Appendix L
Permits and Approvals

Appendix L1 Washington State Department of Ecology Determination of Nonsignificance

Appendix L2 USACE Section 408 Alteration Determination

Appendix L3 CDID No. 10 Federal Encroachment Permit

Appendix L4 USACE Nationwide Permit 38

Appendix L1
Washington State Department of Ecology Determination of Nonsignificance

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

STATE ENVIRONMENTAL POLICY ACT
DETERMINATION OF NONSIGNIFICANCE

Proposed Action:

Cleanup of the Former Reynolds Metals Reduction Plant under the Model Toxics Control Act

Description of proposal:

Proposed Cleanup Action Plan for the Former Reynolds Metals Reduction Plant near Longview, Washington. The proposed cleanup consists of actions to address 12 distinct site units and two areas of affected groundwater identified in the *Remedial Investigation/Feasibility Study, Former Reynolds Reduction Plan – Longview, January 2015*. The proposed cleanup also addresses a small area of stained soil containing petroleum hydrocarbons identified during demolition activities. This area contains less than 10 cubic yards of impacted soil to be removed for off-site disposal.

The proposed cleanup will be conducted pursuant to the requirements of the Model Toxics Control Act and will be implemented under the terms of a consent decree.

The proposed Cleanup Action Plan, consent decree and associated documents are available at:

- The Longview Public Library, 1600 Louisiana Street, Longview, WA
- The Reynolds Metals cleanup site webpage, https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=11796

Applicants: Northwest Alloys, Inc. & Millennium Bulk Terminals-Longview, LLC.

Location of proposal: 4029 Industrial Way, Longview WA, 98632

Lead agency: Department of Ecology, Waste 2 Resources Program, Industrial Section

The lead agency for this proposal has determined it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is therefore not required. This decision was made after review of a completed environmental checklist.

Potential adverse impacts associated with the proposed cleanup actions will be appropriately addressed or mitigated through compliance with the Cleanup Action Plan, obtaining and

complying with the permits necessary to complete the proposed actions and through compliance with the substantive requirements of state and local permits exempted under RCW 70.105D.090.

The Department of Ecology has determined that cleanup actions are necessary at this site to protect human health and the environment in accordance with the requirements of the Model Toxics Control Act, Chapter 70.105D RCW. The proposed cleanup actions are independent of specific proposed uses for the site within the current zoning classification.

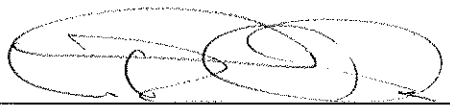
Comments on this Determination of Nonsignificance will be accepted until March 18, 2016.

Send comments to:

Guy Barrett
Dept of Ecology
Industrial Section
P.O. Box 47600
Olympia, WA 98504-7600
Reynoldscleanup.comments@ecy.wa.gov
Fax: (360) 407-6102

Responsible official:

Garin Schrieve, P.E.
Industrial Section Manager
Department of Ecology
PO Box 47600
Olympia, WA 98504-7600
(360) 407-6868

Date 1-15-16 Signature 

Appendix L2
USACE Section 408 Alteration Determination

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, PORTLAND DISTRICT
PO BOX 2946
PORTLAND, OR 97208-2946

February 11, 2022

SUBJECT: USACE Section 408 Alteration Determination, 408-0098-FY22 Model Toxic Control Act Cleanup Action - Reynolds Metals

Northwest Alloys, Inc.
P.O. Box 2098
Longview WA 98632

To Whom this may Concern:

The Portland District of the U.S. Army Corps of Engineers (USACE) received your application for a Section 408 review on January 4, 2022; for a determination under Section 14 of the Rivers and Harbors Act of 1899, which is codified at 33 U.S.C. § 408 (referred to as "Section 408"). The application proposed to conduct a Model Toxic Control Act cleanup action in cooperation with the Department of Ecology. This project would remediate eleven distinct site units, four are situated near the Columbia River levee. Section 408, permission from the USACE is required to make alterations to, or to temporarily or permanently occupy or use, any USACE federally authorized project.

The proposed project is located at 4029 Industrial Way, Longview, Cowlitz County WA. and involves a combination of shallow excavation, clean fill capping, backfill and consolidated offsite disposal. All excavated material and capping will be in overbuild areas of the federal levee and will not encroach on the levee embankment. There is no impact to the federal levee system. There is no in-water work proposed and no impact to the federal navigation channel. We also conducted a USACE real property review, and nothing was identified. The proposed project will not alter, occupy, or use a USACE federally authorized project and therefore does not require permission from the USACE under Section 408.

This determination does not obviate the need to obtain other federal, state, or local authorizations required by law. Your project may require a Department of the Army permit from the Seattle District Regulatory office. The USACE retains the right to revoke this Section 408 determination at any time if the proposed work negatively affects the federally authorized project or if the project plans change.

If you have questions or concerns, please contact the District's Section 408 Program Manager, Ms. Sally Bird-Gauvin at (503) 808-4765 or by email at sally.a.birdgauvin@usace.army.mil.

Sincerely,

RINGOLD.VALERIE.ANN.1231233160 Digitally signed by RINGOLD.VALERIE.ANN.1231233160 Date: 2022.02.11 17:12:04 -08'00'

Valerie A. Ringold
Planning Chief

cc: Amy Blain, CDIC#1, District Manager
Sydney Gebers, Consultant, Grette Associates, LLC

Appendix L3
CDID No. 1 Federal Encroachment Permit

CDID #1
CONSOLIDATED DIKING IMPROVEMENT DISTRICT NO. 1
5350 PACIFIC WAY, LONGVIEW, WA 98632
PHONE (360) 423-2493 • EMAIL cdid1@cdid1.org

FEDERAL ENCROACHMENT PERMIT APPLICATION

DATE: **December 17, 2021**	PERMIT NUMBER: 21-13
APPLICANT: **Kristin Gaines, Director, Alcoa Western USA.**	PHONE: **(360) 425-2800**
OWNER: **Northwest Alloys Inc., c/o Alcoa Inc, 201 Isabella St., Pittsburgh, Pennsylvania 15212-5858**	
APPLICANT MAILING ADDRESS: **Northwest Alloys**	
Attn: Kristin Gaines, P.O. Box 2098, Longview, WA 98632	
PROPERTY LEGAL DESCRIPTION OR ASSESSOR'S TAX NUMBER: **Parcel 61950**	
STREET ADDRESS OF PROPERTY: **4029 Industrial Way, Longview, WA 98632**	
DESCRIPTION OF REQUEST (ATTACH PLANS AND SUPPORTING ENGINEERING DOCUMENTS IF APPLICABLE):	
NW Alloys propose to cleanup 11 distinct Site Units and two areas of affected groundwater at the site of the Former Reynolds Metals Reduction Plant (Figures 1 and 2) under the prevue of the Model Toxics Control Act (MTCA), administered by the Department of Ecology. Four of the 11 Site Units extend into the footprint of the levee right-of-way (ROW), including SU1, SU2, SU8 and SU10 (Figures 2 through 6). Construction activities proposed within the levee ROW include the following: **SU1 and SU2 - The eastern and western portions of SU2 will be excavated and consolidated into a central deposit around SU1 (Figure 3). The excavated portions of SU2 will be backfilled. Post-consolidation, SU1 and the central portion of SU2 will be covered with a low permeability cap to isolate the affected material. Proposed finished grades in this area are illustrated on Figures 7 and 8.** **SU8 and SU10 – Impacted soil from SU8 and SU10 will be excavated and consolidated into a fill deposit (SU7) located approximately 1,000 feet inland of the levee ROW. Post-excavation, each of these areas will be backfilled to the finished grades illustrated on Figures 9 through 12.** **All of the work will occur in overbuilt portions of the levee and excavation is not proposed to extend into the levee design profile. Overall, the completed Project will result in constructed ground contours similar to the existing condition.**	
DURATION OF PERMIT (CHECK BOX AND INSERT TERMINATION DATE, IF ANY):	
☐ TERMINATION DATE:	☒ NO TERMINATION EXCEPT UPON CANCELLATION BY CDID #1

Applicant has read and fully understands the conditions set forth on the reverse side hereof, and the signature hereon by applicant constitutes applicant's full and complete agreement to be bound by such conditions in the event the permit requested is granted. The conditions of this permit, included herein and/or attached hereto, are hereby accepted by the applicant who hereby agrees to comply with said conditions, and acknowledges receipt of a copy thereof. This permit is not valid unless signed by the Manager of CDID #1.

APPLICANT SIGNATURE (OWNER): Kristin Gaines DATE: 12/16/2021

PERMIT TO ENCROACH ON CDID #1 FEDERAL RIGHT-OF-WAY

THIS PERMIT REQUESTED IS HEREBY GRANTED TO THE APPLICANT, SUBJECT TO THE FOLLOWING CONDITIONS:

☐ NONE	☐ ATTACHED HERETO	☒ AS NOTED HEREIN
Notify CDID# 1 inspector Troy Cole by phone or email at troy.cole@cdid1.org before starting work.		
CDID #1 Shall Receive Minimum 48-hour Notice Prior To Construction • 360.423.2493		

This application was reviewed and approved by the CDID #1 Board of Supervisors on: 2 / 22 / 2022

CDID #1 DISTRICT MANAGER: Amy N. Blain DATE: 2/22/2022

CONDITIONS OF FEDERAL ENCROACHMENT PERMITS ISSUED BY CDID #1 OF COWLITZ COUNTY

In compliance with Paragraph 208.10(a)(5) of Title 33, Code of Federal Regulations, no alteration, improvement, excavation or construction is permitted within the federally constructed levee right of way without prior approval from the United States Army Corps of Engineers (USACE) and the local sponsor (CDID#1). Approval requires coordinated review under the Section 408 process pursuant to Section 14 of the Rivers and Harbors Act of 1899 (33 USC 408) and the guidelines described by Engineering Circular 1165-2-220.

Design Standards for Encroachments on Federal Public Works

- All improvements constructed within the federal levee right of way must meet the minimum requirements of USACE Engineer Manual (EM) 1110-2-1913, Design and Construction of Levees; and PDR 1130-2-5, Levee Encroachment Standards and Procedures.

- Installation of any pipeline, conduit, culvert or other utility which crosses over, under or through the federal levee shall also comply with EM 1110-2-2902, Engineering and Design of Conduits, Culverts and Pipes.

- Construction of any driveway, road, turnout, turnaround or other pedestrian or vehicular access which parallels, crosses, straddles or otherwise encroaches upon the federal levee shall also comply with EM 1110-2-1913.

- Geotechnical borings, monitoring wells and subsurface exploration in the levee right of way shall also be conducted in compliance with EM 1110-1-1804, Engineering and Design of Geotechnical Investigations.

- Landscaping improvements on the federal levee including woody and non-woody vegetation, containerized plants, rock, mulch or other groundcover shall also comply with USACE Engineering Technical Letter 1110-2-583, Engineering and Design Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures.

Official USACE publications are available at https://www.publications.usace.army.mil/USACE-Publications/Engineer-Manuals/.

General Conditions

1. This Permit is personal to Permittee and is not appurtenant to adjoining property. Permit does not convey or transfer any interest in real property; it only grants permission for use of District property or easement. The District relies upon the Permittee to comply with all conditions of this Permit.

2. This Permit may not be re-assigned without prior written approval from the USACE and the District. Failure to comply with this condition constitutes noncompliance and is grounds for revocation.

3. If the Permittee fails to comply with any terms of this Permit, or if the USACE or the District determines the encroachments allowed by the Permit impair the usefulness of the federal project or are contrary to public interest, this Permit may be modified or revoked upon thirty (30) days written notice.

4. All construction shall be in accordance with drawings submitted with Permit Application, in accordance with all conditions imposed upon this Permit, and shall be subject to final inspection and approval by the District Engineer. The District is not responsible for the technical sufficiency of the design, means and method of construction, nor of the constructed work.

5. Work authorized by this Permit must begin within six (6) months from the date of issuance, and be completed within five (5) years from the date the USACE authorization is issued unless otherwise specified. Requests for time extension shall be submitted at least one month before the deadline for completion.

6. Any damages resulting directly or indirectly from construction must be repaired to the satisfaction of the District.

7. Permittee shall comply with all conditions of the federal authorization issued by the USACE. The Permittee shall document the project area and the project work before, during and after construction and shall be responsible to submit asbuilt drawings within thirty (30) days of completing work.

8. Permittee, and successor or Permittee, hereby agrees as follows:
   (a) To assume all risk of injury, death, damage to property, attorney's fees and expenses for itself, its successors, assigns, agents, officers, directors, employees and contractors, arising out of construction and maintenance of the improvements and use of the property described herein, or its operations thereon, except those caused by or resulting from the sole negligence of the District.

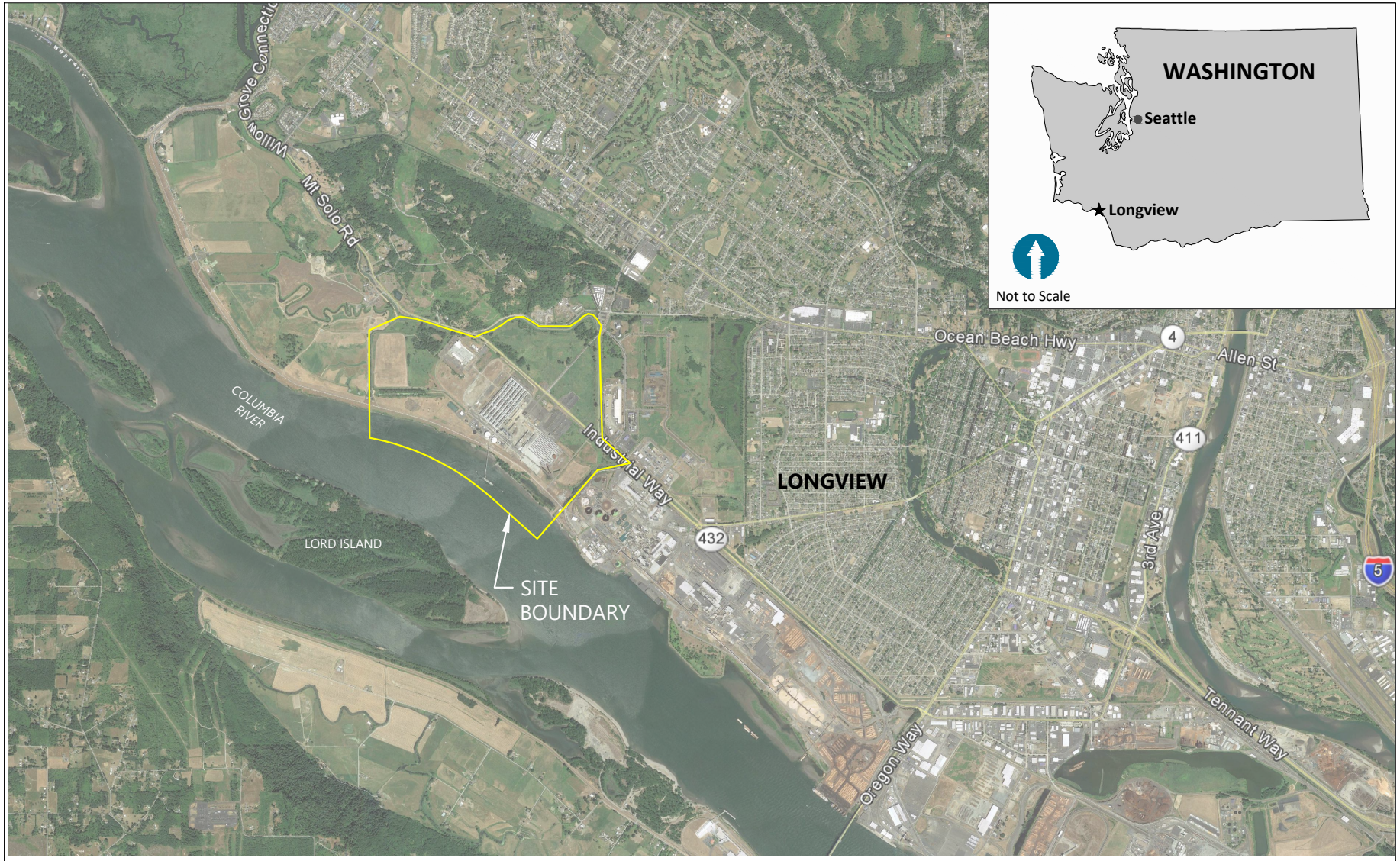
   (b) To indemnify and save harmless the District, its Supervisors, employees and agents, and the United States Corps of Engineers, against all claims, demands, suits and related expenses, including, but not limited to; attorney's fees, flood fight expenses, repair and construction levees, or failure of a levee(s) located in or near the improvements resulting from this Permit.

   (c) Permittee agrees to remove any obstruction (fences, outbuildings, etc.) within thirty (30) days written notice from the District to facilitate equipment access, maintenance and repairs to the District facilities.

9. If this Permit relates to construction of any water withdrawal or discharge involving Waters of the State, the Permittee shall comply with all applicable federal, state and local statutes, ordinances, rules and regulations (current and future). Permittee shall procure all permits including but not limited to dredging operations, in-water work, discharges, wetlands, water rights, and water quality pursuant to the Federal Water Pollution Control Act Title 22 United States Code, Section 1251 et seq., State Water Pollution Control Act RCW 90.48 and Washington State Discharge General Permit Regulation WAC 173-226-130.

10. The District assumes no ownership of culverts, outfalls, conveyances, utilities or other improvements installed under this Permit. The Permittee bears sole responsibility for the maintenance, repair, replacement and/or possible relocation of all constructed improvements.

11. The District shall not be liable for any damage to any underground pipe, conduit, cable, wire, or other facility or device installed, placed, or operated under this Permit, resulting or occurring from or by reason of the District's operation, maintenance or repair of its facilities, nor for any interruption, interference or termination of service along, through or in connection with any such pipe, conduit, cable, wire or other facility.

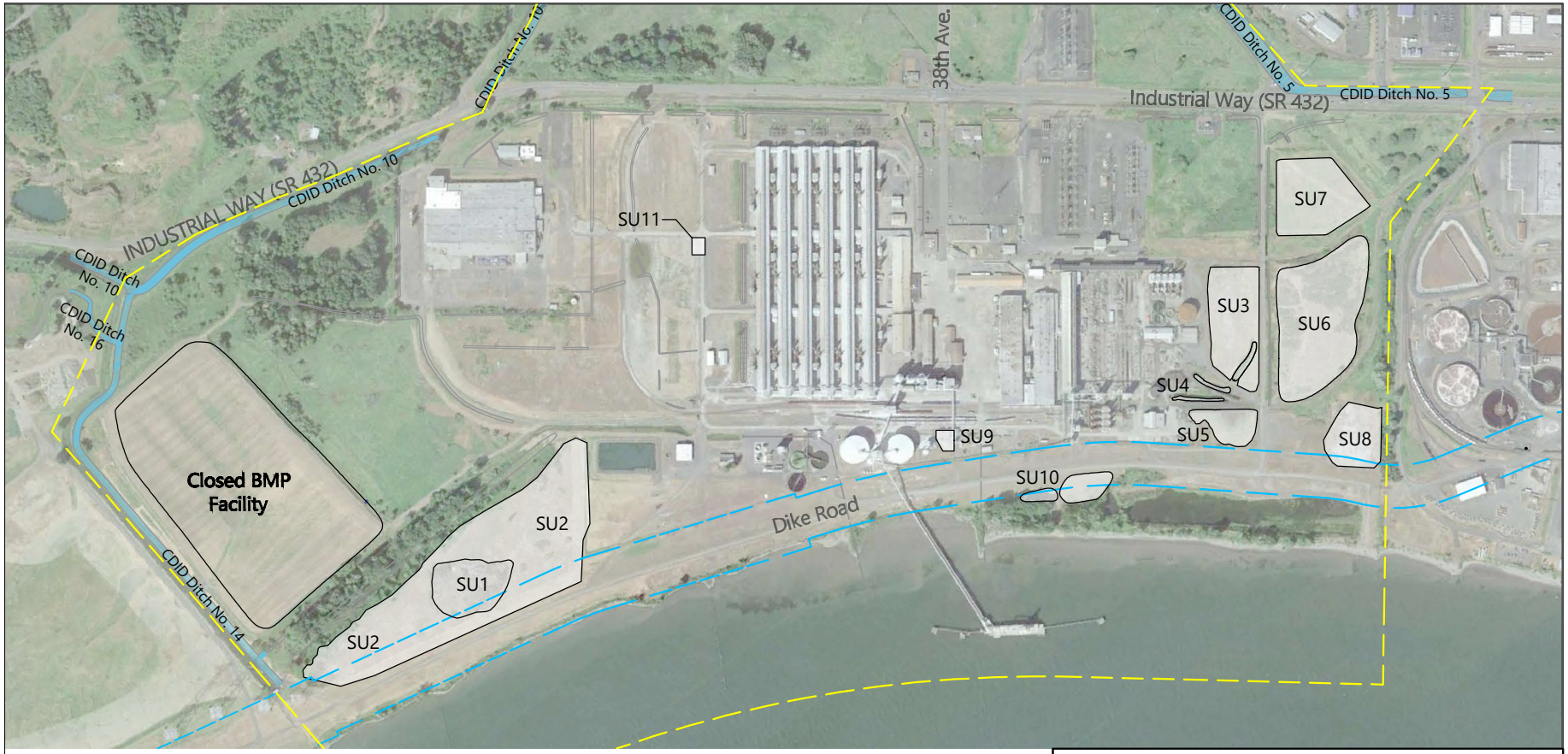


SOURCE: Aerial from Google Earth

ANCHOR QEA

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS

Figure 1
Vicinity Map
Former Reynolds Metals Reduction Plant - Longview



SOURCE:
Drawing prepared from Alta Survey by Minister & Glaeser Surveying, Inc. dated November 11, 2012.
Aerial image from Bing Maps

LEGEND:

- CDID Levee Right-of-Way
- Site Boundary
- Extent of Cleanup Site Unit

0 1,000
Feet

CLEANUP ACTION SUMMARY

SITE UNIT	Description	Acres
SU1	Landfill #2 (Industrial Waste)	2.9
SU2	Fill Deposit B-3 (Residual Carbon)	17.3*
SU3	Fill Deposit B-2 (Residual Carbon)	4.2
SU4	Former Cryolite Ditches	0.4
SU5	Former Stockpile Area	1.4
SU6	Fill Deposit B-1 (Residual Carbon)	8.6
SU7	Fill Deposit A (Spent Lime)	4.5
SU8	Landfill #1 (Floor Sweeps)	2.4
SU9	Pitch Storage Area	0.3
SU10	Landfill #3 (Construction Debris)	1.3
SU11	Flat Storage Area	0.2

