occur under this proposed alternative.

Proposed Alternative B - Southern Mill Site Shoreline Restoration: During the construction phase of this proposed alternative there would be minor short-term adverse effects to air quality due to increases in exhaust and dust from use of construction equipment. No major or long-term impacts to air quality would be expected to result from implementation of this proposed alternative. For areas in which vegetated habitat will replace riprap or structures, the vegetation would take up carbon dioxide, which would result in negligible beneficial air quality impacts.

Proposed Alternative C - Western Bay Nearshore Restoration: Air quality impacts of this proposed alternative would be similar in nature and magnitude to those for Proposed Alternative B.

Proposed Alternative D - Combined Projects (Proposed Preferred Alternative): The Proposed Preferred Alternative would result in short-term minor adverse impacts to the air quality resulting from physical disturbances during construction and maintenance affecting air quality at the restoration implementation sites. All impacts would be limited to periods when construction or maintenance would be performed. Negligible long-term beneficial impacts to air quality would be associated with the Proposed Preferred Alternative because vegetation would take up carbon dioxide.

4.4 Cumulative Impacts

The Trustees determined that the Proposed Preferred Alternative (Proposed Alternative D) would enhance and create habitat in and adjacent to the Bay to address potential injuries to natural resources and address lost ecological services. For the Southern Mill Site, the PGST have placed the adjacent property under restrictions that will limit uses. The Trustees further determined that the Proposed Preferred Alternative's combination with the restoration implementation the cumulative effects to the environment in the Bay and its vicinity would be long-term, minor to moderate, and beneficial. The cumulative effects analysis in this Draft RP/EA is commensurate with the degree of direct and indirect effects anticipated by implementing the Proposed Preferred Alternative which is inclusive of the two other proposed action alternatives, Proposed Alternatives B and C, considered by the Trustees. This section sets forth the Trustees' cumulative impacts analysis in further detail.

The Proposed Preferred Alternative would restore shoreline processes and enhance habitat for benthic invertebrates, forage fish, shellfish, and juvenile salmonids in the Bay. The Trustees' restoration objectives would be met by increasing the functional value of habitat for these resource species by 1) increasing the amount of intertidal habitat acreage; 2) restoring shorelines in the southern portion of the former sawmill facility to more natural intertidal substrates and more gently sloped conditions supported by riparian vegetation to provide habitat for forage fish, shellfish, and juvenile salmonids; and 3) restoring functional shallow subtidal habitat substrate in woody debris areas and transplanting eelgrass in the western Bay. The Proposed Preferred Alternative would create or enhance and then permanently protect approximately 35 acres of riparian, intertidal, and subtidal habitats in and adjacent to the Bay. These actions associated with the Proposed Preferred Alternative would result in long-term minor to moderate benefits for flood control, fish and wildlife habitat, aesthetics, water quality, special status species, vegetation, and wetlands. Moreover, the cumulative impacts associated with the Proposed Preferred Alternative would be long-term because the restored areas would be subject to property protections that would restrict the uses of areas in and around the physical restoration footprints to allow ongoing habitat functions that are the source of the minor to moderate beneficial impacts. Initial maintenance and ongoing stewardship of the Proposed Preferred Alternative would continue to generate beneficial impacts on a long-term basis. Because Proposed Alternatives B and C are also habitat creation and enhancement actions in and adjacent to the Bay, albeit it on a smaller scale than the Proposed Preferred Alternative, both proposed

alternatives are anticipated to provide similar cumulative long-term benefits to a lesser degree than the Proposed Preferred Alternative.

Implementation of the Proposed Preferred Alternative, and the related benefits associated with the creation and protection of new marsh, intertidal, and riparian habitat (e.g., improved water quality, fishing, and other recreational use opportunities), may result in indirect, minor, long-term beneficial impacts to communities with environmental justice concerns, including Tribal sovereigns with Treaty Rights related to resources in the Proposed Preferred Alternative project areas. After short-term, minor negative impacts associated with disturbances caused by restoration implementation, Tribal cultural uses in and adjacent to the Bay would experience minor long-term benefits because the Proposed Preferred Alternative would benefit fish and other natural resources associated with those uses. The visual impact of the created and enhanced habitat related to the Proposed Preferred Alternative may result in minor, long-term benefits for recreational boaters and fishers in the Bay. There is the potential for direct and indirect, short-term, minor beneficial impacts to socioeconomics resulting from the employment opportunities for workers, and the local businesses they support, during the Proposed Preferred Alternative construction.

