IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
EASTERN DIVISION

UNITED STATES OF AMERICA and THE STATE OF NORTH CAROLINA, Plaintiffs, v. DOMTAR PAPER COMPANY, LLC, Defendant.	CIVIL ACTION NO. 4:26-cv-00172

CONSENT DECREE

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I. BACKGROUND

A. WHEREAS Plaintiffs—the United States of America ("United States"), on behalf of the Secretary of the United States Department of the Interior ("DOI"), through the United States Fish and Wildlife Service ("FWS"); the Secretary of the United States Department of Commerce ("Commerce"), through the National Oceanic and Atmospheric Administration ("NOAA"); and the State of North Carolina, through the North Carolina Department of Environmental Quality ("NCDEQ") (collectively, "Plaintiffs")—filed a Complaint in this action pursuant to Section 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, ("CERCLA"), 42 U.S.C. § 9607.

B. WHEREAS Plaintiffs' Complaint alleges that Domtar Paper Company, LLC ("Defendant") is liable under CERCLA for damages for injury to, destruction of, or loss of Natural Resources and Natural Resource services, including the reasonable costs of assessing such injury, destruction, or loss, resulting from releases of "hazardous substances" under 42 U.S.C. § 9601(14), including dioxins, furans, and mercury, into Welch Creek and the Roanoke River, from a facility near Plymouth, North Carolina (the "Plymouth Mill") when it was a wood and paper products manufacturing facility owned and operated by Defendant's predecessor, Weyerhaeuser Paper Company ("Weyerhaeuser"). Areas at and adjacent to this mill where hazardous contaminants have come to be located constitute the "Site," as defined below. These releases negatively affected recreational fishing services in the lower Roanoke River, Welch Creek and the western Albemarle Sound due to dioxin-related fish consumption advisories issued by the State of North Carolina.

C. WHEREAS, pursuant to Executive Order 12580 and the National Contingency Plan, 40 C.F.R. Part 300, Subpart G, Commerce, through NOAA, and DOI, through FWS, have been delegated authority to act as Federal Trustees for the assessment and recovery of damages for injury to, destruction of, or loss of Natural Resources which belong to, are managed by, controlled by, or appertain to the Federal Trustees.

D. WHEREAS, pursuant to 40 C.F.R § 300.605, NCDEQ has been delegated authority to act as a State Trustee for Natural Resources in North Carolina impacted by the releases.

E. WHEREAS, in 2004, the Trustees initiated a Natural Resource Damages assessment in accordance with the regulations found at 43 C.F.R. Part 11, for the purpose of evaluating the injury, destruction, or loss of Natural Resources resulting from the release of hazardous substances at the Site and developing a plan to restore, replace, rehabilitate, or acquire the equivalent of the injured Natural Resources and associated Natural Resource services.

F. WHEREAS Weyerhaeuser, and Defendant have also engaged in a cooperative Natural Resource Damage assessment with the Trustees consistent with 43 C.F.R. Part 11 and pursuant to a memorandum of agreement signed on October 12, 2006. The Trustees, in cooperation with Defendant, gathered data generated through the U.S. Environmental Protection Agency's response efforts and evaluated injuries to Natural Resources at and near the Site, including by assessing the magnitude of recreational fishing losses due to fish consumption advisories for areas of the lower Roanoke River, Welch Creek and the western Albemarle Sound, as well as the benefits of potential restoration projects. As part of that process, Defendant previously reimbursed $71,797.92 of the State Trustee's and $1,153,142.72 of the Federal Trustees' costs incurred conducting the Natural Resource Damage assessment.

G. WHEREAS, in 2006, in accordance with 42 U.S.C. § 9611 and 43 C.F.R. § 11.93, the Trustees released a draft Phase 1 Restoration Plan for public comment. In the final plan, the Trustees selected Alternative 2—Reduce Intake Volume at the Plymouth Mill Cooling Water

Intake—which Defendant voluntarily implemented. The Trustees determined that this restoration project would reduce ongoing impacts to fish populations, have negligible impacts on the human environment, and, of all the alternatives considered, be the most time sensitive in benefiting affected resources. The selected restoration alternative was considered by the Trustees in resolving Weyerhaeuser's potential Natural Resource Damages liability under CERCLA. The Trustees stated in the Phase 1 Restoration Plan that they would retain the remaining alternative restoration projects for further consideration in the Phase 2 restoration planning.

H. WHEREAS, in March 2007, Defendant acquired Plymouth Mill from Weyerhaeuser and assumed all applicable environmental cleanup obligations.

I. WHEREAS the Trustees have prepared a draft Phase 2 Restoration Plan in accordance with 42 U.S.C. § 9611 and 43 C.F.R. § 11.93 to evaluate and select proposed restoration alternatives that will restore, rehabilitate, replace, and/or acquire Natural Resources and services equivalent to those allegedly injured, lost, or destroyed as a result of the releases at or from the Site. A copy of the draft Phase 2 Restoration Plan is attached as Appendix A to this Consent Decree. The Trustees' final Restoration Plan shall accompany any motion filed with the Court to enter this Consent Decree.

J. WHEREAS, by entry into this Decree, Defendant does not admit any liability to Plaintiffs arising out of the transactions or occurrences alleged in the Complaint.

K. WHEREAS the Parties to this Consent Decree recognize, and the Court by entering this Consent Decree finds, that this Consent Decree (i) has been negotiated by the Parties in good faith; (ii) will avoid prolonged and complicated litigation among the Parties; (iii) will expedite the restoration of Natural Resources allegedly injured at and near the Plymouth

Mill, including restoration activities performed, and to be performed, by Defendant; and (iv) is fair, reasonable, and in the public interest.

NOW, THEREFORE, it is hereby **ORDERED** and **DECREED** as follows:

II. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action pursuant to Sections 107 and 113(b) of CERCLA, 42 U.S.C. §§ 9607 & 9613(b), and 28 U.S.C. §§ 1331 & 1345. The Court also has personal jurisdiction over Defendant. Venue lies in the Eastern District of North Carolina pursuant to Section 113(b) of CERCLA, 42 U.S.C. § 9613(b), and 28 U.S.C. §§ 1391(b) & (c), because the releases alleged in the Complaint occurred in, and Defendant resides in, this judicial district. Solely for the purposes of this Consent Decree and the underlying Complaint, Defendant waives all objections and defenses that it may have to jurisdiction of the Court or to venue in this District. Defendant shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce it.

III. PARTIES BOUND

2. This Consent Decree applies to and is binding upon Plaintiffs and upon Defendant and its successors and assigns. Any change in ownership or corporate status of Defendant including, but not limited to, any transfer of assets or real or personal property, shall in no way alter Defendant's responsibilities under this Consent Decree.

3. Defendant shall be responsible for ensuring that its contractors and subcontractors perform any work required hereunder in accordance with the terms of this Decree. In any action to enforce this Consent Decree, Defendant shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

IV. DEFINITIONS

4. Unless otherwise expressly provided herein, terms used in this Consent Decree that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in such law or regulations. Whenever terms listed below are used in this Consent Decree or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

a. "Assessment Costs" means the costs of Natural Resource Damages assessment relating to the Site, including direct and indirect costs, incurred or to be incurred by any of the Trustees that are recoverable pursuant to Section 107(a)(4)(C) of CERCLA.

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

c. "Commerce" means the United States Department of Commerce and any successor departments, agencies, or instrumentalities.

d. "Consent Decree" or "Decree" means this Consent Decree and all appendices attached hereto (listed in Section XVII (Appendices)). In the event of conflict between this Decree and any appendix, this Consent Decree shall control.

e. "Conservation Agreement" shall mean the conservation instrument contained in Appendix B that Defendant shall record under Paragraph 9.a of this Decree.

f. "DARR Fund" means NOAA's Damage Assessment and Restoration Revolving Fund.

g. "Date of Lodging" means the day this Decree is lodged with the Court prior to the public comment process provided for in Section XXI.

h. "Day" means a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.

i. "Defendant" means Domtar Paper Company, LLC.

j. "DOI" means the United States Department of the Interior and any successor departments or agencies of the United States.

k. "Effective Date" means the effective date of this Decree as provided by Section XVIII of this Consent Decree (Effective Date and Retention of Jurisdiction).

l. "Federal Trustees" means DOI, acting through FWS, and Commerce, acting through NOAA.

m. "FWS" means the United States Fish and Wildlife Service and any successor departments or agencies of the United States.

n. "Interest" means interest at the rate specified for interest on investments of the U.S. Environmental Protection Agency's 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 shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year. As of the Date of Lodging, rates are available online at https://www.epa.gov/superfund/superfund-interest-rates.

o. "Natural Resource" or "Natural Resources" means land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources, belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States and/or the State.

p. "Natural Resource Damages" means any damages recoverable by the

United States or the State acting as trustees on behalf of the public for injury to, destruction of, loss of, loss of use of, or impairment of Natural Resources and the services provided by such Natural Resources as a result of the release of hazardous substances at or from the Site, including, but not limited to: (i) the reasonable costs of assessing injury to, destruction of, loss of, or impairment of Natural Resources; (ii) the costs of restoration, rehabilitation, or replacement of injured or lost Natural Resources or of acquisition of equivalent resources and/or their services; (iii) compensation for injury, destruction, loss, loss of use, diminution in value, or impairment of Natural Resources; (iv) the costs of planning, implementing, and monitoring restoration activities; and (v) each of the categories of recoverable damages described in 43 C.F.R. § 11.15 and applicable state law.

q. “NCDEQ” means the North Carolina Department of Environmental Quality and any successor departments or agencies of the State of North Carolina.

r. “NOAA” means the National Oceanic and Atmospheric Administration of the United States Department of Commerce.

s. “NRDAR Fund” means DOI’s Natural Resource Damage Assessment and Restoration Fund.

t. “Paragraph” means a portion of this Consent Decree identified by an Arabic numeral or an upper case letter.

u. “Parties” means the United States, the State, and Defendant.

v. “Plaintiffs” means the United States and the State.

w. “Restoration Projects” means those restoration projects performed and to be performed by Defendant as described in Section VII of this Consent Decree (Natural Resource Restoration Projects).

x. “RIM Costs” means the Natural Resource restoration planning, implementation and monitoring oversight costs to be incurred after the Date of Lodging by the Trustees in connection with the releases at or from the Site, including costs to oversee compliance with, and to implement, this Consent Decree, administrative costs related to implementing the selected restoration project(s), and to amend if necessary, the Phase 2 Restoration Plan prepared by the Trustees.

y. “Section” means a portion of this Consent Decree identified by a roman numeral.

z. “Site” means areas at and adjacent to Plymouth Mill, an active wood and paper products manufacturing facility located on State Road 1565 in Martin County, North Carolina. The mill is situated on about 2,400 acres near the confluence of Welch Creek and the Roanoke River, about 1.5 miles west of the Town of Plymouth and approximately 7 miles upstream from Albemarle Sound. The Site’s northern boundary is Roanoke River. The Site, which is generally depicted in the map attached as Appendix C, includes any areas where hazardous substances released at or from Plymouth Mill have come to be located, including, among other areas, Welch Creek and the Lower Roanoke River.

aa. “State” means the State of North Carolina together with agencies and instrumentalities thereof.

bb. “State Trustee” means NCDEQ.

cc. “Trustees” means the Federal Trustees and State Trustee.

dd. “United States” means the United States of America, including all of its departments, agencies, and instrumentalities.

V. STATEMENT OF PURPOSE

5. The Parties’ mutual objectives in entering into this Consent Decree are: (i) to

contribute to the restoration, replacement, rehabilitation, or acquisition of the equivalent of the Natural Resources allegedly injured, destroyed, or lost as a result of hazardous substances released at or from the Site; (ii) to fund the Trustees' future Natural Resource restoration planning, implementation and monitoring oversight costs; (iii) to resolve Defendant's liability for Natural Resource Damages as provided herein; and (iv) to avoid potentially costly and time-consuming litigation.

VI. PAYMENTS BY DEFENDANT

6. Within 30 Days after the Effective Date, Defendant shall pay to the Trustees:

a. Trustee-Implemented Restoration: $1,750,000, plus Interest running from the Date of Lodging, as a joint recovery of Natural Resource Damages on behalf of the Trustees as provided in this Paragraph. The total amount paid shall be deposited into a segregated, case-specific sub-account within the DARR Fund, to be managed for the joint benefit and use of the Trustees to pay for Trustee-sponsored Natural Resource restoration projects. All such funds shall be applied toward the costs of restoration, rehabilitation, or replacement of injured Natural Resources, or acquisition of equivalent resources in accordance with the selected alternative in the Final Phase 2 Restoration Plan and as further described in Section VIII.

b. Trustees' RIM Costs: $155,000 plus Interest running from the Date of Lodging, as a joint recovery on behalf of the Federal Trustees and the State Trustee for the Trustees' future RIM Costs estimated to be incurred after the lodging of this Consent Decree. The total amount paid shall be deposited in a segregated, case-specific sub-account within the NRDAR Fund to be managed for the joint benefit and use of the Trustees applied toward RIM Costs incurred by DOI, NOAA and the State.

c. NOAA's Past Assessment Costs. NOAA's unreimbursed Natural Resource Damage Assessment Costs accrued from Nov. 3, 2024 through the Effective Date of this Consent Decree, plus Interest running from the Date of Lodging, if NOAA provides supporting cost documentation within 120 Days of the Effective Date of this Consent Decree. Defendant shall pay such unreimbursed Assessment Costs within 60 Days of receipt of the invoice and its supporting cost documentation in accordance with the payment instructions provided in Paragraph 7. If Defendant elects to invoke the dispute resolution procedures set forth in Section XI (Dispute Resolution), it shall do so no later than 30 Days after receipt of NOAA's supporting cost documentation. Defendant's Notice of Dispute must specifically identify the contested unreimbursed Assessment Costs and basis for the objection. In any such proceeding, Defendant has the burden of proving that NOAA made an accounting error or that NOAA included a cost that is not an Assessment Cost. If Defendant carries this burden, Defendant shall pay NOAA's Assessment Costs other than the challenged costs within 30 Days after resolution of the dispute.

7. Payment Instructions. Defendant shall pay the amounts due under Paragraphs 6.a, 6.b, and 6.c, by FedWire Electronic Funds Transfer ("EFT") to the United States Department of Justice account, in accordance with written instructions provided to Defendant by the Financial Litigation Unit ("FLU") of the United States Attorney's Office for the Eastern District of North Carolina after the Effective Date. The payment instructions provided by the FLU will include a Consolidated Debt Collection System ("CDCS") number, which Defendant shall use to identify all payments required to be made in accordance with this Consent Decree. The FLU will provide payment instructions to Defendant as follows:

Linda Belanger
Senior Director, Soil Rehabilitation
Domtar Paper Company, LLC
234 Kingsley Park Dr.
Fort Mill, SC 29715
Email: linda.belanger@domtar.com

on behalf of Defendant. Defendant may change the individual to receive payment instructions on its behalf by providing written notice of such change to the United States in accordance with Section XVI (Notices). At the time of payment, Defendant shall send notice to the United States in accordance with Section XVI that payment has been made. Such notice shall reference the civil action number, CDCS number, and DOJ case number 90-11-3-07838/4.

VII. NATURAL RESOURCE RESTORATION PROJECTS

8. Defendant or its predecessor Weyerhaeuser have completed the following Restoration Projects:

a. Reduced water withdrawals: To improve fish abundance, Defendant redesigned its cooling water intake system at Plymouth Mill to reduce the volume of withdrawals from the lower Roanoke River, an important nursery area for fish where larvae moving with water have little ability to swim away from an intake.

b. Seasonal Closure: Six times in the 2013–2023 period, Defendant shifted annual Plymouth Mill outages to be more protective of fish to avoid time periods when the lower Roanoke River typically contains the highest number of larvae and juveniles.

c. Cooling Water Intake Reduction: Defendant constructed a three-cell, 24,000 gallons-per-minute cooling tower, which became operational in June 2019 and has eliminated once-through cooling water withdrawals at Plymouth Mill, resulting in fewer fish taken from impingement (when fish are pinned against water intake screens or other parts of a water intake system) and entrainment (when fish in the intake water are drawn into a water system and subjected to thermal, physical, or chemical stresses). Defendant could have constructed a smaller capacity cooling tower to satisfy Defendant's chosen Clean Water Act Section 316(b) compliance method, but elected to construct a larger capacity cooling tower and eliminate once-through cooling to reduce numbers of fish taken from impingement and entrainment.

d. Lighting Improvements: Defendant removed all lighting fixtures near the Roanoke River and modified remaining safety lighting to minimize shining into the river, resulting in fewer fish congregating near the cooling water intakes and thereby minimizing fish mortality from impingement and entrainment.

e. Town of Plymouth Waterfront Park Improvements: Defendant funded work at Plymouth's Waterfront Park to increase recreational opportunities for residents and tourists, including repairing and installing bulkheads, constructing a gazebo, building a boardwalk along the riverfront, and making several improvements to the east Plymouth boat ramp allowing boaters to launch in a timely and safe manner.

9. Conservation Agreement Recordation.

a. Within 30 Days after the Effective Date, Defendant shall execute and record the Conservation Agreement, in the form provided in Appendix B, with the Register of Deeds in Martin County in the State of North Carolina.

b. No later than 30 Days after completion of its obligation under Paragraph 9.a, Defendant shall send written notice to the United States and the State, in accordance with Section XVI (Notices), that this obligation is completed in full compliance with the requirements of this Consent Decree, together with a copy of the recorded Conservation Agreement.

VIII. TRUSTEE-IMPLEMENTED RESTORATION

10. Restoration Planning. The Trustees have prepared a draft Phase 2 Restoration Plan and Environmental Assessment ("Draft Restoration Plan") describing how the funds dedicated to Trustee-implemented Natural Resource restoration efforts under Paragraph 6.a are intended to be used. The Draft Restoration Plan identifies how funds are intended to be used for

restoration, rehabilitation, replacement, or acquisition of equivalent resources. The Draft Restoration Plan also identifies how funds are intended to be used to address services lost to the public until restoration, rehabilitation, replacement, or acquisition of equivalent resources is completed. A copy of the Draft Restoration Plan is attached as Appendix A to this Consent Decree.

11. Decisions regarding any use or expenditure of funds under this Section and RIM Costs shall be made by the Trustees, acting through the Trustee Council. Defendant shall not be entitled to dispute, in any forum or proceeding, any decision relating to use of funds or restoration efforts.

12. Defendant shall have no liability arising out of any disputes and/or disagreements among or between the Trustees relating to the use or expenditures of funds. If, after the Effective Date, the Trustees need to amend or supplement the Draft Restoration Plan for any reason, the Trustees may do so without notice to Defendant and without notice to, or approval by, the Court. Where appropriate, the Trustees will provide the public notice and an opportunity to comment on any post-settlement changes or updates to the Draft Restoration Plan.

IX. STIPULATED PENALTIES

13. Defendant shall be liable for stipulated penalties to the United States and the State for violations of this Decree as specified below. A violation includes failing to perform any obligation required by the terms of this Decree, including any Restoration Project or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.

14. Defendant shall not deduct any penalties paid under this Decree pursuant to this Section in calculating its federal, State, or local income tax.

15. Payment & Conservation Agreement Obligations. Defendant shall pay the

following stipulated penalties per Day for each Day that (a) Defendant fails to make any payment required by Section VI (Payments by Defendant) when due, through the date of full payment, (b) Defendant fails to satisfy the Conservation Agreement obligation in Paragraph 9.a of Section VII (Natural Resource Restoration Projects), or (c) Defendant fails to comply with the notice requirement in Paragraph 9.b.

Period of Noncompliance	Penalty Per Violation Per Day
1st through 14th day	$3,500
15th through 30th day	$4,500
31st day and beyond	$6,000

16. Stipulated penalties shall accrue simultaneously for separate violations of this Decree.

17. Defendant shall send a notice of payment of any stipulated penalty to Plaintiffs, including the amount and purpose of the payment, in accordance with Section XVI (Notices).