* SU2 area does not include area of SU1

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Grette Associates LLC
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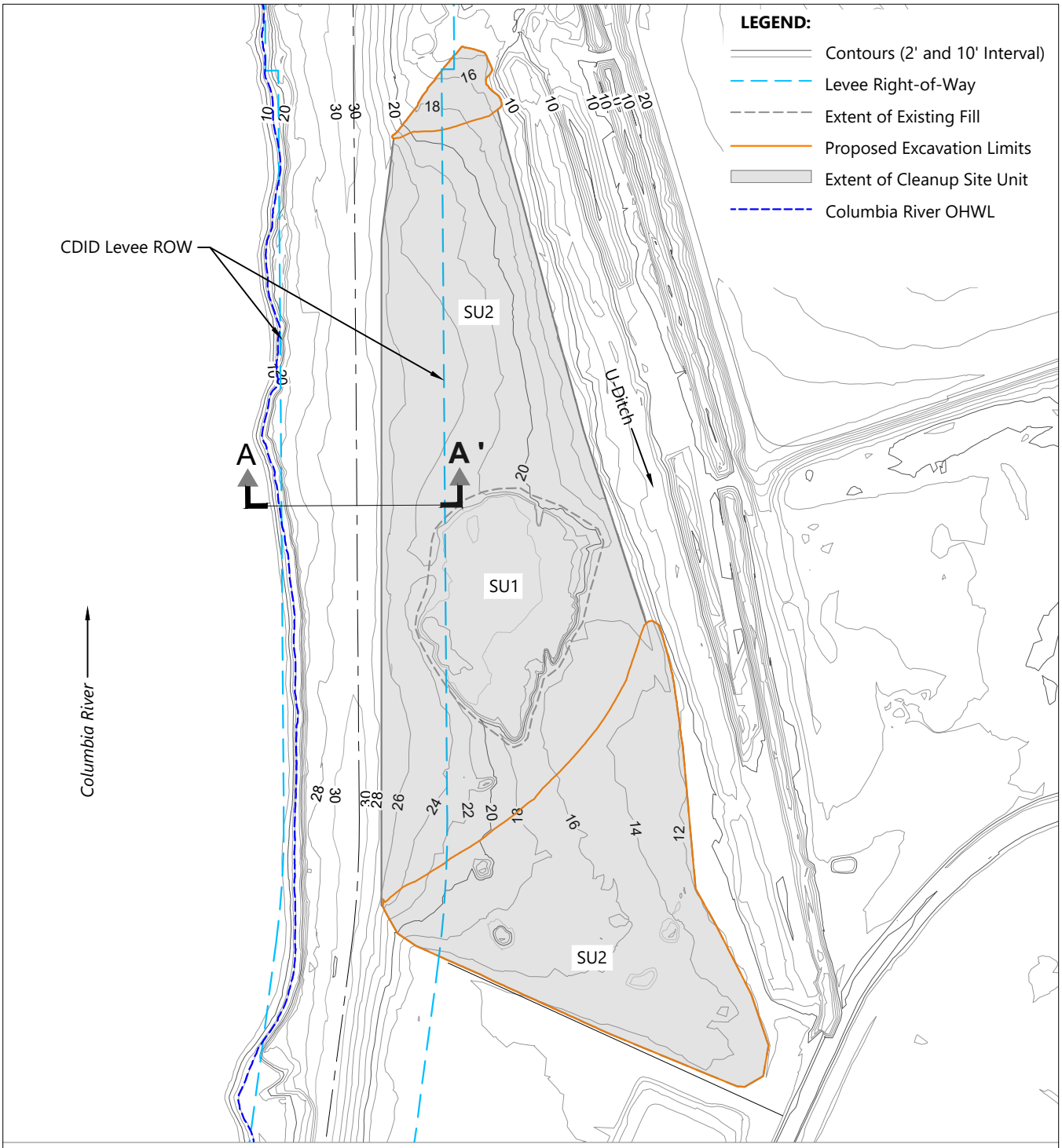
Figure 2
Proposed Cleanup Actions
Former Reynolds Metals Reduction Plant - Longview

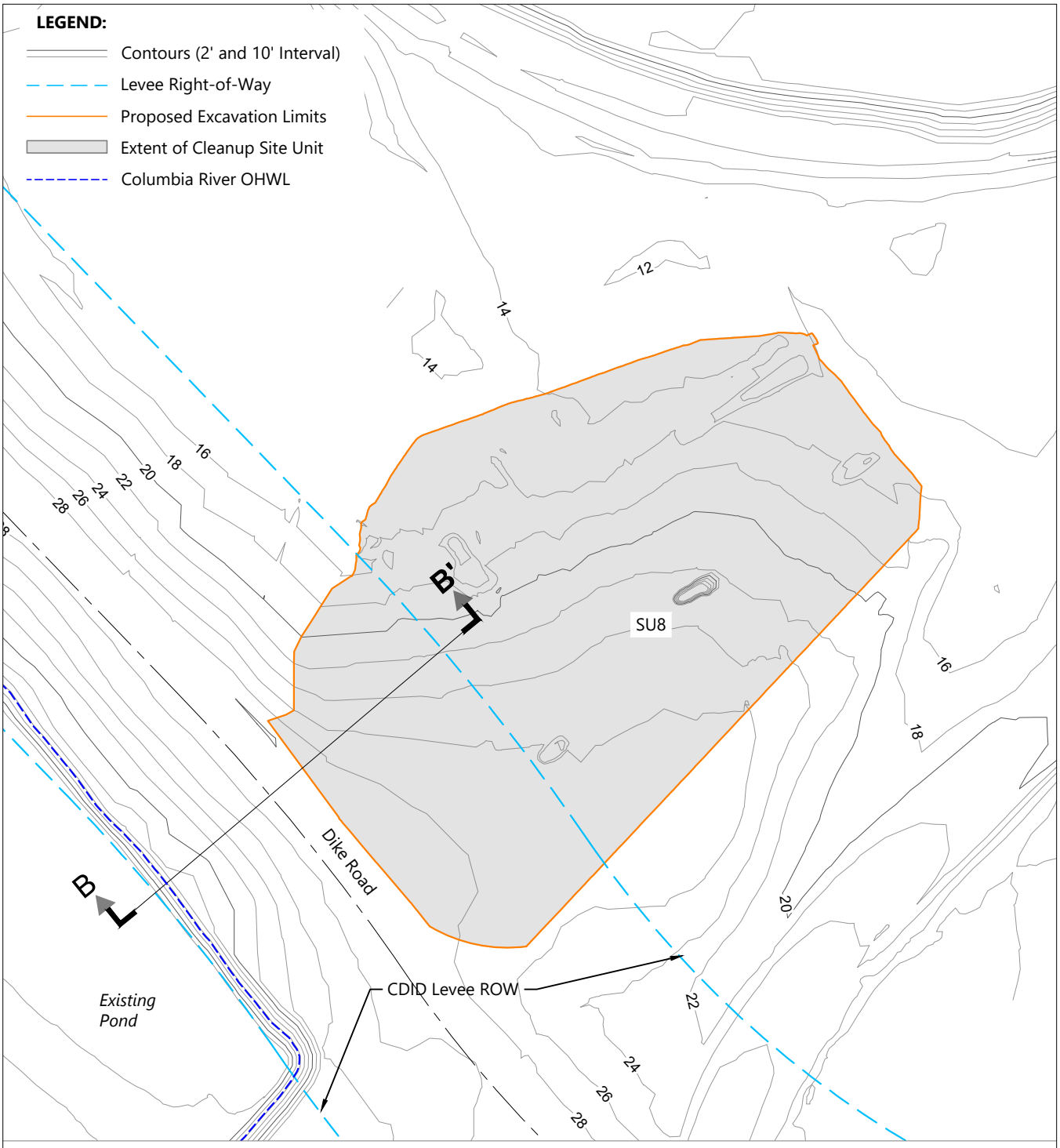


SOURCE: Survey and topography from Minister & Glaeser Surveying, Inc., dated June 14, 2010; March 4, 2013; and July 22, 2014. Additional survey and topography from Gibbs and Olson, dated May, 2020.
HORIZONTAL DATUM: Washington State Plane South Zone, North American Datum of 1983 (NAD83), U.S. Survey Feet
VERTICAL DATUM: North American Vertical Datum of 1988 (NAVD88)
COLUMBIA RIVER OHWL: 13.9 ft NAVD88/11.1 ft CRD
100-YEAR FLOOD ELEVATION: 22.7 ft NAVD88/19.8 ft CRD

0 300
Feet

ANCHOR QEA
Grette Associates LLC
ENVIRONMENTAL CONSULTANTS

Figure 3
SU1 and SU2 Existing Conditions
Former Reynolds Metals Reduction Plant - Longview



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0 100
Feet

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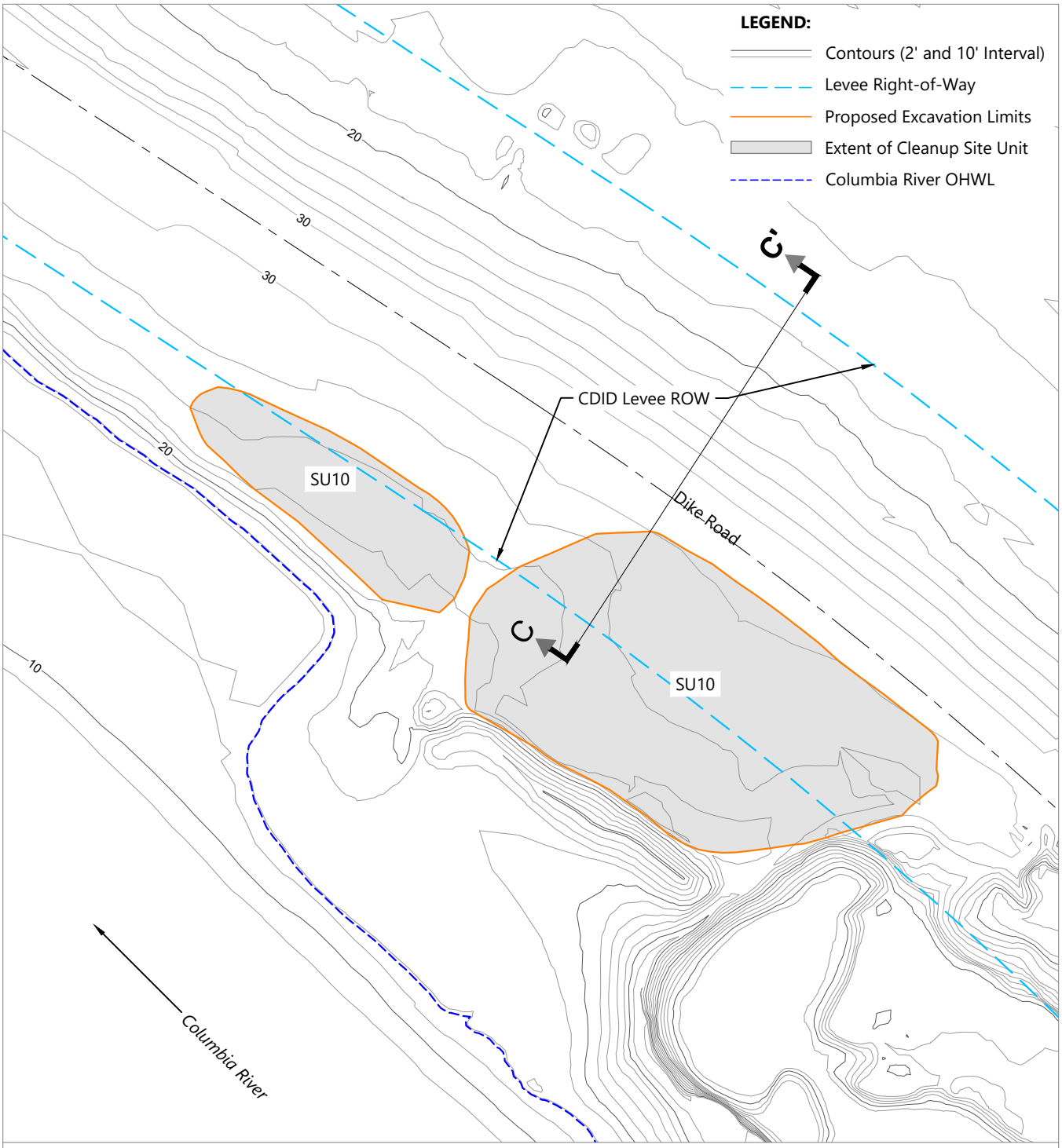
Grette Associates LLC
ENVIRONMENTAL CONSULTANTS

Figure 4
SU8 Existing Conditions
Former Reynolds Metals Reduction Plant - Longview



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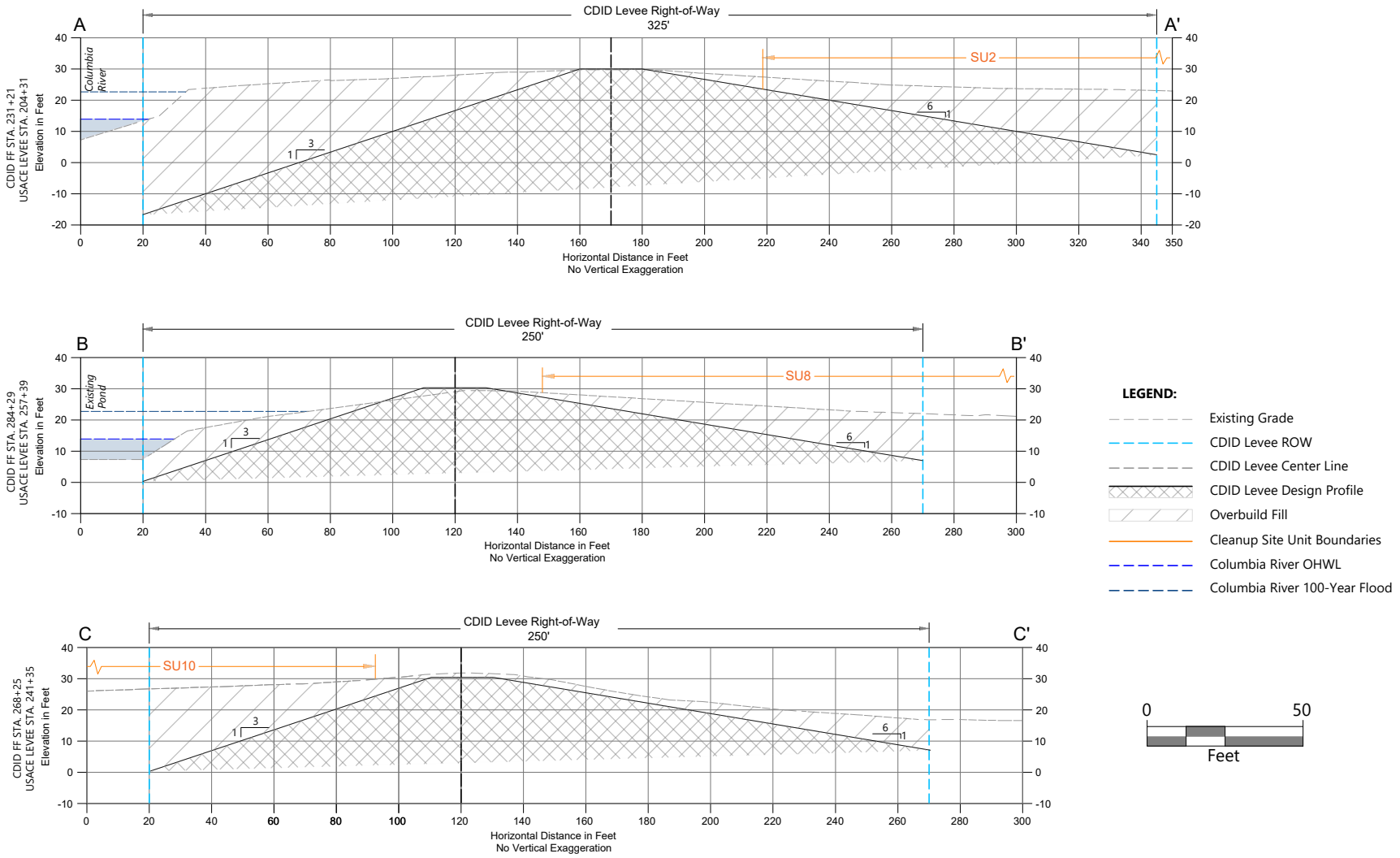
0 100
Feet

ANCHOR QEA
Grette Associates LLC
ENVIRONMENTAL CONSULTANTS

Figure 5
SU10 Existing Conditions
Former Reynolds Metals Reduction Plant - Longview



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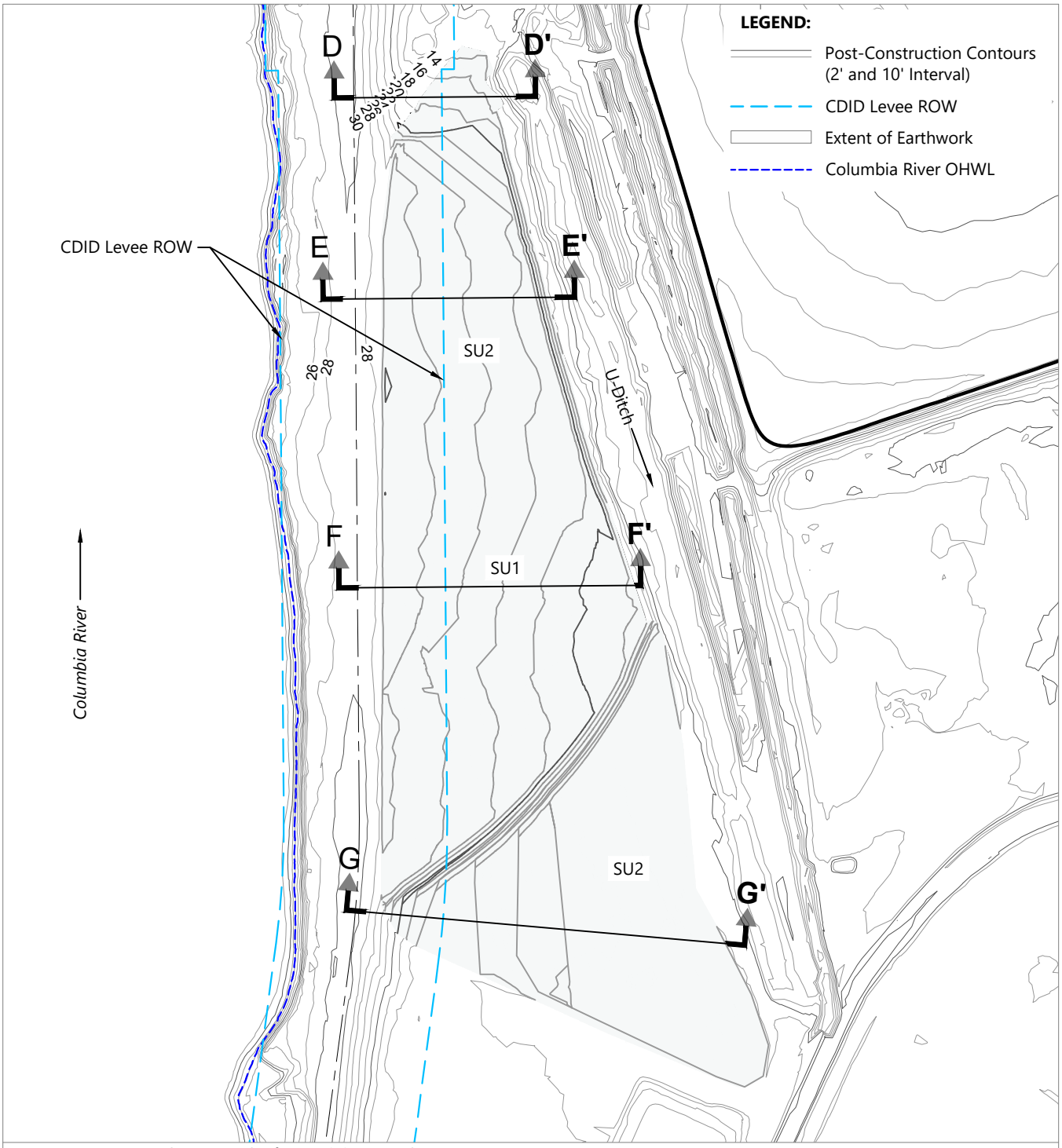
COLUMBIA RIVER OHWL/100-YEAR FLOOD ELEV.: 13.9 ft NAVD88 (11.1 ft CRD) / 22.7 ft NAVD88 (19.8 ft CRD)

ANCHOR QEA

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS

Figure 6
Levee Cross-Sections
Former Reynolds Metals Reduction Plant - Longview



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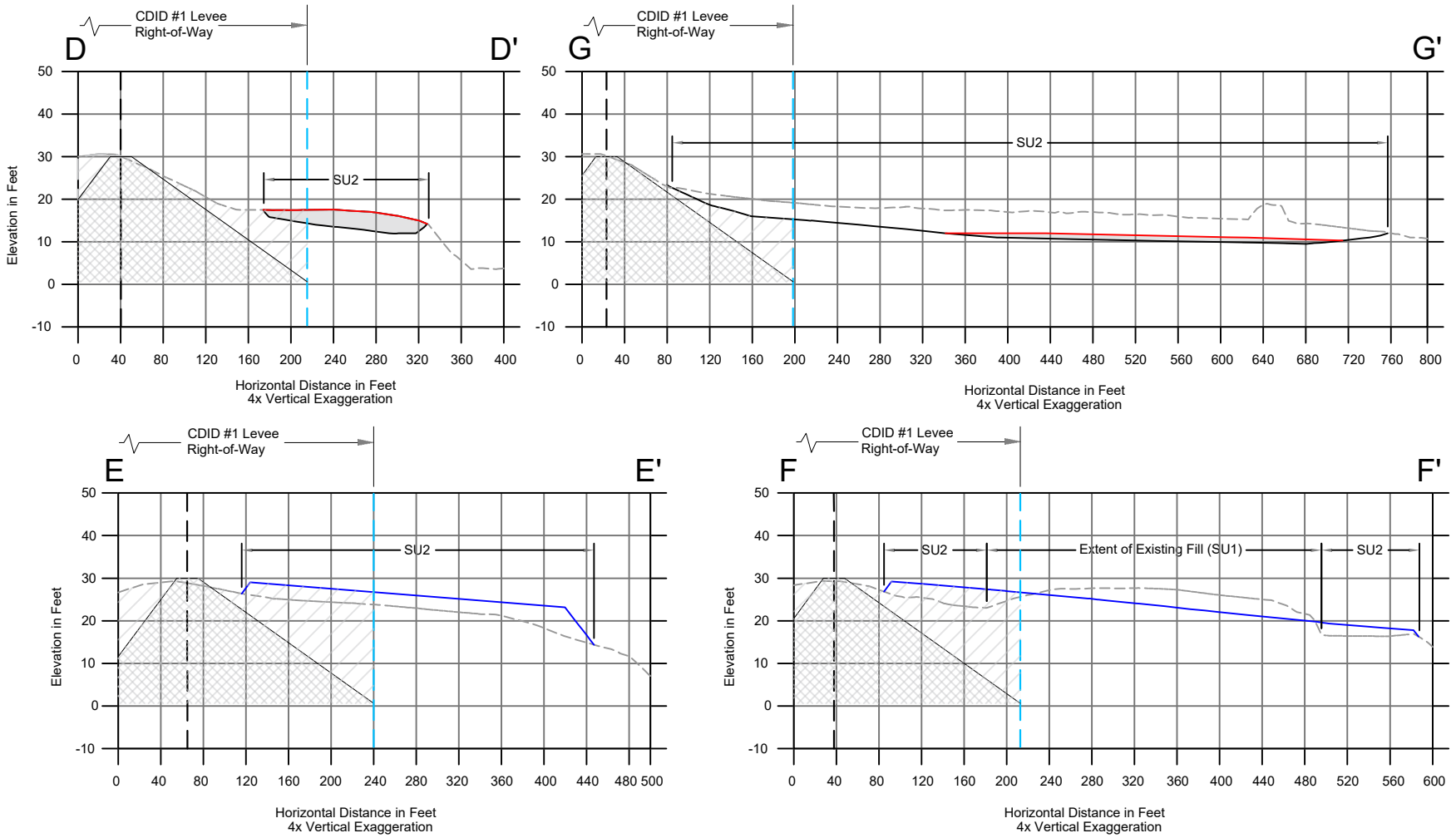
0 300
Feet

ANCHOR QEA
Grette Associates LLC
ENVIRONMENTAL CONSULTANTS

Figure 7
SU1 and SU2 Constructed Conditions
Former Reynolds Metals Reduction Plant - Longview



SOURCE: Survey and topography from Minister & Glaeser Surveying, Inc., dated June 14, 2010; March 4, 2013; and July 22, 2014. Additional survey and topography from Gibbs and Olson, dated May, 2020; and March 6, 2018. Levee Design Height per 1952 USACE DWG. CL-05-16/14.
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COLUMBIA RIVER OHWL/100-YEAR FLOOD ELEV.: 13.9 ft NAVD88 (11.1 ft CRD) / 22.7 ft NAVD88 (19.8 ft CRD)

LEGEND:

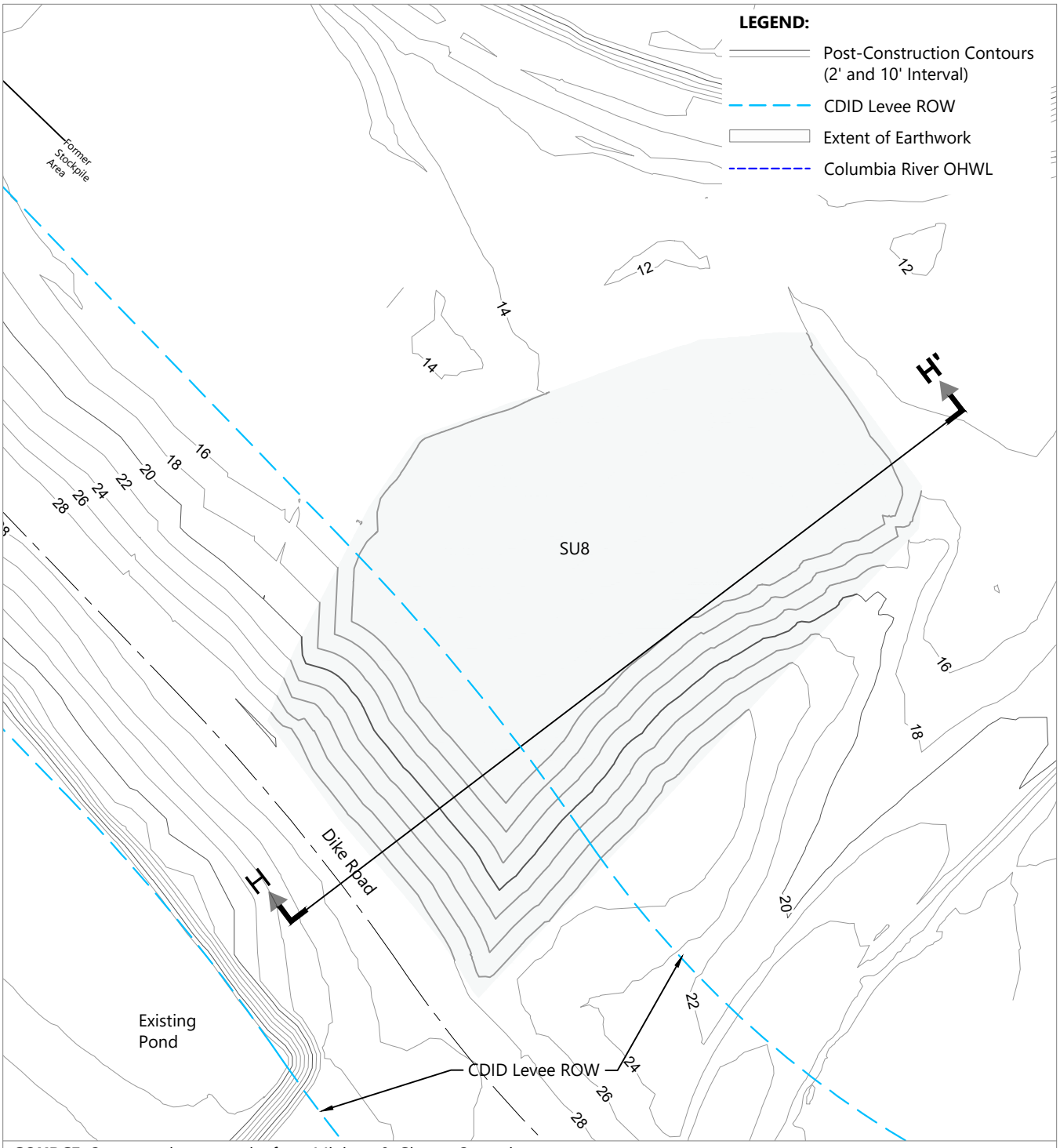
- Pre-construction Grade
- Proposed Excavation
- Proposed Backfill and Grade
- Proposed Cover
- CDID Levee ROW
- CDID Levee Center Line
- CDID Levee Design Profile
- Overbuild Fill

0 150
Feet

ANCHOR QEA

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS

Figure 8
SU1 and SU2 Cross-Sections
Former Reynolds Metals Reduction Plant - Longview



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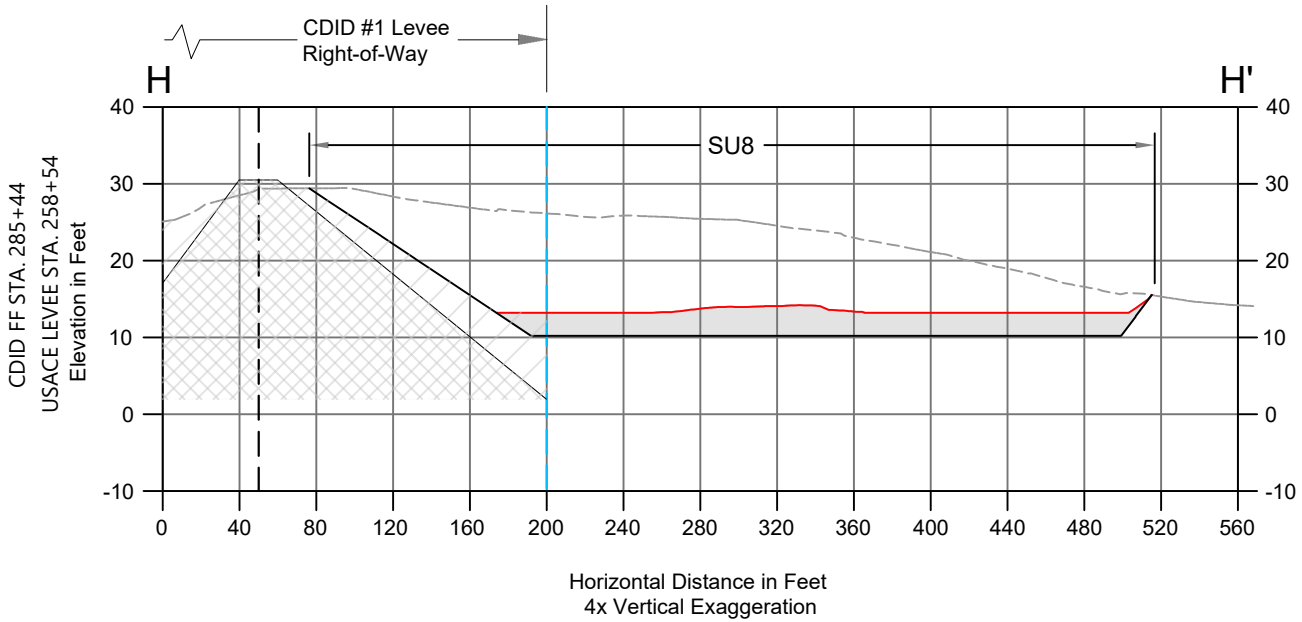
0 100
Feet

ANCHOR QEA
Grette Associates LLC
ENVIRONMENTAL CONSULTANTS

Figure 9
SU8 Constructed Conditions
Former Reynolds Metals Reduction Plant - Longview



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LEGEND:

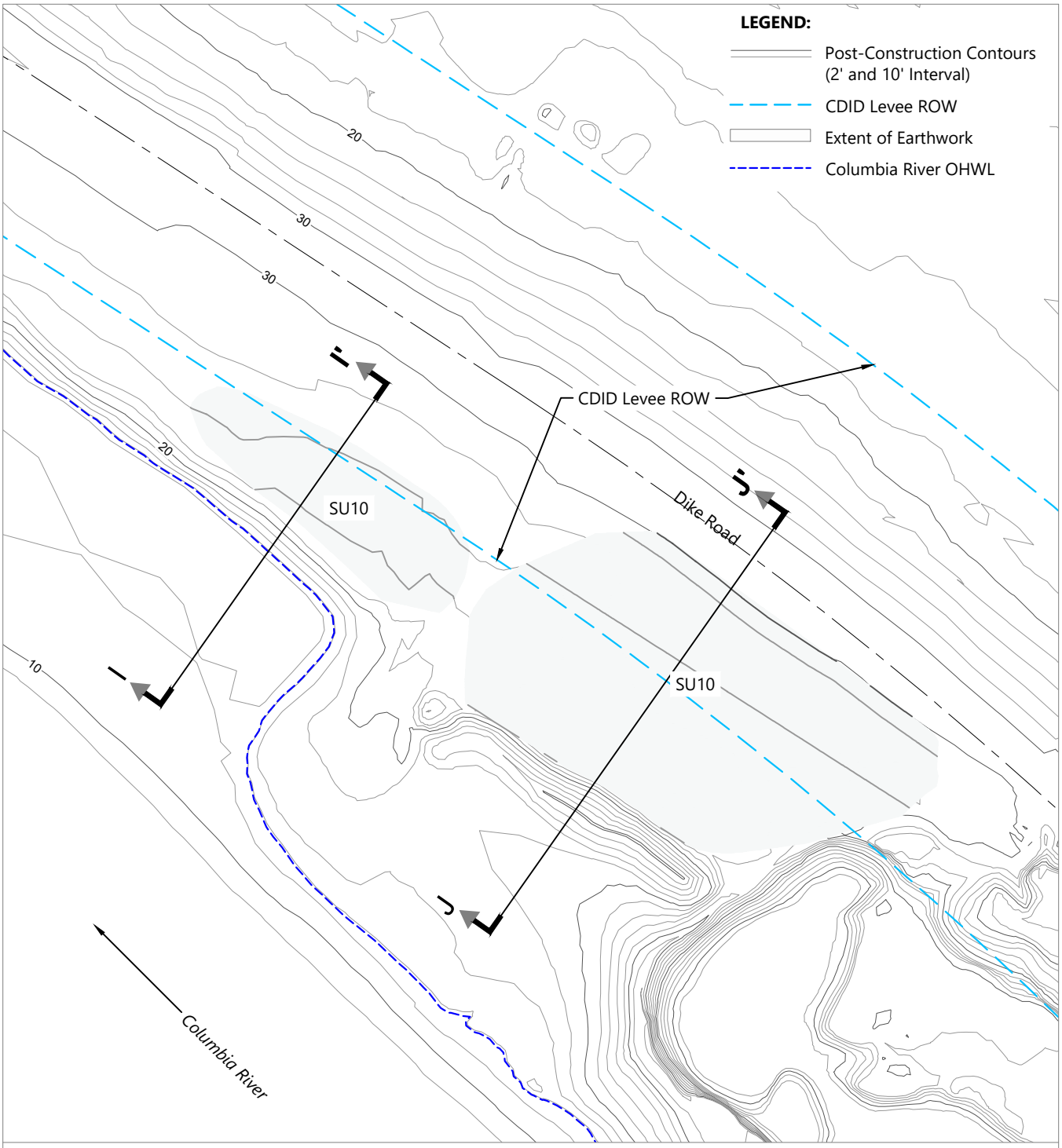
- Pre-construction Grade
- Proposed Excavation
- Proposed Backfill and Grade
- CDID Levee ROW
- CDID Levee Center Line
- CDID Levee Design Profile
- Overbuild Fill

0 100
Feet

ANCHOR QEA

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS

Figure 10
SU8 Cross-Section
Former Reynolds Metals Reduction Plant - Longview



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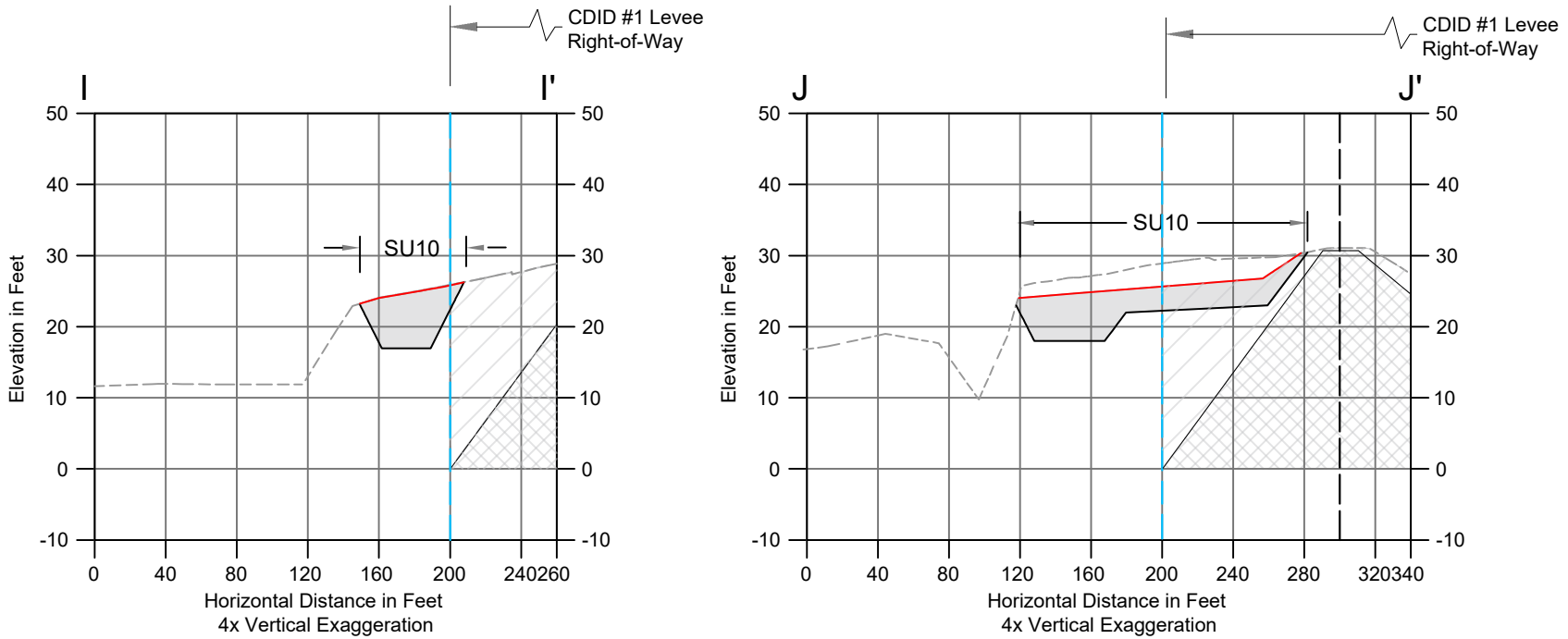
0 100
Feet

ANCHOR QEA

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS

Figure 11
SU10 Constructed Conditions
Former Reynolds Metals Reduction Plant - Longview



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COLUMBIA RIVER OHWL/100-YEAR FLOOD ELEV.: 13.9 ft NAVD88 (11.1 ft CRD) / 22.7 ft NAVD88 (19.8 ft CRD)

LEGEND:

- Pre-construction Grade
- Proposed Excavation
- Proposed Backfill and Grade
- CDID Levee ROW
- CDID Levee Center Line
- CDID Levee Design Profile
- Overbuild Fill

0 100
Feet

ANCHOR QEA

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS

Figure 12
SU10 Cross-Sections
Former Reynolds Metals Reduction Plant - Longview

From: Amy Blain <amy.blain@cdid1.org>
Sent: Friday, August 5, 2022 8:27 AM
To: Gaines, Kristin K <kristin.gaines@alcoa.com>
Cc: Vezzani, Cheryl <cheryl.vezzani@alcoa.com>
Subject: EXT: RE: CDID Encroachment Permit

Hi there! Your email notification is sufficient for me, but if you want to send a tentative project schedule I can write a formal extension.

I don't recall any dredging or in-water work for your project, are you waiting on a Section 404 or Section 10 permit from the USACE Seattle office? The Portland branch did issue the 408 determination with a finding of No Alteration.

Amy N. Blain, P.E.
District Manager
Consolidated Diking Improvement District No. 1
5350 Pacific Way, Longview WA 98632
360.423.2493 | www.cdid1.org

From: Gaines, Kristin K <kristin.gaines@alcoa.com>
Sent: Thursday, August 4, 2022 5:15 PM
To: Amy Blain <amy.blain@cdid1.org>
Cc: Vezzani, Cheryl <cheryl.vezzani@alcoa.com>
Subject: CDID Encroachment Permit

Hi Amy –

Hope this finds you doing well!

It has come to my attention that the permit requires that construction begins within 6 months of issuance, which is August 22. We do not expect to begin this project until 2Q 2023, assuming we receive our permit from the USACE in the next few months. Can we receive an extension to the time period to begin construction?

Thanks,

Kristin

Kristin Gaines
Director, Transformation – Western US

Northwest Alloys - Longview
P.O. Box 2098
4029 Industrial Way
Longview, WA 98632
360-425-2800

Appendix L4
USACE Nationwide Permit 38

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH, BLDG 1202
SEATTLE, WA 98134-2388

Regulatory Branch February 3, 2023

Ms. Kristin Gaines
Northwest Alloys, Inc.
Post Office Box 2098
Longview, Washington 98632

Reference: NWS-2022-00021
Northwest Alloys, Inc.
(MTCA Cleanup Action)

Dear Ms. Gaines:

We have reviewed your application to conduct remedial action that will permanently impact up to 0.11 acre of wetland and 1.83 acres of wetland buffer, at the former Reynolds Metals Reduction Plant, adjacent to the Columbia River, near Longview, Cowlitz County, Washington. Based on the information you provided to us, Nationwide Permit (NWP) 38], *Cleanup of Hazardous and Toxic Waste* (Federal Register December 27, 2021 Vol. 86, No. 245), authorizes your proposal as depicted on the enclosed drawings dated July 2021 provided you implement the mitigation plan dated December 17, 2021.

In order for this authorization to be valid, you must ensure the work is performed in accordance with the enclosed *NWP38, Terms and Conditions* and the following special conditions:

a. You must implement and abide by the Endangered Species Act (ESA) requirements and/or agreements set forth in the *Former Reynolds Metals Reduction Plant Longview Model Toxics Control Act Cleanup Action (Consent Decree No 18 2 01312-08) Biological Evaluation* dated December 17, 2021, in its entirety. The National Marine Fisheries Service (NMFS) provided the enclosed Letter of Concurrence (LOC) with a finding of "may affect, not likely to adversely affect" based on this document on April 4, 2022 (NMFS Reference Number WCRO-2022-00405). The U.S. Fish and Wildlife Service (USFWS) provided the enclosed LOC with a finding of "may affect, not likely to adversely affect" based on this document on September 22, 2022 (USFWS Reference Number USFWS/R1/2022-0013647). Both agencies will be informed of this permit issuance. Failure to comply with the commitments made in this consultation constitutes non-compliance with the ESA and your U.S. Army Corps of Engineers

permit. The USFWS/NMFS is the appropriate authority to determine compliance with ESA.

b. You shall implement and abide by the *Former Reynolds Metals Reduction Plant Longview Model Toxics Control Act Cleanup Action (Consent Decree No 18 2 01312-08) Mitigation Bank Use Plan* dated December 17, 2021 and obtain mitigation bank credits from the Coweeman River Joint Wetland and Conservation Bank in accordance with Table 7 of the Bank Use Plan.

c. You shall obtain from the Coweeman River Joint Wetland and Conservation Bank sponsor documentation of the completed mitigation bank transaction. You shall submit to the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch documentation on the completed mitigation bank transaction prior to performing work in waters of the U.S. authorized by this permit. All submittals must prominently display the reference number NWS-2022-00021.

We have reviewed your project pursuant to the requirements of the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act and the National Historic Preservation Act. We have determined this project complies with the requirements of these laws provided you comply with all of the permit general and special conditions.

Please note that National General Condition 21, *Discovery of Previously Unknown Remains and Artifacts*, found in the *Nationwide Permit Terms and Conditions* enclosure, details procedures that must be followed should an inadvertent discovery occur. You must ensure that you comply with this condition during the construction of your project.

The authorized work complies with the Washington State Department of Ecology's (Ecology) Water Quality Certification (WQC) requirements for this NWP. No further coordination with Ecology for WQC is required.

You have not requested a jurisdictional determination for this proposed project. If you believe the U.S. Army Corps of Engineers does not have jurisdiction over all or portions of your project you may request a preliminary or approved jurisdictional determination (JD). If one is requested, please be aware that we may require the submittal of additional information to complete the JD and work authorized in this letter may not occur until the JD has been completed.

We have reviewed your project pursuant to the requirements of Section 14 of the Rivers and Harbors Act of 1899 as codified at 33 U.S.C.408 (Section 408). It has been

determined that the activities authorized do not impair the usefulness of the U.S. Army Corps of Engineers Navigation project and is not injurious to the public interest.

Our verification of this NWP authorization is valid until March 14, 2026, unless the NWP is modified, reissued, or revoked prior to that date. If the authorized work for the NWP authorization has not been completed by that date and you have commenced or are under contract to commence this activity before March 14, 2026, you will have until March 14, 2027, to complete the activity under the enclosed terms and conditions of this NWP. Failure to comply with all terms and conditions of this NWP verification invalidates this authorization and could result in a violation of Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act. You must also obtain all local, State, and other Federal permits that apply to this project.

Upon completing the authorized work, you must fill out and return the enclosed *Certificate of Compliance with Department of the Army Permit*. All compliance reports should be submitted to the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch electronically at nws.compliance@usace.army.mil. Thank you for your cooperation during the permitting process. We are interested in your experience with our Regulatory Program and encourage you to complete a customer service survey. Referenced documents and information about our program are available on our website at www.nws.usace.army.mil, select “Regulatory Permit Information”. A copy of this letter with enclosures will be furnished to Ms. Sydney Gebers, Grette Associates, LLC at sydg@gretteassociates.com. If you have any questions, please contact me at danette.l.guy@usace.army.mil or (206) 348-3999.

Sincerely,

Danette L. Guy, Senior Project Manager
Regulatory Branch

Enclosures

cc:
Ecology (ecyrefedpermits@ecy.wa.gov)

US Army Corps of Engineers ®
Seattle District

CERTIFICATE OF COMPLIANCE WITH DEPARTMENT OF THE ARMY PERMIT

Permit Number: NWS-2022-00021

Name of Permittee: Northwest Alloys, Inc.

Date of Issuance: February 3, 2023

Upon completion of the activity authorized by this permit, please check the applicable boxes below, date and sign this certification, and return it to the following email or mailing address:

NWS.Compliance@usace.army.mil OR

Department of the Army
U.S. Army Corps of Engineers Seattle District, Regulatory Branch
4735 E. Marginal Way S, Bldg 1202
Seattle, Washington 98134-2388

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with the terms and conditions of your authorization, your permit may be subject to suspension, modification, or revocation.

☐	The work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of this permit. Date work complete: _____ ☐ Photographs and as-built drawings of the authorized work (OPTIONAL, unless required as a Special Condition of the permit).

☐	If applicable, the mitigation required (e.g., construction and plantings) in the above-referenced permit has been completed in accordance with the terms and conditions of this permit (not including future monitoring). Date work complete: _____ ☐N/A ☐ Photographs and as-built drawings of the mitigation (OPTIONAL, unless required as a Special Condition of the permit).

☐	Provide phone number/email for scheduling site visits (must have legal authority to grant property access). Printed Name: _____ Phone Number: _____ Email: _____

Printed Name: _____

Signature: _____

Date: _____

US Army Corps of Engineers
Seattle District

NATIONWIDE PERMIT 38
Terms and Conditions

2021 NWPs - Final 41; Effective Date: February 25, 2022

In addition to any special condition that may be required on a case-by-case basis by the District Engineer, the following terms and conditions must be met, as applicable, for a Nationwide Permit (NWP) authorization to be valid in Washington State.

A. DESCRIPTION OF AUTHORIZED ACTIVITIES

38. Cleanup of Hazardous and Toxic Waste. Specific activities required to effect the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency with established legal or regulatory authority. Court ordered remedial action plans or related settlements are also authorized by this NWP. This NWP does not authorize the establishment of new disposal sites or the expansion of existing sites used for the disposal of hazardous or toxic waste.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 32.) (Authorities: Sections 10 and 404)

Note: Activities undertaken entirely on a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site by authority of CERCLA as approved or required by EPA, are not required to obtain permits under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act.

B. CORPS NATIONAL GENERAL CONDITIONS FOR ALL 2021 NWPs - FINAL 41

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required,

upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Structures and Fills. Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated

critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa/ respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those

tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory

mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements)

may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual

coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:
(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.
(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

_____
(Transferee)

_____
(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to

satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification. (a) *Timing*. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification*: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the “study river” (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification*: The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination*: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity’s compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity’s adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity’s compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies’ concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

C. SEATTLE DISTRICT REGIONAL GENERAL CONDITIONS: The following conditions apply to the 2021 NWPs - Final 41 NWPs for the Seattle District in Washington State, as applicable.

RGC 1, Project Drawings
Drawings must be submitted with pre-construction notification (PCN). Drawings must provide a clear understanding of the proposed project, and how waters of the United States will be affected. Drawings must be originals and not reduced copies of large-scale plans. Engineering drawings are not required. Existing and proposed site conditions (manmade and landscape features) must be drawn to scale.

RGC 2, Aquatic Resources Requiring Special Protection
A PCN is required for activities resulting in a loss of waters of the United States in wetlands in dunal systems along the Washington coast, mature forested wetlands, bogs and peatlands, aspen-dominated wetlands, alkali wetlands, vernal pools, camas prairie wetlands, estuarine wetlands, and wetlands in coastal lagoons.

RGC 3, New Bank Stabilization in Tidal Waters of Puget Sound
Activities involving new bank stabilization in tidal waters in Water Resource Inventory Areas (WRIAs) 8, 9, 10, 11 and 12 (within the areas identified on Figures 1a through 1e) cannot be authorized by NWP.