Adverse impacts would be a result of the Proposed Preferred Alternative as well. Short-term minor adverse impacts to air quality, sediment, water quality, noise, aesthetics, and transportation would be caused by the Proposed Preferred Alternative to the portions of the Bay subject to restoration during implementation and maintenance activities. These adverse impacts would likely be limited in time span and spatial extent. Long-term adverse impacts associated with the Proposed Preferred Alternative would be the result of permanent property restrictions that could limit the uses of restoration footprints in and near the Bay to uses that are consistent with habitat conservation. Adverse impacts related to Proposed Alternatives B and C would be similar in nature and duration to those described for the Proposed Preferred Alternative and more minor in impact due to the narrower scope of activity under these alternatives. Given the short-term nature of the majority of the adverse impacts, and the minor effects of the few long-term adverse impacts, the more numerous, long-term beneficial impacts of the Proposed Preferred Alternative would exceed the adverse impacts.

Although impacts from the Proposed Preferred Alternative to natural resources under the Trustees' jurisdiction, and impacts in general, may occur in the larger Puget Sound region, the potential for the Proposed Preferred Alternative to result in substantial cumulative effects to the human environment in and adjacent to the Bay would be unlikely. In this Draft RP/EA the Trustees analyzed proposed action alternatives that are intended only to compensate for potential injury to natural resources under the Trustees' jurisdiction caused by hazardous releases in the Bay. As stated above, the Proposed Preferred Alternative is anticipated to have predominantly beneficial impacts because the Proposed Preferred Alternative would address existing harms to those resources in the Bay with few, long-term adverse impacts. The physical area of the Proposed Preferred Alternative is relatively small at approximately 35 acres, and the actions are intended to benefit habitat. Because of its size and character, the Proposed Preferred Alternative would likely result in short-term minor negative impacts to associated with construction and

maintenance as well as long-term minor negative impacts by restricting land use within the limited physical footprint. The cumulative impacts analysis for the Proposed Preferred Action appropriately focuses on the incremental effects of the action in the context of other ongoing actions in the Bay.

The cumulative impacts analysis for the Proposed Preferred Action appropriately focuses on the incremental effects of the action in the context of other ongoing actions in the Bay. As described in Section 1.3 of this Draft RP/EA, the Bay and the adjacent Mill Site are also undergoing remedial actions under MTCA. In this case, the Trustees' Proposed Preferred Alternative would implement restoration complimentary to MTCA remedial actions in the Bay; therefore, the potential for cumulative impacts is considered in the context of remedial and restoration activities in the Bay. Remedial actions in and adjacent to the Bay would contribute to the cumulative effects of the Proposed Preferred Alternative and could result in increased long-term beneficial impacts such as improved water, air, and sediment quality, and aesthetics. Remedial activities in the Bay could also contribute to the cumulative short-term adverse impacts of the Proposed Preferred Alternative such as noise and decreased water quality associated with construction disturbances.

Some minor, temporary adverse cumulative impacts to marine fauna and flora could also occur but impacts to these and other resources in and adjacent to the Bay would be minimized by use of best management practices. Cleanup activities and other, non-NRDAR habitat projects that may occur contemporaneously in the vicinity of the Proposed Preferred Alternative would incorporate required best management practices, such as dust control and soil and erosion practices. As discussed above, the overall physical footprint of the Proposed Preferred Alternative would be a relatively small area of the Bay and areas adjacent thereto. Consequently, the minor and temporary impacts of the Proposed Preferred Alternative on air quality, soils and sediments, and water quality has a low potential to result in cumulatively significant impacts to and around the Bay.

Approximately 18.41 acres of the Mill Site are also subject to an existing conservation easement granted to PGST. This easement prohibits development of the easement area for residential, industrial, and commercial uses, and it protects and preserves the shoreline for habitat restoration and public recreation. The easement area overlaps with the area of the Proposed Preferred Alternative and also includes adjacent areas of the Mill Site, including areas where MTCA remedial actions will occur. This conservation easement provides that PGST will develop a restoration and stewardship plan for the easement area, and PGST is currently in the process of completing the designs for this plan, which will provide for habitat restoration as well as low-impact recreational activities and cultural activities. This restoration and stewardship plan has been developed to harmonize with and complement the habitat restoration work contemplated under the Proposed Preferred Alternative.

PGST's conservation easement and its restoration and stewardship plan are intended to result in long-term improvements to the habitat, recreational uses, cultural uses, and aesthetics of the shoreline area, and these long-term beneficial impacts are complementary to the long-term

beneficial impacts of the Proposed Preferred Alternative. The cumulative impacts would likely include substantial and lasting improvements to the overall aesthetic appearance of the Mill Site and to the ecological functioning of the shoreline habitats. Construction under the restoration and stewardship plan could contribute to the cumulative short-term adverse impacts of the Proposed Preferred Alternative, particularly with regard to noise and soil disturbances, but these impacts are likely to be minor and temporary, and these impacts could be decreased by best management practices, as discussed above. Construction under the restoration and stewardship plan is also planned to be coordinated with the Proposed Preferred Alternative and the MTCA remedial actions, which could help to reduce the overall duration of these short-term adverse impacts.