18. <u>Demand and Payment of Stipulated Penalties</u>. Any Plaintiff may send Defendant a demand for stipulated penalties. The demand shall include a description of the noncompliance and specify the amount of the stipulated penalties owed. The Plaintiff making a demand for payment of a stipulated penalty shall simultaneously send a copy of the demand to the other Plaintiff.

19. Defendant shall pay any stipulated penalties to the United States and the State within 30 Days of a written demand by any Plaintiff. Of the total stipulated penalty amount due, Defendant shall pay 50% percent to the United States and 50% to the State. Any stipulated penalties payments to the United States shall be paid in accordance with Paragraph 7 and shall be deposited in the United States Treasury. Any stipulated penalties payments to the State shall be

paid by either check or wire transfer. If paying the State by check, the check shall be made payable to the "North Carolina Department of Environmental Quality" or "NC DEQ" and delivered to the following address:

Office of General Counsel
N.C. Department of Environmental Quality
1601 Mail Service Center
Raleigh, North Carolina 27699-1601

If paying the State by wire transfer, Defendant shall request current wire transfer instructions from Amy Jones, as provided in Paragraph 48, and shall make payment within 60 days upon receipt of confirmation of wire instructions from the North Carolina Department of Environmental Quality.

20. Any Plaintiff may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.

21. Stipulated penalties shall continue to accrue as provided in Paragraph 16, 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, Defendant shall pay accrued penalties determined to be owing, together with interest, to the Trustees 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 United States or the State prevails in whole or in part, Defendant 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, Defendant shall pay all accrued penalties determined to be owing, together with interest, within 15 Days of receiving the final appellate court decision.

22. If Defendant fails to pay stipulated penalties according to the terms of this Consent Decree, Defendant shall be liable for Interest on such penalties, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States or the State from seeking any remedy otherwise provided by law for Defendant's failure to pay any stipulated penalties.

23. The payment of penalties and Interest, if any, shall not alter in any way Defendant's obligation to complete the performance of the requirements of this Decree.

24. Non-Exclusivity of Remedy. Stipulated penalties are not the United States' or the State's exclusive remedy for violations of this Consent Decree. Subject to the provisions of Section XIII (Reservation of Rights by Plaintiffs), Plaintiffs expressly reserve the right to seek any other relief that a Plaintiff deems appropriate for Defendant's violation of this Consent Decree or applicable law, including but not limited to an action against Defendant for statutory penalties, additional injunctive relief or restoration work, and/or contempt. However, the amount of any statutory penalty assessed for a violation of this Consent Decree shall be reduced by an amount equal to the amount of any stipulated penalty assessed and paid pursuant to this Consent Decree.

X. FORCE MAJEURE

25. "Force majeure," for purposes of this Consent Decree, means any event arising from causes beyond the control of Defendant, of any entity controlled by Defendant, or of Defendant's contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Defendant's best efforts to fulfill the obligation. Given the need to protect public health and welfare and the environment, the requirement that Defendant 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 (a) as it is occurring and (b) following the potential force majeure, such that any delay or non-performance is, and any adverse effects of the delay or non-performance are, minimized to the greatest extent possible. "Force majeure" does not include financial inability to perform any obligation under this Consent Decree.

26. If any event occurs for which Defendant will or may claim a force majeure, Defendant shall provide notice to the Trustees pursuant to Section XVI (Notices). The deadline for the initial notice is three Days after Defendant first knew or should have known that the event would likely delay or prevent performance. Defendant shall be deemed to know of any circumstance of which any contractor of, subcontractor of, or entity controlled by Defendant knew or should have known.

27. Regardless of whether Defendant seeks to assert a claim of force majeure concerning the event, within seven Days after the notice under Paragraph 26, Defendant shall submit a further notice to the Trustees that includes (a) an explanation and description of the event and its effect on Defendant's completion of the requirements of the Consent Decree; (b) a description and schedule of all actions taken or to be taken to prevent or minimize the delay and/or other adverse effects of the event; (c) if applicable, the proposed extension of time for Defendant to complete the requirements of the Consent Decree; (d) Defendant's rationale for attributing such delay to a force majeure if it intends to assert such a claim; (e) a statement as to whether, in the opinion of Defendant, such event may cause or contribute to an endangerment to public health or welfare or the environment; and (f) all available proof supporting any claim that the delay was attributable to a force majeure.

28. Failure to submit a timely or complete notice or claim under Paragraph 26 or 27

regarding an event precludes Defendant from asserting any claim of force majeure regarding that event, provided, however, that the Trustees may, in their unreviewable discretion, excuse such failure if it is able to assess to its satisfaction whether the event is a force majeure, and whether Defendant has exercised its best efforts, under Paragraph 25.

29. After receipt of any claim of force majeure, the Trustees will notify Defendant of their determination whether Defendant is entitled to relief under Paragraph 25, and, if so, the excuse of, or 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.

30. If Defendant elects to invoke the dispute resolution procedures set forth in Section XI (Dispute Resolution), it shall do so no later than 15 Days after receipt of the Trustees' notice. In any such proceeding, Defendant has the burden of proving that it is entitled to relief under Paragraph 25, that its proposed excuse or extension was or will be warranted under the circumstances, and that it complied with the requirements of Paragraphs 25–27. If Defendant carries this burden, the delay or non-performance at issue shall be deemed not to be a violation by Defendant of the affected obligation of this Decree identified to Plaintiffs and the Court.

XI. DISPUTE RESOLUTION

31. Unless otherwise expressly provided for in this Consent 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. Defendant's failure to seek resolution of a dispute under this Section concerning an issue of which it had notice and an opportunity to dispute under this Section prior to an action by Plaintiffs to enforce any obligation of Defendant arising under this Decree precludes Defendant from raising any such issue as a defense to any such

enforcement action.

32. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when Defendant sends Plaintiffs a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 20 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 15 Days after the conclusion of the informal negotiation period, Defendant invokes formal dispute resolution procedures as set forth below.

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

34. Plaintiffs shall send Defendant their Statement of Position within 45 Days of receipt of Defendant's 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 shall be binding on Defendant, unless Defendant files a motion for judicial review of the dispute in accordance with Paragraph 35.

35. Judicial Dispute Resolution. Defendant may seek judicial review of the dispute by filing with the Court and serving on Plaintiffs a motion requesting judicial resolution of the

dispute. The motion (a) must be filed within ten Days of receipt of Plaintiffs' Statement of Position pursuant to the preceding Paragraph; (b) may not raise any issue not raised in informal dispute resolution pursuant to Paragraph 32, unless Plaintiffs raise a new issue of law or fact in the Statement of Position; (c) shall contain a written statement of Defendant's 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 Consent Decree.

36. Plaintiffs shall respond to Defendant's 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.

37. Standard of Review

a. Disputes Concerning Matters Accorded Record Review. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 32 pertaining to the adequacy of the performance of work undertaken pursuant to this Consent Decree, and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, Defendant shall have the burden of demonstrating, based on the administrative record, that Plaintiffs' position is arbitrary and capricious or otherwise not in accordance with law.

b. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 32, Defendant shall bear the burden of demonstrating that its position complies with this Consent Decree and better furthers the Decree's mutual objectives described in Paragraph 5.

38. The invocation of dispute resolution procedures under this Section shall not, by

itself, extend, postpone, or affect in any way any obligation of Defendant under this Consent 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 21. If Defendant does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section IX (Stipulated Penalties).

XII. COVENANTS NOT TO SUE BY PLAINTIFFS

39. Except as specifically provided by Paragraph 40 (General Reservations) and Paragraph 41 (Special Reservations Regarding Natural Resource Damages), Plaintiffs covenant not to sue or take administrative action against Defendant for Natural Resource Damages known as of the Date of Lodging of this Consent Decree with the Court pursuant to CERCLA Section 107, 42 U.S.C. § 9607. This covenant not to sue is conditioned upon the satisfactory performance by Defendant of its obligations under this Consent Decree. This covenant not to sue extends only to Defendant and does not extend to any other person.

XIII. RESERVATION OF RIGHTS BY PLAINTIFFS

40. <u>General Reservations</u>. Plaintiffs reserve, and this Consent Decree is without prejudice to, all rights against Defendant and with respect to all matters not expressly included within Paragraph 39 (Covenant by Plaintiffs). Notwithstanding any other provision of this Consent Decree, Plaintiffs reserve all rights against Defendant with respect to:

a. claims based on a failure by Defendant to meet a requirement of this Consent Decree;

b. liability for injunctive relief or administrative order enforcement under CERCLA Section 106, 42 U.S.C. § 9606;

c. liability under CERCLA Section 107(a)(4)(A), 42 U.S.C. § 9607(a)(4)(A), for costs of removal or remedial action incurred by the United States Government or a State or an Indian tribe;

d. liability under CERCLA Section 107(a)(4)(D), 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);

e. liability for any other costs incurred or to be incurred by the United States or by the State that are not within the definition of Natural Resource Damages;

f. liability for damages for injury to, destruction of, or loss of Natural Resources resulting from releases or threatened releases of hazardous substances outside the Site;

g. liability arising from any disposal of hazardous substances at Plymouth Mill by Defendant after the lodging of this Consent Decree; and

h. criminal liability.

41. Special Reservations for Natural Resource Damages. Notwithstanding any other provision of this Consent Decree, Plaintiffs reserve the right to institute proceedings against Defendant in this action or in a new action seeking recovery of Natural Resource Damages, including costs of Natural Resource Damages assessment, based on: (i) conditions caused by releases at or from the Site, unknown to the Trustees as of the Date of Lodging of this Consent Decree, that contribute to injury to, destruction of, or loss of Natural Resources; or (ii) information received by the Trustees after the Date of Lodging of this Consent Decree which indicates that the releases at or from the Site have resulted in injury to, destruction of, or loss of Natural Resources of a type or future persistence that was unknown, or of a magnitude greater than was known, to the Trustees as of the Date of Lodging of this Consent Decree.

XIV. COVENANTS BY DEFENDANT

42. Covenants by the Defendant. Defendant covenants not to sue and agrees not to assert any claims or causes of action against the United States or the State, or their contractors or

employees, with respect to Natural Resource Damages or this Consent Decree, including but not limited to:

a. any direct or indirect claim for reimbursement of any payment for Natural Resource Damages from the Hazardous Substance Superfund based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

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

c. any claim against the United States or the State pursuant to Section 311 of the CWA, 33 U.S.C. § 1321.

43. Except as provided in Paragraph 45, the covenants in this Section shall not apply if the United States or the State brings a cause of action or issues an order pursuant to any of the reservations in Section XIII (Reservation of Rights by Plaintiffs), other than in Paragraphs 40.a (claims for failure to meet a requirement of the Consent Decree) or 40.h (criminal liability), but only to the extent that Defendant's claims arise from the same response action, response costs, or damages that the United States or the State is seeking pursuant to the applicable reservation.

44. Nothing in this Consent Decree shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

45. <u>Res Judicata and Other Defenses</u>. In any subsequent administrative or judicial proceeding initiated by the United States or the State for injunctive relief, recovery of response costs or Natural Resource Damages, or other relief relating to releases at or from the Site, Defendant shall not assert, and may not 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 the United States or the State 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 by the Plaintiffs set forth in Section XII

XV. NO EFFECT ON PERMIT OR OTHER REQUIREMENTS

46. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Defendant is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and Defendant's compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. Plaintiffs do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that Defendant's compliance with any aspect of this Consent Decree will result in compliance with provisions of CERCLA or with any other provisions of federal, State, or local laws, regulations, or permits.

XVI. NOTICES

47. Whenever, under the terms of this Consent Decree, notice is required to be given or a document is required to be sent by one Party to another, it shall be directed to the individuals at the emails or addresses specified below (email preferred), unless those individuals or their successors give notice of a change to the other Parties in writing. Written notice as specified herein shall constitute complete satisfaction of any written notice requirement of the Consent Decree with respect to the United States and the State, and Defendant, respectively.

48. Notices and documents submitted pursuant to this Section shall be deemed submitted upon email delivery or mailing, unless otherwise provided in this Consent Decree or

by mutual agreement of the Parties in writing.

49. Notice or submission to "Plaintiffs" shall mean notice or submission to the United States (the U.S. Department of Justice, DOI, and NOAA) and North Carolina.

50. Notice or submission to the "Trustees" shall mean notice or submission to DOI, NOAA, and North Carolina.

As to the United States:

As to the U.S. Department of Justice:

eescdcopy.enrd@usdoj.gov or EES Case Management Unit
ENRD
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
Re: DJ # 90-11-3-07838/4

As to DOI:

Amy.Hanley@sol.doi.gov or Amy Horner Hanley
Senior Attorney-Advisor
Environmental Restoration Branch
Office of the Solicitor
Department of the Interior
1849 C Street, N.W.
Washington, D.C. 20240

As to NOAA:

Christina.Mcdonald@noaa.gov or Christina McDonald
Attorney-Advisor
Natural Resources Section
NOAA Office of the General Counsel
263 13th Avenue S, Suite 177
St. Petersburg, FL 33701

As to North Carolina:

Amy.Jones@deq.nc.gov or Amy Jones
Assistant General Counsel

N.C. Department of Environmental Quality
1601 Mail Service Center
Raleigh, North Carolina 27699-1601

HDavis@ncdoj.gov or Hill Davis
Special Deputy Attorney General
N.C. Department of Justice
P.O. Box 629
Raleigh, North Carolina 27602

As to Defendant:

Nancy Klembus
Corporate Secretary
Domtar Paper Company, LLC
100 Kingsley Park Dr.
Fort Mill, SC 29715

With a Copy to:
Kodi Verhalen
Taft Stettinius & Hollister LLP
80 S 8th Street, Suite 2200
Minneapolis, MN 55402

XVII. APPENDICES

51. The following appendices are attached to and incorporated into this Consent Decree:

"Appendix A" is the Draft Restoration Plan.

"Appendix B" contains the Conservation Agreement under Paragraph 9.

"Appendix C" is a map generally depicting the Site.

XVIII. EFFECTIVE DATE AND RETENTION OF JURISDICTION

52. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket.

53. The Court shall retain jurisdiction to modify and enforce the terms and conditions

of this Consent Decree as may be necessary or appropriate for the construction or execution of this Consent Decree.

XIX. MODIFICATION

54. Any material modification of this Consent Decree shall be made by agreement of the Parties to this Decree and in writing, and shall not take effect unless approved by the Court. Any non-material modification of this Decree shall be made by agreement of the Parties to this Consent Decree and in writing, and shall not take effect until filed with the Court. Nothing in this Consent Decree shall be deemed to alter the Court's power to enforce, supervise, or approve modifications to this Consent Decree.

55. The provisions of this Consent Decree are not severable. The Parties' consent hereto is conditioned upon the entry of the Consent Decree in its entirety without modification, addition, or deletion except as agreed to by the Parties.

56. Unanticipated or increased costs or expenses associated with the implementation of actions required by this Consent Decree and economic hardship or changed financial circumstances of Defendant shall not serve as a basis for modifications of this Consent Decree.

XX. TERMINATION

57. This Consent Decree may be terminated when Plaintiffs determine that Defendant has satisfactorily completed performance of its Restoration Project obligations required by this Decree, provided that Defendant has fulfilled all other obligations of this Decree, including payment of any outstanding stipulated penalties under Section IX. The Parties shall file with the Court an appropriate joint stipulation reciting that the requirements of the Consent Decree have been met and requesting termination of the Decree.

XXI. LODGING AND OPPORTUNITY FOR PUBLIC COMMENT

58. This Consent Decree shall be lodged with the Court for a period of not less than

30 Days for public notice and comment. The United States reserves the right to withdraw or withhold its consent if comments regarding the Consent Decree disclose facts or considerations which indicate that this Consent Decree is inappropriate, improper, or inadequate. Defendant consents to the entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless Plaintiffs have notified Defendant in writing that they no longer support entry of the Decree. If for any reason the Court should decline to approve this Consent Decree in the form presented, or if approval and entry is subsequently vacated on appeal of such approval and entry, the agreement represented by this Consent Decree is voidable at the sole discretion of any Party and the terms of the agreement may not be used as evidence in any litigation between the Parties.

XXII. SIGNATORIES/SERVICE

59. Each undersigned representative of Defendant, the State, and the Principal Deputy Assistant Attorney General for the Energy and Natural Resources Division of the Department of Justice identified on the DOJ signature page below, certifies that that person is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind such Party to this document. This Consent Decree may be executed in multiple counterparts, each of which shall be deemed an original, but all of which, taken together, shall constitute one and the same instrument.

60. Defendant shall identify, on the attached signature page, the name, address and telephone number of an agent who is authorized to accept service of process by mail or email on behalf of Defendant with respect to all matters arising under or relating to this Consent Decree. Defendant hereby agrees to accept service by either mail or email from any party to this Consent

Decree and with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable local rules of this Court including, but not limited to, service of a summons. Defendant need not file an answer to the Complaint in this action unless or until the Court expressly declines to enter this Consent Decree.

XXIII. FINAL JUDGMENT

61. This Consent Decree and its appendices constitute the final, complete, and exclusive understanding among the Parties with respect to the settlement embodied in the Consent Decree. The Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Consent Decree.

62. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court under Fed. R. Civ. P. 54 and 58 between and among the United States, the State, and Defendant.

SO ORDERED THIS ______ DAY OF ________________, _________.

____

United States District Judge

Signature Page for Consent Decree in
U.S. & North Carolina v. Domtar Paper Company, LLC (E.D. N.C.)

FOR THE UNITED STATES OF AMERICA

ADAM R.F. GUSTAFSON
Principal Deputy Assistant Attorney General
Energy and Natural Resources Division
U.S. Department of Justice

Sheila McAnaney

SHEILA McANANEY
Senior Attorney (IL Attorney No. 6309635)
Environmental Enforcement Section
Energy and Natural Resources Division
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P.O. Box 7611
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Facsimile: (202) 514-8865
Email: sheila.mcananey@usdoj.gov

Signature Page for Consent Decree in
U.S. & North Carolina v. Domtar Paper Company, LLC (E.D.N.C.)

FOR THE STATE OF NORTH CAROLINA

Date: 5/11/2026

SUSHMA MASEMORE
Deputy Secretary for Environment
N.C. Department of Environmental Quality
1601 Mail Service Center
Raleigh, North Carolina 27699-1601 (919) 707-8700
sushma.masemore@deq.nc.gov

Signature Page for Consent Decree in
U.S. & North Carolina v. Domtar Paper Company, LLC (E.D.N.C.)