RGC 4, Commencement Bay
No permanent losses of wetlands or mudflats within the Commencement Bay Study Area may be authorized by any NWP (see Figure 2).

RGC 5, Bank Stabilization
All projects including new or maintenance bank stabilization activities in waters of the United States where salmonid species are present or could be present, requires PCN to the U.S. Army Corps of Engineers (Corps) (see NWP general condition 32).
For new bank stabilization projects only, the following must be submitted to the Corps:

a. The cause of the erosion and the distance of any existing structures from the area(s) being stabilized.
b. The type and length of existing bank stabilization within 300 feet of the proposed project.
c. A description of current conditions and expected post-project conditions in the waterbody.
d. A statement describing how the project incorporates elements avoiding and minimizing adverse environmental effects to the aquatic environment and nearshore riparian area, including vegetation impacts in the waterbody.

In addition to a. through d., the results from any relevant geotechnical investigations can be submitted with the PCN if it describes current or expected conditions in the waterbody.

RGC 6, Crossings of Waters of the United States
Any project including installing, replacing, or modifying crossings of waters of the United States, such as culverts or bridges, requires submittal of a PCN to the U.S. Army Corps of Engineers (see NWP general condition 32).
If a culvert is proposed to cross waters of the U.S. where salmonid species are present or could be present, the project must apply the stream simulation design method from the Washington Department of Fish and Wildlife located in the *Water Crossing Design Guidelines* (2013), or a design method which provides passage at all life stages at all flows where the salmonid species would naturally seek passage. If the stream simulation design method is not applied for a culvert where salmonid species are present or could be present, the project proponent must provide a rationale in the PCN sufficient to establish one of the following:

a. The existence of extraordinary site conditions.
b. How the proposed design will provide equivalent or better fish passage and fisheries habitat benefits than the stream simulation design method.

Culverts installed under emergency authorization that do not meet the above design criteria will be required to meet the above design criteria to receive an after-the-fact nationwide permit verification.

RGC 7, Stream Loss

A PCN is required for all activities that result in the loss of any linear feet of streams.

RGC 8, Construction Boundaries
Permittees must clearly mark all construction area boundaries within waters of the United States before beginning work on projects that involve grading or placement of fill. Boundary markers and/or construction fencing must be maintained and clearly visible for the duration of construction. Permittees should avoid and minimize removal of native vegetation (including submerged aquatic vegetation) to the maximum extent possible.

RGC 9, ESA Reporting to NMFS
For any nationwide permit that may affect threatened or endangered species;
Incidents where any individuals of fish species, marine mammals and/or sea turtles listed by National Oceanic and Atmospheric Administration Fisheries, National Marine Fisheries Service (NMFS) under the Endangered Species Act appear to be injured or killed as a result of discharges of dredged or fill material into waters of the U.S. or structures or work in navigable waters of the U.S. authorized by this Nationwide Permit verification shall be reported to NMFS, Office of Protected Resources at (301) 713-1401 and the Regulatory Office of the Seattle District of the U.S. Army Corps of Engineers at (206) 764-3495. The finder should leave the animal alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals involved and, if possible, take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed by discharge exposure or some unnatural cause. The finder may be asked to carry out instructions provided by the NMFS to collect specimens or take other measures to ensure that evidence intrinsic to the specimen is preserved.

D. SEATTLE DISTRICT REGIONAL SPECIFIC CONDITIONS FOR THIS NWP:

NWP 38 Specific Regional Condition:
1. Non-government project proponents must submit a copy of court ordered remedial plans or related settlements with the pre-construction notification.

E. 401 WATER QUALITY CERTIFICATION: Depending on the geographic region of the work authorized by this verification, the appropriate 401 certifying authority has made the following determinations:

Washington Department of Ecology (Ecology) (Projects in all areas except as described for the other certifying agencies listed below): General and Specific WQC Conditions

A. State General Conditions for all Nationwide Permits

In addition to all of the U.S. Army Corps of Engineers' (Corps) national and Seattle District'sregional permit conditions, the following state general Water Quality Certification (WQC) conditions **apply to all NWPs whether granted or granted with conditions** in Washington where Ecology is the certifying authority.

Due to the lack of site specific information on the discharge types, quantities, and specific locations, as well as the condition of receiving waters and the quantity of waters (including wetlands) that may be lost, Ecology may need to review the project if one of the following stategeneral conditions is triggered.

This case-by-case review may be required, and additional information regarding the project and associated discharges may be needed, to verify that the proposed project would comply with state water quality requirements and if an individual WQC is required or if the project meets this programmatic WQC.

1. **In-water construction activities**. Ecology WQC review is required for projects or activities authorized under NWPs where the project proponent has indicated on the Joint Aquatic Resource Permit Application (JARPA) question 9e that the project or activity will not meet State water quality standards, or has provided information indicating that the project or activity will cause, or

may be likely to cause or contributeto an exceedance of a State water quality standard (Chapter 173-201A WAC) or sediment management standard (Chapter 173-204 WAC).

Note: In-water activities include any activity within a jurisdictional wetland and/orwaters.

2. **Projects or Activities Discharging to Impaired Waters**. Ecology WQC review is required for projects or activities that will occur in a 303(d) listed segment of a waterbody or upstream of a listed segment and may result in further exceedances of the specific listedparameter to determine if the project meets this programmatic WQC or will require individual WQC.

To determine if your project or activity is in a 303(d) listed segment of a waterbody, visitEcology's Water Quality Assessment webpage for maps and search tools.

3. **Aquatic resources requiring special protection**. Certain aquatic resources are unique and difficult-to-replace components of the aquatic environment in Washington. Activities that would affect these resources must be avoided to the greatest extent practicable. Compensating for adverse impacts to high value aquatic resources is typically difficult, prohibitively expensive, and may not be possible in some landscapesettings.

Ecology WQC review is required for projects or activities in areas identified below to determine if the project meets this programmatic WQC or will require individual WQC.

a. Activities in or affecting the following aquatic resources:
    i. Wetlands with special characteristics (as defined in the Washington State Wetland Rating Systems for western and eastern Washington, Ecology Publications #14-06-029 and #14-06-030):
        - Estuarine wetlands.
        - Wetlands of High Conservation Value.
        - Bogs.
        - Old-growth forested wetlands and mature forested wetlands.
        - Wetlands in coastal lagoons.
        - Wetlands in dunal systems along the Washington coast.
        - Vernal pools.
        - Alkali wetlands.

    ii. Fens, aspen-dominated wetlands, camas prairie wetlands.

    iii. Category I wetlands.

    iv. Category II wetlands with a habitat score ≥ 8 points.

b. Activities in or resulting in a loss of eelgrass (Zostera marina) beds.

This state general condition does not apply to the following NWPs:
NWP 20 – Response Operations for Oil and Hazardous Substances
NWP 32 – Completed Enforcement Actions
NWP 48 – Commercial Shellfish Mariculture Activities

4. **Loss of More than 300 Linear Feet of Streambed.** For any project that results in the lossof more than 300 linear feet of streambed Ecology WQC review is required to determineif the project meets this programmatic WQC or will require individual WQC.

5. **Temporary Fills.** For any project or activity with temporary fill in wetlands or other waters for

more than six months Ecology WQC review is required to determine if theproject meets this programmatic WQC or will require individual WQC.

6. **Mitigation.** Project proponents are required to show that they have followed the mitigation sequence and have first avoided and minimized impacts to aquatic resourceswherever practicable. For projects requiring Ecology WQC review or an individual WQC with unavoidable impacts to aquatics resources, a mitigation plan must be provided.

    a. Wetland mitigation plans submitted for Ecology review and approval shall be based on the most current guidance provided in Wetland Mitigation in Washington State, Parts 1 and 2 (available on Ecology's website) and shall, at aminimum, include the following:

        i. A description of the measures taken to avoid and minimize impacts to wetlands and other waters of the U.S.

        ii. The nature of the proposed impacts (i.e., acreage of wetlands and functions lost or degraded).

        iii. The rationale for the mitigation site that was selected.

        iv. The goals and objectives of the compensatory mitigation project.

        v. How the mitigation project will be accomplished, including construction sequencing, best management practices to protect water quality, proposed performance standards for measuring success and the proposed buffer widths.

        vi. How it will be maintained and monitored to assess progress toward goals and objectives. Monitoring will generally be required for a minimum of five years. For forested and scrub-shrub wetlands, 10 years of monitoring will often be necessary.

        vii. How the compensatory mitigation site will be legally protected for the long term.

Refer to Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Ecology Publication #06-06-011b) and Selecting Wetland Mitigation Sites Using a Watershed Approach (Ecology Publications #09-06-032 (Western Washington) and #10-06-007 (Eastern Washington)) for guidance on selecting suitable mitigation sites and developing mitigation plans.

Ecology encourages the use of alternative mitigation approaches, includingcredit/debit methodology, advance mitigation, and other programmatic approaches such as mitigation banks and in-lieu fee programs. If you are interested in proposing use of an alternative mitigation approach, consult with the appropriate Ecology regional staff person. Information on alternative mitigation approaches is available on Ecology's website.

    b. Mitigation for other aquatic resource impacts will be determined on a case-by-case basis.

7. **Stormwater Pollution Prevention**. All projects involving land disturbance or impervious surfaces must implement stormwater pollution prevention or control measures to avoiddischarge of pollutants in stormwater runoff to waters.

    a. For land disturbances during construction, the applicant must obtain and

implement permits (e.g., Construction Stormwater General Permit) where required and follow Ecology's current stormwater manual.

b. Following construction, prevention or treatment of on-going stormwater runofffrom impervious surfaces shall be provided.

Ecology's Stormwater Management and Design Manuals and stormwater permitinformation are available on Ecology's website.

8. **Application**. For projects or activities that will require Ecology WQC review, or anindividual WQC, project proponents must provide Ecology with a JARPA or the equivalent information, along with the documentation provided to the Corps, as described in national general condition 32, Pre-Construction Notification (PCN), including, where applicable:

   a. A description of the project, including site plans, project purpose, direct and indirect adverse environmental effects the project discharge(s) would cause, best management practices (BMPs), and proposed means to monitor the discharge(s).

   b. List of all federal, state or local agency authorizations required to be used for anypart of the proposed project or any related activity.

   c. Drawings indicating the OHWM, delineation of special aquatic sites, and other waters of the state. Wetland delineations must be prepared in accordance with thecurrent method required by the Corps and shall include Ecology's Wetland Rating form. Wetland Rating forms are subject to review and verification by Ecology staff.

   Guidance for determining the OHWM is available on Ecology's website.

   d. A statement describing how the mitigation requirement will be satisfied. A conceptual or detailed mitigation or restoration plan may be submitted. See stategeneral condition 5.

   e. Other applicable requirements of Corps NWP general condition 32, Corps regional conditions, or notification conditions of the applicable NWP.

Ecology **grants with conditions Water Quality Certification** (WQC) for this NWP provided that Ecology individual WQC review is not required per the state general conditions (see above) and the following conditions:

Ecology Section 401 Water Quality Certification – Granted with conditions. Ecology individual WQC is required for projects or activities authorized under this NWP if:

The project or activity is not authorized though a Model Toxics Control Act (MTCA) order or a Comprehensive Environmental Response, Compensation and Liability Act(CERCLA) order

Environmental Protection Agency (EPA) (on Tribal Lands where Tribes Do Not Have Treatment in a Similar Manner as a State and Lands with Exclusive Federal Jurisdiction in Washington):

On behalf of the 28 tribes that do not have treatment in a similar manner as a state and for exclusive federal jurisdiction lands located within the state of Washington, EPA Region 10 has determined that CWA Section 401 WQC for the following proposed NWPs is granted with conditions. EPA Region 10 has determined that any discharge authorized under the following proposed NWPs will comply with water quality requirements, as defined at 40 C.F.R. § 121.1(n), subject to the following conditions pursuant to CWA Section 401(d).

General Conditions:

EPA General Condition 1 – Aquatic Resources of Special Concern

Activities resulting in a point source discharge in the following types of aquatic resources of special concern shall request an individual project-specific CWA Section 401 WQC: mature forested wetlands; bogs, fens and other peatlands; vernal pools; aspen-dominated wetlands; alkali wetlands; camas prairie wetlands; wetlands in dunal systems along the Oregon or Washington Coast; riffle-pool complexes of streams; marine or estuarine mud-flats; salt marshes; marine waters with native eelgrass or kelp beds; or marine nearshore forage fish habitat. To identify whether a project would occur in any of these aquatic resources of special concern, project proponents shall use existing and available information to identify the location and type of resources, including using the U.S. Fish and Wildlife Service's online digital National Wetland Inventory maps, identifying project location on topographical maps, and/or providing on-site determinations as required by the Corps. When a project requires a Pre-Construction Notification (PCN) to the Corps, project proponents shall work with the Corps to identify whether the project is in any of these specific aquatic resources of special concern.

EPA General Condition 2 – Soil Erosion and Sediment Controls

Turbidity shall not exceed background turbidity by more than 50 Nephelometric Turbidity Units (NTU) above background instantaneously or more than 25 NTU above background for more than ten consecutive days.[8] Projects or activities that are expected to exceed these levels require an individual project-specific CWA Section 401 WQC.

The turbidity standard shall be met at the following distances from the discharge:

Wetted Stream Width at Discharge Point	**Approximate Downstream Point to Sample to Determine Compliance**
Up to 30 feet	50 feet
>30 to 100 feet	100 feet
>100 feet to 200 feet	200 feet
>200 feet	300 feet
Lake, Pond, Reservoir	Lesser of 100 feet or maximum surface distance

For Marine Water	**Point of Compliance for Temporary Area of Mixing**
Estuaries or Marine Waters	Radius of 150 feet from the activity causing the turbidity exceedance

Measures to prevent and/or reduce turbidity shall be implemented and monitored prior to, during, and after construction. Turbidity monitoring shall be done at the point of compliance within 24 hours of a precipitation event of 0.25 inches or greater. During monitoring and maintenance, if turbidity limits are exceeded or if measures are identified as ineffective, then additional measures shall be taken to come into compliance and EPA shall be notified within 48 hours of the exceedance or measure failure.

EPA General Condition 3 - Compliance with Stormwater Pollution Prevention and the National Pollutant Discharge Elimination System Permit Provisions

For land disturbances during construction that 1) disturb one or more acres of land, or 2) will disturb less than one acre of land but are part of a common plan of development or sale that will ultimately disturb one or more acres of land, the permittee shall obtain and implement Construction Stormwater General Permit requirements,[9] including:

1. The permittee shall develop a Stormwater Pollution Prevention Plan (SWPPP)[10] and submit it to EPA Region 10 and appropriate Corps District; and
2. Following construction, prevention or treatment of ongoing stormwater runoff from impervious surfaces that includes soil infiltration shall be implemented.

EPA General Condition 4 – Projects or Activities Discharging to Impaired Waters

Projects or activities are not authorized under the NWPs if the project will involve point source discharges into an active channel (e.g., flowing or open waters) of a water of the U.S. listed as impaired under CWA Section 303(d) and/or if the waterbody has an approved Total Maximum Daily Load (TMDL) and the discharge may result in further exceedance of a specific parameter (e.g., total suspended solids, dissolved oxygen, temperature) for which the waterbody is listed or has an approved TMDL. The current lists of impaired waters of the U.S. under CWA Section 303(d) and waters of the U.S. for which a TMDL has been approved are available on EPA Region 10's web site at: https://www.epa.gov/tmdl/impaired-waters-and-tmdls-region-10.

EPA General Condition 5 – Notice to EPA

All project proponents shall provide notice to EPA Region 10 prior to commencing construction activities authorized by a NWP. This will provide EPA Region 10 with the opportunity to inspect the activity for the purposes of determining whether any discharge from the proposed project will violate this CWA Section 401 WQC. Where the Corps requires a PCN for an applicable NWP, the project proponent shall also provide the PCN to EPA Region 10. EPA Region 10 will provide written notification to the project proponent if the proposed project will violate the water quality certification of the NWP.

EPA General Condition 6 – Unsuitable Materials

The project proponent shall not use wood products treated with leachable chemical components (e.g., copper, arsenic, zinc, creosote, chromium, chloride, fluoride, pentachlorophenol), which result in a discharge to waters of the U.S., unless the wood products meet the following criteria:

1. Wood preservatives and their application shall be in compliance with EPA label requirements and criteria of approved EPA Registration Documents under the Federal Insecticide, Fungicide, and Rodenticide Act;
2. Use of chemically treated wood products shall follow the Western Wood Preservatives Institute (WWPI) guidelines and BMPs to minimize the preservative migrating from treated wood into the aquatic environment;
3. For new or replacement wood structures, the wood shall be sealed with non-toxic products such as water-based silica or soy-based water repellants or sealers to prevent or limit leaching. Acceptable alternatives to chemically treated wood include untreated wood, steel (painted, unpainted or coated with epoxy petroleum compound or plastic), concrete and plastic lumber; and
4. All removal of chemically treated wood products (including pilings) shall follow the most recent "EPA Region 10 Best Management Practices for Piling Removal and Placement in Washington State."

Federally recognized tribes located within the state of Washington

EPA Region 10 cannot certify that the range of discharges from potential projects authorized under this NWP will comply with water quality requirements, as defined in 40 CFR 121.1(n). Therefore, CWA Section 401 water quality certification is denied for this NWP and applicants must request an individual water quality certification, consistent with 40 CFR 121.5.

Lands of Exclusive Federal Jurisdiction

EPA Region 10 cannot certify that the range of discharges from potential projects authorized under this NWP will comply with water quality requirements, as defined in 40 CFR 121.1(n). Therefore, CWA Section 401 water quality certification is denied for this NWP and applicants must request an individual water quality certification, consistent with 40 CFR 121.5.

Specific Tribes with Certifying Authority (Projects in Specific Tribal Areas):
WQC was issued by the Swinomish Indian Tribal Community. WQC was waived by the Confederated Tribes of the Chehalis Reservation and Colville Indian Reservation, Kalispel Tribe of Indians, Port Gamble S'Klallam Tribe, Quinault Indian Nation, and the Spokane Tribe of Indians. WQC was denied by the Lummi Nation, Makah Tribe, Puyallup Tribe of Indians, and the Tulalip Tribes; therefore, individual WQC is required from these tribes.

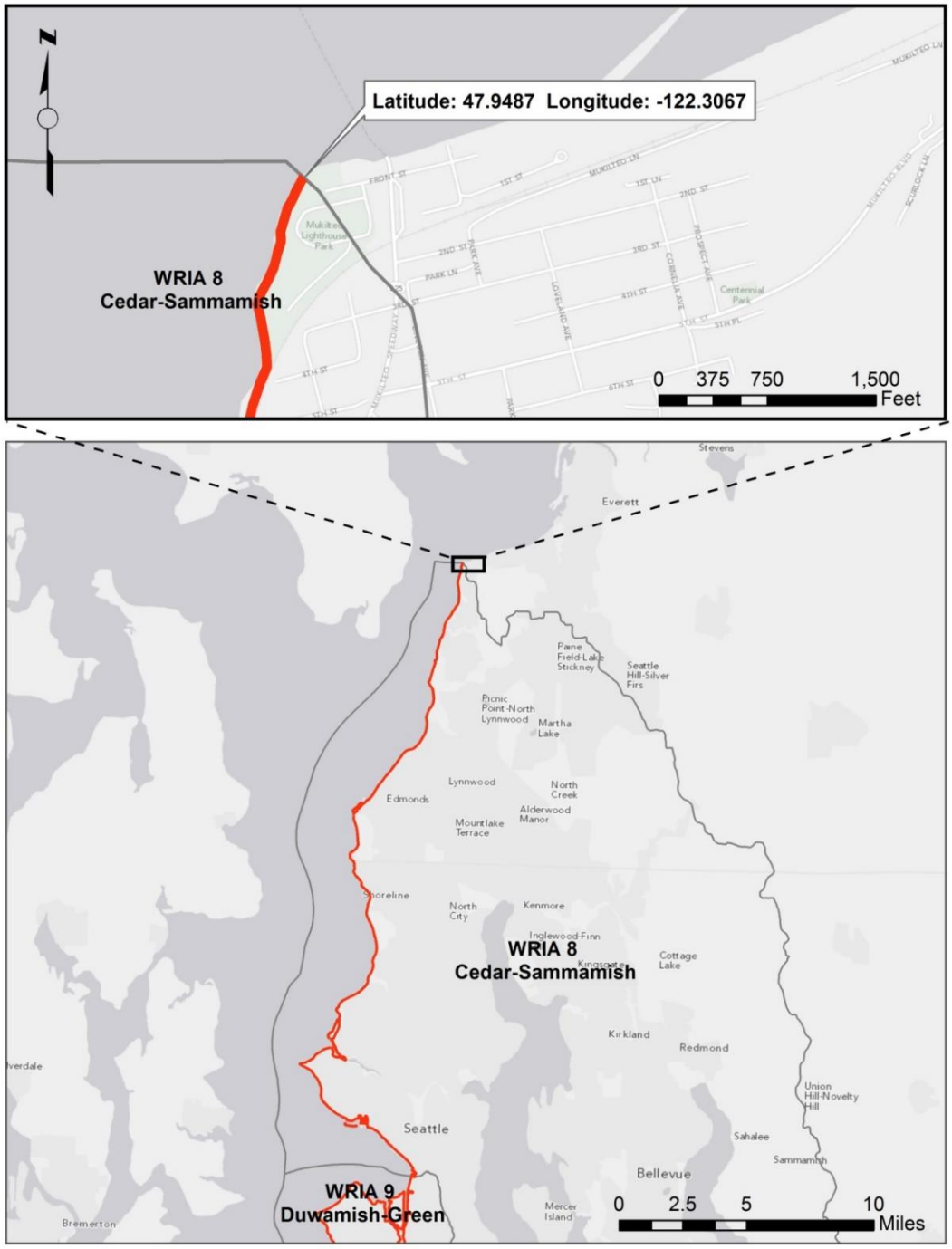
F. COASTAL ZONE MANAGEMENT ACT (CZMA) CONSISTENCY RESPONSE FOR THIS NWP:

Ecology's determination is that they concur with conditions that this NWP is consistent with CZMA.

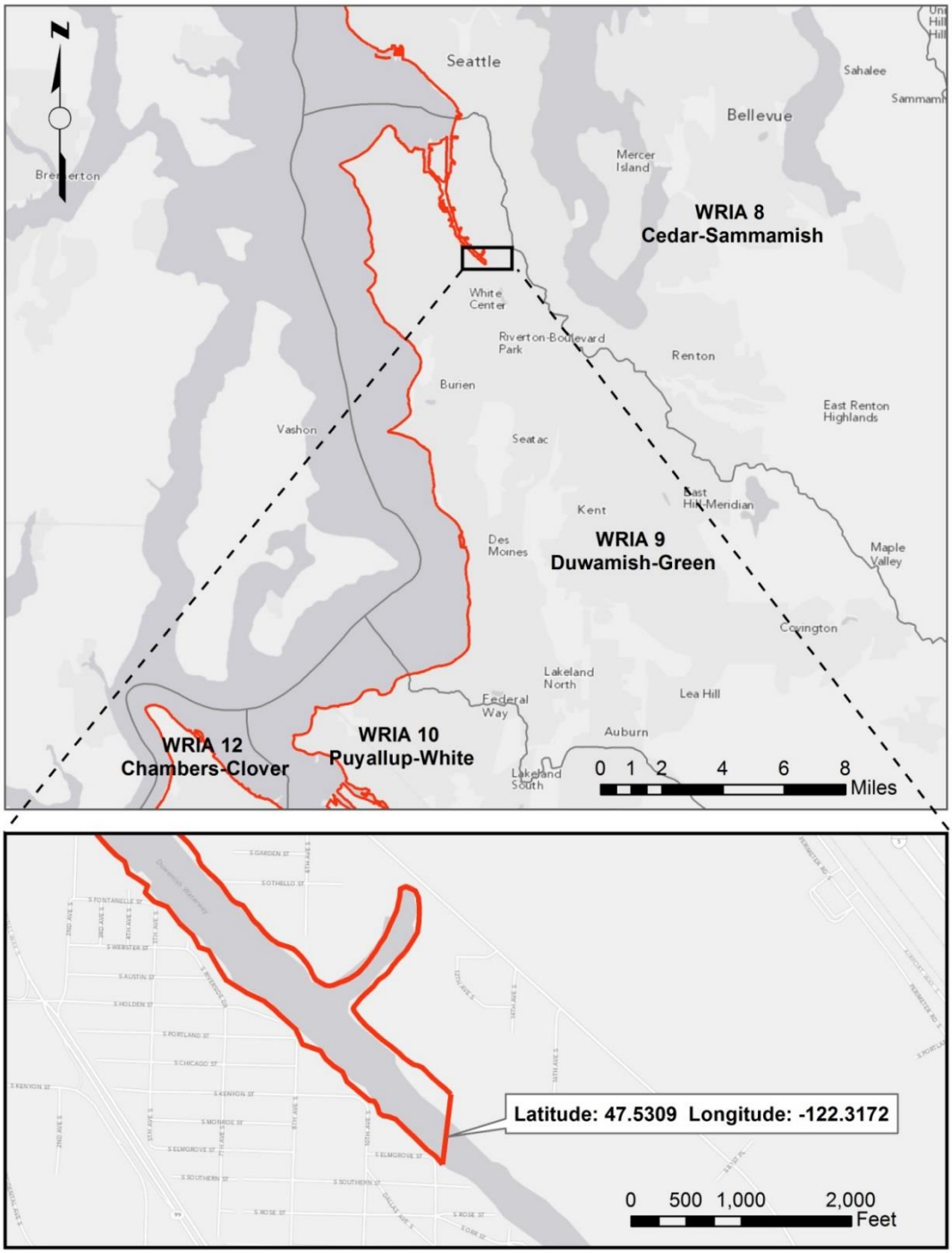
CZM Federal Consistency Response – Concur with Conditions.