Excluding the planned MTCA remedial actions and PGST's stewardship and restoration actions under its conservation easement, the Trustees cannot predict with certainty what other actions may be undertaken by other entities within and in the vicinity of the Bay that could combine with NRDAR restoration actions to produce cumulative impacts. The Trustees anticipate that future actions in and adjacent to the Bay would be expected to have at least short-term negative impacts from construction activities, but some future actions could have long-term negative impacts if the construction is prolonged. As discussed, as required by the Proposed Preferred Alternative, certain uses and any construction associated with those uses would be prohibited in the areas under property protections. It is possible that some future actions may result in long-term adverse impacts to habitats or species in and adjacent to the Bay, although presumably mitigation measures would be used to minimize such impacts and habitat mitigation could be required.

Potential cumulative impacts to the Bay under Proposed Alternatives B and C would likely be the same impacts that are discussed above for the Proposed Preferred Alternative. Because Proposed Alternatives B and C are smaller in scale than the Proposed Preferred Alternative, the likely cumulative impacts to the Bay from either Proposed Alternatives B or C would be less than those cumulative impacts anticipated for the Proposed Preferred Alternative.

There would be no cumulative impacts to the Bay and adjacent environment under the Proposed Alternative A, No Action Alternative. Under Proposed Alternative A, restoration efforts would only occur if implemented under other legal frameworks or programs, and there would be no impacts associated with a NRDAR process under CERCLA and MTCA.

4.4.1 Potential Impacts of Climate Change on Restoration

The climate in Hood Canal and Admiralty Inlet is west coast marine type, characterized by cool wet winters and mild summers. There are no long-term temperature and precipitation monitoring stations on the Bay. However, five monitoring stations near the Bay (e.g., Forks, Port Angeles, Port Townsend, Cushman Powerhouse 2, Everett) indicate at least a 1˚F annual warming trend. Generally, the Bay is cooler and less precipitous than the rest of Puget Sound because the region is partially protected from Pacific storms and Arctic air by the Olympic Mountains (USHCN 2019, PGST 2017). Rising temperatures are very likely to intensify and continue well into the next century with subsequent adverse effects, which could have major effects on restoration

outcomes because of ecological conditions that may change over vast ranges. Hence, climatic changes will cause the ranges of individual species to shift.

4.4.1.1 Potential Shoreline Effects

Streamflow and Temperature

Glaciers in the Olympic Mountains, west of Hood Canal (Figure 1), lost 34% of their area between 1980 and 2009. The snow in the Olympics is melting earlier in the year leading to higher winter stream flows and lower summer stream flows. Lower summer/fall stream flows and warmer water temperatures stresses salmon and hinders migration (USHCN 2019, PGST 2017). Restoring intertidal, tidal, and riparian habitat in and adjacent to the Bay will provide site specific shading and localized cooler water temperatures.

Photo 4: View looking west from Bay opening to Hood Canal and Olympic Mountains, photographed in 2012. Photo credit: M. Carlson, USFWS

Sea Level Rise

Sea level rise is of particular concern in coastal areas, including the Bay. Factors influencing local sea level rise include global sea level rise, local land movement (such as tectonic land movement), and changes in wind patterns (University of Washington and Washington Department of Ecology 2008). Sea level at the Seattle tide gauge, the longest running tide gauge in the Puget Sound region, rose +8.6 inches between 1900 and 2008 (+0.8 inches or +20 mm/decade). The average rate of change in sea level at Port Townsend, a nearby monitoring station to the Bay, is comparable to Seattle (+0.7 inch or +17.78 mm/decade) (PGST 2016)

The latest sea level rise projections for Washington project a median increase of 1.6 ft for a low greenhouse gas scenario, and an increase of 2.0 ft for a high greenhouse gas scenario, for 2100 relative to 1991-2010. Storms that produce coastal flooding are not projected to change in the future. However, sea level rise will increase the height and extent of storm surge and waves even if the storms themselves do not change (Miller et al., 2019; Mauger and Vogel 2020). Ultimately, sea level rise is likely to lead to a high risk of inundated restoration sites in and adjacent to the Bay.

Because the Proposed Preferred Alternative would include tidal and estuarine habitat with adjacent riparian habitat, the Trustees considered the estimated sea level rise. To ensure survival of the plant and animal communities, the habitat must have room to migrate upslope and stay at the same intertidal elevation required for the specific organisms. For example, if the water level increases over time, but there is no space upslope for a tidal marsh to migrate (i.e., located against a steep slope), the wetland will not be able to survive in the long term. The Trustees endeavored to locate and develop restoration projects in such a way as to maximize the opportunity for restored habitats to migrate upslope.

4.4.1.2 Potential Eelgrass Restoration Impacts

Ocean Temperature

The strong influence of El Niño- Southern Oscillation and the Pacific Decadal Oscillation are believed to be largely responsible for warming global ocean temperatures including those for the Bay. Between 1950 and 2009, water temperatures for monitoring stations located in the vicinity of the Bay, the Admiralty Inlet, Point Jefferson, and Hood Canal stations, increased +0.8 to +1.6°F depending on the location (USHCN 2019). Currently, there are no monitoring stations directly in the Bay for monitoring water temperature. Eelgrass shoot survival depends on three factors: temperature, light and density. Higher ocean temperatures can adversely affect eelgrass survival (Thom et al. 2014).