FOR DOMTAR PAPER COMPANY, LLC

Date: 3/4/2026

Nancy Klembus
Corporate Secretary
Domtar Paper Company, LLC
100 Kingsley Park Dr.
Fort Mill, SC 29715

APPENDIX A

PHASE 2
DRAFT RESTORATION PLAN AND ENVIRONMENTAL ASSESSMENT

FOR THE

Weyerhaeuser Co. Plymouth Mill
Martin County, North Carolina
NATURAL RESOURCE DAMAGE ASSESSMENT AND RESTORATION

(Unique ID #45349.834)

February 24, 2026

Prepared by

Weyerhaeuser Plymouth Mill Site Natural Resource Trustee Council:

United States Fish and Wildlife Service
North Carolina Department of Environmental Quality
National Oceanic and Atmospheric Administration

Contents

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List of Acronyms and Abbreviations

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CWA	Clean Water Act (or Federal Water Pollution Control Act)
CZMA	Coastal Zone Management Act
DOI	United States Department of the Interior
EFH	Essential Fish Habitat
FCA	Fish Consumption Advisory(ies)
Mill	Domtar Plymouth Mill
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NCDEQ	North Carolina Department of Environmental Quality
NCDWQ	North Carolina Division of Water Quality
NCWRC	North Carolina Wildlife Resources Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
NRD	Natural Resource Damages

NRDAR	Natural Resource Damage Assessment and Restoration
MBTA	Migratory Bird Treaty Act
MMPA	Marine Mammal Protection Act
PEIS	Programmatic Environmental Impact Statement
PRP	Potentially Responsible Party
RC	Restoration Center
RP/EA	Restoration Plan and Environmental Assessment
Site	Weyerhaeuser Plymouth Wood Treating Plant Site
U.S.C	United States Code
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service

Executive Summary

Releases of hazardous substances from the Weyerhaeuser Plymouth Wood Treating Plant Site (Site), in Plymouth, Martin County, North Carolina (now owned by Domtar Paper Company (Domtar)) were sufficient to cause injury to natural resources and lost recreational services under the trusteeship of the National Oceanic and Atmospheric Administration (NOAA) of the United States Department of Commerce, the United States Fish and Wildlife Service (USFWS) on behalf of the United States Department of the Interior (DOI), and the North Carolina Department of Environmental Quality (NCDEQ) (collectively, "the Trustees"). The Site is an active wood and paper products manufacturing facility located in Martin County, North Carolina. As a result of contaminant discharges from the Site and other sites in the area, Welch Creek, the lower Roanoke River, and other nearby areas have had a State imposed fish consumption advisory (FCA) due to dioxin or mercury since 1990. The release(s) of dioxins from the Site negatively affected recreational uses (i.e., angling) in the lower Roanoke River, Welch Creek and the western Albemarle Sound due to dioxin related FCAs issued by the state of North Carolina.

Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), through the Natural Resource Damage Assessment and Restoration (NRDAR) process, natural resource trustees are authorized to assess and recover damages resulting from injuries to natural resources and loss of associated services attributable to hazardous substance releases. 42 U.S.C. § 9607 (f). The trustees then utilize these recovered damages to plan and implement actions to restore, replace, rehabilitate, and/or acquire the equivalent of injured natural resources and the services they provide pursuant to a restoration plan. 42 U.S.C. § 9611(i). The purpose of this Draft Phase 2 Restoration Plan and Environmental Assessment (Draft Phase 2 RP/EA) is to describe restoration planning and implementation activities to date and inform the public as to the types and scale of restoration proposed to be undertaken towards compensating for injuries to natural resources.

In 2006, the Trustees released a Draft Phase 1 Restoration Plan for public comment. In the final plan, the Trustees selected Alternative 2, Reduce Intake Volume at the Weyerhaeuser Plymouth Mill Cooling Water Intake, which Weyerhaeuser Paper Company, a Potentially Responsible Party (PRP) at the Site, voluntarily implemented. The restoration project would reduce ongoing impacts to fish populations, have negligible impacts on the human environment, and, of all the alternatives considered, be the most time sensitive in benefiting affected resources. The selected restoration alternative was considered by the Trustees in resolving the PRP's potential natural resource damages liability under CERCLA. The Trustees stated in the Phase 1 Restoration Plan that they would retain the remaining restoration alternative projects not selected for further consideration in Phase 2 restoration planning.

The Trustees developed this Draft Phase 2 RP/EA in accordance with CERCLA Section 111(i) and its implementing regulations (43 C.F.R. § 11.93) to inform the public as to the types and amount of restoration that are expected to compensate for injuries to natural resources and lost recreational services resulting from releases of hazardous substances at and from the Site. This document is an addendum to the Final Phase 1 Restoration Plan (https://pub-data.diver.orr.noaa.gov/admin-record/6225/FinalWeyerhaeuserPhase_1_RP_November2006.pdf).

Herein, the Trustees evaluate the potential benefits from the remaining Phase 1 restoration projects, as well as other potential restoration activities not evaluated during Phase 1 and propose a suite of restoration projects that will offset injuries. The CERCLA NRDAR alternatives described and evaluated in this Draft Phase 2 RP/EA include the Trustees' preferred alternatives, Additional Modifications to the Domtar Plymouth Mill Cooling Water Intake System (Alternative 2); Lighting Modifications at the Plymouth Facility (Alternative 3); Waterfront Park Improvements (Alternative 4); Warren Neck Conservation (Alternative 5); and Floodplain Reconnection, Wetland Protection, and Fish Passage Improvements (Alternative 6), and other alternatives, including the No Action alternative and one non-preferred alternative.

Under the National Environmental Policy Act (NEPA; 42 U.S.C. § 4321 et seq.), federal agencies must identify and evaluate environmental impacts that may result from proposed major federal actions. This Draft Phase 2 RP/EA describes the purpose and need for action, identifies potential alternatives, including a No Action alternative, summarizes the affected environment, and describes the potential environmental consequences of a reasonable range of alternatives. The NEPA alternatives described and evaluated in this Draft Phase 2 RP/EA include two of the Trustees' preferred alternatives, Warren Neck Conservation (Alternative 5) and Floodplain Reconnection, Wetland Protection, and Fish Passage Improvements (Alternative 6), as well as, the No Action alternative and one non-preferred alternative.

The preferred restoration alternatives collectively aim to enhance habitat conditions for Roanoke River fish, conserve bottomland hardwood forest wetland habitats important for maintaining the water quality aspects of fish nursery habitat, and provide recreation opportunities, such as angling, for the public. Collectively, the preferred restoration alternatives restore, enhance, create, or replace the equivalent natural resources and enhance recreational services. The Trustees are soliciting comments on this Draft Phase 2 RP/EA for a period of 30 days and will address any public comments received in preparing a Final Phase 2 RP/EA wherein the Trustees will identify the Selected Alternatives. Comments may be submitted to the address listed in Section 1.8 of this document.

1.0 INTRODUCTION

This Draft Phase 2 Restoration Plan and Environmental Assessment (Draft Phase 2 RP/EA) has been developed by the National Oceanic and Atmospheric Administration (NOAA) of the U. S. Department of Commerce, the United States Fish and Wildlife Service (USFWS) on behalf of the U.S. Department of the Interior (DOI), and the North Carolina Department of Environmental Quality (NCDEQ) (collectively, "the Trustees") to address natural resources, including recreational services, injured, lost or destroyed due to releases of hazardous substances in areas at or adjacent to the Weyerhaeuser Plymouth Wood Treating Plant Site, in Plymouth, Martin County, North Carolina (now owned by Domtar Paper Company (Domtar)) (the "Site").

This Draft Phase 2 RP/EA is an addendum to the Final Phase 1 Restoration Plan (Weyerhaeuser Plymouth Mill Site Trustee Council 2006) which selected Alternative 2, Reduce Intake Volume at the Weyerhaeuser Plymouth Mill Cooling Water Intake, as the preferred alternative for an early restoration action. In 2007, Weyerhaeuser Paper Company (Weyerhaeuser), a Potentially Responsible Party (PRP) at the Site, voluntarily implemented this alternative.

Development of this Draft Phase 2 RP/EA is in accordance with 43 Code of Federal Regulations (C.F.R.) § 11.93 and Section 111(i) of CERCLA to inform the public as to the types and amount of restoration that are expected to compensate for injuries to natural resources and lost recreational services associated with the releases of hazardous substances at and from the Site. The CERCLA natural resource damage assessment and restoration (NRDAR) process allows for recovered funds to be used to plan and implement actions to restore, replace, rehabilitate, and/or acquire the equivalent of injured natural resources and the services they provide. In this Draft Phase 2 RP/EA, the Trustees describe the purpose and need for action, identify and evaluate additional restoration projects that will compensate for the injured resources and services lost that have not been addressed to date, summarize the affected environment, and describe the potential environmental consequences of proposed restoration activities. The Trustees are soliciting comments on this Draft Phase 2 RP/EA and will address comments in preparing a Final RP/EA wherein the Trustees will identify the Selected Restoration Alternative(s).

1.1 Overview of the Site

The Domtar Plymouth Mill (Mill) is an active wood and paper products manufacturing facility located on State Road 1565 in Martin County, North Carolina. Weyerhaeuser Paper Company was the owner/operator of this Mill beginning in 1957, when the company merged with the Kieckhefer-Eddy Company, which began operations at the facility in 1937. Domtar acquired the Site from Weyerhaeuser and assumed all site-related environmental cleanup obligations in March 2007. The Mill is situated on about 2,400 acres near the confluence of Welch Creek and the Roanoke River, about 1.5 miles from the Town of Plymouth and approximately 7 miles upstream from Albemarle Sound (Figure 1). The Roanoke River is the northern boundary of the Site.

Since 1937, Welch Creek and the Roanoke River received wastes from the Site containing contamination including dioxins, furans, and mercury. As a result of contaminant discharges from this and other sites in the area, Welch Creek and the lower Roanoke River have had a State imposed FCA due to dioxin since 1990 (Figure 2). Western Albemarle Sound was added to this advisory in 1991. A FCA for mercury was imposed for all State waters east of I-85 in 1997 and expanded to include all State waters in 2006.

Waste disposal practices contaminated groundwater, sediment, soil, surface water and fish. The Environmental Protection Agency (EPA) did not list the Site on the Superfund program's National Priorities List (NPL) but considers it an NPL-caliber site. The EPA, State of North Carolina, and Domtar and its predecessor have investigated Site conditions and have taken steps to clean up the Site to protect human health and the environment through the Superfund Alternative Approach. Domtar, with oversight from the EPA and North Carolina Department of Environmental and Natural Resources (NCDENR)[1], led remedial actions under CERCLA at the Site. The last 5-year review, issued by EPA in 2025 concluded that the selected remedies currently protect human health and the environment because exposure pathways that could result in unacceptable risks have been addressed. (USEPA 2025)

The Site includes four Operable Units (OUs): OU1, landfill #1; OU2, the Lower Roanoke River; OU3, the former chlorine plant; and OU4, Welch Creek. The landfill (OU1) and former chlorine plant (OU3) are located on the Site property and Weyerhaeuser completed remedial actions in 2005 and 2006, respectively. Welch Creek (OU4), a tributary to the lower Roanoke River (OU2), flows through the eastern portion of the Site for approximately 4.1 miles. EPA issued a cleanup plan and Record of Decision for OU4 in 2007, requiring the installation of a thin layer sand cap to address contaminated sediment in Welch Creek, continuation of an existing FCA, and other requirements. In 2008, EPA issued a cleanup plan for OU2, requiring Domtar to monitor natural recovery to address contamination in surface water, sediment, and fish tissue, continuation of an existing FCA, and other monitoring activities.

1.2 Purpose and Need for Restoration

This Draft Phase 2 RP/EA has been prepared by the Trustees. The purpose of this Draft Phase 2 RP/EA, building from the Final Phase 1 RP (Weyerhaeuser Plymouth Mill Site Trustee Council 2006), is to address injured natural resources and lost recreational services due to release(s) of hazardous substances in areas at or adjacent to the Site. The need for this Draft Phase 2 RP/EA arises from the statutory requirement to use recovered NRDAR damages to restore, rehabilitate, replace, or acquire natural resources injured and recreational services lost by releases of hazardous substances and to describe the restoration actions or projects that the Trustees have proposed to undertake using recovered restoration funds. Additionally, the RP/EA describes restoration projects undertaken and to be undertaken by the PRP as creditable for its potential NRD liability.

The Trustees developed this Draft Phase 2 RP/EA in accordance with 43 C.F.R. § 11.93 to inform the public as to the types and scale of restoration proposed to be undertaken as compensation. Consistent with the CERCLA NRDAR regulations, this plan includes a reasonable number of alternatives and identifies preferred alternatives.

[1] NCDENR became the North Carolina Department of Environmental Quality (NCDEQ) in 2016.

Figure 1. Locations of proposed restoration projects within and near Martin County, North Carolina and in context with the Domtar Plymouth Mill. Floodplain projects refer to Alternative 6: Floodplain Reconnection, Wetland Protection, and Fish Passage Improvements.

1.3 Natural Resource Trustees and Authority

Pursuant to the authority of Section 107(f) of CERCLA, as amended, 42 U.S.C. § 9607(f); Federal Water Pollution Control Act (commonly known as the Clean Water Act), as amended, 33 U.S.C. § 1321(f)(4) and (5), (CWA); Subpart G of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. §§ 300.600, 300.605; and other applicable Federal and State laws, designated Federal and State authorities may act on behalf of the public as natural resource trustees to pursue damages for injury to, destruction of, or loss of natural resources and their services, including recreational services, resulting from the release of hazardous substances to the environment.

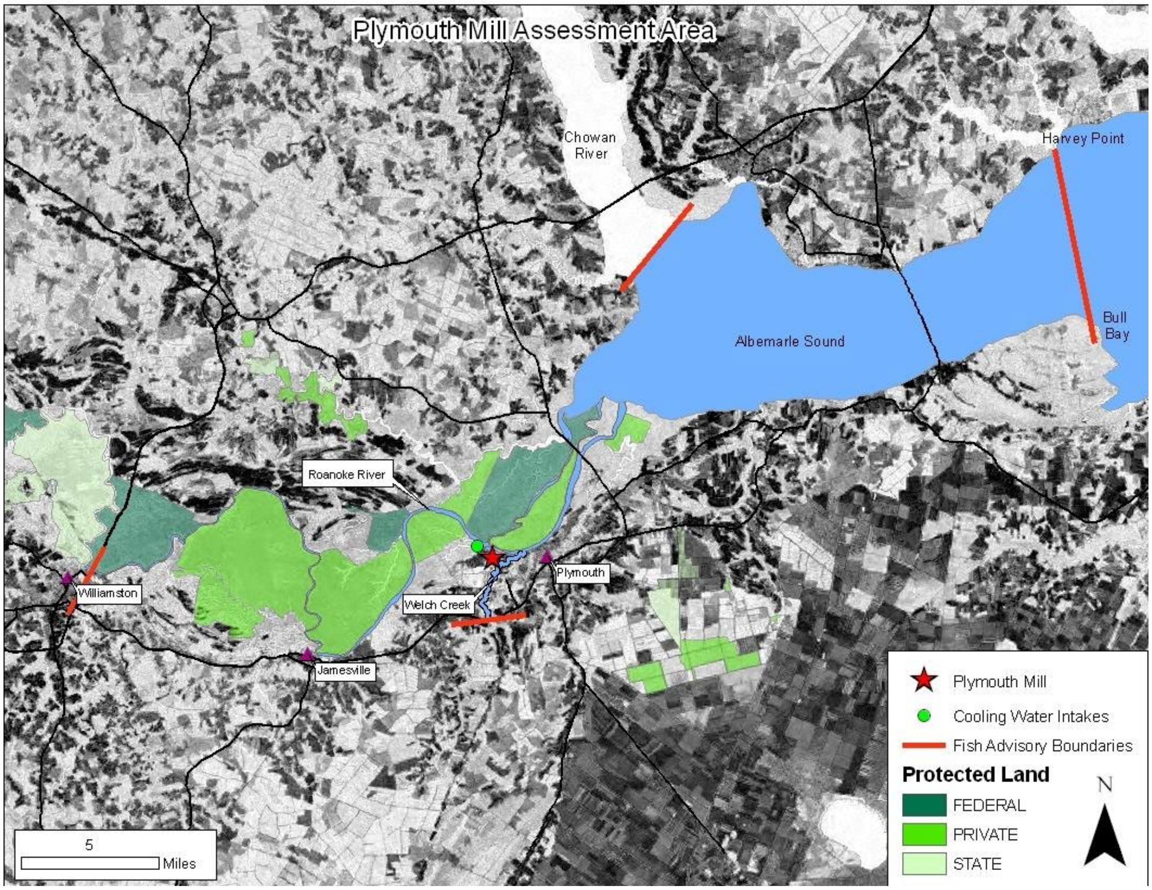

Figure 2. Weyerhaeuser Plymouth Mill assessment area near Plymouth, North Carolina. The red bars indicate the boundaries of the dioxin FCA.

The President has designated Federal resource trustees in the NCP, 40 C.F.R. § 300.600, and through Executive Order 12580, dated January 23, 1987, as amended by Executive Order 13016, dated August 28, 1996. Pursuant to the NCP, the Secretary of the DOI acts as a Trustee for natural resources and their supporting ecosystems, managed or under jurisdiction of the DOI. The Secretary of Commerce shall act as trustee for natural resources managed or controlled by Department of Commerce and for natural resources managed or controlled by other federal agencies and that are found in, under, or using waters navigable by deep draft vessels, tidally influenced waters, or waters of the contiguous zone, the exclusive economic zone, and the outer continental shelf.

In accordance with 42 U.S.C. § 9607(f)(2)(B) and the NCP, the State of North Carolina has designated the Secretary of the NCDEQ as its Natural Resource Trustee representative. The State Trustee acts on behalf of the public as Trustee for natural resources, including their supporting ecosystems, within the boundaries of their state, or belonging to, managed by, controlled by, or appertaining to North Carolina, respectively.

The State and Federal Trustees may have concurrent jurisdiction over the natural resources potentially affected in this matter. 40 C.F.R. § 300.615(a). This shared trusteeship is reflected in the coordinated fish and wildlife management practices of the Trustees and is consistent with the management policies of all the Trustees.

This Draft Phase 2 RP/EA was prepared jointly by the Trustees in accordance with Section 111(i) of CERCLA and its implementing regulations (43 C.F.R. § 11.93). In addition, federal trustees must comply with the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321 et seq.) and agency-specific NEPA implementing procedures.[2] NEPA requires a federal agency to consider the potential environmental impacts of a proposed major federal action(s) to determine if the proposed action(s) may significantly affect the quality of the human environment and to inform and involve the public in the decision-making process. For this Phase 2 RP/EA, NOAA is acting as the lead agency for NEPA compliance and USFWS is participating as a cooperating agency (42 U.S.C. 4336a(a). More about NEPA compliance is contained in Section 5.8.

1.4 Restoration Goals

In the Phase 1 RP (Weyerhaeuser Plymouth Mill Site Trustee Council 2006), the Trustees identified one restoration goal -- restoring or enhancing recreational fisheries -- which was used to guide development of alternatives.

Stemming from these goal statements, the Trustees proposed reducing fish mortality due to impingement and entrainment at the Site's cooling water intakes to restore fish stocks to address compensable losses. This was Alternative 2 in the Phase 1 RP.

This Draft Phase 2 RP/EA adopts the above-mentioned restoration goal and the additional projects (alternatives) described and evaluated in this Draft Phase 2 RP/EA are intended to further improve fish populations by reducing mortality and conserving nursery habitat as well as enhancing recreation.

1.5 Summary of Natural Resource Damage Assessment and Restoration

In the damages determination phase of the NRDAR process, (see generally 43 C.F.R. §§ 11.80-11.84) the Trustees identified and determined the restoration needed to compensate for the public's loss of natural resource services for the period from the time of release to the time the resources are fully restored to baseline condition, or until resources are replaced and/or equivalent natural resources are acquired (the "interim loss") (see 43 C.F.R. 11.83(c)). The scale (or size) of the restoration action(s) should be that which provides the value to adequately offset the natural resource service losses. The process of determining the restoration size is called restoration scaling. Restoration scaling requires a framework for quantifying losses and for benefits of restoration such that losses and benefits can be compared. For restoration scaling in this assessment, the Trustees evaluated how recreational angling behavior was affected by FCAs due to dioxin contamination and the potential offsetting benefits of restoration projects increasing/improving access for recreational angling and enhancing fish populations targeted by recreational anglers. In general, the Trustees' assessment attempted to evaluate recreational

[2] See Companion Manual for NOAA Administrative Order 216-6A - "Policy and Procedures for Compliance with the National Environmental Policy Act and Related Authorities" (June 30, 2025), DOI's NEPA implementing regulations (43 CFR Part 46), and U.S. Department of the Interior Handbook: National Environmental Policy Act Implementing Procedures.

angling behavior under With- and Without-Release conditions that led to North Carolina issuing dioxin FCAs, and With- and Without-Restoration to evaluate the benefits of restoration to recreational angling from enhancements to fish populations and increased/improved fishing access.