1. A CZM Federal Consistency Decision is required for projects or activities under this NWP if a State 401 Water Quality Certification is required.

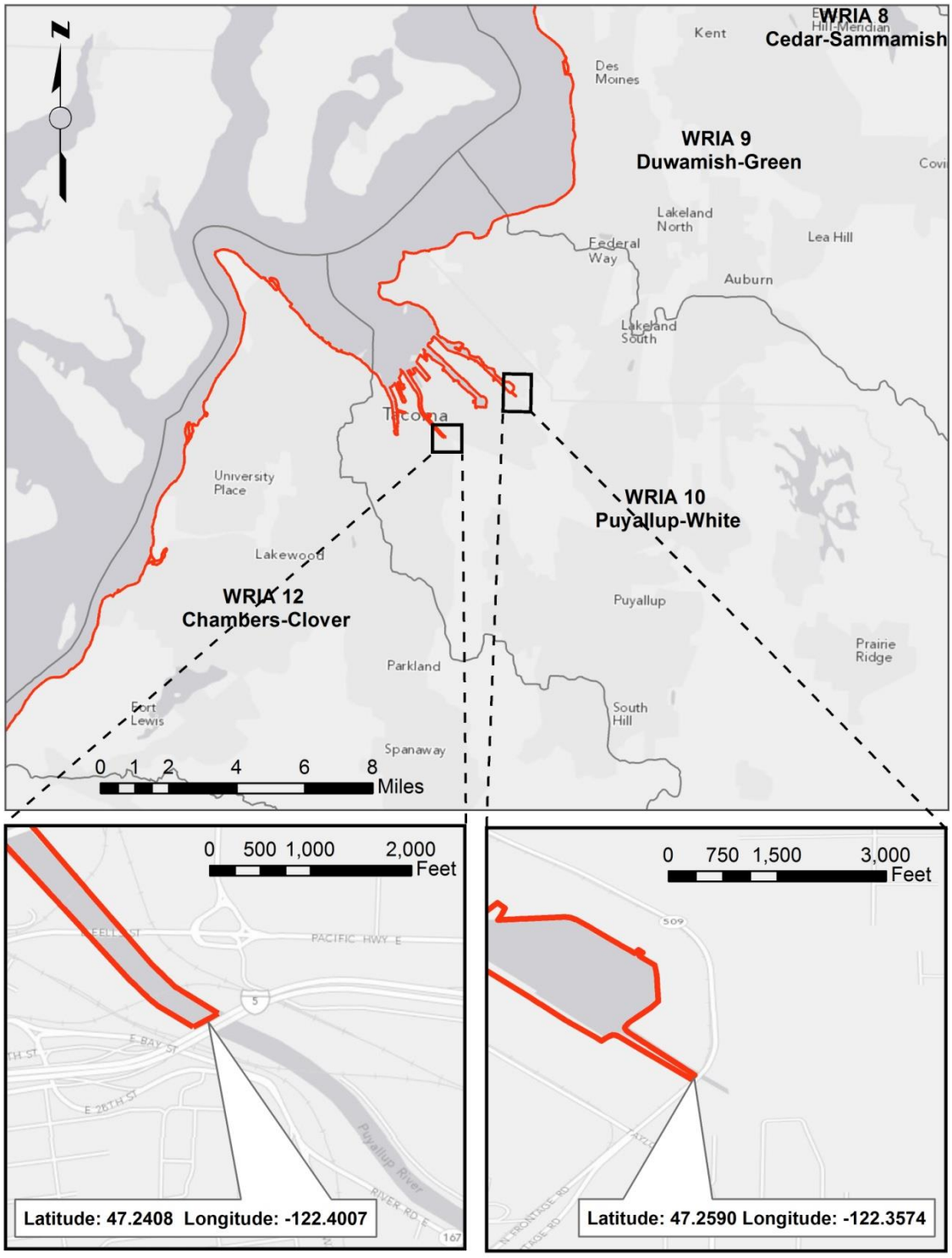
Seattle District Regional General Conditions - Figures
Figure 1: RGC 3 - WRIAs 8, 9, 10, 11, and 12
a. WRIA 8



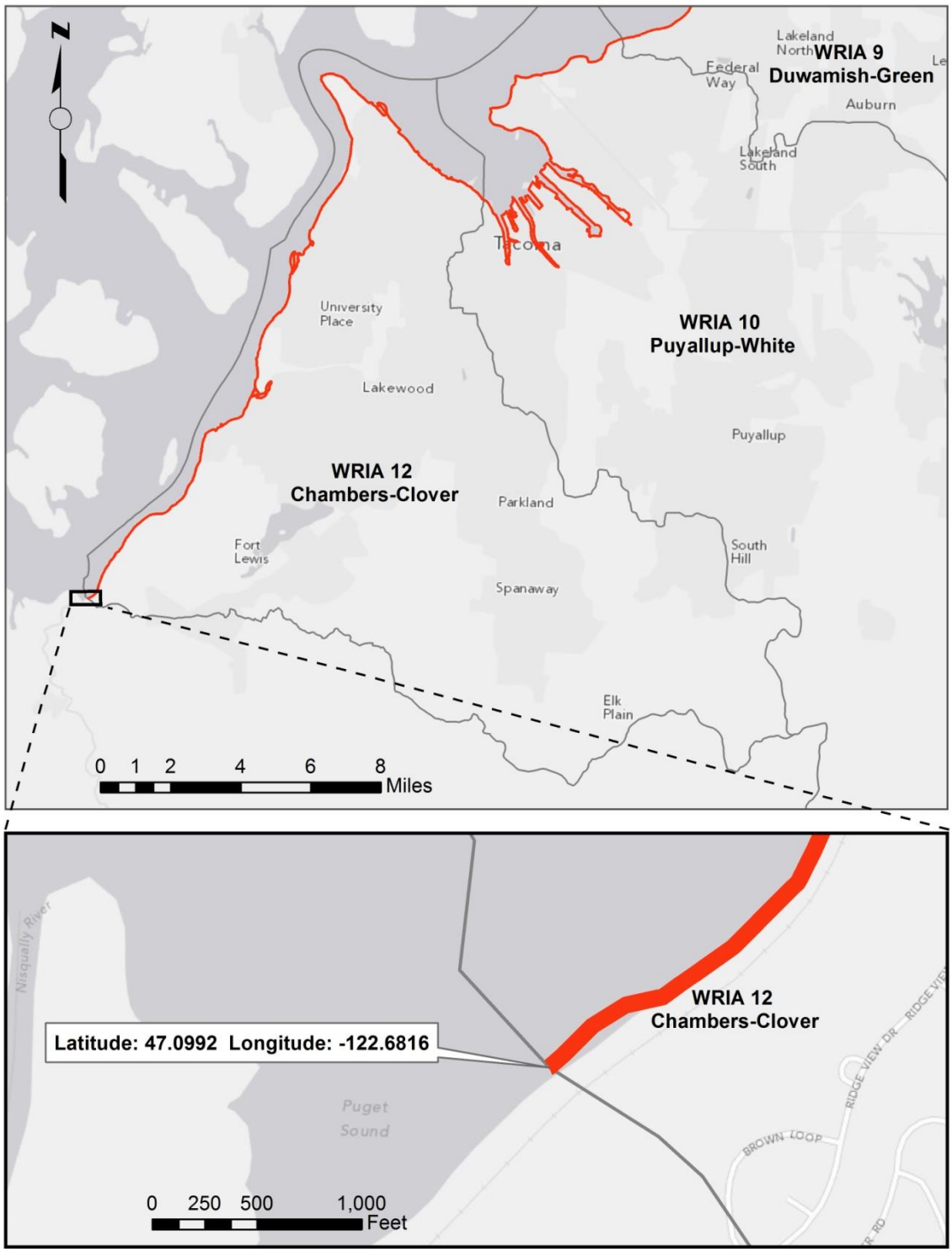
b. WRIA 9


N
Seattle
Bellevue
Sahalee
Mercer Island
Bremerton
WRIA 8
Cedar-Sammamish
White Center
Riverton-Boulevard Park
Renton
Burien
East Renton Highlands
Vashon
Seatac
Kent
East Hill-Meridian
Des Moines
WRIA 9
Duwamish-Green
Maple Valley
Covington
Lakeland North
Lea Hill
Federal Way
Auburn
WRIA 12
Chambers-Clover
WRIA 10
Puyallup-White
Lakeland South
0 1 2 4 6 8
Miles
Latitude: 47.5309 Longitude: -122.3172
0 500 1,000 2,000
Feet

c. WRIA 10


WRIA 8
Cedar-Sammamish
WRIA 9
Duwamish-Green
WRIA 10
Puyallup-White
WRIA 12
Chambers-Clover
Kent
Des Moines
Lakeland North
Federal Way
Lea Hill
Auburn
Lakeland South
Tacoma
University Place
Lakewood
Puyallup
Parkland
Prairie Ridge
South Hill
Spanaway
Fort Lewis
0 1 2 4 6 8 Miles
0 500 1,000 2,000 Feet
PACIFIC HWY E
E BAY ST
E 26TH ST
Puyallup River
RIVER RD E
Latitude: 47.2408 Longitude: -122.4007
0 750 1,500 3,000 Feet
Latitude: 47.2590 Longitude: -122.3574

d. WRIA 12


N
Lakeland North
WRIA 9
Duwamish-Green
Federal Way
Auburn
Lakeland South
Tacoma
University Place
WRIA 10
Puyallup-White
Lakewood
Puyallup
WRIA 12
Chambers-Clover
Parkland
Fort Lewis
South Hill
Spanaway
Elk Plain
0 1 2 4 6 8
Miles
Nisqually River
WRIA 12
Chambers-Clover
Latitude: 47.0992 Longitude: -122.6816
Puget Sound
BROWN LOOP
RIDGE VIEW DR
0 250 500 1,000
Feet

e. WRIA 11

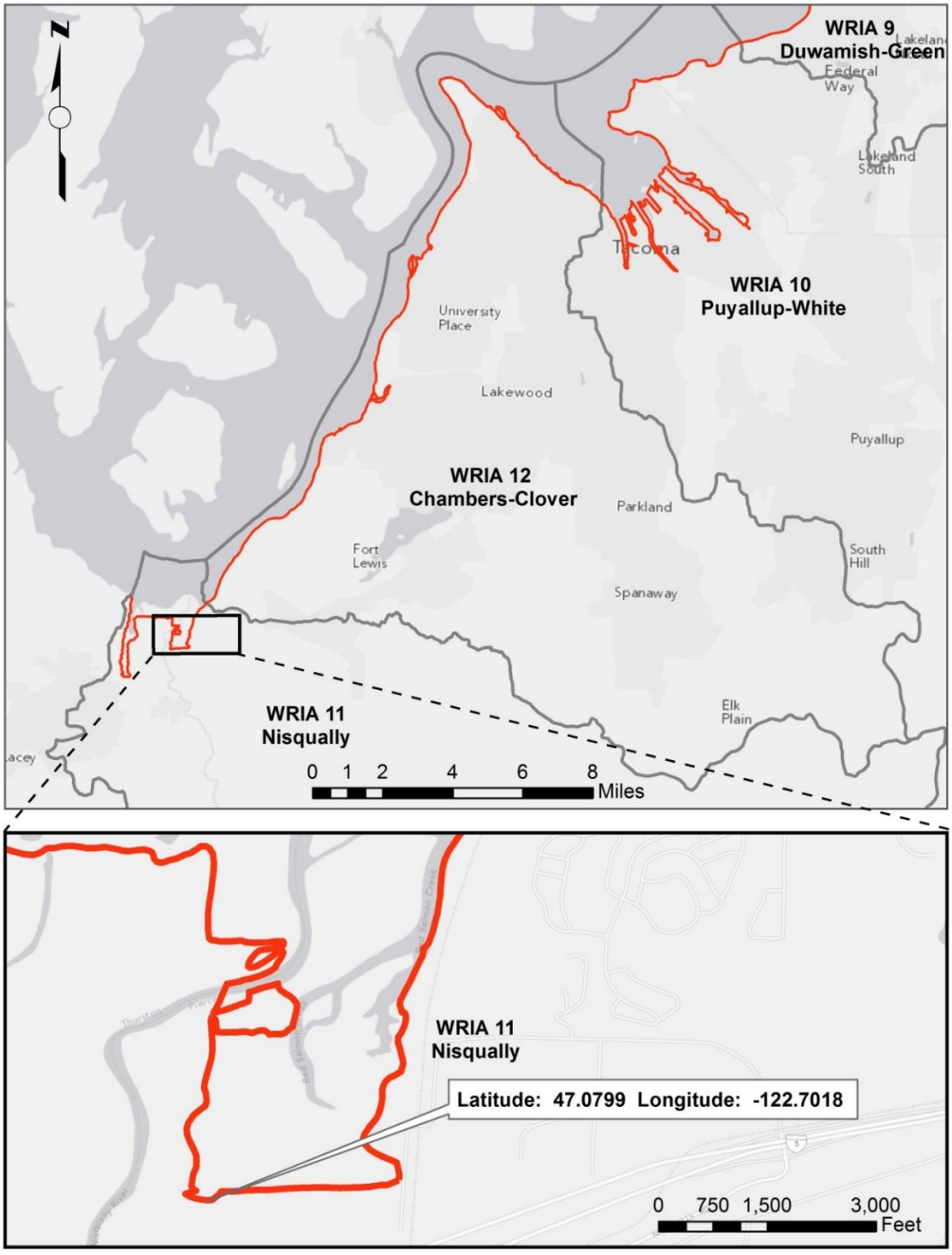
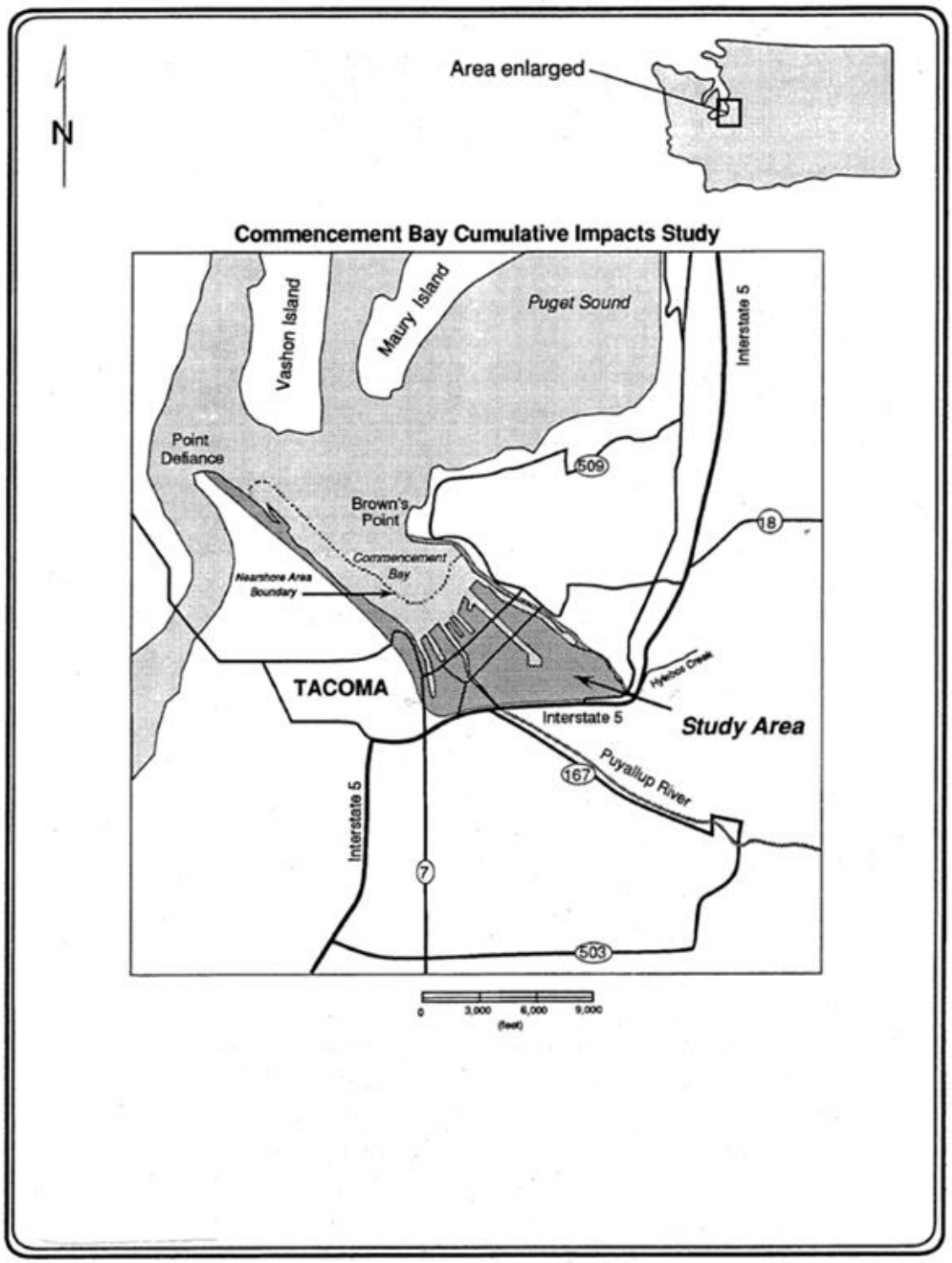

WRIA 9
Duwamish-Green
Federal Way
Lakeland South
Tacoma
WRIA 10
Puyallup-White
University Place
Lakewood
Puyallup
WRIA 12
Chambers-Clover
Parkland
Fort Lewis
South Hill
Spanaway
Elk Plain
Lacey
WRIA 11
Nisqually
0 1 2 4 6 8
Miles
WRIA 11
Nisqually
Latitude: 47.0799 Longitude: -122.7018
0 750 1,500 3,000
Feet

Figure 2. RGC 4 - Commencement Bay Study Area



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Washington Fish and Wildlife Office
510 Desmond Dr. S.E., Suite 102
Lacey, Washington 98503

In Reply Refer to:
USFWS/R1/2022-0013647

Todd Tillinger, Chief Regulatory Branch
Seattle District, U.S. Army Corps of Engineers
ATTN: Danette Guy
4735 E. Marginal Way South, Building 1202
Seattle, Washington 98134-2388

Dear Mr. Tillinger:

Subject: Northwest Alloys, Inc., MTCA Cleanup Action (NWS-2022-0021)

This letter is in response to your February 23, 2022, request for informal consultation pursuant to section 7(a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) (ESA). Your letter and supporting information, addressing the proposed cleanup and remedial action at 4029 Industrial Way, Longview, Cowlitz County, Washington, were received on February 23, 2022. Based on the information you provided, best available science, and complete and successful implementation of agreed-upon conservation measures, we concur with your determination that the proposed action "may affect, but is not likely to adversely affect" the federally listed species and designated critical habitat identified below:

- Bull trout (*Salvelinus confluentus*)
- Designated bull trout critical habitat

Project Description:

The U.S. Army Corps of Engineers proposes to issue a permit(s) to Northwest Alloys, Inc. for cleanup and remediation of the former Reynolds Metals Reduction Plant site on the Columbia River. This cleanup action is being administered under Washington State's Model Toxics Cleanup Act (MTCA). The associated Consent Decree requires specific corrective and remedial measures for control and removal of sources of contaminants, including fluoride, cyanide, polycyclic aromatic hydrocarbons, petroleum, and polychlorinated biphenyls (PCBs), in surface water, groundwater, and soils. Northwest Alloys, Inc. will implement this action, to meet and achieve cleanup levels and remedial standards under MTCA (WAC 173-340), and applicable landfill requirements (WAC 173-304).

The proposed remedial action includes excavation and off-site disposal, excavation and on-site consolidation, low permeable caps, placement of a reactive backfill, installation of permeable reactive barriers, and maintenance of existing stormwater storage and conveyance functions. The cleanup site includes 13 site units (SUs), two of which have already been remediated (SUs 12 and 13, in 2016 and 2019, respectively). All work will be conducted from the uplands, and will require two construction seasons to complete. Only one SU, SU 10, is located waterward of the Diking Improvement District flood control levee, but above the ordinary high water (OHW) line; work here includes excavation, on-site consolidation, backfilling and grading to the original contours, and reseeding. No in-water work and no excavation below the OHW line is proposed.

The cleanup site includes an operating stormwater collection, conveyance, and treatment system, to control and treat stormwater runoff generated in areas landward of the Diking Improvement District levee. The proposed action will permanently alter approximately 0.11 acres of wetland, 1.83 acres of wetland buffer, and will temporarily disturb small additional wetlands and wetland buffers. The Applicant/project proposes to offset unavoidable wetland and buffer impacts, by purchasing mitigation credits from the Coweeman River Joint Wetland and Conservation Bank (Cowlitz County, WA).

The U.S. Army Corps of Engineers has determined that the action will have "no effect" on additional listed species and designated critical habitat that are known to occur in Cowlitz County. The determination of "no effect" to listed resources rests with the action agency. The U.S. Fish and Wildlife Service (Service) has no regulatory or statutory authority for concurring with a "no effect" determination, and no consultation with the Service is required. We recommend that the action agency document their analyses on effects to listed species, and maintain that documentation as part of the project file.

Sufficient information has been provided to determine the effects of the proposed action and to conclude whether it would adversely affect federally listed species and/or designated critical habitat. Our concurrence is based on information provided by the action agency, best available science, and complete and successful implementation of the conservation measures included by the action agency.

EFFECTS TO BULL TROUT

I. Exposures and Effects to Bull Trout

Effects will not be measurable (insignificant) and will not significantly disrupt normal behaviors (i.e., the ability to successfully feed, move, and/or shelter) and are therefore considered insignificant because of the following:

- Work will occur in the uplands and standard best management practices will prevent construction debris, sediments, equipment, and materials from entering drainages or waterways.

- Sources of sound and visual disturbance will not exceed existing baseline conditions at the site. The site is located in industrialized portions of Longview. The proposed action does not include pile driving or blasting.

- The cleanup site includes an operating stormwater collection, conveyance, and treatment system, to control and treat stormwater runoff generated in areas landward of the Diking Improvement District levee.

- The action will improve water and sediment quality in the Columbia River, wetlands, surface water, and groundwater surrounding the cleanup site.

II. Effects to Bull Trout, their Habitat, and their Prey

With successful implementation of the conservation measures included by the action agency as part of the proposed action, we expect that the effects of the action will not measurably degrade or diminish habitat functions or prey resources in the action area. Therefore, effects from the action are considered insignificant.

- The proposed cleanup may cause temporary, construction-related discharges of stormwater and debris. The effects of these will be minimized by implementing best management practices, for work in and around water, and spill and erosion control measures and maintenance.

- Materials removed from SU 10 will contain inert construction debris and no chemical contamination in excess of applicable screening levels. With successful implementation of the proposed measures, the foreseeable impacts to water and sediment quality in the Columbia River will be temporary, intermittent, and will not significantly disrupt normal behaviors (successful feeding, moving, and sheltering).

- The proposed action will permanently alter approximately 0.11 acres of wetland, 1.83 acres of wetland buffer, and will temporarily disturb small additional wetlands and wetland buffers. The Applicant/project proposes to offset unavoidable wetland and buffer impacts, by purchasing mitigation credits from the Coweeman River Joint Wetland and Conservation Bank (Cowlitz County, WA).