Ocean Acidification

Although ocean acidification is not caused by warmer temperatures, it is caused by increasing levels of carbon dioxide in the atmosphere. Additional carbon dioxide changes the ocean's pH and reduces the availability of carbonate ions. Washington's marine waters are particularly susceptible to ocean acidification because of the influence of regional upwelling, which transports offshore, carbon-rich water to the continental shelf (WA DoE 2012).[21] In urbanized estuaries and restricted inlets of Puget Sound (such as Hood Canal), runoff containing nutrients and organic carbon from land sources also influences pH levels. Added nutrients and organic

[21] The increase in the hydrogen ion concentration reduces the amount of calcium carbonate of marine organisms like mollusks to build and maintain body parts dependent on calcium carbonate. Thus, ocean acidification also impacts shellfish, one of the potentially injured resources in the Bay for which restoration under the Proposed Preferred Alternative may benefit.

carbon stimulate algal growth (WA Blue Ribbon Panel on OA 2012, Feely et al 2010), ultimately increasing potential harmful algal blooms and blocked sunlight for eelgrass restoration planned for the Bay.

Photo 5: Moon Snail (*Euspira lewisii*) eggs in sand collar casing in 2012 with pilings that have since been removed in background. Photo Credit: M. Carlson, USFWS

5. RESTORATION MONITORING, PERFORMANCE CRITERIA, MAINTENANCE, AND STEWARDSHIP

The Trustees value restoration monitoring as a critical component of the Proposed Preferred Alternative (Proposed Alternative D). Monitoring will be a mechanism for the Trustees to determine whether restoration has met its performance criteria and will guide adaptive management actions and maintenance. The Trustees have developed performance criteria specific to the Proposed Preferred Alternative. These performance criteria are metrics that reflect whether the restoration is functioning as designed to provide ecological benefits for potentially injured resources in the Bay, thereby meeting the Trustees' goals and CERCLA requirements. During the first ten years after shoreline restoration implementation completion, monitoring results will inform adaptive management of the restoration to ensure ongoing habitat function. After the initial ten years, the South Mill Shoreline Restoration will be subject to ongoing maintenance, monitoring, and stewardship. Each of these aspects of the Proposed Preferred Alternative are described in more detail in this section.

5.1 Monitoring & Performance Criteria

Under the Proposed Preferred Alternative, the PRPs will conduct maintenance and monitoring of the restoration actions for the first ten years following restoration implementation. The specific parameters that will be monitored for the Proposed Preferred Alternative reflect both the physical structure and biological components of the restored habitat. The Trustees developed the selected parameters and monitoring plan to assess how the system and its ecological processes are functioning. Consistent with the technical statement of work for the Proposed Preferred Alternative, the PRPs will monitor the following physical and biological parameters to determine whether the Proposed Preferred Alternative is performing as intended and providing the anticipated ecological benefits to potentially injured resources in the Bay. In addition, eelgrass monitoring from year to year will dictate the planting locations for the next year.

Physical parameters

- Total intertidal area, including area of low and high marsh and mudflats.
- Slope stability and erosion.
- Soil/sediment structure and quality.
- Porewater sulfide protection.
- Sediment accumulation patterns.
- Surface elevation gradients
- Photosynthetically available radiation (PSAR), temperature, and depth

Biological parameters

- Vegetation survival, density, and areal coverage.
- Herbivore control effectiveness.
- Invasive species cover and presence.

- Presence of desired fish and wildlife species.
- Fish or wildlife use of site.
- Benthic community structure.
- Primary productivity levels.

5.2 Adaptive Management

During the first ten years following shoreline restoration implementation completion, the PRPs will be responsible for performing adaptive management actions in consultation with the Trustees.

To inform appropriate adaptive management actions, the Trustees will require the PRPs to conduct periodic habitat monitoring. Feedback from the monitoring will be compared to the performance criteria described in Section 5.1 to determine what attributes are not on target for project success and what actions, including overall course corrections due to site conditions, will need to be taken to achieve project success. Working with the Trustees, the PRPs will implement adaptive management actions to address performance failures. Adaptive actions may include replanting species, changing plant species or densities, adding mulch, or further amending soils, adjusting, or augmenting herbivore exclusion devices, and/or installing irrigation. The Trustees will consider lessons learned from previous restoration efforts in and adjacent to the Bay when evaluating whether (and what kinds of) adaptive management actions are appropriate. Because the PRPs will be performing adaptive management actions, adaptive management plans that detail these actions for the Proposed Preferred Alternative must be reviewed and approved by Trustees prior to the PRPs implementing adaptive management.