The release(s) of dioxins from the facility negatively affected recreational uses (i.e., angling) in the lower Roanoke River, Welch Creek and the western Albemarle Sound due to dioxin FCAs issued by the state of North Carolina.[3,4] FCAs were first issued for Welch Creek and the Roanoke River in 1990. Anglers were advised not to eat fish taken from Welch Creek and to limit consumption of fish to no more than one meal per month for fish taken from the affected area of the Roanoke River. These FCAs applied to all fish species. The FCAs were expanded to the western portion of the Albemarle Sound in 1991 at the level of no more than one meal per month. The Albemarle Sound FCAs extended from the mouth of the Roanoke River in the west to Bull Bay and Harvey Point in the east. In 2002, the FCAs for all three affected areas were modified to apply only to catfish and carp and recommended the consumption of no more than one meal per month of these species. These modified FCAs for the affected areas of Welch Creek, Roanoke River, and Albemarle Sound continue through the present time.[5]

The presence of contamination in fish and advisories recommending reduced consumption of fish can negatively affect recreational angling in different ways. Anglers may decrease the number of fishing trips they take or they may choose to fish at alternative sites unaffected by the FCA. Anglers continuing to fish at the site under the FCA may change fish cleaning and cooking practices to limit exposure to contaminants, decrease fish consumption or eat none, or change fish targeted for consumption. Recreational anglers could also experience a loss without changes in fishing practices if these anglers prefer sites that are not contaminated but do not have access to acceptable alternative sites for fishing. For such anglers, these behavioral responses represent a loss in utility or well-being received from the trip still taken to sites with the FCA. Conversely, restoration activities that are undertaken to increase/improve access to fishing sites or to enhance fish populations targeted by recreational anglers in certain areas can positively affect angler behavior. Anglers may increase the number of trips they take or may choose to change fishing from another site to the area benefiting from restoration due to improved conditions. Anglers already fishing at areas benefiting from restoration may receive an enhanced fishing experience due to a greater abundance of fish to catch or decreased travel costs from better accessibility.

The assessment of the magnitude of recreational fishing losses due to FCAs for areas of the lower Roanoke River, Welch Creek and the western Albemarle Sound was evaluated via benefit transfer. Benefit transfer is a listed economic valuation methodology in the CERCLA NRDAR regulations, 43 C.F.R. § 11.83. In the context of recreational uses, the benefit transfer methodology uses existing preference information on recreational uses from the economics literature to identify how changes in environmental quality or site characteristics affect a

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[3] Issuance of a fish consumption advisory is injury under the CERCLA NRDAR regulations, 43 C.F.R. § 11.62(f)(iii).

[4] See Clark (2004) for a historical account of the FCAs issued by North Carolina for the lower Roanoke River, Welch Creek and Albemarle Sound.

[5] See the North Carolina Department of Health and Human Services current fish consumption advisories at https://epi.dph.ncdhhs.gov/oee/fish/advisories.html#W.

recreational user's well-being (e.g., recreational angler). The Trustees' NRDAR was informed by the existing economics literature on recreational angling and factors that affect angling preferences/values (e.g., FCAs), information on the affected area and population, information on historical recreational angling activity in the affected area, and information about how potential restoration projects affect fish populations and/or access for recreational angling. Economics literature on recreational angling and impacts of FCAs includes Breffle et al. (2009), Chen and Cosslett (1998), Jakus et al.(1997), Jakus, Dadakas, and Fly (1998), Jakus and Shaw (2003), Montgomery and Needelman (1997), Parsons and Hauber (1998) and Parsons, Jakus and Tomasi (1999). Information and data on historical recreational angling activity was obtained from North Carolina Fishery Management Plans (NCDENR and NCWRC, 2003), creel surveys (NCDEHNR, 1994) and economics literature (Schuhmann and Schwabe, 2004). Additional information and data sources utilized included marine recreational fisheries data collected by NOAA[6] and economics literature (Morey, 1994).

1.6 Summary of Phases 1 and 2 Restoration Plans

In 2006, the Trustees released the Phase 1 RP ("Phase 1 Final Restoration Plan for the Weyerhaeuser Plymouth Mill Martin County, NC"; available at https://www.diver.orr.noaa.gov/web/guest/diver-admin-record/6225. In the Phase 1 RP, the Trustees selected Alternative 2 ("Reduce Intake Volume at the Weyerhaeuser Plymouth Mill Cooling Water Intake") to reduce fish mortality and enhance fish stocks. The alternatives analysis in the Phase 1 RP is incorporated by reference herein. Weyerhaeuser voluntarily implemented the selected project.

The entire lower Roanoke River, including the Mill's water intake location, is an important nursery area for fish (Rulifson and Overton 2006). Many fish larvae tend to move with water with little ability to swim away from an intake. The Trustees assumed that using less water from the river for cooling will harm fewer fish which would be taken along with the water, thereby improving future fish abundance consistent with the Phase 1 RP goal. Based on cooling water system data provided by Domtar, the redesigned cooling water intake system has reduced the volume of river water withdrawn, subsequently reducing the likelihood of annual fish mortality rates in the lower Roanoke River caused by the impingement and/or entrainment of larval and juvenile fish at the cooling water intakes. Therefore, the Trustees believe the selected project in the Phase 1 RP has been successful in supporting the restoration goal. Because the water recycling project was designed to reduce, but not eliminate, water taken from the river, the Trustees assumed that additional modifications to the cooling water intake system, in addition to other potential projects, may be considered in a subsequent restoration phase. Additional modifications to the cooling water intake system were noted as Alternative 3 in the Phase 1 RP.

The remaining restoration alternative projects not selected (five in total) in the Phase 1 RP have been retained for further consideration in Phase 2 restoration (Table 1). During Phase 2, the Trustees evaluated the potential benefits from the remaining Phase 1 restoration projects, as well as other potential restoration activities, including new or improved recreational fishing access

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[6] The T rustees' NRDAR initially relied on NOAA's Marine Recreational Fisheries Statistics Survey (MRFSS). In 2008, MRFSS was replaced by the Marine Recreational Information Program (MRIP) (see: https://www.fisheries.noaa.gov/recreational-fishing-data/about-marine-recreational-information-program).

and facilities and decreased fish mortality to help enhance fish populations in the affected area over time. The Trustees' evaluation determined that these restoration types would directly benefit recreational anglers and their fishing experience and therefore, offset losses.

Table 1. Summary of alternatives not selected in the Phase 1 restoration plan and whether they have been retained for further consideration in Phase 2 restoration plan.

Phase 1 Restoration Alternative	Retained or Eliminated in Phase 1	Reason for Exclusion in Phase 1 (if applicable)	Alternative Number in Phase 2
Alternative 3: Additional Modification to the Cooling Water Intake System	Retained	N/A	Alternative 2
Alternative 4: Filling Levee Breaches in Lower Roanoke River Floodplain	Eliminated	No viable project sites identified*	N/A
Alternative 5: Acquisition of Land for Habitat Protection	Retained	N/A	Alternative 5
Alternative 6: Improving Recreational Fishing Public Access	Retained	N/A	Alternative 4
Alternative 7: Reduction of Fish Take at Other Cooling Water Intakes in the Lower Roanoke River	Eliminated	No viable project sites identified	N/A

*Alternative 6 in Phase 2 has potential to provide similar water quality benefits

In addition to the above-mentioned alternatives in Table 1, the Trustees evaluate three other alternatives in this Phase 2 RP, which are described in Section 2.2.

1.7 Summary of the Proposed Settlement Agreement

The United States (DOI/USFWS and NOAA), the State of North Carolina (NCDEQ), and Domtar Paper Company, LLC have negotiated a Consent Decree to resolve Domtar's alleged liability for natural resource damages associated with historical releases at and from the Plymouth Mill Site under CERCLA. The settlement's purposes are to fund restoration of injured resources and associated services, cover Trustee oversight costs, resolve claims without prolonged litigation, and formalize obligations under court supervision.

Key terms of the settlement include:

- Funding for Trustee-implemented restoration: Domtar will pay $1,750,000 plus interest into NOAA's Damage Assessment and Restoration Revolving Fund (DARR Fund) for Trustee-sponsored restoration consistent with the Final Phase 2 Restoration Plan.
- Trustee oversight costs: Domtar will pay $155,000 plus interest into DOI's NRDAR Fund to cover planning, implementation, monitoring, and administrative oversight costs.
- Past assessment costs: The Consent Decree provides for reimbursement of DOI, NOAA, and State past natural resource damage assessment costs, with interest, pursuant to documentation and specified timelines.
- Recognition of completed restoration actions: The Decree acknowledges actions already implemented by Domtar, including cooling-water intake reductions (24,000 gpm cooling tower eliminating once-through cooling), lighting modifications, seasonal outages timed to protect spawning fish, and Plymouth Waterfront Park improvements that enhance public recreation.
- Conservation Agreement: Within 30 days of the Effective Date, Domtar must record a Conservation Agreement (deed restriction) in Martin County and provide notice and a copy of the recorded instrument to the United States and the State.

1.8 Public Participation

Public participation is an important step in the NRDAR process. The Trustees have prepared this Draft Phase 2 RP/EA to provide the public with information on natural resource injuries and service losses assessed in connection with the Site, restoration goals that have guided the Trustees in developing this plan, alternatives that were considered, and the process and rationale used by the Trustees to identify preferred alternatives. Public review of the Draft Phase 2 RP/EA is an integral part of the restoration planning process and is consistent with all applicable State and Federal laws and regulations, including CERCLA and the guidance for restoration planning found within 43 C.F.R. Part 11.

This Draft Phase 2 RP/EA is available for public review and comment concurrently with the public comment period for the proposed consent decree, which is available for public review at https://www.justice.gov/enrd/consent-decrees. The Draft Phase 2 RP/EA will be open for public comment for 30 days from the date of publication of the Notice of Availability. The Draft Phase 2 RP/EA will also be made available to the public for comment via a NOAA web posting at: https://darrp.noaa.gov/. Interested individuals, organizations, and agencies may submit comments by writing or emailing:

Howard Schnabolk
National Oceanic and Atmospheric Administration
2234 South Hobson Avenue
Charleston, SC 29405
Phone: 854-429-2252
Email: Howard.Schnabolk@noaa.gov

The Trustees will review and consider all public comments and input on this plan received during the public comment period prior to finalizing the Phase 2 RP/EA. The development of the Draft Phase 2 RP/EA, the public comment process, and finalization of the Phase 2 RP/EA is performed solely by the Trustees. Based on the public's comments, or other information, the Trustees may amend the Phase 2 RP/EA if significant changes are made to the type, scope, or impact of the projects. In the event of a significant modification to the Phase 2 RP/EA the Trustees will provide the public with an opportunity to comment on that particular amendment.

The Trustees have maintained records documenting the information considered and actions taken by the Trustees during the NRDAR. These records are available for review by interested members of the public. Interested persons can access or view these records at:

https://www.diver.orr.noaa.gov/web/guest/diver-admin-record/6225

1.9 Organization of the Restoration Plan

Section 2 describes the proposed alternatives the Trustees identified and evaluated to compensate for the losses caused by the Site releases. This includes a summary of the criteria with which the Trustees evaluated possible restoration alternatives. 43 C.F.R. § 11.82(d) and § 11.93.

Section 3 describes the affected environment where the alternatives would be implemented and presents the Trustees' analysis of the environmental consequences of the alternatives that propose major federal actions.

Section 4 describes the monitoring plan for the preferred alternatives and project fulfillment activities.

Section 5 lists additional environmental compliance with laws, regulation, and policies required as part of project fulfillment.

Section 6 provides an estimated budget summary and timeline of the preferred alternatives, and

Section 7 contains the references identified in this Draft Phase 2 RP/EA.

2.0 ALTERNATIVES

The Trustees have identified seven alternatives, including the No-Action alternative, for compensation of losses resulting from releases of hazardous substances at and from the Site.

2.1 Alternatives Evaluation Criteria

The CERCLA NRDAR regulations list ten factors for the Trustees to evaluate and consider when selecting a restoration alternative or project to pursue. Thus, these factors are applied to identify a range of alternatives for consideration as well as to identify the restoration alternative(s) or project(s) that is/are best to pursue.

The Trustees evaluated the alternatives to determine if they provide sufficient type, quality, and quantity of natural resources and recreational uses to compensate for those lost due to contamination in the context of the CERCLA NRDAR (43 C.F.R. §11.82 (d)) (see following list of criteria). Each of the ten factors listed in 43 C.F.R. §11.82 (d) are evaluated for each of the alternatives in Section 2.2. The Trustees also evaluated whether significant effects may be associated with the alternatives that propose major federal actions, as well as the No Action alternative, as required by NEPA (42 U.S.C. §§ 4332(2)(C)(i-iii), 4336(b)(2)) in Section 3.3. Similar to Phase 1 RP, the Trustees used the CERCLA § 11.82(d) factors and additional case-specific alternative selection criteria to assess the potential alternatives as follows:

<u>Technical Feasibility (43 C.F.R. § 11.82(d)(1)):</u>
The selected restoration alternative must be technically sound. The Trustees considered the level of risk or uncertainty involved in implementing a project. A proven record of accomplishment demonstrating the success of projects utilizing similar or identical restoration techniques can be used to satisfy this evaluation criterion.

<u>Cost Benefit (43 C.F.R. § 11.82(d)(2)):</u>
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. Projects with higher benefit to cost ratios are preferred.

<u>Cost Effectiveness (43 C.F.R. § 11.82(d)(3)):</u>
When two or more activities provide the same or similar level of benefits, the least costly activity providing that level of benefits will be selected.

<u>Actual or Planned Response Actions (43 C.F.R. § 11.82(d)(4)):</u>
The Trustees must consider the results of any actual or planned response actions when evaluating alternatives.

<u>Potential for Additional Injury Resulting from the Proposed Actions (43 C.F.R. § 11.82(d)(5)):</u>
Trustees must identify the adverse impacts, both short and/or long term, from the project. Some short-term adverse impacts from implementation may be expected, however, projects with large or long-term adverse impacts are not preferred.

<u>Natural Recovery Period and the Ability of Resources to Recover without Restoration (43 C.F.R. § 11.82(d)(6-7)):</u>

Trustees must consider the ability of injured natural resources to recover and the time required for that recovery if no restoration is undertaken to benefit injured natural resources. Trustees should also consider the time required to observe those benefits if the project is implemented.

Public Health and Safety (43 C.F.R. § 11.82(d)(8)):
The preferred alternative(s) should not pose a threat to the health and safety of the public.

Compliance with Laws, Regulations, and Policies (43 C.F.R. § 11.82(d)(9-10)):
Development of this RP/EA requires consideration of a variety of legal authorities and their potentially applicability to the preferred alternative. As part of the restoration planning process, the Trustees initiated steps to ensure compliance with applicable laws, regulations, and policies. Implementation of the preferred alternative(s) remains subject to complying with all applicable laws and regulations.

Consistency with the Trustees' Restoration Goals:
The preferred alternative(s) should meet the Trustees' intent to directly restore the injured resources or the services those resources provide. Included in this criterion is the potential for success (meeting restoration goals) and the level of expected return of resources and resource services.

Proposed restoration actions are anticipated to have long-term beneficial and sometimes short-term adverse impacts to the physical, biological, socio-economic, and/or cultural environments. In Section 2.3, the Trustees determine for each alternative the potential for success and the level of expected return.

2.2 NRDAR Evaluation of Alternatives

In this section, the Trustees identify and evaluate the seven Phase 2 alternatives using the evaluation criteria described in Section 2.1. Figure 1 illustrates the locations of each of the preferred alternatives completed and area of focus for those contemplated for implementation. Table 2 identifies the restoration alternative, expected benefit, and the implementation status of each Phase 2 restoration alternative. Tables 3 through 9 provide an evaluation of each of the Phase 2 alternatives against the restoration evaluation criteria.

Domtar elected to implement some projects at its own risk to be considered by the Trustees for credit against its potential NRD liabilities. These implemented projects are described further below. Consequently, in this document, the Trustees evaluate both alternatives which have already been implemented and others which have yet to be implemented.

Table 2. Summary of Natural Resource and Service Benefits of Restoration Alternatives

Phase 2 Restoration Alternative	**Natural Resources and Services Benefited**	**Status**
1 - No Action	Resources and services and their condition and trajectories would not be changed	Evaluated in this plan.
2 - Additional Modifications to the Domtar Plymouth Mill Cooling Water Intake System	Fish populations in the Roanoke River Basin, especially larval-stage and juvenile fish in the Roanoke River through reduced impingement and entrainment of fish into the facility's cooling water intake system.	Completed by Domtar in 2019. Not a proposed major Federal action requiring NEPA evaluation.
3 - Lighting Modifications at the Plymouth Facility	Reducing Roanoke River fish attraction to facility lighting and resulting potential impingement or entrainment.	Completed in 2011. Not a proposed major Federal action requiring NEPA evaluation.
4 - Waterfront Park Improvements, City of Plymouth	Recreation-user experience will be enhanced.	Property improvements on waterfront park to enhance recreational opportunities. Partially completed and reimbursed by Domtar in 2013. Not a proposed major Federal action requiring NEPA evaluation.
5 - Warren Neck Conservation	Protection of floodplain forests and their existing natural resources and associated resource services, including water quality benefits to fish nursery habitat.	Proposed to be completed. Evaluated for NEPA compliance in this plan.
6 - Floodplain Reconnection, Wetland Protection, and Fish Passage Improvements	Enhancement of fish passage, reduction in fish mortality, and improvement to water and habitat quality, thereby increasing fish abundance in the area.	Proposed to be completed. Evaluated for NEPA compliance in this plan.
7 - Acquisition and Conservation of Mush Island Property (Approx. 3,000 acres)	Protection of existing natural resources, including spawning habitat for American shad and striped bass, and associated resource services located on the property.	Not completed. Evaluated for NEPA compliance in this plan.

2.2.1 Alternative 1: No Action

NEPA requires the Trustees to evaluate an alternative in which no actions are taken by a federal agency (42 U.S.C. § 4332(2)(C)(iii)). CERCLA has the same requirement (43 C.F.R. § 11.82(c)(2)). Here, the No Action alternative would mean no direct action to restore injured natural resource habitat, create new habitat, enhance existing habitat, or compensate for lost natural resources or lost recreational services. Instead, the Trustees would rely solely on natural recovery for the achievement of restoration goals. While the Trustees believe that natural recovery will occur over varying time scales, the interim losses would not be fully compensated under a no-action alternative.

Pursuant to CERCLA and NEPA, the Trustees considered a No Action alternative. This alternative is appropriate if/when no additional restoration projects are necessary to restore, rehabilitate, replace, and/or acquire the equivalent of the injured natural resources or lost human use of those resources. The principal advantages of this approach are the ease of implementation and lack of costs because natural processes rather than humans determine the trajectory of the system.

Table 3. Evaluation of No Action alternative against the evaluation criteria.

Alternative 1: No Action	
Restoration Criteria	**Evaluation**
Technical Feasibility	The No Action alternative is technically feasible.
Cost Benefit	Assumed to be the least costly alternative in terms of planning and implementation costs. However, it also provides less benefits when compared to the preferred alternatives over a similar period. Cost-to-benefit ratio is not favorable.
Cost Effectiveness	Assumed to be less costly than if the Trustees were to pursue restoration under the preferred alternatives; however, the No Action alternative does not address interim losses of natural resources and services, whereas the preferred alternatives do, and therefore provide greater benefits.
Actual or Planned Response Actions	There are no further actual or planned response activities; therefore, there is no impact on the No Action alternative and vice versa.
Public Health and Safety	Any potential public health and safety issues or concerns that exist under current and future natural resource management activities would likely remain the same.
Adverse Impacts from Project	Does not cause further injury but provides no benefits to offset interim losses.
Natural Recovery Period and the Ability of Resources to Recover without Restoration	The natural recovery period would likely be variable and dependent on site-specific factors, especially in areas where there is residual contamination.
Compliance with Laws and Policies	Does not meet the requirements and goals of the CERCLA NRDAR process.
Consistency with the Trustees' Restoration Goals and Objectives	The No Action alternative would not provide for restoration, replacement, enhancement or acquisition of injured natural resources, making this alternative inconsistent with Trustee restoration goals.