- The proposed cleanup will address site contamination and bring the site into compliance with current MTCA standards. The foreseeable long term effects of the proposed action are considered beneficial.

EFFECTS TO DESIGNATED BULL TROUT CRITICAL HABITAT

The final revised rule designating bull trout critical habitat (75 FR 63898 [October 18, 2010]) identifies nine Primary Constituent Elements (PCEs) essential for the conservation of the species. The 2010 designation of critical habitat for bull trout uses the term PCE. The new critical habitat regulations (81 FR 7214) replace this term with physical or biological features (PBFs). This shift in terminology does not change the approach used in conducting our analyses, whether the original designation identified PCEs, PCBs, or essential features. In this letter, the term PCE is synonymous with PBF or essential features of critical habitat.

The following PCEs are present in the action area. Of the PCEs present, some will not be affected by the proposed action.

PCE 1: *Springs, seeps, groundwater sources, and subsurface water connectivity (hyporheic flows) to contribute to water quality and quantity and provide thermal refugia*.

- The action will improve water and sediment quality in the Columbia River, wetlands, surface water, and groundwater surrounding the cleanup site.

PCE 2: *Migration habitats with minimal physical, biological, or water quality impediments between spawning, rearing, overwintering, and freshwater and marine foraging habitats, including but not limited to permanent, partial, intermittent, or seasonal barriers*.

- The action may temporarily introduce an impediment or barrier within migration habitat. However, it will not preclude bull trout movement through the area, either during or after construction, and any effects will be temporary. The migration habitat will not be permanently altered, destroyed, or degraded.

PCE 8: *Sufficient water quality and quantity such that normal reproduction, growth, and survival are not inhibited*.

- The action may have impacts to water quality. However, the effects will be temporary; components of the project design include actions to avoid, reduce, or compensate for the effects; and/or we would be unable to measure, detect, or evaluate the effects. The action will measurably and substantially improve riparian and wetland habitat conditions and functions by removing chemical contaminants from the environment, providing significant benefits for bull trout.

CONCLUSION

This concludes consultation pursuant to the regulations implementing the ESA (50 CFR 402.13). Our review and concurrence with your effect determination is based on the implementation of the project as described. It is the responsibility of the Federal action agency to ensure that projects that they authorize or carry out are in compliance with the regulatory permit and ESA. If a permittee or the Federal action agency deviates from the measures outlined in a permit or project description, the Federal action agency has the obligation to reinitiate consultation and comply with section 7(d).

This project should be re-analyzed and re-initiation may be necessary if 1) new information reveals effects of the action that may affect listed species or critical habitat in a manner, or to an extent, not considered in this consultation, 2) if the action is subsequently modified in a manner that causes an effect to a listed species or critical habitat that was not considered in this consultation, and/or 3) a new species is listed or critical habitat is designated that may be affected by this project.

This letter constitutes a complete response by the Service to your request for informal consultation. A record of this consultation is on file at the Washington Fish and Wildlife Office, in Lacey, Washington. If you have any questions about this letter or our shared responsibilities under the ESA, please contact the consulting biologist identified below.

U.S. Fish and Wildlife Service Consultation Biologist(s):
Anne Heron (anne_heron@fws.gov)
Ryan McReynolds (ryan_mcreynolds@fws.gov)

Sincerely,

Brad Thompson, State Supervisor
Washington Fish and Wildlife Office

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
1201 NE Lloyd Boulevard, Suite 1100
Portland, OR 97232

Refer to NMFS No:
WCRO-2022-00405

April 4, 2022

Jacalen Printz
Chief, Regulatory Branch
U.S. Army Corps of Engineers, Seattle District
4735 East Marginal Way South, BLDG 1202
Seattle, WA 98134-2388

Re: Endangered Species Act Section 7(a)(2) Concurrence Letter and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for Northwest Alloys, Inc, Cowlitz County, Washington, NWS 2022-0021, HUC 170800030602

Dear Ms. Printz:

On February 23, 2022, the U.S. Army Corps of Engineers (COE) submitted a Biological Evaluation to the National Marine Fisheries Service (NMFS) and requested written concurrence for NW Alloys remediation work to be permitted under Section 404 of the Clean Water Act, is not likely to adversely affect (NLAA) determination regarding the proposed action's effects on species listed as threatened or endangered or critical habitats designated under the Endangered Species Act (ESA). This response documenting our concurrence with your request was prepared by NMFS under section 7(a)(2) of the ESA and implementing regulations at 50 CFR 402.

The COE also determined that permitting the proposed project would not adversely affect essential fish habitat (EFH) designated under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) (16 U.S.C. 1855(b)) for this action. We concur with the COE that EFH for Pacific salmonids is not adversely affected and that no EFH consultation is required.

This letter underwent pre-dissemination review using standards for utility, integrity, and objectivity in compliance with applicable guidelines issued under the Data Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, A complete record of this consultation is on file electronically at the Oregon Washington Costal Office.

Consultation History

The COE submitted its request for informal consultation on February 23rd, 2022, which serves as the initiation date.

On March 10th, 2022, NMFS emailed the COE requesting the work windows for the project. The COE responded on March 16th, stating the work window would be from May-September in each year of the project, 2023 and 2024. NMFS concurred that the work window would be suitable because work near the bank of the Columbia River would occur during the driest time of year and decrease the likelihood of erosion happening and thus avoiding contaminated soils reaching the water.,

On March 17th, 2022, NMFS emailed the COE asking for additional measures to protect ESA-listed species that could be present in the action area when construction is undertaken in Site Unit (SU) 10. These other measures include using haybales and coir logs and the already established BMPs in SU10 to reduce the possibility of contaminated soils entering the water. On March 17th, 2022, the COE agreed to implement these additional measures.

The COE concluded that the proposed action might affect but is not likely to adversely affect the following ESA-listed species:

- Lower Columbia River (LCR) Chinook salmon
- Upper Willamette River (UWR) Chinook salmon
- Upper Columbia River (UCR) spring-run Chinook salmon
- Snake River (SR) spring/summer-run Chinook salmon
- SR fall-run Chinook salmon
- LCR Coho salmon
- SR sockeye salmon
- LCR steelhead
- UWR steelhead
- Middle Columbia River (MCR) steelhead
- UCR steelhead
- SR Basin steelhead
- Chum Salmon
- Southern Distinct Population Segment (sDPS) eulachon
- (sDPS) green sturgeon

The Corps similarly concluded that the proposed action may affect but is not likely to adversely affect the designated critical habitats for each species except green sturgeon because there is no critical habitat designated in the Action Area.

Proposed Action and Action Area

Northwest Alloys (NWA) proposes to remediate 11 distinct SUs and two areas of affected groundwater located on the former Reynolds Metals Reduction Plant site in Longview, Cowlitz County, Washington, at river mile 63. The remediation work will have minor impacts on wetlands that are located on-site. There is no work purposed to occur within the Columbia River. The proposed action area is within the Lower Columbia-Clatskanie watershed.

The proposed action will entail a combination of excavation/capping, backfill, consolidation, and offsite disposal of hazardous materials. Clean-up will be achieved either by excavation and off-site disposal or excavation and on-site consolidation. On-site consolidation will then be supplemented by low permeability caps, reactive backfill (below the water table), and permeable reactive barriers (PRBs). Impacted materials from SU3, SU5, SU8, SU10, and the eastern and western portions of SU2 will be excavated and consolidated with three landfills: West Landfill (SU1), East Landfill No.1 (SU7), and East Landfill No.2 (SU6). Following consolidation, these areas will be capped with low permeability caps. The consolidation and capping will minimize the potential for direct contact with and infiltration of precipitation through impacted materials.

The Project involves maintaining the existing roadside ditches (CD02, CD03, and CD04) located in the vicinity of East Landfill No. 1 (SU7) and East Landfill No. 2 (SU6). Ditch maintenance will involve regrading (select excavation and filling) to maintain the ditches 'stormwater storage and conveyance functions.

Cleanup Action construction will start as soon as possible upon receiving all necessary permits and authorizations. Construction is anticipated to require at least two seasons
and could begin as early as March 2023.

Figure 1: Photo of proposed project location on the Columbia River, Longview, WA

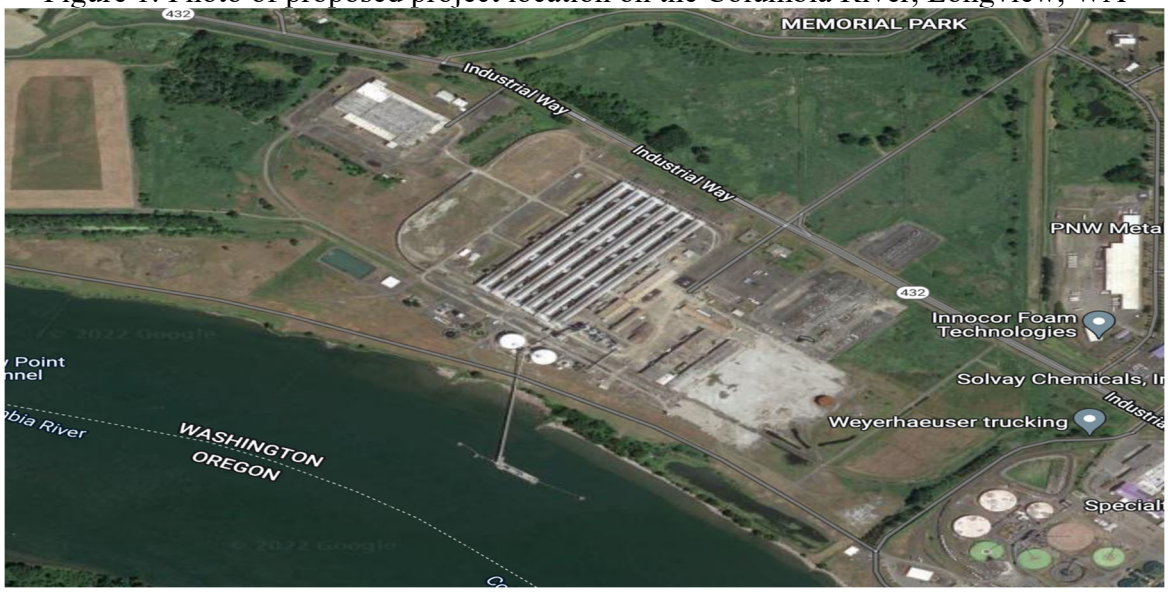
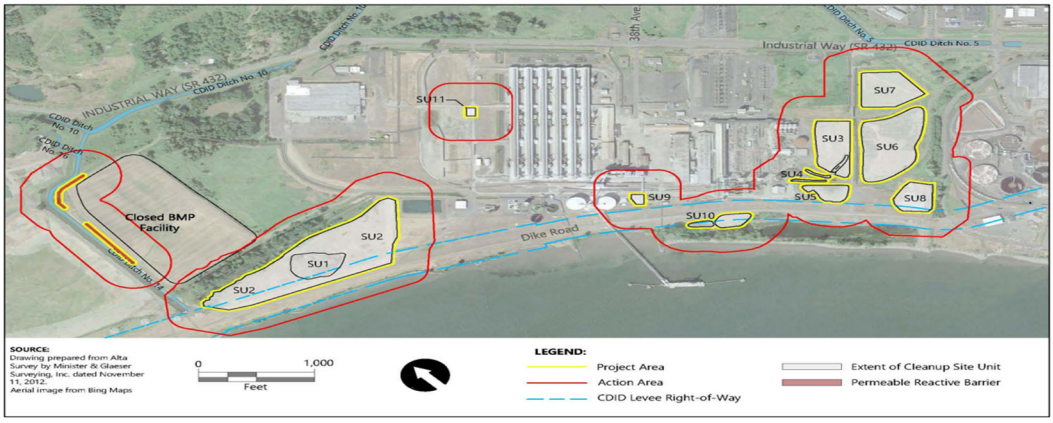


Figure 2 MTCA Cleanup project and action area



No work is proposed in the Columbia River. During construction, potential impacts to aquatic species will be limited to the small risk of a spill or erosion occurring in proximity to the
aquatic environment. Multiple federal, state, and local permit conditions are expected to govern the project in a manner that reduces project effects. These are expected to include but are not
limited to the following minimization measures and Best Management Practices (BMPs).

- No land-based construction equipment would enter any shoreline body of water.

- Typical construction BMPs for working near water will be applied, including checking
equipment for leaks and other problems that could result in the discharge of petroleum-based
products, hydraulic fluid, or other material to the Columbia River.

- The contractor will have a spill containment kit, including oil-absorbent materials, on-site
to be used in a spill or if any oil product is observed in or near the water.

- The contractor will be responsible for preparing and implementing a Spill Control plan for the duration of the project. The program will be submitted to the Project engineer before any project activities. A copy of the plan with any updates will be maintained at the worksite by the contractor.

- Equipment will have properly functioning mufflers, engine-intake silencers, and engine
closures according to federal standards; the contractor will inspect fuel hoses, oil or fuel
transfer valves and fittings regularly for drips or leaks to prevent spills
into the surface water.

• Proper erosion control measures would be installed before any excavation or backfilling
to prevent the uncontrolled discharge of turbid water or sediments into waters of the state.
Erosion control structures or devices will be regularly maintained and inspected to ensure their proper functioning throughout this project.

• All fuel and chemicals would be kept, stored, handled, and used in a fashion that assures
no opportunity for entry of fuel and chemicals into the water.

• The cleanup will be carried out in accordance with the BMPs listed in the Stormwater
Manual for Western Washington and Construction Stormwater General Permit. These BMPs include but are not limited to:

- Stabilized Construction Entrance / Exit.
  - Stabilized entrance and exit would be installed and maintained through the duration of demolition, site preparation, pre-loading, and construction.
- Wheel Wash would be used if the stabilized construction entrance/exit is not preventing sediment from being tracked off-site; and
- Construction Road/Parking Area Stabilization roads, parking areas, and other onsite vehicle transportation routes would be stabilized to reduce erosion caused by construction traffic or runoff.

• Onsite Construction Equipment BMPs during construction include, but are not limited to:
Material Delivery, Storage, and Containment would be used to prevent, reduce, or eliminate the discharge of pollutants to the stormwater system or watercourses from
material delivery and storage; Storage of hazardous materials onsite would be minimized
to the extent feasible, Materials would be stored in a designated area, and secondary containment would be installed where needed; Refueling would occur in designated areas
with appropriate spill control measures.

• Earthwork associated with remediating SU10 will not extend below the OHW mark of the
Columbia River or into the adjacent wetlands.

• The footprint of the SU10 work area has been limited to that necessary to be protective of
human health and the environment and otherwise comply with MTCA requirements.

• SU10 will be backfilled and restored to its original configuration following remediation
and impacts will be temporary.

• NWA proposes to offset unavoidable wetland impacts by purchasing mitigation credits
from the Coweeman River Joint Wetland and Conservation Bank in Cowlitz County (Grette Associates 2021). In addition to providing wetland mitigation, this bank also addresses specific elements within the Salmon Recovery Plan (LCFRB 2010), such as protecting and restoring habitat types is critical and beneficial to anadromous fish (Habitat
Bank 2016).

Effects of the Action

Under the ESA, "effects of the action" are all consequences to listed species or critical habitat caused by the proposed action, including the consequences of other activities caused by the proposed action. The proposed action causes a consequence if it would not occur but for the proposed action, and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (50 CFR 402.02). In our analysis, which describes the effects of the proposed action, we considered 50 CFR 402.17(a) and (b). When evaluating whether the proposed action is not likely to affect listed species or critical habitat adversely, NMFS considers whether the effects are expected to be ultimately beneficial, insignificant, or discountable. Entirely beneficial effects are contemporaneous positive effects without adverse effects on the species or critical habitat. Insignificant effects relate to the size of the impact and should never reach the scale where take occurs. Effects are considered discountable if they are extremely unlikely to occur.

The possible effects of the proposed action are temporary water quality reductions during project implementation from sediment reaching the aquatic habitat, tree removal in the riparian area, and noise/visual disturbance affecting the aquatic habitat adjacent to the upland work. Based on the project location and as the action area is described, the critical habitat for all ESUs and DPSs may be affected by the project except the critical habitat for sDPS green sturgeon. Based on the timing of the work and because work will occur over two years (2023 and 2024), most species are likely to be exposed to construction effects during at least one life-history stage due to rearing or migration behavior could overlap with work. Juveniles are the most likely to migrate through the action area based on its limited extension into the water adjacent to the shoreline. The following species have juveniles that are likely to migrate through the action area during the proposed work period of May-September:

1. LCR Chinook
2. UWR Chinook
3. UCR Chinook
4. SR Spring/Summer Chinook
5. Fall SR Chinook
6. SR Sockeye,
7. LCR Steelhead,

8. MCR Steelhead
9. UCR Steelhead
10. SR Steelhead
11. LCR Coho
12. sDPS Eulachon
13. Columbia River (CR) chum

Adult salmon rely on deeper water and are unlikely to enter the action area. Green sturgeon also relies on deeper water and are unlikely to enter the action area.

The exposure of 13 species and the critical habitat of 14 species is not discountable. Because all species are likely to be exposed to the remediation action's short and long-term effects, we evaluate if the exposures will be insignificant or beneficial over both the short and long term.

Features of critical habitat for salmonid migration are freshwater corridors free of obstruction with water quantity and quality conditions and natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, side channels, and undercut banks supporting juvenile and adult mobility and survival. Features of critical habitat for rearing salmonids are rearing sites with water quantity and floodplain connectivity to form and maintain physical habitat conditions and support juvenile growth and mobility; water quality and forage supporting juvenile development; and natural cover such as shade, submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks.

Features of critical habitat for eulachon spawning are spawning and incubation sites with water flow, quality and temperature conditions, and a substrate supporting spawning and incubation. Features of critical habitat for eulachon migration are freshwater and estuarine corridors free of obstruction. Water flow, quality, and temperature conditions support larval and adult mobility, and abundant prey items support larval feeding after depleting the yolk sac.

The common features of critical habitat (salmonids and eulachon) likely to be affected by the proposed action are water quality and prey availability. Natural cover/riparian vegetation is also likely to be affected by salmonids. The project site and the action area are outside the critical habitat for green sturgeon.

Construction-Related Turbidity

Critical Habitat: The project incorporates timing restrictions and multiple erosion control measures to avoid sediment reaching the designated critical habitat, making the exposure discountable. However, if any sediment does enter the water, for example, during a significant rain event, erosion measures will minimize the amount of sediment reaching the water. Turbid conditions would be both temporary (hours) and localized (several feet), such that the effect on water quality from increased turbidity as a feature of CH is insignificant.

Species: As described above, exposure to decreased water quality/increased turbidity is unlikely among adult salmonids or green sturgeon. Juveniles' salmonids migrating through the action

area are expected to have only very brief exposure to turbidity because the turbid conditions are expected to be very limited in space and time. Juveniles rearing near the action area might be displaced from the area where the pulse occurs to adjacent water, avoiding gill abrasion or other physical responses. Therefore, some species and life stages have discountable exposure, and those exposed will have an insignificant response.

Eulachon larvae migrate passively, drifting downriver. They are unlikely to be present in the nearshore portion of the action area where turbidity may occur; however, if they are present, it is unlikely that turbid conditions will affect this migration or larval health; therefore, the effects on eulachon are discountable.

Vegetation Reduction in the Riparian Zone

Critical Habitat: Natural cover for rearing and migrating juvenile salmonids includes riparian vegetation. Vegetation removal in the units on the landward side of the flood levee is not expected to impact critical habitat. However, SU10 is on the riverward side of the flood control levee will remove all the vegetation from the entirety of the 1.3-acre footprint of SU10, including the combined total of 0.35 acres of the buffer associated with wetlands. The vegetation removal is far enough away from the riverbank that shade is not reduced. Still, there could be a small reduction of detrital prey that salmonids consume reaching the water. Because the trees are not river adjacent, this reduction is expected to be very small and insignificant on either natural cover or prey as features for rearing or migrating salmon.

Species: The insignificant level of prey reduction will not be experienced by green sturgeon, a bottom-feeding species; green sturgeon response is discountable.

Eulachon larvae consume their yolk sacs as their primary nutrition and only begin consuming prey as they mature in the estuary; eulachon response to the prey reduction is discountable.

Adult salmonids that migrate upstream during the work window are not foraging; thus, response to prey reduction is discountable for this life stage of all salmonids. Juvenile salmonids enter the action area while detrital prey is reduced may have to migrate to adjacent foraging areas. Still, as most of these species' juveniles migrate through the action area, this is not a modification of behavior. Their exposure to an insignificant decrease in detrital prey is likely to have an only insignificant response for rearing juveniles.

Beneficial Effects
The remediation removes contaminated material, caps portions of the site with low permeable material, and places material below the water table; all of these measures reduce a source of potential future contamination from stormwater runoff or hyporheic movement of contaminants to the Columbia River. This will serve as a water quality improvement for all 15 listed species and each of the 14 designated critical habitats.

Conclusion
Having reviewed all likely effects and finding they are discountable, insignificant, or beneficial, the proposed action is not likely to adversely affect designated critical habitat for LCR Chinook

salmon, UWR Chinook salmon, UCR spring-run Chinook salmon, SR spring/summer-run Chinook salmon, SR fall-run Chinook salmon, LCR Coho salmon, SR sockeye salmon, CR chum salmon, LCR steelhead, UWR steelhead, MCR steelhead, UCR steelhead, SR Basin steelhead, sDPS eulachon.

We also conclude that the action is not likely to adversely affect LCR Chinook salmon, UWR Chinook salmon, UCR spring-run Chinook salmon, SR spring/summer-run Chinook salmon, SR fall-run Chinook salmon, LCR Coho salmon, SR sockeye salmon, LCR steelhead, UWR steelhead, MCR steelhead, UCR steelhead, SR Basin steelhead, sDPS eulachon, chum, and sDPS green sturgeon.

Reinitiation of Consultation

Reinitiation of consultation is required and shall be requested by the Corps or by NMFS, where discretionary Federal involvement or control over the action has been retained or is authorized by law, and: (1) the proposed action causes take; (2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this concurrence letter; or, (4) a new species is listed or critical habitat designated that may be affected by the identified action (50 CFR 402.16). This concludes the ESA consultation.

Please direct questions regarding this letter to Amanda Gillen, Pathways Intern, at Amanda.Gillen@noaa.gov, or Bonnie Shorin, Program Analyst, at Bonnie.Shorin@noaa.gov..