Monitoring data collection and analysis will be critical in the first few years after the Proposed Preferred Alternative is implemented because that is the time during which adaptive management actions are often most effective. Eradicating or controlling invasive species before the population is too large or planting different species because the hydrology or salinity of the site is different than what was originally anticipated are examples of adaptive management actions that are more successful when taken earlier in a restoration project's lifespan.

5.3 Long-Term Maintenance, Monitoring, and Stewardship

To ensure the ongoing success of the Proposed Preferred Alternative, long-term maintenance and monitoring requirements for the Southern Mill Site Riparian Vegetation Area and Southern Mill Site Beach Area (depicted in Figures 3 and 4) will be conducted for years 11 through 30 after shoreline restoration implementation completion. A permanent stewardship plan will be developed to be implemented after year 30 to detail actions for preventing degradation of habitat and associated ecological services from invasive species, debris, and other impacts. Activities such as inspections, maintenance, monitoring and management will be identified by schedules, funding, and assigned responsibilities in conducting permanent stewardship. Between years 11 and 30, the PRPs will undertake all long-term maintenance and monitoring activities to address intertidal stability and substrates at the South Mill Site Beach Area. The PRPs will also be

responsible for funding all additional long-term maintenance, monitoring, and stewardship activities. A designated Trustee or its contractor will use the PRP funding to conduct long-term maintenance and monitoring for the South Mill Site Riparian Vegetation Area between years 11 and 30 after shoreline restoration implementation completion, transitioning to permanent stewardship activities thereafter. Collectively, these efforts when paired with permanent restrictions on the uses of the properties underlying the restoration will support ongoing functioning habitat to benefit those natural resources in the Bay potentially injured by hazardous releases.

5.4 Reporting Requirements

Within 60 days of completion of the upland and in-water construction activities, excluding eelgrass transplanting, the PRPs will prepare a construction completion report that describes the as-built condition of the restoration projects. Monitoring plans along with identified adaptive management actions that need to be taken must be completed once a year for the first three years after implementation completion and according to the approved monitoring schedule thereafter. The primary objective of the initial monitoring plan is to establish monitoring activities to verify that the goals and objectives of the habitat projects are being achieved. The PRPs will submit eelgrass and sensor deployment work plans to the Trustees for review and approval prior to implementation. The PRPs will submit permanent stewardship plans to Trustees for review and approval prior to permanent stewardship implementation, which is expected to begin 30 years after shoreline restoration implementation completion.

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7. GLOSSARY

Adaptive management- an explicitly experimental approach to managing natural resource projects by integrating design, management, and monitoring to systematically test assumptions to adapt and learn.

Anadromous- a species, such as salmon, that is born in freshwater, spends a large part of its life in the sea, and returns to freshwater rivers and streams to spawn.

Baseline- the condition that would exist but for the releases of hazardous substances.

Benthic- relating to the bottom of a sea or lake or to the organisms that live there.

Bioassay-a procedure for determining the biological activity of a substance (e.g., a drug or pollutant) by measuring its effect on an organism, tissue, or cell, compared to a standard preparation.

Chinook salmon (ocean-type)- one of two types (races) of Chinook salmon that typically migrate to sea within the first three months of life but may spend up to a year in freshwater prior to emigration to the sea. They also spend their ocean life in coastal waters. Ocean-type Chinook salmon return to their natal streams or rivers as spring, winter, fall, summer, and late-fall runs, but summer and fall runs predominate. Ocean-type Chinook salmon tend to use estuaries and coastal areas more extensively than other pacific salmonids for juvenile rearing.

Ecological services- the processes by which the environment produces resources that we often take for granted such as clean water, timber, habitat for fisheries, and the decomposition of wastes.

Ecosystem processes- the physical, chemical, and biological actions or events that link organisms and their environment. Ecosystem processes include decomposition, production of plant matter, nutrient cycling, and fluxes of nutrients and energy.

Intertidal- occurring within, or forming, the area between the high and low tide levels in a coastal zone.

Invasive species- native or non-native species that heavily colonize a particular habitat, displacing desirable native species and adversely affecting the ecosystem.

Limiting factor- controls a process, such as organism growth or species population size or distribution. The availability of food, predation pressure, or availability of shelter are examples of factors that could be limiting for a species population in a specific area. For example, in the Bay, limiting factors for juvenile salmon include a lack of resting and feeding areas in the estuarine portion of the river as the juveniles acclimate from freshwater to saltwater.

Marsh- an area of soft, wet, low-lying land, characterized by grassy vegetation and often forming a transition zone between water and land.

Mean lower low water- the average height of the lower of the daily low waters over a 19-year period.

Natural resource services- the physical and biological functions provided by the resource that serve the ecological and human uses of the environment. Examples of ecological services include plant and animal habitat, food supply, etc.

Nexus- the degree of the linkage between the injured natural resource and the restoration actions. The strength of a nexus is determined, in part, by the location of the restoration in comparison to the location of the injured resources.