2.2.2 Alternative 2: Additional Modifications to the Domtar Plymouth Mill Cooling Water Intake System and Seasonal Outages (Preferred)

Alternative 2 involves providing NRDAR restoration credit for the benefits to fish resulting from seasonal shutdowns and the installation of a 24,000 gallon per minute (gpm) cooling tower at Domtar's Plymouth Mill. The cooling tower eliminated once-through cooling water taken from the Roanoke River; when larval fish are abundant in the river at the Mill, every gallon not taken from the river results in fewer fish being taken from impingement and entrainment. Impingement occurs when fish are pinned against water intake screens or other parts of a water intake system. Entrainment occurs when fish in the intake water are drawn into a water system and subjected to thermal, physical, or chemical stresses. Means to reduce water use from the river were part of the Phase 1 RP and were expanded on for consideration under this Phase 2 RP/EA.

In June 2019, Domtar started operating a 24,000 gpm cooling tower at the Mill. The cooling tower has eliminated once-through cooling water withdrawals at the Mill. The amount of once-through cooling water used before the cooling tower became operational is known from records for a cooling water discharge pipe back to the river. Water exclusively for cooling averaged 35% of the total water withdrawn from the river (range 28 to 41%) in the five years prior to the cooling tower becoming operational (2014 to 2018). With the operation of the cooling tower, the percentage of cooling water decreased to 9.3% for 2019. The 2019 figure is an annual average, and in seven months of data following the 2019 startup of the cooling tower, the percentage of cooling water was close to zero. The corresponding water withdrawn from the river over the same period shows a reduction from 51 million gallons per day (MGD) average in the five years prior to the cooling tower became operational (2014 to 2018) to 26 MGD in 2019 when the cooling tower was in operation for half the year, to 22 MGD from 2020 to 2022 – about a 57% reduction in river water withdrawn.

Some of the water reduction was done for CWA Section 316(b) compliance, but the Mill went beyond what those regulations required to realize additional benefits to fish that could be proposed for NRDAR restoration credit. In 2014, the EPA promulgated the Existing Facilities Rule (Rule) pursuant to the CWA Section 316(b). The Rule applies to a facility if the intake flow is greater than 2 MGD and with at least 25% of the water used exclusively for cooling purposes. In 2014, the Domtar Plymouth Mill exceeded both thresholds as noted above. The Mill had options for how they complied with the CWA 316(b) requirement, and they chose to reduce their proportion of water used for cooling to less than 25% through installation of a cooling tower. Mill staff reviewed a 10-year average of water withdrawal and cooling water data and calculated the reduction in cooling water needed to be below the 25% threshold that could be achieved with a 3,000-6,000 gpm cooling tower. Domtar instead installed a 24,000 gpm cooling tower to further reduce cooling water taken from the river. The 316(b) regulations did not require Domtar to reduce its cooling water usage to less than 25%; rather, that was Domtar's chosen approach among other options.

For purposes of restoration, the Trustees evaluated what portion of water reduction resulting from the construction and operation of the cooling water tower was more than required for CWA 316(b) compliance. For example, the cooling water tower was fully operational by mid-2019, but compliance with the new regulations was not required until the facility's National Pollutant Discharge Elimination System (NPDES) permit was issued in mid-2022. This resulted in approximately three years of restoration of fish by reducing fish impingement and entrainment mortality. For purposes of restoration after the NPDES permit issuance, the Trustees consider only a portion of the benefits to fish resulting from the amount of water reduction attributable to the new tower—specifically the amount beyond that used to achieve the 25% cooling water CWA compliance threshold.

Additionally, the Trustees evaluated the benefits to fish achieved through Domtar's seasonal Mill shutdowns during fish spawning season. Over a 10-year period, the Plymouth Mill took its outage in the month of May (peak of spawning) five times with the other five outages taken in other months (March and April). Each outage ranged from 13 days to 20 days in duration.

- Because the cooling water tower was fully operational by mid-2019 and compliance with the new regulations was not required until the facility's permit was issued in mid-2022, Trustees suggest 100% credit for reductions in water use (which directly relates to reduced fish impingement and entrainment mortality, as describe below) for three years. Overall water intake withdrawal from the river went from an average of 51 MGD in the five years prior to the cooling tower became operational to 22 MGD in the three years following. The water saved is about 29 MGD (see estimate of associated fish benefits below).
- After the mid-2022 permit issuance, only the amount of water reduction beyond that used to achieve the 25% cooling water CWA compliance threshold is creditable. Domtar estimated the cooling tower capacity needed to get river water cooling needs to 25% (from the 35% it was in the preceding years) at about 4,500 gpm (taken as the middle of their 3,000-6,000 gpm design estimate), which is equivalent to 6.5 MGD. They instead installed a 24,000 gpm cooling tower which has reduced the percentage of exclusive cooling water taken from the river to near 0. Trustees propose credit for water reductions from mid-2022 moving forward at 22.5 MGD (29 MGD water reduction realized - 6.5 MGD for the mill's approach to CWA compliance = 22.5 MGD, or 78% of the total, available for NRDAR crediting).
- Additionally, Domtar will be credited with 100% of the benefits from scheduling Mill shutdowns during fish spawning season. Over a 10-year period, the Plymouth Mill took its outage in the month of May (peak of spawning) five times with the other five outages taken in other month (March and April). Each outage ranged from 13 days to 20 days in duration. When this outage modification was implemented, it was done to reduce water usage during periods when larvae and juvenile fish were most present in the river.

Natural resource benefits of the water reduction may be estimated and/or verified several ways including the following. The additional 25% reduction in water withdrawals equates to four billion fewer gallons removed from the river per year from the intake over minimum design needed for CWA compliance (based on the three years prior to cooling tower installation).

Since every gallon of water not used at the Mill may seasonally conserve larval fish in that water, the fisheries benefits are estimated to be substantial. Rulifson and Overton (2006) report that striped bass (*Morone saxatilis*), white perch (*Morone americana*), and river herring (*Alosa pseudoharengus*) made up 97% of all the fish larvae collected at station in front of this Mill from March through June. Taking just May for illustration purposes, from the density of fish larvae at the mill (known from previous sampling) and changes in May water use (known from Mill reports to the State), cooling tower operations in May can be estimated to result in daily reduction of larvae potentially harmed of 18,000 river herring, 85,000 striped bass, and 28,000 white perch. Similar records are available for March through June which is the period when most larval fish are present; those data can be used for estimating additional benefits.

An ancillary benefit is the elimination of all cooling water discharges back to the river. By no longer discharging this noncontact cooling water into the Roanoke River, which averaged from approximately 193 to 1,349 million gallons per month over the decade prior to the cooling tower implementation, thermal impacts to the Roanoke River have been eliminated from this outfall which was permanently closed.

Table 4. Evaluation of Alternative 2: Additional Modifications to the Domtar Plymouth Mill Cooling Water Intake System and Seasonal Outage Schedule.

Alternative 2: Additional Modifications to the Domtar Plymouth Mill Cooling Water Intake System and Seasonal Outage Schedule	
Restoration Criteria	**Evaluation**
Technical Feasibility	The project is technically feasible and has been completed by Domtar.
Cost Benefit	Trustees did not evaluate cost benefit.
Cost Effectiveness	The Trustees do not have sufficient information to determine cost-effectiveness.
Actual or Planned Response Actions	There are no further actual or planned response actions.
Public Health and Safety	The Trustees are not aware of any public health and safety issues associated with this alternative.
Adverse Impacts from Project	There are no known adverse impacts to the environment associated with this alternative. This alternative was developed to provide benefits to Roanoke River fish.
Natural Recovery Period and the Ability of Resources to Recover without Restoration	The recovery period to provide benefits to Roanoke River fish through implementation of this alternative would be less than the recovery period for the No Action alternative.
Compliance with Laws and Policies	Meets the requirements and goals of CERCLA NRDAR process to provide for restoration that compensates the public for the injury and loss of the natural resources and services caused by releases of hazardous substances from the Site. In addition, this alternative is consistent with implementation of Section 316(b) of the Clean Water Act, 33 U.S.C. § 1326.
Consistency with the Trustees' Restoration Goals and Objectives	This alternative would reduce Roanoke River fish impingement and entrainment in the facility's cooling water intake system, directly benefiting fish species impacted by releases of hazardous substances from the Site.

2.2.3 Alternative 3: Lighting Modifications at the Plymouth Facility (Preferred)

In 2011, Domtar removed all the lighting fixtures near the Roanoke River and modified remaining safety lighting to prevent/minimize shining into the river. The reduction of light benefits fish because fewer fish congregate near the cooling towers, thereby minimizing impingement and entrained-related fish mortality.

Table 5. Evaluation of Alternative 3: Lighting Modifications at the Plymouth Facility.

Alternative 3: Lighting Modifications at the Plymouth Facility	
Restoration Criteria	**Evaluation**
Technical Feasibility	The project is technically feasible and has been completed by Domtar.
Cost Benefit	The Trustees did not evaluate cost benefit.
Cost Effectiveness	The Trustees have no information to determine cost-effectiveness.
Actual or Planned Response Actions	There are no further actual or planned response actions.
Public Health and Safety	The Trustees are not aware of any public health and safety issues associated with this alternative.
Adverse Impacts from Project	There are no known adverse impacts to the environment associated with this alternative. This alternative was developed to provide benefits to Roanoke River fish.
Natural Recovery Period and the Ability of Resources to Recover without Restoration	The recovery period to provide benefits to Roanoke River fish through implementation of this alternative would be less than recovery period for the No Action alternative.
Compliance with Laws and Policies	Meets the requirements and goals of CERCLA NRDAR process to provide restoration that compensates the public.
Consistency with the Trustees' Restoration Goals and Objectives	This alternative would reduce attraction of Roanoke River fish to lights at the Plymouth Mill, thereby reducing fish impingement and entrainment in the facility's cooling water intake system.

2.2.4 Alternative 4: Waterfront Park Improvements (Preferred)

Domtar and the Town of Plymouth entered into a Funding Agreement in April 2013 to provide a mechanism for Domtar to reimburse the Town of Plymouth for costs to improve its Waterfront Park and thereby increase recreational opportunities available to residents and tourists associated with the area's natural resources. The improvements completed to date include repair and installation of new bulkheads, construction of a gazebo, paving parking lots, and building a boardwalk along the riverfront as an attractive walking path connecting the Civil War Museum on the east side of town and the Lighthouse and Maritime Museum on the west side of Town. Improvements to the east Plymouth boat ramp entailed improving the ramp surface and length and reconstruction of the dock alongside the ramp. Restoration of the boat ramp was intended to allow boaters to launch their boats from Plymouth in a timely and safe manner. Pursuant to the 2013 Agreement, Domtar has previously reimbursed the Town $375,000 for this work. The 2013 Agreement provides funding up to the amount of $527,000, with the remaining $152,000 to be made available for reimbursement upon final agreement on settlement with the Trustees. The Trustees evaluated the completed improvements to the waterfront park in this Draft RP/EA; any future work under the 2013 Agreement is not within the scope of the NRDAR.

Table 6. Evaluation of Alternative 4: Waterfront Park Improvements.

Alternative 4: Waterfront Park Improvements	
Restoration Criteria	**Evaluation**
Technical Feasibility	The project is technically feasible and has been completed by Domtar.
Cost Benefit	The Trustees did not evaluate cost benefit.
Cost Effectiveness	The Trustees have no information to determine cost-effectiveness.
Actual or Planned Response Actions	There are no further actual or planned response actions.
Public Health and Safety	The Trustees are not aware of any public health and safety issues associated with this alternative.
Adverse Impacts from Project	There are no known adverse impacts to the environment associated with this alternative. This alternative is intended to provide recreational benefits to the public with the purpose of offsetting lost recreation due to FCAs.
Natural Recovery Period and the Ability of Resources to Recover without Restoration	Recreation losses due to releases of hazardous substances would not be offset without implementation of this project or one like it.
Compliance with Laws and Policies	Meets the requirements and goals of CERCLA NRDAR process to provide restoration that compensates the public.
Consistency with the Trustees' Restoration Goals and Objectives	Completion of improvements to park facilities enhances the recreational-user experience, including anglers and other river-users who may have been impacted by injury to the recreational fishery.

2.2.5 Alternative 5: Warren Neck Conservation (Preferred)

Alternative 5 encompasses the conservation of forested habitat that benefits water quality and therefore fish while preserving recreational opportunities for the public. Ownership of the Warren Neck property will be retained by Domtar and a deed restriction will be placed on the parcel, preserving the natural condition of the property. The purpose of this conservation is to preserve the mature bottomland forest on the property to benefit water quality and fish nursery habitat to compensate the public for losses associated with releases of hazardous substances at and from the Site. The shoreline of the Warren Neck property is publicly accessible by boat from the Roanoke River, thus providing protected habitat to support recreational fishing.

The Warren Neck area is approximately 760 acres of cypress/gum swamp forest dominated by bald-cypress (Taxodium distichum) and water tupelo (*Nyssa aquatica*). The Warren Neck parcel is of interest to the Trustees because it is fish nursery habitat, contiguous with existing conservation land, and represents a portion of the bottomland forest ecosystem that is critical to the health of the

Roanoke River. The extensive floodplain in the lower reaches of the Roanoke River is one of the largest intact, and least disturbed, bottomland forest ecosystems in the mid-Atlantic region. The conservation community has made it a focal area for large-landscape protection for the biodiversity and water quality benefits provided by large, intact floodplain forests. The USFWS, North Carolina Wildlife Resources Commission (NCWRC), The Nature Conservancy, and others have acquired easements and properties to realize long term benefits of these forests. The Nature Conservancy has an easement on an adjacent parcel, and there are State and federally-protected lands across the river. The protected aspect of large neighboring tracts is an important concept in addition to the habitat value of the site. The stream and riparian wetland habitats on this tract are similar in composition, size and function to those of the dioxin-impacted Welch Creek system and also offer fish nursery habitat. A deed restriction avoids the risk of potential development degrading fish habitat.

Table 7. Evaluation of Alternative 5: Warren Neck Conservation

Alternative 5: Warren Neck Conservation and Recreational Uses	
Restoration Criteria	**Evaluation**
Technical Feasibility	The project is technically feasible and likely to result in conservation of similar resources injured.
Cost Benefit	The Trustees do not have cost information to evaluate this criterion.
Cost Effectiveness	The Trustees have no information to determine cost-effectiveness.
Actual or Planned Response Actions	There are no remedial response activities proposed that will affect this alternative.
Public Health and Safety	The Trustees are not aware of any public health and safety issues associated with the project.
Adverse Impacts from Project	Majority of impacts are anticipated to be positive and long-term, although short-term, minor, and adverse impacts are possible depending on the nature of activities, including those intended to improve or maintain ecological functions.
Natural Recovery Period and the Ability of Resources to Recover without Restoration	The time needed for natural resource benefits to accrue from this alternative is less than recovery period for the No Action alternative.
Compliance with Laws and Policies	Compliant with applicable/relevant laws, policies, and regulations.
Consistency with the Trustees' Restoration Goals and Objectives	Consistent with the restoration goal of restoring or enhancing recreation fisheries since the project will conserve fish habitat (temporarily flooded areas that serve as juvenile fish habitat).

2.2.6 Alternative 6: Floodplain Reconnection, Wetland Protection, and Fish Passage Improvements (Preferred)

Alternative 6 encompasses the restoration of approximately 600 acres of Roanoke River floodplain habitat using several techniques to accomplish restoration goals. The overall goal of the project is to improve floodplain connectivity, with additional goals of reestablishing fish passage through the placement of culverts and bridges at barriers, significantly enhancing fish habitat, improving water quality, and reducing flood impacts on infrastructure. Restoration of modified landforms (artificial levees, artificially breached natural levees, artificial ditches) in the floodplain below Roanoke Rapids has been identified as a high priority for management of both fisheries and terrestrial resources. Changes to the flood operations at the U.S. Army Corps of Engineers (USACE) Wilmington District's John H. Kerr Reservoir, upriver from the proposed project area, have resulted in more frequent, higher flood releases to the lower Roanoke River Basin. There are two separate issues that impact fish related to these alterations:

1. Many roads, both major and minor, cross over the lower Roanoke River floodplain. Old and/or deteriorating culverts can inhibit the natural hydrology in the floodplain. Old culverts often restrict fish access and prohibit sufficient tidal flow, which in turn, can degrade forested wetlands.
2. Historic cuts made in the natural river banks to facilitate the removal of timber were left unfilled and allow water that would not normally overbank into the forested wetlands to fill these areas during high water events. This water remains there for days or weeks before oxygen-depleted floodwaters are flushed back into the river rapidly through the straight cuts in the bank.

Replacing old culverts with properly sized structures – such as rock fords, bridges, or larger culverts – restores floodplain hydrology and reduces environmental impacts from road crossings. In addition, filling the man-made cuts in the natural river bank with clean local sediments to restore the natural hydrology of the forested wetlands would significantly reduce the flushing of low dissolved oxygen water into the Roanoke River, thereby improving water quality, and reducing fish mortality.

Solutions include barrier retrofits, such as improved culverts that are properly-sized and designed for fish passage; low water crossings which are passable by fish; and simple stream crossings for vehicles, such as timber bridge crossings. Instream habitat features may be added, where appropriate and feasible, such as large woody debris, leaf packs, and pools. Native plantings may be incorporated to stabilize banks and enhance habitat diversity.

The proposed alternative includes hydrologic modification, habitat restoration, and construction/installation of simple water crossings and fish-friendly culverts. Up to five lost natural connections to the Roanoke River could be restored; reconnection of three miles of historic stream channels to natural flow and flood regime; and over 600 acres of potentially improved habitats.

Table 8. Evaluation of Alternative 6: Floodplain Reconnection, Wetland Protection, and Fish Passage Improvements.

Alternative 6: Floodplain Reconnection, Wetland Protection, and Fish Passage Improvements	
Restoration Criteria	**Evaluation**
Technical Feasibility	The project is technically feasible and likely to result in conservation of similar resources injured.
Cost Benefit	The project has favorable benefit-to-cost ratios given the success of similar restoration activities in nearby areas and that the project is focused on multiple resources and services. Project has clear goals and objectives, both of which are measurable.
Cost Effectiveness	Project has been developed to be cost-effective, as restoration elements are supported by best available information and nearby similar projects.
Actual or Planned Response Actions	There are no remedial response activities proposed that will affect this alternative.
Public Health and Safety	The Trustees are not aware of any public health and safety issues associated with the project.
Adverse Impacts from Project	Majority of impacts are anticipated to be positive and long-term, although short-term, minor, and adverse impacts are possible during construction, such as low water crossings or culverts.
Natural Recovery Period and the Ability of Resources to Recover without Restoration	The time needed for natural resource benefits to accrue from this alternative is less than recovery period for the No Action alternative.
Compliance with Laws and Policies	Compliant with applicable/relevant laws, policies, and regulations.
Consistency with the Trustees' Restoration Goals and Objectives	This alternative would allow for the enhancement of fish habitat and passage, providing both direct and indirect benefits to the same type of aquatic resource and services injured by releases of hazardous substances from the Site.