Sincerely,

Kim W. Kratz, Ph.D.
Assistant Regional Administrator
National Marine Fisheries West Coast Region
Oregon and Washington Coastal Area Office

cc: Danette Guy. USACE

Literature

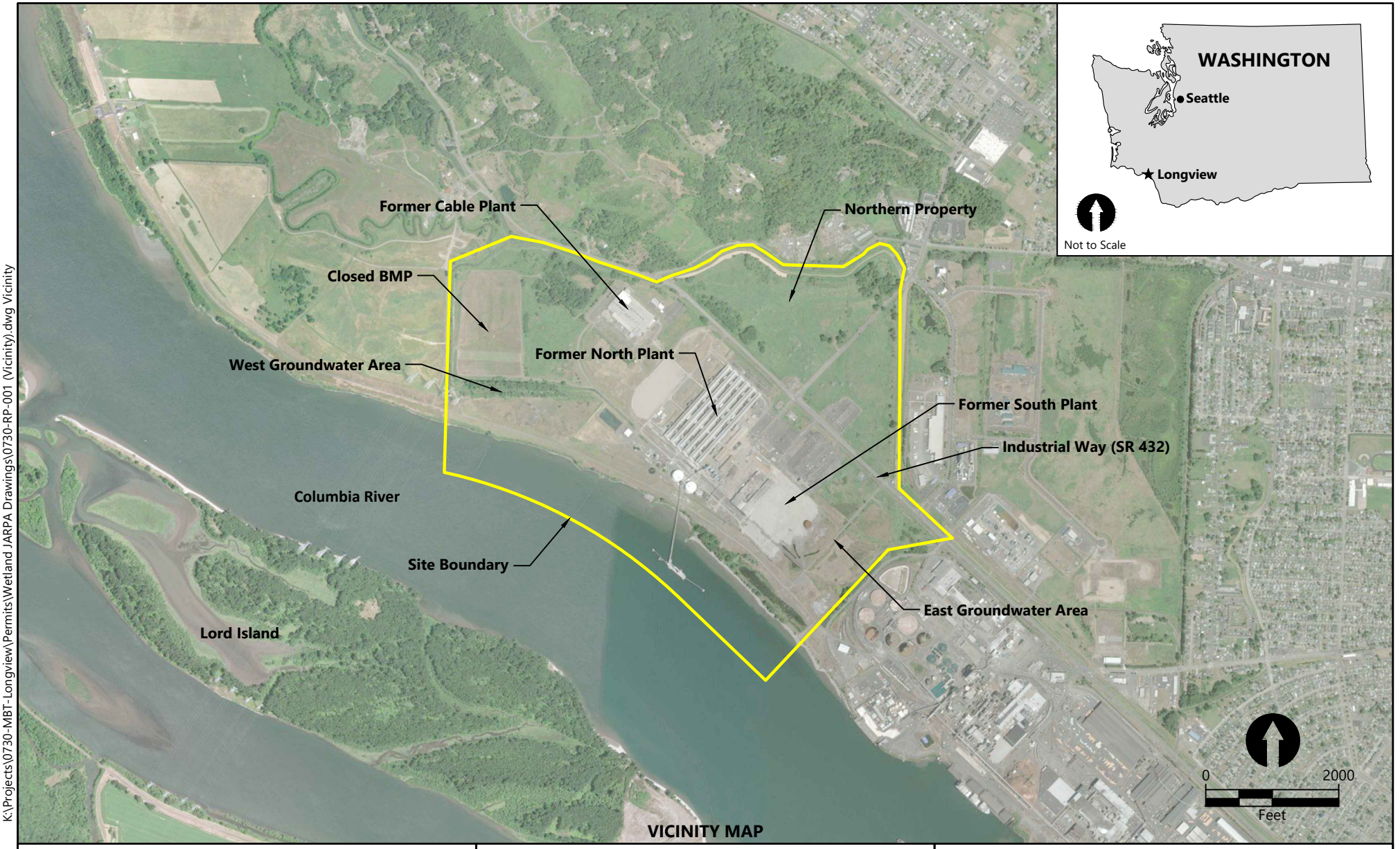
Bash, J., Berman, C. H., & Bolton, S. (2001). EFFECTS OF TURBIDITY AND SUSPENDED SOLIDS ON SALMONIDS. *Undefined*. https://www.semanticscholar.org/paper/EFFECTS-OF-TURBIDITY-AND-SUSPENDED-SOLIDS-ON-Bash-Berman/b74f1a531a4822093303b24d28206c55ae69d096

Harvey, B. C., & White, J. L. (2008). Use of benthic prey by salmonids under turbid conditions in a laboratory stream. *Transactions of the American Fisheries Society 137: 1756-1763*, *137*, 1756–1763. http://www.fs.usda.gov/treesearch/pubs/43927

Grette Associates. (2021). Former Reynolds Metals Reduction Plant Longview Model Toxics Control Act Cleanup Action (Consent Decree No. 18 2 01312-08) Mitigation Bank Use Plan.
Prepared for Northwest Alloys, Inc.

Habitat Bank. (2016). Coweeman River Mitigation Bank Mitigation Banking Instrument, Kelso, Washington.

LCFRB (Lower Columbia Fish Recovery Board. (2010). Washington Lower Columbia salmon recovery and fish and wildlife subbasin plan, chapter H – Coweeman Subbasin: Longview,
Washington. Lower Columbia Fish Recovery Board.



VICINITY MAP

REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

ADJACENT PROPERTY OWNERS:
1 - NIPPON DYNAWAVE PACKAGING, INC.
2 - MOELLER LAND/CATTLE CO., INC.
3 - TERRA FIRMA, INC.
4 - BONNEVILLE POWER ADMINISTRATION

NAME: FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

PROPOSED: EXCAVATION, CONSOLIDATION, CAP,
AND COVER OF WASTE MATERIAL

DATUM: NAVD88
LATITUDE: 46°08'3.4"N
LONGITUDE: -122°59'45"W
S-T-R: 36 & 38-8N-3W

IN: COLUMBIA RIVER
NEAR/AT: LONGVIEW
COUNTY: COWLITZ
STATE: WASHINNGTON

DATE: JULY 2021

ANCHOR QEA
1201 3rd Ave, Suite 2600
Seattle, WA 98101
206-287-9130

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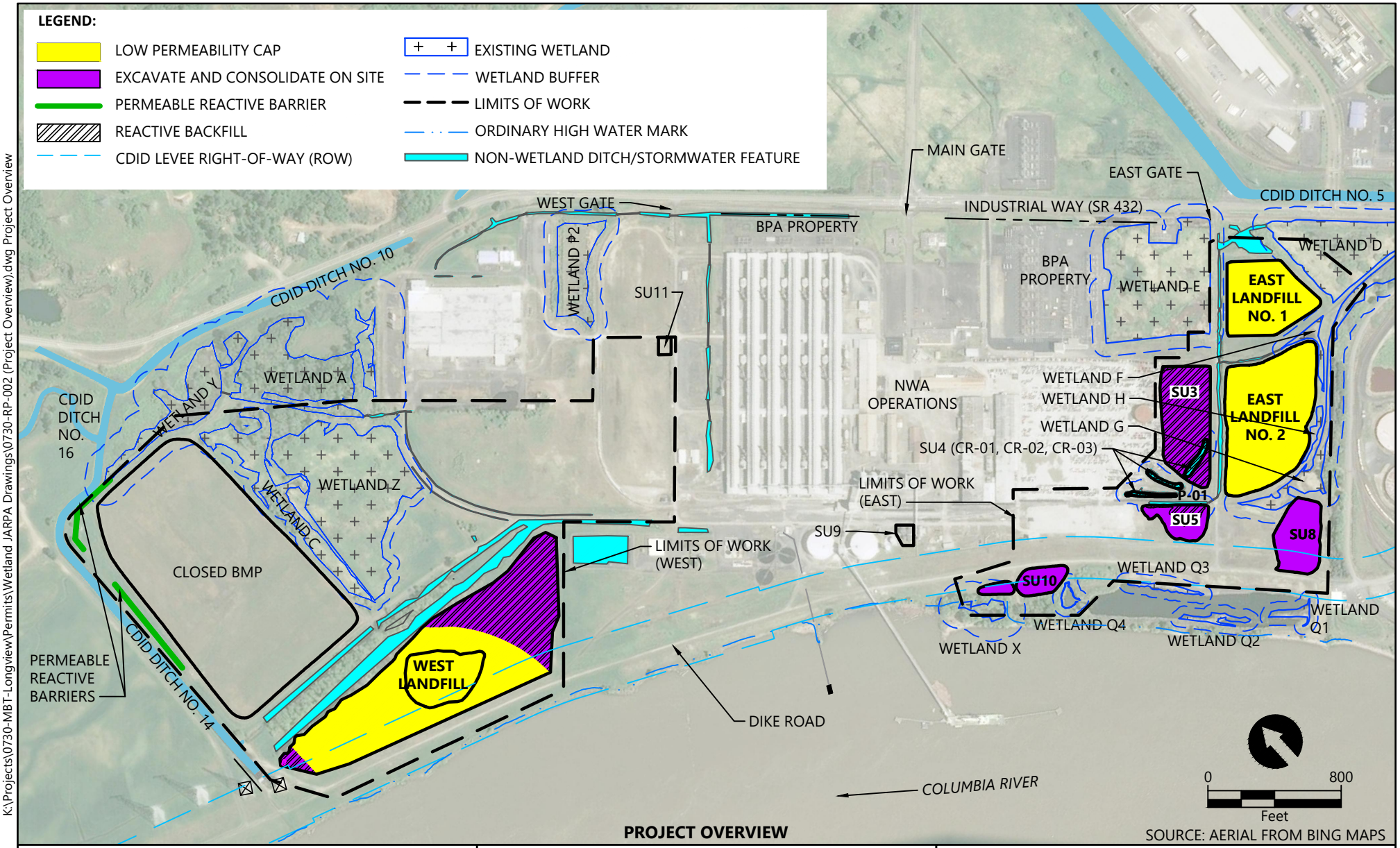
Jul 15, 2021 8:32am chewett



PROJECT OVERVIEW

SOURCE: AERIAL FROM BING MAPS

REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

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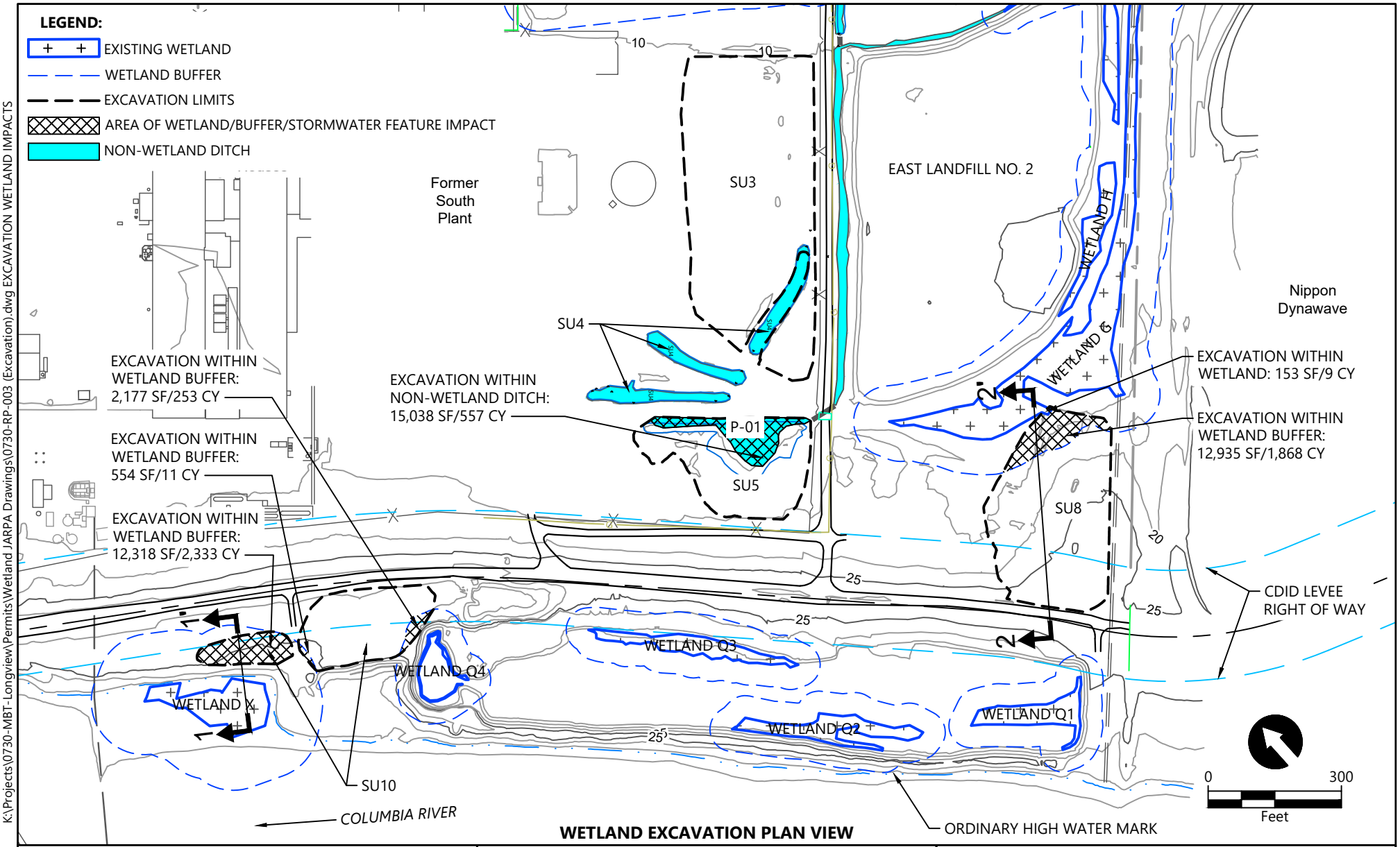
206-287-9130



WETLAND EXCAVATION PLAN VIEW

REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

ADJACENT PROPERTY OWNERS:
1 - NIPPON DYNAWAVE PACKAGING, INC.
2 - MOELLER LAND/CATTLE CO., INC.
3 - TERRA FIRMA, INC.
4 - BONNEVILLE POWER ADMINISTRATION

NAME: FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

PROPOSED: EXCAVATION, CONSOLIDATION, CAP, AND COVER OF WASTE MATERIAL

DATUM: NAVD88
LATITUDE: 46°08'3.4"N
LONGITUDE: -122°59'45"W
S-T-R: 36 & 38-8N-3W

IN: COLUMBIA RIVER
NEAR/AT: LONGVIEW
COUNTY: COWLITZ
STATE: WASHINNGTON

DATE: JULY 2021

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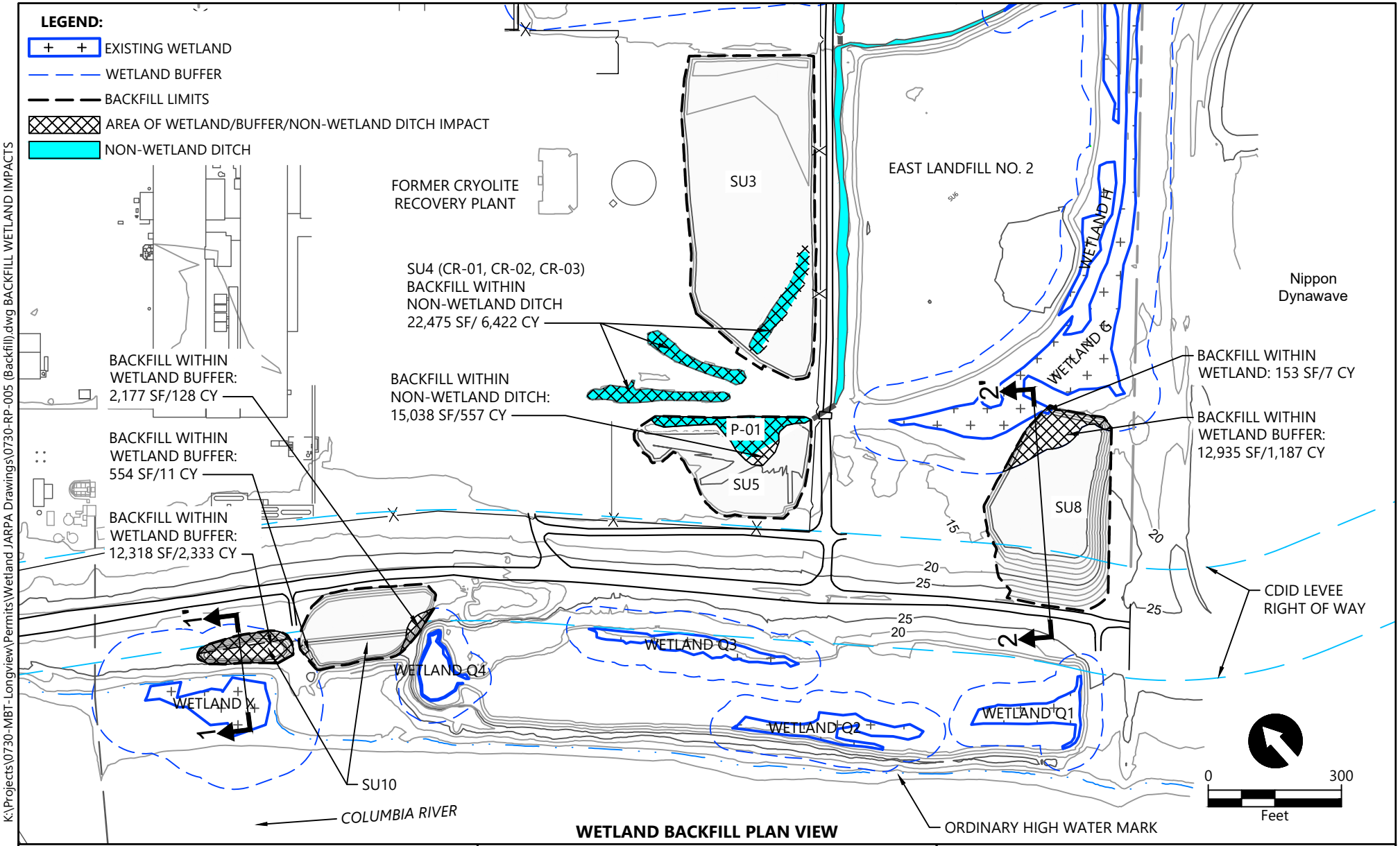
1201 3rd Ave, Suite 2600
Seattle, WA 98101
206-287-9130



WETLAND BACKFILL PLAN VIEW

K:\Projects\0730-MBT-Longview\Permits\Wetland JARPA Drawings\0730-RP-005 (Backfill).dwg BACKFILL WETLAND IMPACTS

Jul 15, 2021 8:34am chewett

REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

ADJACENT PROPERTY OWNERS:
1 - NIPPON DYNAWAVE PACKAGING, INC.
2 - MOELLER LAND/CATTLE CO., INC.
3 - TERRA FIRMA, INC.
4 - BONNEVILLE POWER ADMINISTRATION

NAME: FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

PROPOSED: EXCAVATION, CONSOLIDATION, CAP, AND COVER OF WASTE MATERIAL

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STATE: WASHINNGTON

DATE: JULY 2021

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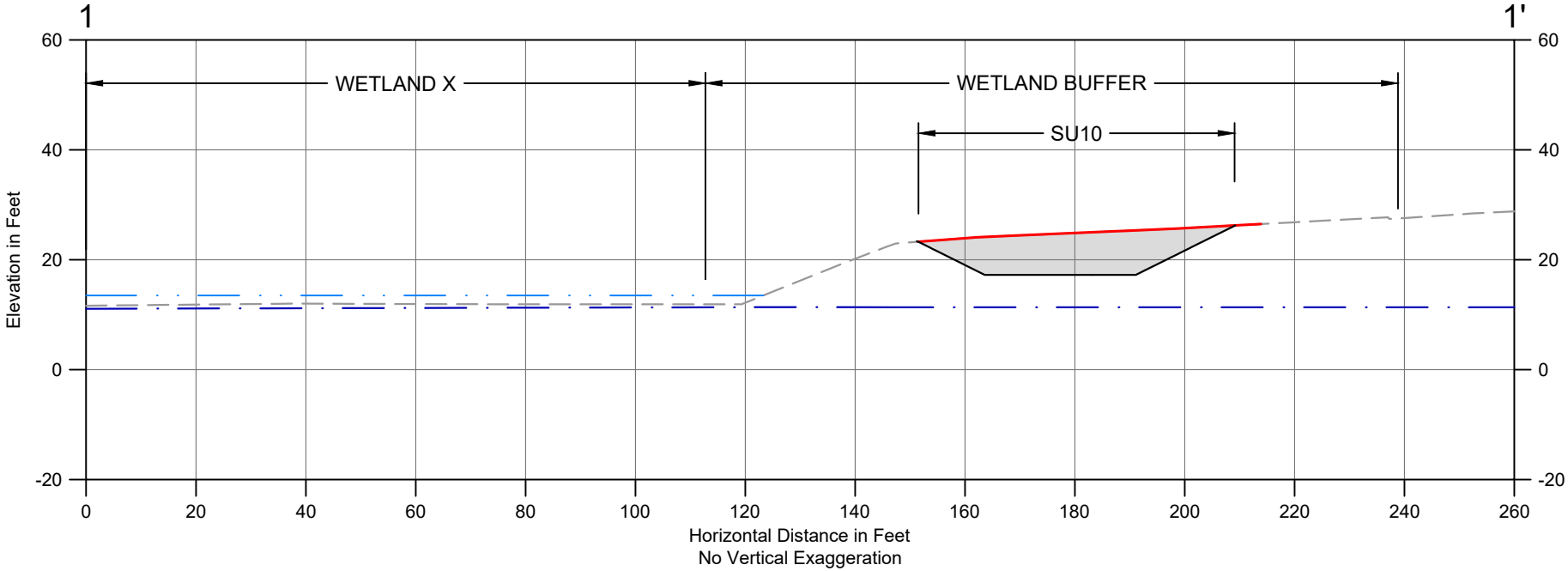
Seattle, WA 98101
206-287-9130

LEGEND:

EXISTING GRADE
PROPOSED EXCAVATION GRADE
PROPOSED GENERAL BACKFILL AND GRADE
WET WEATHER GROUNDWATER CONDITIONS
DRY WEATHER GROUNDWATER CONDITIONS
ORDINARY HIGH WATER MARK



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Feet

EXCAVATION AND BACKFILL SECTION 1-1'

REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

ADJACENT PROPERTY OWNERS:
1 - NIPPON DYNAWAVE PACKAGING, INC.
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3 - TERRA FIRMA, INC.
4 - BONNEVILLE POWER ADMINISTRATION

NAME: FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

PROPOSED: EXCAVATION, CONSOLIDATION, CAP, AND COVER OF WASTE MATERIAL

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STATE: WASHINNGTON

DATE: JULY 2021

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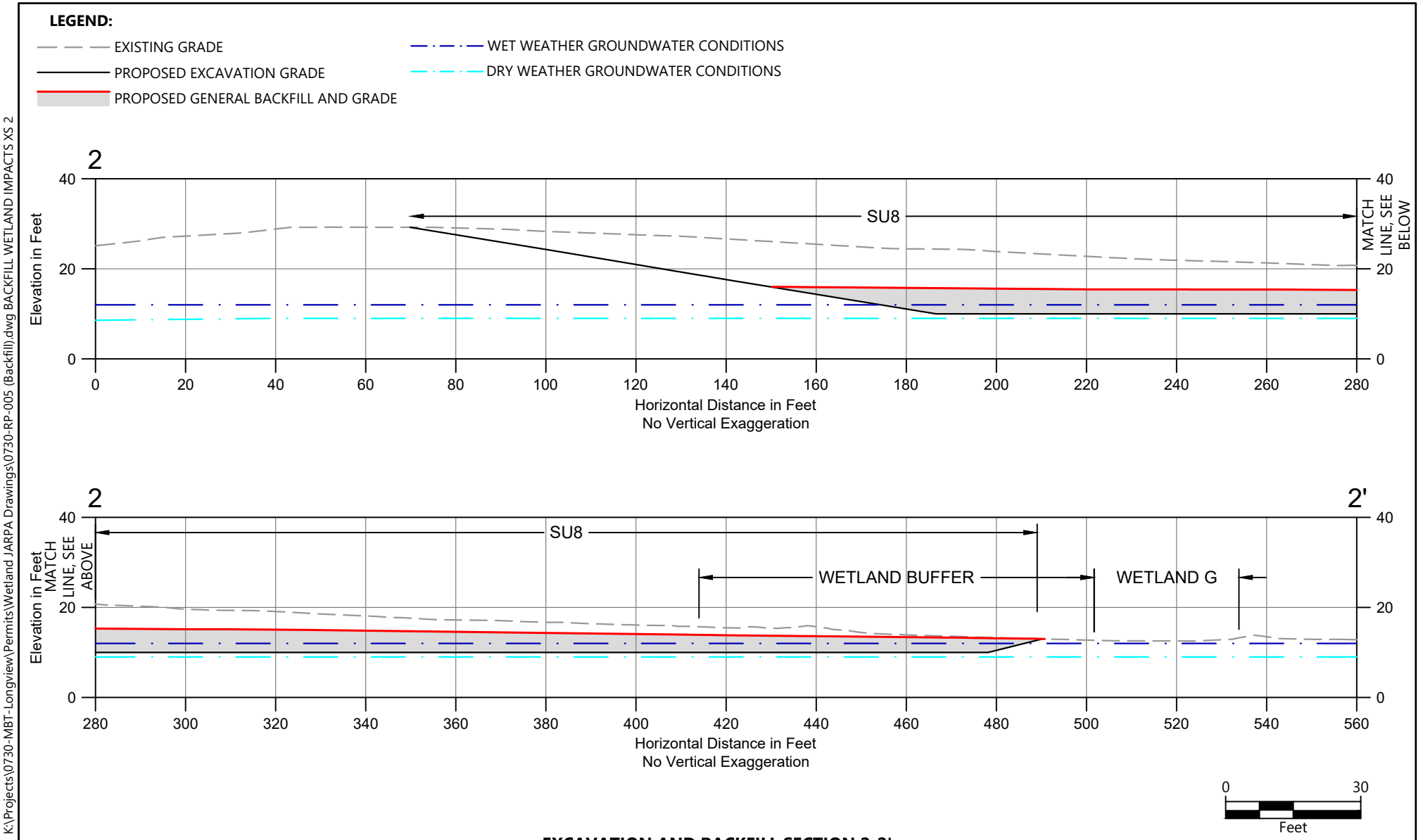