PAHs (polycyclic aromatic hydrocarbons)- a group of chemicals naturally found in coal, coal tars, oil, wood, tobacco, and other organic materials. There are more than 100 different PAHs. PAHs are the waxy solids found in asphalt, crude oil, coal, coal tar pitch, creosote, and roofing tar. Some types of PAHs are used in medicines and to make dyes, plastics, and pesticides. PAHs can be divided into the following two groups based on their physical, chemical, and biological characteristics:

- PAHs, Low Molecular Weight-PAHs with 2 to 3 rings, such as naphthalene, fluorenes, phenanthrenes, and anthracenes, that have significant acute toxicity to aquatic organisms. In general, low molecular weight PAHs are more soluble and volatile and have less affinity for surfaces than do high molecular weight PAHs.
- PAHs, High Molecular Weight-PAHs with more than 3 rings (such as chrysene). Several members of the high molecular weight PAHs are carcinogenic. In general, high molecular weight PAHs are less soluble and volatile than low molecular weight PAHs.

PCBs (polychlorinated biphenyls)- any of a family of industrial compounds produced by chlorination of biphenyl, noted primarily as an environmental pollutant that accumulates in animal tissue with resultant pathogenic and teratogenic effects.

Rearing habitat- an area where larval and juvenile fish find food and shelter.

Riparian habitat- areas adjacent to rivers and streams with a differing density, diversity, and productivity of plant and animal species relative to nearby uplands.

Service loss- *see* Ecological service loss.

Subtidal- areas below the low tide that are continuously submerged.

8. LIST OF PREPARERS AND EDITORIAL ASSISTANCE

The following individuals and organizations were involved in development of this Environmental Assessment and Restoration Plan.

Deirdre F. Donahue (United States Department of the Interior)
Jeff Krausmann, Michael Carlson, Annette Maes and Valerie Chu (U.S. Fish and Wildlife Service)
Susannah Edwards (Washington Department of Ecology)
Chris Waldbillig (Washington Department of Fish & Wildlife)
Jonathon Thompson (Washington Attorney General's Office)
The Port Gamble S'Klallam Tribe Natural Resources Department
Joseph Pavel (Skokomish Tribe)
Alison O'Sullivan (Suquamish Indian Tribe)
Hansi Hals (Jamestown S'Klallam)
Matt Beirne (Lower Elwha Klallam Tribe)

Appendix A

Point No Point Treaty. The Lower Elwha Klallam Tribe, the Jamestown S'Klallam Tribe, the Port Gamble S'Klallam Tribe, and the Skokomish Tribe are signatories to the 1855 Point No Point Treaty, which guarantees the signatory Tribes' rights to natural resources in Port Gamble Bay. Under the Supremacy Clause of the United States Constitution, treaties are superior to any conflicting state laws or constitutional provisions.

Treaty of Point Elliott. The 1855 Treaty of Point Elliott sets forth articles of agreement between the United States and the Suquamish Indian Tribe, and other federally recognized Tribes within the Puget Sound area. Under the Supremacy Clause of the United States Constitution, treaties are superior to any conflicting state laws or constitutional provisions.

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 USC § 9601, *et seq.*, and National Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR Part 300. CERCLA, also known as Superfund, is a federal law that provides the basic legal framework for clean-up and restoration of the nation's hazardous substances sites. CERCLA establishes a hazard ranking system for assessing the nation's contaminated sites, with the most contaminated sites being placed on the National Priorities List. Trustees are responsible, under CERCLA, for restoring injuries to natural resources and losses of natural resource services.

Model Toxics Control Act (MTCA), Ch. 70A.305 RCW (formerly Ch. 70.105D RCW [1989]) and Ch. 173-340 WAC (1992). Washington's toxic clean-up law is the state equivalent of the federal CERCLA law and is managed by the Washington Department of Ecology. The statewide regulations establish clean-up standards and requirements for managing contaminated sites.

National Environmental Policy Act (NEPA), as amended, 42 USC § 4321, *et seq.*; 40 CFR Parts 1500-1508. NEPA was enacted in 1969 to establish a national policy for the protection of the environment. CEQ was established to advise the president and to carry out certain other responsibilities relating to implementation of NEPA by federal agencies. Federal agencies are obligated to comply with the NEPA implementing regulations promulgated by CEQ (40 CFR Parts 1500-1508). These regulations outline the responsibilities of federal agencies under NEPA and provide specific procedures for preparing environmental documentation to comply with NEPA.

Sediment Management Standards (SMS), Chapter 173-204 WAC. The Sediment Management Standards establish standards for sediment quality in State of Washington and provide regulations regarding use of the sediment standards for managing and reducing sources of pollutants, and cleanup of contaminated sediments. The standards include numeric criteria for contaminant concentrations in sediment, biological criteria for sediment laboratory bioassays and benthic community abundance, and narrative criteria for human health, other aquatic organisms, and other toxic substances.