2.2.7 Alternative 7: Mush Island Perpetual Conservation Easement (Non-Preferred)

Mush Island is an approximately 3,100-acre mix of agricultural lands, upland forests and bottomland hardwood wetland forests near Weldon, North Carolina. The area has extensive and intact palustrine forested wetlands along the Roanoke River floodplain. The river from above Mush Island and downstream to the Broadneck area provides important spawning habitat for a significant population of striped bass and other anadromous species, including American shad (*Alosa sapidissima*) and Hickory shad (*Alosa aestivalis*) (Hassler et al, 1981, Johnson et al. 1981). The river levee forests provide important water quality functions for this spawning reach. The U.S. Departments of Commerce and DOI emphasized, in a report to Congress, the need to protect riparian wetlands immediately adjacent to the Roanoke River's important striped bass spawning habitat (USFWS 1992).

The wisdom of protecting this nursery area, for the benefit of aquatic resources as well as the public's investment in the striped bass restoration effort, was embraced in 1989 when the Governor of North Carolina, the USFWS, and NCWRC signed a memorandum of understanding facilitating the creation of the Roanoke River National Wildlife Refuge (USDOI and NCWRC 1989). That memorandum references the Roanoke River National Wildlife Refuge environmental assessment (USFWS 1988) which identifies the Mush Island site for refuge acquisition and states a primary purpose of the refuge as protection of migrating and spawning habitat for striped bass and other anadromous fish. To restore and protect water quality and fish spawning, Mush Island is included within Congressionally-approved acquisition boundary of Roanoke River National Wildlife Refuge.

However, despite the conservation value of Mush Island and attempts by the Trustees and other parties to reach agreement on the terms of a conservation easement, the current owners of the property were not interested in selling the property. Therefore, this alternative is not technically feasible.

Table 9. Evaluation of Alternative 7: Mush Island Perpetual Conservation Easement

Alternative 7: Mush Island Perpetual Conservation Easement	
Restoration Criteria	**Evaluation**
Technical Feasibility	Not technically feasible—no willing seller.
Cost Benefit	The project has favorable benefit-to-cost ratios given the success of similar conservation activities in nearby parcels and that the project is focused on multiple resources and services. Project has clear goals and objectives, both of which are measurable.
Cost Effectiveness	Project has been developed to be cost-effective, as conservation elements have been shown to be relatively inexpensive (compared to active restoration) and supported by best available information and nearby similar projects.
Actual or Planned Response Actions	There are no remedial response activities proposed that will affect this alternative.
Public Health and Safety	The Trustees are not aware of any public health and safety issues associated with the project.
Adverse Impacts from Project	Majority of impacts are anticipated to be positive and long-term.
Natural Recovery Period and the Ability of Resources to Recover without Restoration	The time needed for natural resource benefits to accrue from this alternative are uncertain.
Compliance with Laws and Policies	Compliant with applicable/relevant laws, policies, and regulations.
Consistency with the Trustees' Restoration Goals and Objectives	Allows for the protection of existing natural resources, including spawning habitat for American shad and striped bass, and associated resource services that were injured by releases of hazardous substances from the Site.

2.2.8 Evaluation of Alternatives

The preferred alternatives of this Draft Phase 2 RP/EA include Alternatives 2 through 6, as they 1) meet the restoration evaluation criteria and 2) meet the Trustees' restoration goals and objectives, as described in Section 1.4. Alternative 7, Mush Island Conservation Easement, could not be completed, thus making it a non-preferred alternative.

Alternative 1, the No Action alternative, does not meet the requirements and goals of the CERCLA NRDAR process to restore injured natural resources and services. In addition, the restoration funds must be spent on restoration, replacement, rehabilitation, and/or acquisition of the equivalent of injured resources. 42 U.S.C. § 111(i). A No Action alternative does not allow for the spending of the restoration funds in accordance with the Consent Decree.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

NEPA requires that a federal agency evaluate the reasonably foreseeable environmental effects of the proposed agency action (42 U.S.C. § 4332(2)(C)(i)). This includes evaluation of what would happen if the Trustees did nothing further, referred to as the "No Action alternative." This section of the Draft Phase 2 RP/EA describes the potential impacts of both the No Action alternative and the other alternatives that propose a major federal action because they have not yet been implemented (i.e., alternatives 1, 5, 6 and 7 identified in Section 2). The analysis presented here considers the range of potential environmental consequences that may be anticipated to occur as a result of implementation of activities evaluated in the environmental assessment.

The following definitions are used in this section to characterize the nature of the various impacts evaluated in this Draft Phase 2 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 period. In general, short-term impacts are those that would occur only with respect to a particular activity or for a finite period. Long-term impacts are those that are more likely to be persistent and chronic.
- 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 human environment. Minor impacts are generally those that might be perceptible but, in their context, are not amenable to measurement because of their relatively minor character. Moderate impacts are those that are more perceptible and, typically, more amenable to quantification or measurement. Major impacts are those that, in considering the potentially affected environment and the degree of effects of the proposed action, have the potential to have significant effects (see NOAA, Policy and Procedures for Compliance with the National Environmental Policy Act and Related Authorities (June 30, 2015)) and, thus, warrant heightened attention and examination for potential means for mitigation to fulfill the requirements of NEPA.
- 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.

This Section presents pertinent information about the affected area of the preferred alternatives that have not been completed and the Trustees' analysis of the environmental consequences of implementing those projects. The Environmental Assessment applies only to the No Action alternative (Alternative 1); Warren Neck Conservation (Alternative 5); Floodplain Reconnection, Wetland Protection, and Fish Passage Improvements (Alternative 6); and the non-preferred alternative (Alternative 7). Alternatives 2, 3, and 4 are not proposed major Federal actions because they have already been implemented by Domtar; therefore, these alternatives are outside the scope of the NEPA reasonable range of alternatives.

In Section 3.3, the environmental consequences of the No Action, Alternatives 5, 6, and 7 are assessed to determine whether implementation of any of these alternatives may significantly affect the quality of the human environment, particularly with respect to physical, biological, socio-economic, or cultural environments.

3.1 Affected Environment

3.1.1 The Physical Environment

A description of the physical environment, including surface waters, major dams, dominant habitats of Albemarle Sounds and the Roanoke River, and the Roanoke River National Wildlife Refuge is included in Section 3.1 of the Phase 1 RP and is incorporated by reference herein.

3.1.2 The Biological Environment

Habitats in the area include woodlands, wetlands, rivers, and creeks. These habitats support a wide variety of plant and animal species. Aquatic organisms potentially affected by contamination of surface water and sediments include benthic macroinvertebrates and fish.

With 214 bird species, including 88 breeding species (44 of these being neotropical migrants), the Roanoke River floodplain has the highest diversity of breeding birds in the North Carolina coastal plain. These species include a large resident wood duck population, wintering waterfowl such as mallard (Anas platyrhynchos) and black duck (*Anas rubripes*), and a number of landbirds including the bald eagles (Haliaeetus leucocephalus). Birds typical of rich floodplain forests are common here during the breeding season, including Louisiana waterthrush (*Parkesia motacilla*), American redstart (*Setophaga ruticilla*), Kentucky warbler (*Geothlypis formosa*), Red-eyed vireo (*Vireo olivaceus*), yellow-throated vireo (*Vireo flavifrons*), great crested flycatcher (*Myiarchus crinitus*), Acadian flycatcher (Empidonax virescens), and six species of woodpeckers. More uncommon species that occur here include Swainson's warbler (*Limnothlypis swainsonii*), cerulean warbler (*Setophaga cerulea*), and Mississippi kite (*Ictinia mississippiensis*). Martin County is within the known or expected range of red-cockaded woodpecker (*Picoides borealis*).

In addition to having significant bird concentrations, the assessment area is a productive area for freshwater, estuarine and marine finfish, plant species, and other wildlife. Important recreational gamefish include largemouth bass (*Micropterus salmoides*), black crappie (*Pomoxis nigromaculatus*), bluegill (*Lepomis macrochirus*), redear sunfish (*Lepomis microlophus*), pumpkinseed (*Lepomis gibbosus*), channel catfish (*Ictalurus punctatus*), white catfish (*Ameiurus catus*), white perch (*Morone americana*), yellow perch (*Perca flavescens*). Plant species in the assessment area include: wild hyacinth (*Camassia scilloides*), trout lily (*Erythronium americanum*), atamasco lily (*Zephyranthes atamasca)*, fire pink (*Silene virginica*), spring beauty (*Claytonia virginica*), Virginia bluebells (*Mertensia virginica*), pawpaw (*Asimina triloba*), spicebush (*Lindera benzoin*), yellow buckeye (*Aesculus flava*), eastern wahoo (*Euonymus atropurpureus*).

The river supports one of the most diverse resident and anadromous fish communities. Anadromous fisheries of the river include striped bass *(Morone saxatilis*), Atlantic sturgeon (*Acipenser oxyrinchus*), shortnose sturgeon (*Acipenser brevirostrum*), blueback herring (*Alosa aestivalis*), alewife (*Alosa pseudoharengus*), hickory shad (*Alosa mediocris*), and American shad (*Alosa sapidissima*).

The Roanoke River has the only self-sustaining population of striped bass in North Carolina. Although near the verge of collapse in the 1980s, striped bass recovery, due primarily to improvements in flow management during the spawning season and conservative harvest regulations, occurred steadily until the population was officially declared recovered in 1997. However, in recent years, the Roanoke striped bass population has declined. In 2023, during a spawning grounds survey, NCWRC biologists observed the lowest abundance of striped bass in the Roanoke River on record. High mortality rates in recent years resulted in a persistent low abundance of older fish, which are important for population recovery. Low abundance and the impacts of high mortality resulted in poor spawning success over the past six years, even in years when Roanoke River conditions were considered optimal for spawning. The decline in population recently prompted closures of the striped bass commercial and recreational 2025 harvest season in the Roanoke River and Albemarle Sound Management Areas.

Atlantic and shortnose sturgeon are present, but rare, in the area. The population, size and range of these species declined drastically throughout the 20th century. In 1967, shortnose sturgeon was originally listed under the Endangered Species Preservation Act, the precursor to the ESA. The species was regarded as extirpated from the Roanoke River region prior to the capture of a single adult in 1998. The Atlantic sturgeon, while not as rare as the shortnose, also has very limited presence in the Roanoke. As a result, the NOAA National Marine Fisheries Service (NMFS) conducted a status review of the species in 2007 to determine if a threatened or endangered listing is needed. The status review determined the most significant threats to Atlantic Sturgeon are bycatch mortality, poor water quality, lack of adequate state and federal regulatory mechanisms, and dredging activities. Additional stressors include habitat impediments and ship strikes. Atlantic Sturgeon were listed as a federally endangered species in 2012. In 2017, NMFS designated the Roanoke River as Critical Habitat for the species. A recent estimate of effective population size indicates there are between 16 and 21 individuals in the Roanoke River. Recent records have also shown Atlantic sturgeon in the Roanoke River as far upstream as Weldon, NC. The recreational and commercial harvesting (take) of any species of sturgeon is prohibited. Any sturgeon caught must be immediately released.

American shad and Hickory shad are important migratory fisheries of the Roanoke River. Historically, shad were abundant and supported exceptional commercial and recreational fisheries. Spawning habitat loss, fragmentation caused by the construction of dams, overharvest, and other factors have contributed to the decline of shad population along the Atlantic Coast. Due to the ecological importance of American Shad in the Roanoke River as well as providing opportunities for recreational fisheries, the NCWRC has put tremendous effort into monitoring and restoring American Shad populations in this system. Since the inception of a hatchery-based stocking program developed by NCWRC in 1998, nearly 76 million fry have been stocked into the Roanoke River Basin. The most recent coastwide stock assessment of American shad stated that populations in the Albemarle Sound, including Roanoke River, are sustainable and not depleted. Commercial and recreational harvest is permitted; however, restrictions are in place and fluctuate year to year.

In North Carolina blueback herring and alewife, collectively known as river herring, are managed under the North Carolina River Herring Fishery Management Plan for River Herring. This plan was adopted in February of 2000, and focuses on issues pertaining to stock conditions, habitat degradations, and research/monitoring expansion to provide assessment and socioeconomic data. In 2007, the plan implemented a no-harvest provision for commercial and recreational fisheries of river herring in coastal waters of the state. This was a result of the North Carolina Division of Marine

Fisheries (NCDMF) 2005 stock assessment of river herring that determined blueback herring and alewife were overfished and overfishing was occurring.

It is worthy to note the importance habitat and water quality play in the recovery of the river herring stocks in North Carolina and coastwide (NCDMF 2009). In North Carolina, considerable habitat has been lost through wetland drainage, stream channelization, and conversion to other uses. Some streams are blocked by dams, storm debris, and other physical barriers. Migration and spawning may be affected by the replacement of small road bridges and culverts. Oxygen consuming wastes are discharged into several streams and practices to control non-point discharges are inadequate causing nuisance algal blooms, fish kills, and fish diseases over the years. The NCDMF initiated a survey of culverts and obstructions as part of the North Carolina River Herring Fishery Management Plan. The list created from the survey has resulted in the replacement of failing culverts and prioritized others for replacement or repair.

Federally sensitive species occurring in the project area include two species of bats, two species of birds, and several other protected species (Table 10).

Table 10. List of federally protected species potentially occurring in Martin County, North Carolina, and in the vicinity of the alternatives. Data from U.S. Fish and Wildlife Service Information, Planning, and Conservation System (http://ecos.fws.gov/ipac) generated on May 27, 2025. Key: E – Federally Endangered; EXPN – Experimental population, Non-essential; PE – Proposed Endangered; PT – Proposed Threatened; T –Federally Threatened

Common Name	**Scientific Name**	**Status**
American alligator	*Alligator mississippiensis*	T – similarity of appearance
Monarch butterfly	*Danaus plexippus*	PT
Northern long-eared bat	*Myotis septentrionalis*	E
Red-cockaded woodpecker	*Picoides borealis*	E
Red wolf	*Canis rufus*	E, EXPN
Rufa red knot	*Calidris canutus rufa*	T
Tricolored bat	*Perimyotis subflavus*	PE
West Indian manatee	*Trichechus manatus*	T

3.1.3 Recreation

Recreation activities occurring at and near the Site and at Albemarle Sound/Roanoke River include recreational fishing, camping, boating, kayaking, canoeing, and other common outdoor activities. Descriptions of recreation activities are included in Sections 2.1 and 3.3 of the Phase 1 RP and are incorporated by reference herein.

3.1.4 Archaeological and Cultural Resources

Currently, the Trustees are not aware of archaeological, historical, or cultural resources situated within the footprints of the alternatives. However, prior to the implementation of the alternatives selected in the Final Phase 2 RP/EA, potential impacts to historic and archaeological resources will be reviewed. Section 106 of the National Historic Preservation Act requires federal agencies to consider the effects of alternatives on historic properties.

Historic properties may also be considered under NEPA. The National Register of Historic Places is a federally-maintained list of districts, sites, buildings, structures, objects, and landscapes significant in American history, prehistory, architecture, archaeology, engineering, and culture. Archaeological sites are places where past peoples left physical evidence of their occupation. Sites may include ruins and foundations of historic-era buildings and structures.

Historic properties can also include traditional cultural properties and resources. Native American cultural resources may include human skeletal remains, funerary items, sacred items, and objects of cultural patrimony. Native peoples who have or still do occupy and/or use areas at or in close proximity to proposed restoration projects include the Moratok, Secotan, and Lumbee Tribes.

The Trustees will consult with the North Carolina State Historic Preservation Office and Tribal Historic Preservation Offices from potentially affected Tribes, where appropriate, to identify historic, archaeological, and cultural resources potentially impacted by the project implementation and complete Section 106 review and compliance prior to initiating restoration implementation. More about National Historic Preservation Act compliance can be found in Section 5.9. Information concerning authorities or policies requiring Tribal consultation or describing procedures for consultation with Indian Tribes can be found in Section 5.10.

3.2 Components Not Analyzed in this Document

As mentioned in the previous section, Alternatives 2, 3, and 4 were previously implemented by Domtar. Thus, these alternatives are outside the scope of this environmental assessment and dismissed from further evaluation.

The following components have been identified as not being present or affected by Alternatives 1, 5, 6, or 7; therefore, these components are not brought forward for additional analysis in this Draft Phase 2 RP/EA:

- Transportation – there will be no measurable change in transportation volume or patterns, and thus no anticipated transportation impacts associated with Alternatives 1, 5, 6, and 7.
- Air Quality – there will be no measurable emissions and no other air quality impacts associated with Alternatives 1, 5, 6, and 7.

- Demographics and Socioeconomics – no measurable anticipated impacts to demographic or socioeconomic variables, including noise, public health and safety, and local or regional economy indicators (e.g., housing or tourism), are associated with Alternatives 1, 5, 6, and 7.

3.3 Environmental Consequences

3.3.1 Evaluation of Alternative 1: No Action

The Trustees found that the No Action alternative does not meet the purpose and need for restoration under either this draft Phase 2 RP/EA or the responsibilities of the Trustees under CERCLA, including as defined by NRDAR procedures under CERCLA and guided by the restoration evaluation criteria listed in Section 2.1. The Trustees have not advanced the No Action alternative as a viable option since it does not meet the purpose and need or the responsibilities of the Trustees under CERCLA. A summary of the environmental consequences associated with the No Action alternative is provided in Table 11.

3.3.2 Evaluation of Alternative 5: Warren Neck Conservation (Preferred)

This alternative would result in conservation of forested habitat of the Warren Neck property that benefits water quality and fish of Roanoke River. The shoreline of the Warren Neck property is publicly accessible by boat from the Roanoke River, thus providing protected habitat to support recreational fishing. Benefits of continued recreation would likely be realized primarily by local/regional residents. The Warren Neck property has been and will continue to be managed to ensure long- term protection of wildlife habitat, particularly those beneficial to fish and migratory birds. Upon approval by the Trustees, Domtar will continue to oversee management activities needed to reduce invasive species; remove dead, diseased, or dying trees, if warranted; and address other situations where threats could reduce ecological value of the Warren Neck property. A deed restriction on the Warren Neck property will prohibit the use or any activity that would impinge upon or interfere with preservation of the habitat located on the property in its present conditions. Overall, long-term beneficial impacts are anticipated from preservation of the Warren Neck property. Impacts from recreation are expected to be negligible to minor, direct and indirect, long-term, and both beneficial and adverse (e.g., littering).

A summary of the environmental consequences associated with Alternative 5: Warren Neck Conservation is provided in Table 11.

3.3.3 Evaluation of Alternative 6: Floodplain Reconnection, Wetland Protection, and Fish Passage Improvements (Preferred)

Alternative 6 would result in the improvement of floodplain connectivity on the lower Roanoke River in North Carolina, fish habitat enhancement, enhancement of flood protection, and improvement of water quality and fish passage through culverts and at water crossings. These improvements and enhancements would occur primarily through the strategic restoration of modified landforms (artificial levees, artificially breached natural levees, artificial ditches) in the floodplain below the city of Roanoke Rapids. Restoration actions would primarily include barrier retrofits, such as improved culverts that are properly-sized and designed for fish passage; low water crossings which are passable by fish; and simple stream crossings for vehicles, such as timber bridge crossings.

Impacts associated with the above-mentioned types of restoration actions have been evaluated in NOAA's Restoration Center Programmatic Environmental Impact Statement (RC PEIS) for habitat restoration activities implemented throughout the coastal United States (NOAA 2015). The RC PEIS analyzes a suite of restoration approaches -- including restoration approaches proposed for Alternative 6 -- that NOAA believes most effectively conserves and restores the coastal and marine resources under NOAA trusteeship. DOI and NOAA representatives have reviewed the 2015 RC PEIS as part of this environmental evaluation; this included reevaluating the analysis and underlying assumptions on which the 2015 RC PEIS was based, consistent with the requirements of the Fiscal Responsibility Act of 2023 (42 U.S.C. § 4336). The analysis and underlying assumptions of the 2015 RC PEIS remain valid.