State Environmental Policy Act (SEPA), Chapter 43.21C RCW and Chapter 197-11 WAC. SEPA sets forth the state's policy for protection and preservation of the natural environment. Local jurisdictions must also implement the policies and procedures of SEPA. Each project will undergo a public comment period under SEPA requirements and the SEPA checklist; the permit application, the permit, and the public comments will become a part of the administrative record for each project.

Clean Water Act (Federal Water Pollution Control Act), 33 USC § 1251, *et seq*. The Clean Water Act is the principal law governing pollution control and water quality of the nation's waterways. It requires the establishment of guidelines and standards to control the direct or indirect discharge of pollutants to waters of the United States. Discharges of material into navigable waters are regulated under Sections 401 and 404 of the Clean Water Act. The U.S. Army Corps of Engineers has the primary responsibility for administering the Section 404 permit program. Under Section 401, projects that involve discharge or fill to wetlands or navigable waters must obtain certification of compliance with state water quality standards.

Rivers and Harbors Act, 33 USC § 401, *et seq*. This Act regulates development and use of the nation's navigable waterways. Section 10 of the Act prohibits unauthorized obstruction or alteration of navigable waters and vests U.S. Army Corps of Engineers with authority to regulate discharges of fill and other materials into such waters. Actions that require Section 404 Clean Water Act permits are also likely to require permits under Section 10 of this Act.

Endangered Species Act of 1973 (ESA), 16 USC § 1531, *et seq*., 50 CFR Parts 17, 222 & 224. The ESA directs all federal agencies to conserve endangered and threatened species and their habitats and encourages such agencies to utilize their authorities to further these purposes. Under the Act, the National Marine Fisheries Services (NMFS) and USFWS publish lists of endangered and threatened species. Section 7 of the Act requires that federal agencies consult with these agencies to ensure their actions are not likely to jeopardize listed species or result in destruction or adverse modification of designated critical habitat. The project implementer has conducted the necessary consultations under the ESA.

Magnuson-Stevens Fishery Conservation and Management Act (MSA), 16 USC § 1801, *et seq.*, 50 CFR Part 600. In 1996, the Act was reauthorized and changed by amendments to require that fisheries be managed at maximum sustainable levels and that new approaches are taken in habitat conservation. Essential Fish Habitat is defined broadly to include "those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity" (62 Fed. Reg. 66551, § 600.10 Definitions). The Act requires consultation for all federal agency actions that may adversely affect Essential Fish Habitat. Under Section 305(b)(4) of the Act, NMFS is required to provide advisory conservation and enhancement recommendations to federal and state agencies for actions that adversely affect Essential Fish Habitat. Where federal agency actions are subject to ESA Section 7 consultations, such consultations may be combined to accommodate the substantive requirements of both ESA and MSA. The project implementer has conducted the necessary consultations under the MSA.

Fish and Wildlife Coordination Act (FWCA), 16 USC § 661, *et seq.*, and the Migratory Bird Treaty Act (MBTA) of 1918, 16 USC § 703, *et seq*. The FWCA requires that federal agencies consult with the USFWS, NMFS, and state wildlife agencies for activities that affect, control, or modify waters of any stream or bodies of water, to minimize the adverse impacts of such actions on fish and wildlife resources and habitat. Similarly, the MBTA requires the protection of ecosystems of special importance to migratory birds against detrimental alteration, pollution, and other environmental degradation. These consultations are generally incorporated into Section 404 of the Clean Water Act, NEPA, or other federal permit, license, or review requirements.

Executive Order 11988: Floodplain Management. On May 24, 1977, President Carter issued Executive Order 11988, Floodplain Management. This Executive Order requires each federal agency to provide opportunity for early public review of any plans or proposals for actions in floodplains, in accordance with Section 2(b) of Executive Order 11514, as amended, including the development of procedures to accomplish this objective.

Executive Order 11990: Protection of Wetlands. On May 24, 1977, President Carter issued Executive Order 11990, Protection of Wetlands. This Executive Order requires each agency to provide opportunity for early public review of any plans or proposals for new construction in wetlands, in accordance with Section 2(b) of Executive Order 11514, as amended, including the development of procedures to accomplish this objective.

Executive Order 12898 - Environmental Justice, as amended. On February 11, 1994, President Clinton issued Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. This Executive Order requires each federal agency to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations. EPA and CEQ have emphasized the importance of incorporating environmental justice review in the analyses conducted by federal agencies under NEPA and of developing mitigation measures that avoid disproportionate environmental effects on minority and low-income populations.

Executive Order 11514 – Protection and Enhancement of Environmental Quality. This Executive Order directs federal agencies to monitor, evaluate, and control their activities to protect and enhance the quality of the nation's environment; to inform and seek the views of the public about these activities; to share data gathered on existing or potential environmental problems or control methods; and to cooperate with other governmental agencies.

Executive Order 13007 – Indian Sacred Sites, and Executive Order 13175 – Consultation and Coordination with Indian Tribal Governments. Executive Order 13007 describes federal policy for accommodating sacred Indian sites. This Executive Order requires federal agencies with statutory or administrative responsibility for managing federal lands to: 1) accommodate access to and ceremonial use of Indian sacred sites by Indian religions practitioners; 2) avoid adversely affecting the physical integrity of such sacred sites; and 3) maintain the confidentiality of these sacred sites.

Executive Order 13175 exists to: 1) promote regular and meaningful consultation and collaboration with Tribal officials in the development of federal policies that have Tribal implications; 2) strengthen the United States government-to-government relationships with Indian Tribes; and 3) reduce the imposition of unfounded mandates upon Indian Tribes.

Executive Order 12962 – Recreational Fisheries. This Executive Order directs federal agencies to, among other things, foster and promote restoration that benefits and supports viable, healthy, and sustainable recreational fisheries.

Executive Order 13112 – Invasive Species. The purpose of Executive Order 13112 is to prevent the introduction of invasive species and provide for their control, and to minimize the economic, ecological, and human health impacts that invasive species cause.

Information Quality Guidelines issued Pursuant to Public Law 106-554. Information disseminated by federal agencies to the public after October 1, 2002, is subject to information quality guidelines developed by each agency pursuant to Section 515 of Public Law 106-554 that are intended to ensure and maximize the quality of such information (i.e., the objectivity, utility, and integrity of such information).

Section 508 of the Rehabilitation Act, 29 USC § 749D, *et seq*. Under Section 508 of the Rehabilitation Act, all federal agencies must take steps to afford persons with disabilities, including members of the public, access to information that is comparable to the access available to others. Section 508 was enacted in part to eliminate access barriers associated with information technology. For web accessibility under Section 508, documents posted must make text equivalents available for any non-text elements (including images, navigation arrows, multimedia objects (with audio or video), logos, photographs, or artwork) to enable users with disabilities access to all important (as opposed to purely decorative) content. Compliance also extends to making accessible other multimedia and outreach materials and platforms, acquisition of equipment and other assistive technologies, and computer software compliance.

Other potentially applicable federal, state, Tribal, and local laws that are integrated into the regulatory process include:

- Archaeological Resources Protection Act, 16 USC § 469, *et seq*.
- Bald and Golden Eagle Act, 16 USC §§ 668-668d
- Clean Air Act, as amended, 42 USC § 7401, *et seq*.
- Coastal Zone Management Act of 1982, as amended, 16 USC § 1451, *et seq*.
- Marine Mammal Protection Act, 16 USC § 1361, *et seq*.
- National Historic Preservation Act, 16 USC § 470, *et seq*.
- Shoreline Management Act, Ch. 90.58 RCW and Ch. 173-14 WAC
- Historic Preservation Act, Ch. 27.34 RCW, Ch. 27.44 RCW, and Ch. 27.53 RCW
- State of Washington Executive Order 21-02
- State of Washington Hydraulic Code, Ch. 77.55 RCW and Ch. 220-110 WAC

Appendix B

Sediment Chemistry Sampling Events with Data Used by Trustees for Natural Resource Injury Assessment

Year	Author(s)	Study/ Report Name
2000	Parametrix	Port Gamble Mill sediment chemistry reconnaissance investigation
2001	Parametrix	Historical Landfills 2 and 3 sediment data report
2003	Parametrix	Sediment Characterization Report, Former Pope & Talbot, Inc. Site, Port Gamble Bay, Washington
2003	Parametrix	Sediment characterization report, Former Pope and Talbot, Inc., Department of Natural Resources Aquatic Land Lease No. 20-012795
2004	Parametrix	Historical Landfill No. 4 upland soil cleanup action report
2004	Parametrix	Sediment Cleanup Action Plan, Former Pope & Talbot, Inc. Mill Site
2006	Anchor	Existing Data Compilation Report, Former Mill Site Sediments, Port Gamble, Washington
2009	Anchor	Remedial Investigation Report, Former Pope & Talbot Inc. Sawmill Site, Port Gamble, WA
2009	Hart Crowser	Remedial Investigation, Port Gamble Bay, Port Gamble, WA
2010	PGST	E-mail transmission of tissue data for Port Gamble Bay from Bill Beckley, Ridolfi, Inc. to Kevin MacLachlan, Ecology on 14 September 2010. Submitted on behalf of the Port Gamble S'Klallam Tribe, Port Gamble, WA.
2011	NewFields	Port Gamble Bay Supplemental Remedial Investigation, Port Gamble, WA
2011	Ridolfi	E-mail transmission of sediment data for Port Gamble Bay from Bill Beckley, Ridolfi, Inc. to Russ McMillan, Ecology on 29 November 2011. Submitted on behalf of the Port Gamble S'Klallam Tribe, Port Gamble, WA.
2014	WDFW/ PGST/ Ecology	Herring Embryo Mortality Study Sediments (in preparation)

PGST = Port Gamble S'Klallam Tribe
WDFW = Washington Department of Fish and Wildlife
Ecology = Washington State Department of Ecology