Section 2.2.2.3 of the RC PEIS describes the removal, modification, or replacement of dams, culverts, and similar infrastructure (e.g., weirs, concrete trapezoidal channels, seasonal push-up dams, failed step/pool structures) for the purposes of enhancing fish passage and habitat function in riverine systems. Similar to the restoration activities for fish passage enhancement, Section 2.2.2.11 of the RC PEIS describes removal and/or modification of levees, dikes, culverts, and similar infrastructure for the purposes of enhancing or restoring hydrologic connections in tidal or riverine wetland habitats. These types of activities, especially culvert replacement, comprise the primary restoration activities proposed for Alternative 6. Section 4.5.2.3 of the RC PEIS describes the environmental consequences associated with dam and culvert removal, modification, or replacement projects. Section 4.5.2.11 of the RC PEIS describes environmental consequences associated with wetland restoration, including levee and culvert removal. These two categories of restoration activities (i.e., fish passage and wetland restoration) typically produce short-term adverse environmental impacts and considerations, but the long-term ecological benefits – improved water quality, sediment transport, and native resident and migratory species recovery – demonstrate that removal of these barriers can be an effective long-term and beneficial restoration tool. The above-mentioned sections of the RC PEIS and the analyses contained within them are incorporated by reference herein.

The RC PEIS also evaluates other restoration techniques that may be used in the overall restoration strategy for Alternative 6. These techniques include 1) side channel and in-stream restoration activities aimed at restoring habitat complexity and sediment sorting processes that are critical for all life stages of fish and many other aquatic organisms and 2) stream bank restoration and erosion reduction techniques that are implemented in the area adjacent to the stream or river that are intended to improve the quality and/or quantity of riparian vegetation or other habitat features and improve the water quality of the adjacent stream. Stream and bank restoration approaches, including woody debris installation, vegetation bioengineering techniques, erosion and sediment control practices, and native vegetation planting, are described in Section 2.2.2.5 of the RC PEIS. Native planting restoration activities are further described in Section 2.2.2.11.5, Wetland Planting, of the RC PEIS. These two sections of the RC PEIS are incorporated by reference herein. Sections 4.5.2.5 and 4.5.2.11.3 of the RC PEIS describe the environmental consequences associated with instream and bank restoration and wetland planting. Stream and bank restoration practices often involve construction activities which can cause both direct and indirect, short- and long-term, minor and moderate, localized, beneficial and adverse impacts. For the types of construction activities needed to implement Alternative 6, primarily short-term, both direct and indirect, and minor adverse impacts are anticipated. Once construction has been completed, the impacts associated with instream and bank restoration activities are anticipated to be long-term and provide direct and indirect minor to moderate benefits. Planting may cause short-term, direct adverse impacts (e.g., trampling of existing vegetation) within and near the project footprint; however, after planting activities have been completed, long-term and minor to moderate beneficial impacts are anticipated due to the erosion reduction and enhancement of native ecosystem integrity. Sections 4.5.2.5 and 4.5.2.11.3 of the RC PEIS are incorporated by reference herein.

A summary of the environmental consequences associated with Alternative 6: Floodplain Reconnection, Wetland Protection, and Fish Passage Improvements is provided in Table 11.

3.3.4 Evaluation of Alternative 7: Mush Island Perpetual Conservation Easement (Non-Preferred)

Placing a conservation easement on Mush Island would result in similar conservation benefits to the natural resources and associated services as described in the section above for Alternative 5, Warren Neck Property. Increases in recreation, such as bird watching, small non-motorized watercraft usage, and hiking, within areas of the Mush Island conservation easement are anticipated to be small. Benefits of enhanced recreation would likely be realized primarily by local/regional residents. Impacts from these small changes in recreation are expected to be minor, direct and indirect, long-term, and both beneficial and adverse (e.g., littering) from recreation activities at and in the vicinity of the property. Overall, continued recreation activities and protection of natural resources of Mush Island and mixed habitat types along the Roanoke River near Weldon, North Carolina are anticipated to result in long-term, direct and indirect, moderate, and beneficial impacts.

A summary of the environmental consequences associated with Alternative 7: Mush Island Perpetual Conservation Easement is provided in Table 11.

3.4 Summary of Impacts

Implementing the alternatives as proposed and analyzed in this Draft Phase 2 RP/EA would have no major adverse impacts on Martin County habitats, on adjacent lands and waterways, or on the natural resources within each. The proposed projects may result in minor, short-term adverse impacts and both short- and long-term beneficial impacts. Direct and indirect adverse impacts are likely to be short-term and to occur only during periods of active construction activities. Periods of active construction will vary (likely intermittently for weeks to a few months), but at worst, would result in only short-term impacts.

The resources or services that may be temporarily impacted during construction activities include water quality (from temporary increases in turbidity) and noise (during construction). Some short-term, negligible to minor impacts to fish, wildlife, and vegetation in the project areas could occur, but impacts to these and other resources would be minimized by the use of best management practices (BMPs). Consequently, the minor and short-term impacts of restoration and habitat enhancement activities on soils and sediments, water quality, and noise have a low potential to result in significant impacts to these resources.

In summary, the preferred alternatives evaluated in this Draft Phase 2 RP/EA are anticipated to have mainly long-term and beneficial impacts. Floodplain and riparian habitat and natural resource services provided, such as reducing soil runoff, increasing soil carbon storage, and provision of habitat for migratory birds, will be protected by the property owner and long-term stewardship. Preserved habitat will supplement conservation values being provided for by other conservation parcels in the region.

3.5 Certification

3.5.1 Certification Related to Page Limits

The Federal Trustees certify that they have considered the factors mandated by NEPA; that the EA represents the Trustees' good-faith effort to prioritize documentation of the most important considerations required by the statute within the congressionally mandated page limits; that this prioritization reflects the Trustees' expert judgment; and that any considerations addressed briefly or left unaddressed were, in the Trustees' judgment, comparatively not of a substantive nature that meaningfully informed the consideration of environmental effects and the resulting decision on how to proceed.

3.5.2 Certification Related to Deadline

The Federal Trustees certify that this EA represents the Trustees' good-faith effort to fulfill NEPA's requirements within the congressionally mandated timeline that such effort is substantially complete; that, in the Trustees' expert opinion, they have thoroughly considered the factors mandated by NEPA; and that, in the Trustees' judgment, the analysis contained therein is adequate to inform and reasonably explain the Trustees' final decision regarding the proposed activity or decision.

Table 11. Summary of Environmental Consequences for NEPA Alternatives 1, 5, 6, and 7.

Resource	Alternative 1: No Action	Alternative 5: Warren Neck Conservation and Recreational Uses (Preferred)	Alternative 6: Floodplain Reconnection, Wetland Protection, and Fish Passage Improvements (Preferred)	Alternative 7: Mush Island Conservation Easement (Non-Preferred)
Physical	No change from current conditions.	Long-term benefits to soil and water quality as a result of protection and stewardship.	Short-term, minor, direct and indirect, and adverse impacts to water quality and soil during construction periods. Long-term, moderate to major, direct and indirect, and beneficial impacts to water quality.	Long-term and moderate to major benefits to physical resources, such as water quality, as a result of protection and stewardship.
Biological	No change from current conditions.	Long-term, minor to moderate benefits to biological resources as a result of protection and stewardship.	Short-term, minor, direct and indirect, and adverse impacts to plants and wildlife during construction periods. Long-term, moderate to major, direct and indirect, and beneficial impacts to plants and wildlife, including fish species.	Long-term and moderate to major benefits to biological resources as a result of protection and stewardship.
Archaeological and Cultural	No effect.	No effect due to no proposed change in use.	To be determined after consultations, but assumed to have no effect on archaeological, historical, and cultural resources.	To be determined after consultations, but assumed to have no effect on archaeological, historical, and cultural resources.
Recreation	No effect.	Long-term, direct, minor, and beneficial impacts, primarily through maintained access.	No effect.	Long-term, direct, minor, and beneficial impacts, primarily through enhanced access.

4.0 PROJECT FULFILLMENT AND MONITORING

As described earlier, Domtar has completed Alternatives 2, 3, and 4. Alternative 5 will not have any associated monitoring post-recordation of the deed restriction.

Implementation of Alternative 6 will include project monitoring and adaptive management protocols. The work plan will commit adequate resources to support an as-built monitoring effort to meaningfully monitor and document restoration outcomes. NOAA Restoration Center's guidance for Tier 1 Monitoring will support the Trustees' development of a monitoring and adaptive management plan (NOAA, 2024). Tier 1 metrics for hydrologic restoration (Floodplain Reconnection, Wetland Protection, and Fish Passage Improvements) include land elevations and water levels. Trustees may coordinate with partners such as NOAA science centers and local universities to design, develop, and implement monitoring protocols.

5.0 COMPLIANCE WITH OTHER APPLICABLE/RELEVANT LAWS, POLICIES, AND REGULATIONS

The preferred alternatives must comply with all applicable federal, state, Tribal, and local laws, policies, and regulations. Alternatives 2, 3, and 4 are complete, so most of the environmental compliance requirements below only apply to Alternatives 5 and 6. The following subsections provide a non-exhaustive list of federal natural resource and environmental laws, orders, and regulations considered during the development of this Draft Phase 2 RP/EA. An explanation of how compliance will be met for these applicable laws, policies, and regulations is described below. Additional environmental compliance, including at the state, Tribal, or local level, may be required depending on the specific activities required for a restoration project.

5.1 Clean Water Act

The Clean Water Act (33 U.S.C. § 1251, et seq.) is the principal law governing pollution control and water quality of the Nation's waterways. Section 404 of the Clean Water Act authorizes a permit program to regulate the discharge of dredged or fill material in navigable waters. The U.S. Army Corps of Engineers (USACE) administers the program.

Compliance: Alternative 5, Warren Neck Property, does not propose a discharge of dredged or fill materials into waters of the United States; therefore, authorization from the USACE is not required. Alternative 6, Floodplain Reconnection, Wetland Protection, and Fish Passage Improvements, will require coordination with the USACE to ensure compliance with Section 404 of the Clean Water Act.

5.2. Coastal Zone Management Act

The goal of the federal Coastal Zone Management Act (CZMA) (16 U.S.C. § 1451, et seq., 15 C.F.R. Part 923) is to preserve, protect, develop and, where possible, restore and enhance the Nation's coastal resources. The federal government provides grants to states with federally approved coastal management programs. Section 1456 of the CZMA requires any federal action inside or outside of the coastal zone that affects any land or water use or natural resources of the coastal zone to be consistent, to the maximum extent practicable, with the enforceable policies of federally-approved state management programs. Further, no federal license or permit may be granted without giving the State the opportunity to concur that the project is consistent with the State's coastal policies.

Compliance: Consultation with the North Carolina Department of Environmental Quality will be completed to ensure implementation of Alternatives 5 and 6 will be consistent with the North Carolina Coastal Management Act.

5.3 Endangered Species Act (and other regulations protecting fish, wildlife, and plants)

The federal Endangered Species Act (ESA) (16 U.S.C. § 1531, et seq., 50 C.F.R. Parts 17, 222, 224) directs all federal agencies to conserve threatened and endangered (T&E) species and their habitats and encourages such agencies to utilize their authority to further these purposes. Under the ESA, the NOAA NMFS and the USFWS publish lists of endangered and threatened species. Section 7 of the ESA requires that federal agencies consult with these agencies to minimize the effects of federal actions on endangered and threatened species.

Compliance: Because of the restoration and enhancement nature of the proposed habitat projects and the best management practices (BMPs) that will be used, the Trustees anticipate only minor and temporary adverse impacts to the biological environment, including fish, wildlife, and their supporting habitats. The Trustees will conduct necessary ESA Section 7 consultations with USFWS and the NOAA NMFS prior to implementation of any future restoration projects associated with Alternative 6. However, since no change in use and management of the Warren Neck property is proposed, no consultation with USFWS and NOAA NMFS is necessary for Alternative 5.

5.4 Fish and Wildlife Conservation Act

The Fish and Wildlife Conservation Act of 1980 (16 U.S.C. § 2901 and 50 C.F.R. § 83) provides for protection and management of non-game fish and wildlife and their habitats.

Compliance: The intent of NRDAR is to restore, replace, enhance, and/or acquire equivalent natural resources (fish, wildlife, and their supporting habitats) and resource services as were injured by releases of hazardous substances. The Trustees believe the restoration activities described in the RP/EA will enhance habitats and fish and wildlife, thereby benefiting natural resources and enhancing the recreational experience.

5.5 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) (16 U.S.C. § 1801, et seq.) as amended and reauthorized by the Sustainable Fisheries Act (Public Law 104297), established a program to promote the protection of essential fish habitat (EFH) in the review of projects conducted under federal permits, licenses, or other authorities that affect or have the potential to affect such habitat. After EFH has been described and identified in fishery management plans by the regional fishery management councils, federal agencies are obligated to consult with the Secretary of the U.S. Department of Commerce with respect to any action authorized, funded, or undertaken or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any EFH.

Compliance: Consultation with the NOAA NMFS will be completed to ensure implementation of Alternative 6 will not adversely affect EFH. Any EFH consultation will need to be completed during the design phase, in order to complete the design phase prior to initiating the project. The results of the consultation will be documented and added to the administrative record for this NRDAR case. Alternative 5 will also not adversely affect EFH but EFH consultation is not required because the Federal Trustees are not authorizing, funding, or undertaking the recordation of a deed restriction on the Warren Neck property.

5.6 Marine Mammal Protection Act

The Marine Mammal Protection Act (16 U.S.C. § 1361, et seq.) establishes a moratorium on the taking and importation of marine mammals and marine mammal products, with exceptions for scientific research, allowable incidental taking, subsistence activities by Alaskan natives, and hardship. The Act provides authority to manage and protect marine mammals, including maintenance of the ecosystem.

Compliance: The proposed alternatives do not involve construction that would harm or take marine mammals.

5.7 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 U.S.C. § 715, et seq.) provides for the protection of migratory birds. The Act does not specifically protect the habitat of these birds but may be used to consider time of year restrictions for activities on restoration sites where it is likely migratory birds may be nesting and/or to stipulate maintenance schedules that would avoid the nesting seasons of migratory birds.

Compliance: Consultation with the USFWS constitutes compliance with this Act.

5.8 National Environmental Policy Act (NEPA)

Actions undertaken by the Trustees to restore natural resources or services under CERCLA and other federal laws are subject to NEPA and agency-specific NEPA implementing procedures. These authorities outline the responsibilities of federal agencies in their decision-making process concerning proposed actions, including the federal agencies' responsibility to consider the relevant NEPA documentation. NEPA requires that an agency take a hard look at proposed major federal actions that have the potential to significantly affect the human environment. If an impact is considered significant, then an Environmental Impact Statement (EIS) is prepared. If the impact is considered in an Environmental Assessment (EA) and determined to be not significant, then a Finding of No Significant Impact is issued. Certain types of agency actions are categorically excluded from preparation of an EA or EIS. 42 U.S.C. 4336(a)(2).

Compliance: In accordance with NEPA, this Draft Phase 2 RP/EA summarizes (through incorporation by reference) the affected environment for the alternatives that are proposed major Federal Actions (alternatives 1, 5, 6, and 7); describes the purpose and need for restoration actions; identifies a reasonable range of alternatives; assesses the environmental consequences of the NEPA alternatives, where necessary; and summarizes the opportunity the Trustees will provide for public participation in the decision-making process. After conducting the NEPA analysis, the Trustees may conclude that the impacts associated with the preferred alternatives identified herein do not meet the threshold requiring an EIS. If the impacts are considered not significant, then an Environmental Assessment (EA) is drafted and a Finding of No Significant Impact (FONSI) is issued. In this instance, since NOAA is the lead federal agency for NEPA and FWS is a cooperating agency, then each agency will issue a separate FONSI.

5.9 National Historic Preservation Act (NHPA)

The National Historic Preservation Act of 1966 (NHPA) established a process to preserve historical and archaeological sites affected by projects directed or funded by the federal government. Cultural resources are those parts of the physical environment, natural and built, that have cultural value to some socio-cultural groups and human social institutions. Cultural resources include historic sites, archeological sites and associated artifacts, sacred sites, traditional cultural properties, cultural items, and buildings and structures. Most cultural resources concerns can be identified through the Section 106 process of the NHPA. Absent objections from Historic Preservation Officers or from other interested persons (36 C.F.R. §§ 800.2(c)(2), (4), and (5)), the NHPA has legal standing in land acquisition projects, projects involving ground disturbance, and projects impacting buildings and structures 50 years and older.

Compliance: Compliance with the NHPA is undertaken through consultation with the North Carolina State Historic Preservation Office (SHPO), at a minimum. If an eligible historic property or archeological resource is within the area of one of the proposed alternatives, then an analysis should be made to determine whether the alternative would have an adverse effect on historic properties or archaeological resources. For potential impacts to Tribal cultural, historic, or religious resources or properties, NHPA regulations require federal agencies to acknowledge the expertise of affected Native American tribes in determining which properties are of religious and cultural significance to them. Prior to completion of this Phase 2 RP/EA, the DOI will consult with the SHPO and Tribal Historic Preservation Office (THPO), if applicable, under NHPA about the potential adverse effects of Alternative 5 on historic properties or archaeological, religious, and cultural resources. These consultation letters will be added to the administrative record. Prior to Alternative 6 project implementation, the DOI will complete required NHPA consultation(s).

5.10 Other Legal Authorities Requiring Tribal Consultation

In addition to the regulations implementing Section 106 of the NHPA requiring consultation with affected Native American tribes (36 CFR 800.(c)(2)) throughout the historic preservation review process, there are several authorities or policies requiring Tribal consultation or describing procedures for consultation with affected Native American tribes.

- Executive Order 13175 – Consultation and Coordination with Indian Tribal Governments (November 6, 2000): In summary, this Executive Order reaffirms the Federal government's commitment to tribal sovereignty, self-determination, and self-government. Its purpose is to ensure that all Executive departments and agencies consult with Indian tribes and respect tribal sovereignty as they develop policy on issues that impact Indian communities.
- Presidential Memorandum for the Heads of Executive Departments and Agencies on Tribal Consultation and Strengthening Nation-to-Nation Relationships (January 26, 2021): In this Memorandum, President Biden established as a priority of his Administration to make respect for Tribal sovereignty and self-governance, commitment to fulfilling Federal trust and treaty

responsibilities to Tribal Nations, and regular, meaningful, and robust consultation with Tribal Nations cornerstones of Federal Indian policy. The Memorandum directs each Federal agency to submit to the Office of Management and Budget a "detailed plan of actions the agency will take to implement the policies and directives of Executive Order 13175," which addresses consultation and coordination with Indian Tribal governments. Department of the Interior has taken initial steps focusing on lasting, substantive improvements it can make in its implementation of the policies and directives of E.O. 13175. More about DOI's initial steps towards improving consultation and coordination with Indian Tribal governments can be found at https://www.doi.gov/priorities/tribal-consultation/consultation-interior-improving-consultation

- Part 512, Chapter 4 of the DOI's Departmental Manual provides the requirements for DOI government-to-government consultation between appropriate tribal officials and DOI officials. It expands and clarifies DOI's policy on consultation with Indian Tribes and Alaska Native Claims Settlement Act of 1971 and acknowledges the provisions for conducting consultation in compliance with Executive Order 13175, applicable statutes, and administrative actions.
- Part 512, Chapter 5 of the DOI's Departmental Manual provides the procedures and process for DOI government-to-government consultation between appropriate tribal officials and DOI officials.

5.11 Rivers and Harbors Act

The federal Rivers and Harbors Act (RHA) (33 U.S.C. § 401, et seq.) 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 the USACE with authority to regulate discharges of fill and other materials into such waters.

Compliance: Coordination with the USACE, where necessary, would be completed pursuant to Section 10 of this Act before site-specific restoration actions for Alternative 6 are undertaken.

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APPENDIX

(reserved for any attachments, such as FONSI or environmental compliance documents)

APPENDIX B

STATE OF NORTH CAROLINA

MARTIN COUNTY

CONSERVATION AGREEMENT

This **CONSERVATION AGREEMENT and DECLARATION of COVENANTS, CONDITIONS, and RESTRICTIONS ("Conservation Agreement" or "Agreement"),** is made this __ day of ________, 2026, by Domtar Paper Company, LLC having an address at 100 Kingsley Park Dr., Fort Mill, SC 29715 ("Owner") for the benefit of North Carolina Department of Environmental Quality; National Oceanic and Atmospheric Administration Restoration Center, National Marine Fisheries Service, Office of Habitat Conservation; and Department of the Interior, each acting in its capacity as a Weyerhaeuser Plymouth Mill Site Natural Resource Trustee agency ("Trustee Agency" or, collectively, "Trustee Agencies") under 40 C.F.R. §§ 300.600-605 (the Owner, Trustee Agency, and Trustee Agencies, individually, "Party" and collectively, "Parties")").

RECITALS & CONSERVATION PURPOSES

A. Owner is the sole owner in fee simple of the certain Conservation Property ("Warren Neck Property" or "Property") being approximately 760 acres, more particularly described in Exhibit A attached hereto and by this reference incorporated herein; and

B. The purpose of this Conservation Agreement is to preserve the mature bottomland forest ecosystem, including water quality and fish nursery habitat, of the Property and prevent the use or development of the Property for any purpose or in any manner that would conflict with the maintenance of the Property in its natural condition in order to restore fish and enhance recreational fishing that were negatively affected by releases of hazardous substances from the Weyerhaeuser Plymouth Wood Treating Plant Site as provided in the Final Phase 2 Restoration Plan and Environmental Assessment for the Weyerhaeuser Co. Plymouth Mill, NC ("Final Phase 2 RP/EA"), incorporated herein by reference (available at https://www.diver.orr.noaa.gov/web/guest/diver-admin-record/6225). The preservation of the Warren Neck Property in its natural condition is a requirement of the Consent Decree among Owner, the United States of America, and the State of North Carolina entered in *United States and State of North Carolina v. Domtar Paper Company, LLC*, Civ. No. 4:26-cv-00172, in the United States District Court for the Eastern District of North Carolina pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601, *et seq.* ("Consent Decree"), and this Conservation Agreement may therefore be enforced by the United States of America or the State of North Carolina.

NOW, THEREFORE, Owner hereby unconditionally and irrevocably declares that the Warren Neck Property shall be held and subject to the following restrictions, covenants and conditions as set out herein, to run with the subject real Warren Neck Property and be binding on all parties that have or shall have any right, title, or interest in the Warren Neck Property.

ARTICLE I. PROHIBITED AND RESTRICTED ACTIVITIES

The Warren Neck Property shall not be used for purposes other than conservation and restoration of natural resources and for passive recreation of the type described for the Warren Neck Property in the Final Phase 2 RP/EA. The Warren Neck Property shall be managed and maintained to the fullest extent possible in its natural state except for the purposes of habitat restoration and management and passive recreation consistent with the restoration, enhancement, and preservation of the Warren Neck Property in its natural state and as described for this Warren Neck Property in the Final Phase 2 RP/EA.

Without limiting the generality of the foregoing, the following activities and uses are expressly prohibited or restricted:

A. Disturbance of Natural Features. Any change, disturbance, alteration or impairment of the natural features of the Warren Neck Property or any introduction of non-native or invasive plants and/or animal species is prohibited.

B. Disturbance of Trees and other Vegetation. There shall be no removal, burning, destruction, harming, cutting, mowing, or spraying of trees, shrubs, or other vegetation on the Warren Neck Property unless (i) required by the existing third-party utility easement for the overhead transmission line right-of-way, (ii) with the prior written approval of the Trustee Agencies, (iii) to access or install monitoring wells on the Warren Neck Property or on adjacent property owned by Owner when access is not practicable otherwise, or (iv) such activity is necessary to address, remedy, or respond to any immediate safety or emergency condition on the Warren Neck Property or adjoining parcels. Owner shall notify the Trustee Agencies of any activity listed here as quickly as practicable.

C. Construction. There shall be no constructing or placing of any building, mobile home, asphalt or concrete pavement, billboard or other advertising display, antenna, utility pole, tower, conduit, line, pier, landing, dock or any other temporary or permanent structure or facility on or above the Warren Neck Property, except to the extent that any state or federal agency with jurisdiction directs, orders, or requires the installation of new monitoring wells on the Warren Neck Property. All previously existing buildings, facilities, utilities, ponds, dams, stormwater conveyances, wells, mines, and other structures within the Warren Neck Property shall be shown on the recorded survey plat. Any such structures not shown on the recorded survey plat shall be deemed to have been abandoned and shall not be repaired or replaced.

D. Industrial, Commercial and Residential Use. Industrial, residential and/or commercial activities, including any right of passage for such purposes are prohibited. Prohibited commercial activities include, without limitation, timbering, logging, or any commercial activity involving the removal or destruction of any trees or other vegetation on the Warren Neck Property subject to the provisions of Article I, Paragraph B herein.

E. Agricultural, Grazing, and Horticultural Use. Agricultural, grazing, animal husbandry, and horticultural use of the Warren Neck Property are prohibited.

F. Roads and Trails. There shall be no construction of roads, trails or walkways on the Warren Neck Property unless with prior written approval by the Trustee Agencies. Existing roads or trails located in the Warren Neck Property may be maintained by Owner in order to minimize runoff, sedimentation and for access to the interior of the Warren Neck Property for purposes consistent with this Conservation Agreement. Existing roads, trails, or paths may be maintained with loose gravel or vegetation to stabilize or cover the surfaces, including those necessary for maintenance of existing area monitoring wells or new monitoring wells as contemplated in Article I, Paragraph C, the landfill on the adjoining Domtar Mill parcel, and the existing third-party utility easement for the overhead transmission line right-of-way.

G. Signage. No signs shall be permitted on or over the Warren Neck Property, except the posting of no trespassing signs, signs identifying the conservation values of the Warren Neck Property, signs giving directions or proscribing rules and regulations for the use of the Warren Neck Property and/or signs identifying the owner of the Warren Neck Property.

H. Dumping or Storage. Dumping or storage of soil, trash, ashes, garbage, waste, abandoned vehicles, appliances, machinery or hazardous substances, oil, petroleum, or toxic or hazardous waste, or any placement of underground or aboveground storage tanks or other materials on the Warren Neck Property is prohibited.

I. Excavation, Dredging or Mineral Use. There shall be no grading, filling, excavation, dredging, mining or drilling; no removal of topsoil, sand, gravel, rock, peat, minerals or other materials, and no change in the topography of the land in any manner on the Warren Neck Property, except to restore natural topography or drainage patterns with the prior written approval of the Trustee Agencies or as described in Article I, Paragraph F.

J. Water Quality and Drainage Pattern. There shall be no diking, draining, dredging, channeling, filling, leveling, pumping, impounding or related activities, or altering or tampering with water control structures or devices, or disruption or alteration of the restored, enhanced, or created drainage patterns unless consistent with the conservation purposes of this Agreement and the Final Phase 2 RP/EA and with the prior written permission of the Trustee Agencies.

K. Transfers and Subdivision. No development rights that have been encumbered or extinguished by this Conservation Agreement shall be transferred pursuant to a transferable development rights scheme or cluster development arrangement or otherwise. Owner shall not subdivide the Warren Neck Property. Any future conveyance of the title to the Property shall be as a single block of property and subject to this Conservation Agreement. At least thirty (30) days prior to any conveyance of the Property, Owner shall notify the Trustee Agencies in writing of any pending changes in ownership, transfer of title or other conveyance of the Property.

L. Vehicles. The operation of mechanized vehicles, whether motorized or not, including, but not limited to, bicycles, motorcycles, dirt bikes, all-terrain vehicles, cars and trucks is prohibited unless consistent with the conservation purposes of this Agreement and the Final Phase 2 RP/EA; otherwise, they shall be allowed for land management, restoration implementation, monitoring, and for the purposes of the provisions of Article I, Paragraphs B, C, and F.

M. Other Prohibitions. Any other use of, or activity on, the Warren Neck Property which is or may become inconsistent with the purposes of this grant, the preservation of the Warren Neck Property substantially in its natural condition, or the protection of its environmental systems, is prohibited.

Owner may request permission to vary from the above restrictions for good cause shown, provided that any such request is not inconsistent with the purposes of this Conservation Agreement, and Owner obtains prior written approval from the Trustee Agencies.

ARTICLE II. ACCESS EASEMENT

Owner hereby grants and conveys unto each Trustee Agency or its designee(s) a perpetual, non-exclusive easement for ingress and egress over and upon the Warren Neck Property to monitor compliance with the terms of this Conservation Agreement and for other purposes not inconsistent with this instrument. Each Trustee Agency, when accessing the Warren Neck Property, should provide notice to Owner, when practicable, by calling the safety officer at 252-793-8202. This access easement shall not vest any rights in the public and shall not be construed as a public dedication of the Access Easement. Owner covenants, represents and warrants that it is the sole owner of and is seized of the Property in fee simple and has the right to grant and convey this Access Easement.

ARTICLE III. NOTICE, ENFORCEMENT & REMEDIES

A. This Agreement is intended to ensure continued compliance with the terms and conditions of the Consent Decree and therefore may be enforced by the United States of America and the State of North Carolina. This covenant is to run with the land in perpetuity and shall be binding on all parties and all persons claiming under Owner. This Conservation Agreement is intended to be a "conservation agreement" as defined and contemplated in the Conservation and Historic Preservation Agreements Act, N.C.G.S. § 121-34, *et seq.* (the "Act").

B. If Owner, or its successors in interest, become aware of any event or action that constitutes or may constitute a breach of this Conservation Agreement, Owner, or its successors in interest, shall notify the Trustee Agencies within thirty (30) days of becoming aware of the event or action, and Owner, or its successors in interest, shall remedy any breach of this Conservation Agreement within sixty (60) days of becoming aware of the event or action, or such other time as may be reasonable to remedy the breach, or as agreed to by Owner, or its successors in interest, and the Trustee Agencies.

C. All notices required by the Conservation Agreement shall be provided to:

Director, Division of Mitigation Services, North Carolina Department of Environmental Quality: 1652 Mail Service Center, Raleigh, NC 27699-1652

DARRP Program Manager, Office of Habitat Conservation, National Marine Fisheries Service, National Oceanic and Atmospheric Administration: 1315 East-West Highway, Silver Spring, MD 20910

Director, Department of the Interior, Office of Restoration and Damage Assessment: 1849 C Street NW MS 2627, Washington, DC 20240; with an electronic copy to DOINRDAR@ios.doi.gov.

Corporate Secretary, Domtar, 234 Kingsley Park Dr., Fort Mill, SC 29715
With a copy to: Kodi Verhalen, Taft Stettinius & Hollister LLP, 80 S 8th St, Suite 2200, Minneapolis, MN 55402

D. Pursuant to law, including the above referenced statutes, this Conservation Agreement and Access Easement shall be perpetual, and it shall run with, and be a continuing restriction upon the use of, the Property. Any Trustee Agency may enforce these covenants and conditions against Owner and its successors and assigns, personal representatives, agents, lessees, and licensees, using all remedies available at law or equity, including injunctive relief. Any damages received from enforcing the covenants and conditions, including monetary amounts for cutting the forest pursuant to North Carolina General Statutes 14-135 and 1-539, shall be paid to the Trustee Agencies.

E. Nothing contained in this Conservation Agreement shall be construed to entitle the Trustee Agencies to bring any action against Owner for any injury or change in the Warren Neck Property caused by third parties, resulting from causes beyond Owner's control, including, without limitation, fire, flood, storm, and earth movement, or from any prudent action taken in good faith by Owner under emergency conditions to prevent, abate, or mitigate significant injury to life, damage to Warren Neck Property or harm to the Property resulting from such causes. Owner shall have an affirmative duty to prevent third parties from engaging in prohibited activities within the Warren Neck Property but shall not be liable where such actions could not have been reasonably prevented.

ARTICLE IV. DOCUMENTATION AND TITLE

A. Conservation Warren Neck Property Condition. Owner represents and acknowledges that the Warren Neck Property is currently undeveloped land, with no improvements other than the existing third-party utility easement for the overhead transmission line.

B. Environmental Conditions. Owner covenants and represents that, to the best of its knowledge, no hazardous substance or toxic waste exists nor has been generated, treated, stored, used, disposed of, or deposited in or on the Property and that there are not now any underground storage tanks located on the Property. If, at any time, there occurs or has occurred, a release in, on or about the Property 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 to the air, water or soil, or in any way harmful or threatening to human health or the environment, Owner agrees to take all steps necessary to assure its containment and remediation, including any cleanup that may be required.

C. Title. Owner covenants and represents that Owner is the sole owner and is seized of the Property in fee simple and has good right to make the herein Agreement; that the Property is free and clear of any and all encumbrances, except Agreements of record.

ARTICLE V. MODIFICATION AND TERMINATION

A. Modifications, changes, or alterations to the provisions in this Conservation Agreement must be made in writing and executed by Owner, or its successor in interest, and all Trustee Agencies. Any amendment to this Conservation Agreement by consent of the Owner, or its successor in interest, and the Trustee Agencies must be consistent with the Consent Decree, the Final Phase 2 RP/EA, and the conservation purposes of this Agreement.

B. This Conservation Agreement is perpetual unless the Trustee Agencies jointly determine that the intended benefits of the Conservation Agreement can no longer be realized and it is so ordered by the United States District Court for the Eastern District of North Carolina, or by consent of Owner, or its successor in interest, and the Trustee Agencies.

ARTICLE VI. MISCELLANEOUS

A. Conservation Purpose. Owner, for itself, its successors and assigns, agrees that the Warren Neck Property shall be held exclusively for conservation purposes.

B. Entire Agreement. This instrument sets forth the entire agreement of the parties with respect to the Conservation Agreement and supersedes all prior discussions, negotiations, understandings, or agreements relating to the Conservation Agreement. If any provision is found to be invalid, the remainder of the provisions of this Conservation Agreement, and the application of such provision to persons or circumstances other than those as to which it is found to be invalid, shall not be affected thereby.

C. Recording. Owner shall record this instrument and any amendment hereto in timely fashion in the official records of Martin County, North Carolina, and may re-record it at any time as may be required to preserve its rights. Owner, or its successors in interest, shall provide a copy of the recorded Conservation Agreement, re-recorded Conservation Agreement, or recorded amendment or termination to the Trustee Agencies.

D. Nature of Interests. Any interest held by a Trustee Agency under this Conservation Agreement does not give rise to liability under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. § 9601 *et seq*., or any other law.

E. Non-Operator Status. Nothing in this Conservation Agreement shall be construed to give any right or ability of a Trustee Agency to exercise physical or managerial control over the day-to-day operations of the Property, or any activities of any owner of any or all portions of the Property, or otherwise to become an "operator" with respect to the Property within the meaning of CERCLA.

F. Indemnification. Owner hereby releases and agrees to hold harmless, indemnify, and defend the Trustee Agencies, their members, directors, officers, employees, agents, and contractors and their heirs, personal representatives, successors, and assigns of each of them (collectively "Indemnified Parties") from and against any and all liabilities, penalties, fines, charges, costs, losses, damages, expenses, causes of action, claims, demands, orders, judgments, or administrative actions, including without limitation, reasonable attorney's fees, arising from or in any way connected with: (1) injury to or the death of any person, or physical damage to any property resulting from any act, omission, condition, or other matter related to or occurring on or about the Property, regardless of cause, unless due solely to the negligence of any of the Indemnified Parties; (2) the violation or alleged violation of, or other failure to comply with, any state, federal, or local law, regulation, or requirement; and (3) 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 to the air, water, or soil, or in any way harmful or threatening to human health or the environment, unless caused solely by any Indemnified Party.

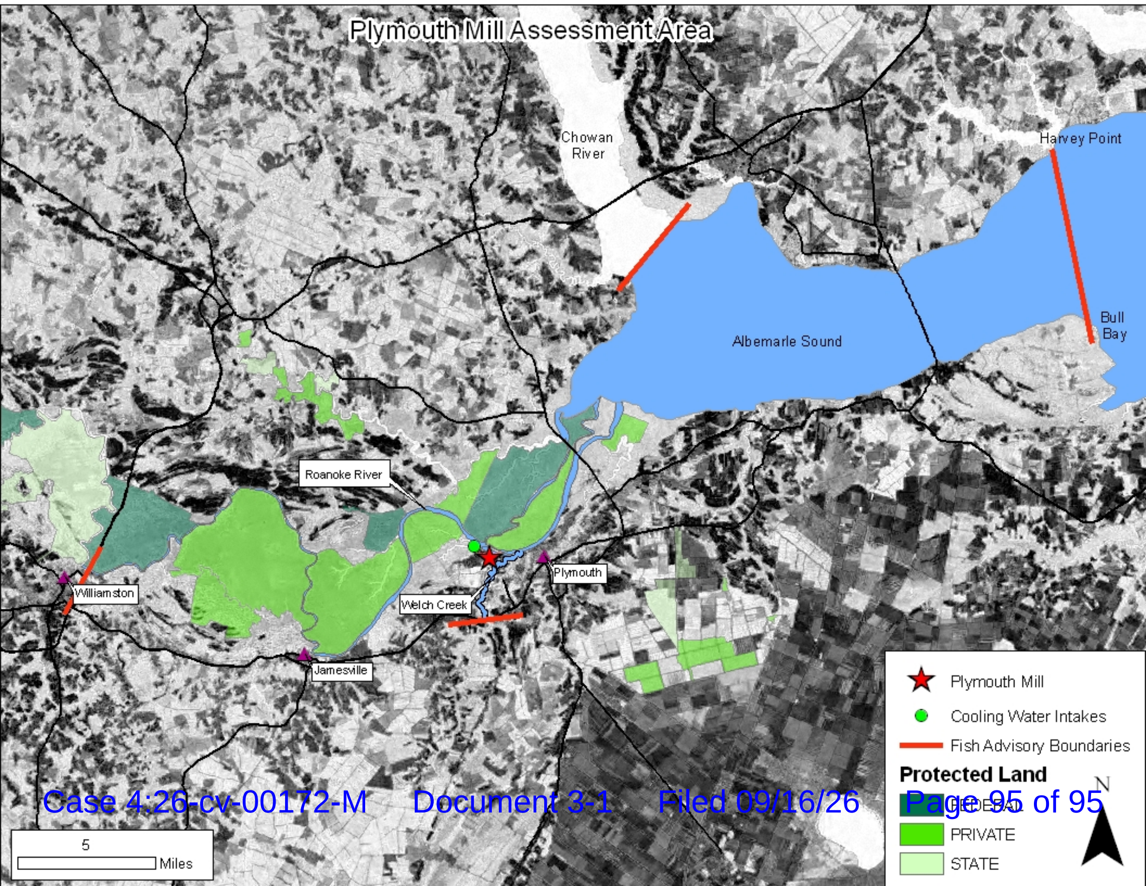
G. Effective Date. The Effective Date of this Conservation Agreement shall be the date upon which the fully executed Conservation Agreement has been recorded as a deed record for the Warren Neck Property with the Martin County Register of Deeds.

H. Assumption of Risk. Owner makes no warranty as to the condition of the premises and any Trustee Agency or employee, agent, representative, or contractor thereof enters the premises with this knowledge and at their own risk.

IN WITNESS WHEREOF, Owner has hereunto set his hand and seal, the day and year first above written.

[Signature of Owner in proper form]

APPENDIX C



Plymouth Mill Assessment Area
Chowan River
Harvey Point
Albemarle Sound
Bull Bay
Roanoke River
Plymouth
Williamston
Welch Creek
Jamesville
Plymouth Mill
Cooling Water Intakes
Fish Advisory Boundaries
Protected Land
FEDERAL
PRIVATE
STATE
5
Miles
N