EXCAVATION AND BACKFILL SECTION 2-2'

REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

ADJACENT PROPERTY OWNERS:
1 - NIPPON DYNAWAVE PACKAGING, INC.
2 - MOELLER LAND/CATTLE CO., INC.
3 - TERRA FIRMA, INC.
4 - BONNEVILLE POWER ADMINISTRATION

NAME: FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

PROPOSED: EXCAVATION, CONSOLIDATION, CAP, AND COVER OF WASTE MATERIAL

DATUM: NAVD88
LATITUDE: 46°08'3.4"N
LONGITUDE: -122°59'45"W
S-T-R: 36 & 38-8N-3W

IN: COLUMBIA RIVER
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STATE: WASHINNGTON

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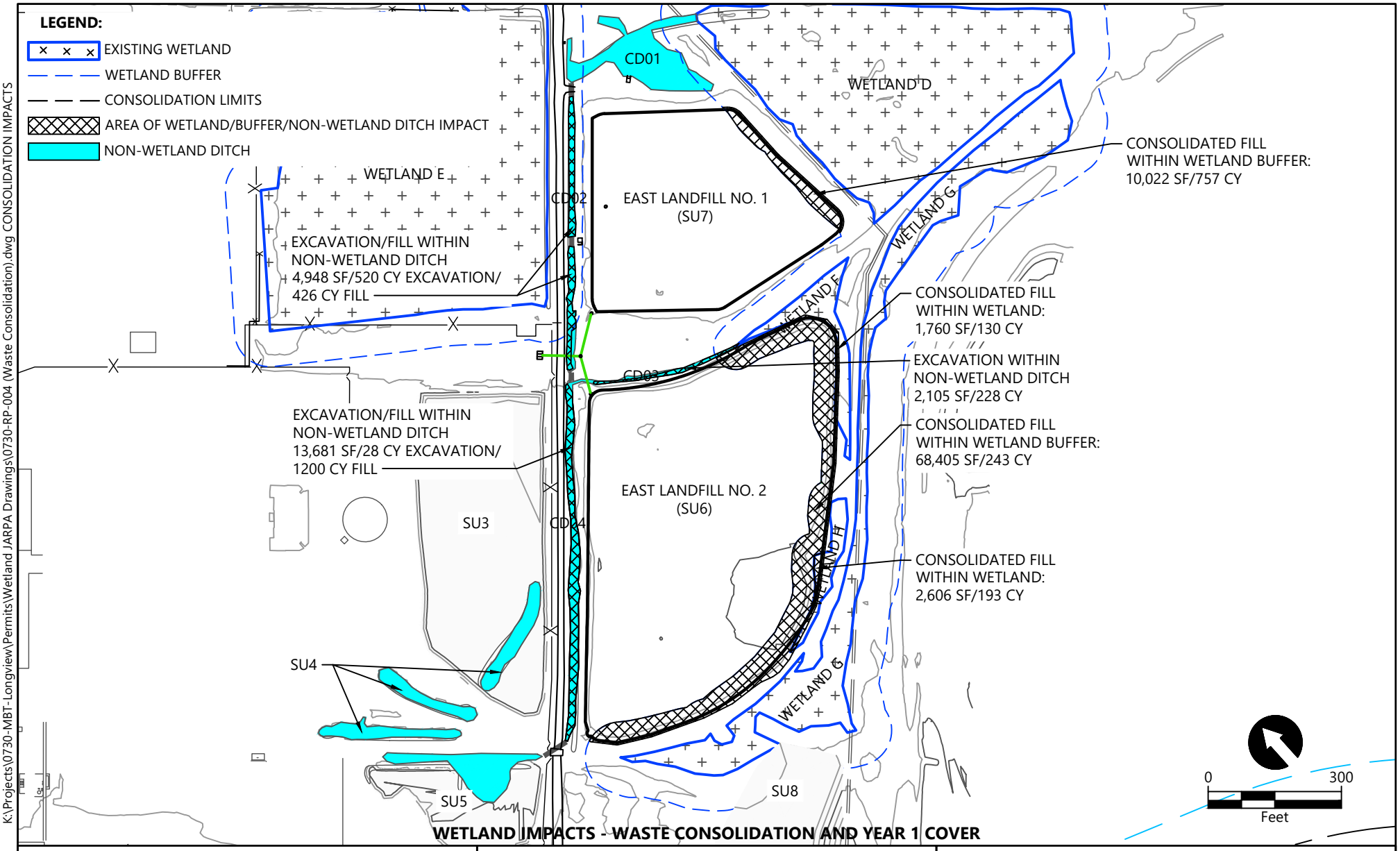

WETLAND IMPACTS - WASTE CONSOLIDATION AND YEAR 1 COVER

REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

ADJACENT PROPERTY OWNERS:
1 - NIPPON DYNAWAVE PACKAGING, INC.
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NAME: FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

PROPOSED: EXCAVATION, CONSOLIDATION, CAP, AND COVER OF WASTE MATERIAL

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STATE: WASHINNGTON

DATE: JULY 2021

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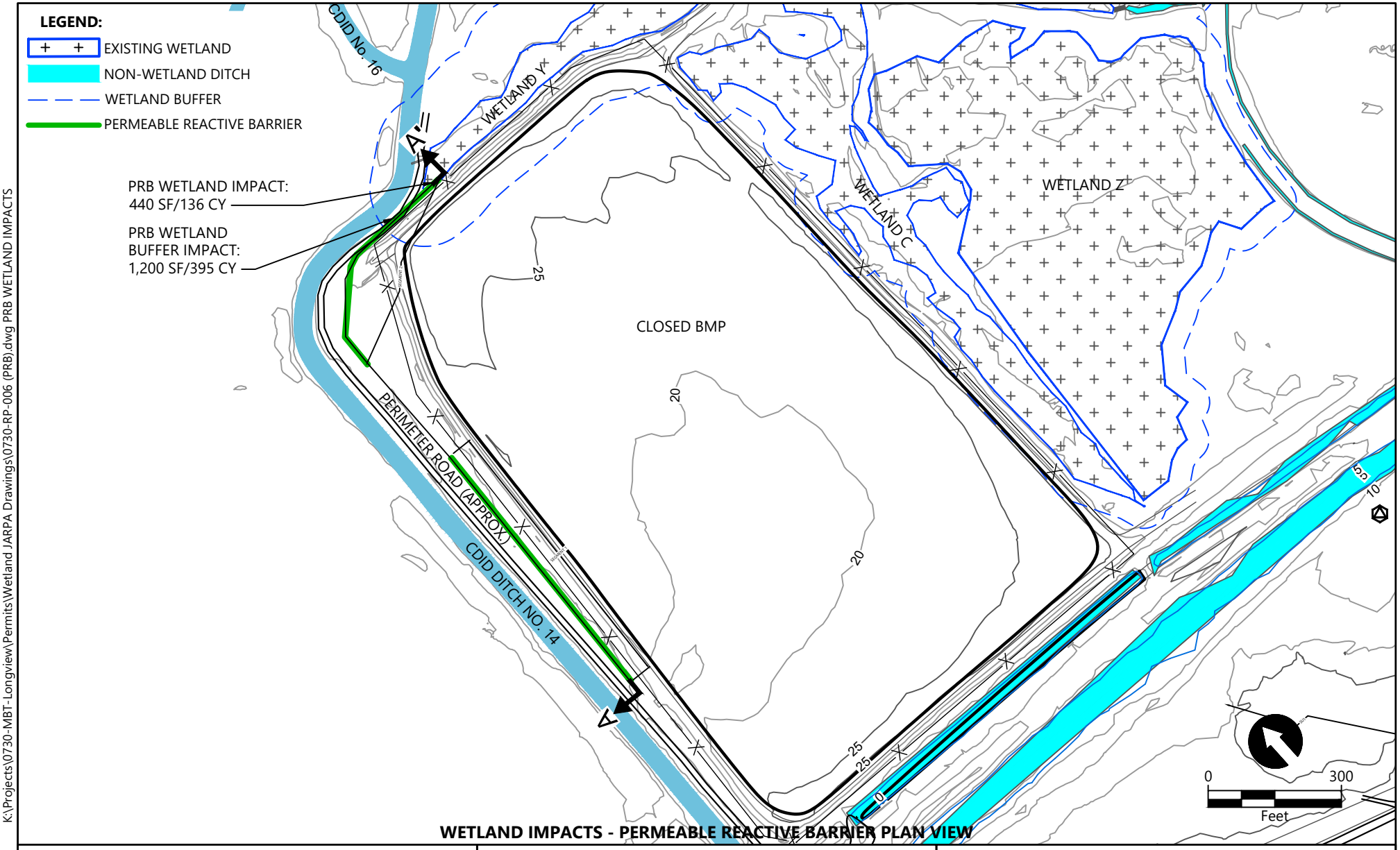

WETLAND IMPACTS - PERMEABLE REACTIVE BARRIER PLAN VIEW

REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

ADJACENT PROPERTY OWNERS:
1 - NIPPON DYNAWAVE PACKAGING, INC.
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NAME: FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

PROPOSED: EXCAVATION, CONSOLIDATION, CAP,
AND COVER OF WASTE MATERIAL

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STATE: WASHINNGTON

DATE: JULY 2021

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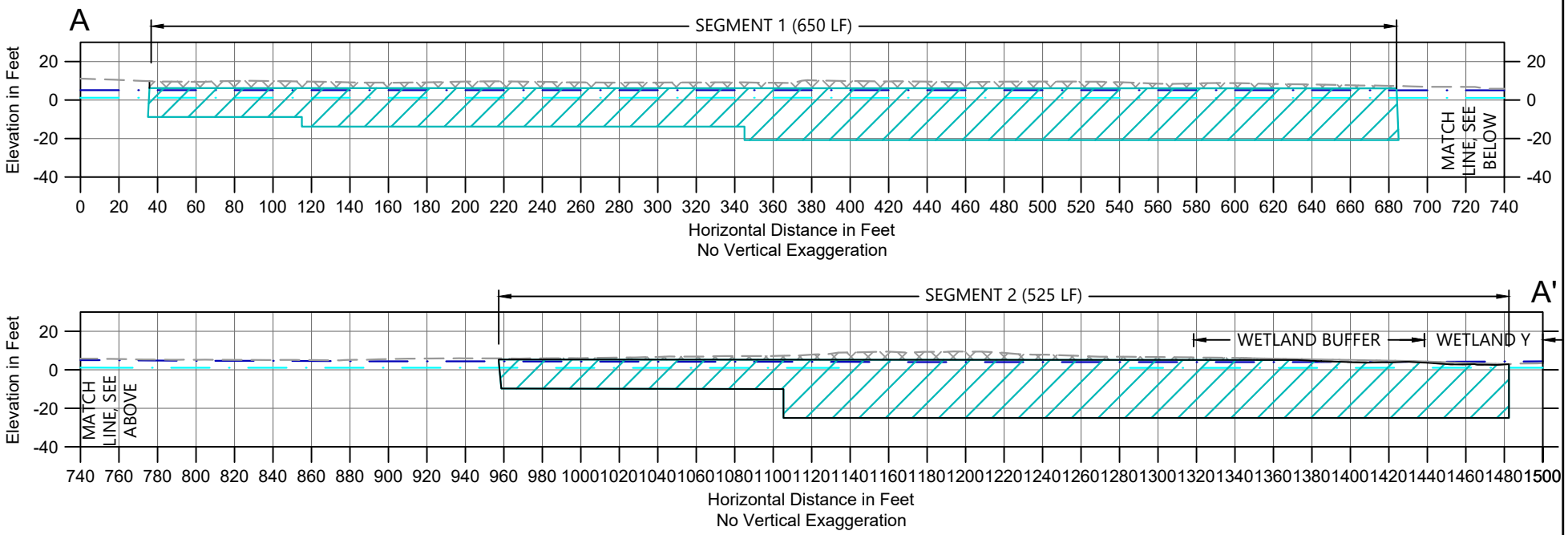
LEGEND:

- EXISTING GRADE
- REACTIVE MATERIAL EXTENTS
- GENERAL BACKFILL
- WET WEATHER GROUNDWATER ELEVATION
- DRY WEATHER GROUNDWATER ELEVATION



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Feet

PERMEABLE REACTIVE BARRIER CROSS SECTION

REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

ADJACENT PROPERTY OWNERS:
1 - NIPPON DYNAWAVE PACKAGING, INC.
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PROPOSED: EXCAVATION, CONSOLIDATION, CAP, AND COVER OF WASTE MATERIAL

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NEAR/AT: LONGVIEW
COUNTY: COWLITZ
STATE: WASHINNGTON

DATE: JULY 2021

ANCHOR QEA
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Seattle, WA 98101
206-287-9130

FORMER REYNOLDS METALS REDUCTION PLANT LONGVIEW MODEL TOXICS CONTROL ACT CLEANUP ACTION (CONSENT DECREE NO. 18 2 01312-08)

BIOLOGICAL EVALUATION

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LIST OF ABBREVIATIONS

BMP	Black Mud Pond
CAP	Cleanup Action Plan
CCC	Cowlitz County Code
COC	Chemicals of Concern
CWTD	Columbia White-tailed Deer
DCID	Consolidated Diking Improvement District
cPAH	carcinogenic polycyclic aromatic hydrocarbon
cy	cubic yard
Draft EDR	Draft Engineering Design Report
Ecology	Washington State Department of Ecology
EFH	Essential Fish Habitat
ESA	Endangered Species Act
Reynolds	former Reynolds Metals Reduction Plant
GCL	geosynthetic clay liner
MBI	Mitigation Banking Instrument
MCL	maximum containment level
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
MTCA	Model Toxics Control Act
NE	No effect
NLAA	May affect, not likely to adversely affect
NOAA Fisheries	National Oceanic and Atmospheric Administration Fisheries Services
NRCS	Natural Resources Conservation Service
NWA	Northwest Alloys
RM	river mile
SFA	1996 Sustainable Fisheries Act
SU	Site Unit
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

1 INTRODUCTION AND SPECIES OF CONCERN

Northwest Alloys (NWA) proposes to conduct a Model Toxics Control Act (MTCA) cleanup action at the Former Reynolds Metals Reduction Plant in Longview, Washington (see permit drawing 1). The cleanup will remediate 11 distinct Site Units (SUs) and two areas of affected groundwater at the site. The cleanup would entail a combination of excavation/capping, backfill, consolidation, and offsite disposal. The site is located at 4029 Industrial Way, within Township 8N, Range 3W, Section 35 and 36, at approximately river mile (RM) 63 of the Columbia River (Figure 1).

Figure 1. Project location

In connection with the proposed MTCA cleanup action, NWA is submitting an application for a U.S. Army Corps of Engineers (USACE) permit due to minor impacts to wetlands. No work is proposed within the Columbia River. The Endangered Species Act (ESA) requires Federal agencies to ensure that they do not authorize, fund, or carry out actions that are likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of critical habitat for such species. ESA is co-administered by the National Oceanic and Atmospheric Administration Fisheries Services (NOAA Fisheries[1]) and U.S. Fish and Wildlife Service (USFWS). This document has been prepared to assist the USACE in its review of the permit application and in consulting with NOAA Fisheries and USFWS under Section 7 of the ESA.

This Biological Evaluation (BE) addresses the potential effects of the Project on the ESA listed species summarized in Table 1 and their designated critical habitat. In addition, an evaluation of the effects of the proposed Project on Essential Fish Habitat (EFH) has been prepared pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) and the 1996

[1] This document uses NOAA Fisheries as the universal short reference for the NOAA National Marine Fisheries Service. Service publications, particularly Federal Register notices, may be referenced NOAA, NMFS, and NOAA Fisheries, as indicated by citations in this document.

Sustainable Fisheries Act (SFA). The effects of the proposed Project on EFH are addressed in Attachment 1.

Table 1. Federally listed threatened and endangered species addressed in this BE[2]

Species, ESU/DPS if applicable	Federal Status	Critical Habitat Designated	Critical Habitat in Action Areas
Chinook salmon (*Oncorhynchus tshawytscha*)			
Snake River fall ESU	threatened	yes	yes
Snake River spring/summer ESU	threatened	yes	yes
Upper Columbia River spring ESU	endangered	yes	yes
Lower Columbia River ESU	threatened	yes	yes
Upper Willamette River ESU	threatened	yes	yes
Coho salmon (*O. kisutch*)			
Lower Columbia River ESU	threatened	yes	yes
Chum salmon (*O. keta*)			
Columbia River ESU	threatened	yes	yes
Sockeye salmon (*O. nerka*)			
Snake River ESU	endangered	yes	yes
Steelhead trout (*O. mykiss*)			
Snake River DPS	threatened	yes	yes
Upper Columbia River DPS	endangered	yes	yes
Middle Columbia River DPS	threatened	yes	yes
Lower Columbia River DPS	threatened	yes	yes
Upper Willamette River DPS	threatened	yes	yes
Bull trout (*Salvelinus confluentus*)	threatened		
Conterminous United States DPS	threatened	yes	no
Other fish species			
Eulachon (*Thaelichthys pacificus*), southern DPS	threatened	yes	yes
Green sturgeon (*Acipenser medirostris*), southern DPS	threatened	yes	no
Terrestrial species			
Streaked horned lark (*Eremophila alpestris strigata*)	threatened	yes	no
Columbia white-tailed deer (*Odocoileus virginianus*)	endangered	no	no
Yellow-billed cuckoo (*Coccyzus amercanus*), western DPS	threatened	proposed	no

Based on the analysis in this document, determinations of Project impacts on applicable ESA-listed species and critical habitats are as follows in Table 2.

[2] An official USFWS species list is included as Attachment 2.

Table 2. Summary of ESA species and critical habitat effects determinations.

Species	Species Effect Determination	Critical Habitat Effect Determinations
Chinook salmon		
Snake River fall ESU	NLAA[1]	NLAA
Snake River spring/summer ESU	NLAA	NLAA
Lower Columbia River ESU	NLAA	NLAA
Upper Columbia River spring ESU	NLAA	NLAA
Upper Willamette River ESU	NLAA	NLAA
Coho salmon		
Lower Columbia River ESU	NLAA	NLAA
Chum salmon		
Columbia River ESU	NLAA	NLAA
Sockeye salmon		
Snake River ESU	NLAA	NLAA
Steelhead trout		
Snake River DPS	NLAA	NLAA
Lower Columbia River DPS	NLAA	NLAA
Middle Columbia River DPS	NLAA	NLAA
Upper Columbia River DPS	NLAA	NLAA
Upper Willamette River DPS	NLAA	NLAA
Bull trout		
Conterminous United States DPS	NLAA	N/A
Other fish species		
Eulachon, southern DPS	NLAA	NLAA
Green sturgeon	NLAA	N/A
Terrestrial species		
Streaked horned lark	NE[2]	N/A
Columbia white-tailed deer	NE	N/A
Yellow-billed cuckoo	NE	N/A

[1] May affect, not likely to adversely affect
[2] No effect

2 PROJECT DESCRIPTION

2.1 BACKGROUND

The Former Reynolds Plant is located within a portion of an approximately 536-acre property owned by NWA. The site has a long history of industrial use and was initially developed as an aluminum smelter by Reynolds Metals Company (RMC) to support World War II efforts in 1941; the existing dock (Dock 1) was constructed in the late 1960s to facilitate the direct import of alumina ore to the plant via ocean-going vessels. The facility was operated as an aluminum smelter until 2001, when smelter operations ceased. The site continues to support industrial operations and is currently used as a bulk materials handling facility that includes both marine and upland facilities. Current unloading and loading activities are conducted to or from ships, railcars, and trucks.

After the Former Reynolds Plant was closed, the site was found to contain contaminants above applicable cleanup levels (Anchor QEA 2015). As a result, Ecology and NWA entered into Agreed Order No. DE-8940 to clean-up the site consistent with MTCA requirements.

To date, extensive work has been conducted to decommission inactive portions of the facilities, remove industrial materials and wastes from the property, and perform closures and cleanup actions. Remediation at two of the cleanup areas identified in the *Cleanup Action Plan* (CAP – Ecology 2018) were completed in 2016 and 2019 (SU12 and SU13, respectively).

2.2 PURPOSE AND NEED

The purpose of the Project is to remediate the site, consistent with MTCA regulations, the conclusions of the CAP (Ecology 2018) and the Consent Decree No. 18 2 01312-08. The CAP includes a detailed discussion of the Project need, including current site-related chemicals of concern exceeding cleanup levels. The Project will accomplish the following:

- Comply with MTCA and other applicable laws and standards
- Achieve human health and environmental protection in a relatively rapid time frame, compared with the range of alternatives evaluated and to the extent practicable with respect to groundwater restoration
- Reduce the volume of affected media and waste in the environment
- Include protective, engineered in situ confinement of residual carbon fill deposits that are not practicable to remove
- Consolidate and cover industrial waste deposits with low permeable caps consistent with Ecology expectations for remedial alternatives (WAC-173-340-370)
- Have minimal and manageable short-term construction risks, compared with the range of alternatives evaluated
- Use multiple technologies to provide maximum long-term effectiveness
- Be implementable
- Be protective under the industrial land uses for which the property is zoned
- Include long-term monitoring and institutional controls to ensure long-term effectiveness in accordance with WAC 173-340- 400 and 173-340-410

2.3 PROPOSED PROJECT

The cleanup action is divided into 13 cleanup action areas, or Site Units (SUs). Two SUs (SU 12 and 13) have already been remediated. Clean up will be achieved either by excavation and offsite disposal, or excavation and on-site consolidation. On-site consolidation will then be supplemented by the addition of low permeability caps, reactive backfill (below the water table), and permeable reactive barriers (PRBs). Table 3 (below) from the *Revised Engineering Design Report* (Revised EDR; Anchor QEA 2021) summarizes the cleanup plan by SU. A more detailed description of the cleanup action is available in the *Revised EDR* and the Joint Aquatic Resources Permit Application (JARPA) and these sources can be referenced for additional information.

Table 3. Summary of the cleanup plan by Site Unit

SU	Description	Remedial Action Type				
		Excavation and Off-Site Disposal	**Excavation and On-Site Consolidation**	**Reactive Backfill Below Water Table**	**Low Permeability Cap[1]**	**PRB**
SU1	Landfill #2 (industrial)				X[2]	
SU2	Fill Deposit B-3 (residual carbon) (Future West Landfill)		Eastern and western portions[3,4]		Center portion	
SU3	Fill Deposit B-2 (residual carbon)		x[3,5,6]	x		
SU4	Former Cryolite Area Ditches			X[5,7]		
SU5	Former Stockpile Area		x[3,5,6]	x		
SU6	Fill Deposit B-1 (residual carbon) (Future East Landfill No. 2)				x	
SU7	Fill Deposit A (spent lime) (Future East Landfill No. 1)				x	
SU8	Landfill #1 (floor sweeps)		x[8,9]			
SU9	Pitch Tanks	X[5]				
SU10	Landfill #3 (construction debris)		x[8,9]			
SU11	Flat Storage Area	X[3]				
SU12	Vicinity of Outfall 002A **COMPLETED**	X[10]				

SU	Description	Remedial Action Type				
		Excavation and Off-Site Disposal	**Excavation and On-Site Consolidation**	**Reactive Backfill Below Water Table**	**Low Permeability Cap[1]**	**PRB**
SU13	Localized Area of TPH-Impacted Soil **COMPLETED**	X[11]				
Other	PRB Northwest of Closed BMP Facility					X

Consolidation areas are preliminary and subject to modification during final design and permitting.

1. Finished operating surface will be hydroseed.
2. Existing soil cover and waste from SU1 will be excavated and graded onto adjacent future West Landfill areas prior to placing a low permeability cap.
3. Excavation will be backfilled with select backfill.
4. Excavated material will be consolidated within the same SU.
5. Finished operating surface will be gravel.
6. Excavated material will be transferred to SU6 prior to capping of SU6.
7. Former cryolite ditches will receive a combination of reactive and select backfill.
8. Excavation would be backfilled with compacted select backfill, and the finished operating surface would be vegetated using hydroseed.
9. Excavated material will be transferred to SU7 prior to capping of SU7.
10. Removal of SU12 was completed in late 2016. Removed sediments were managed by off-site disposal.
11. Removal of SU13 was completed in December 2019. Removed material was managed by off-site disposal.

Impacted soils in SU9 (Pitch Tanks) and SU11 (Flat Storage Area) will be excavated and managed by off-site disposal, at an appropriately permitted facility.

Excavation and On-Site Consolidation Areas (SUs 3, 5, 8, 10)

Impacted materials from SU3, SU5, SU8, SU10 and the eastern and western portions of SU2 will be excavated and consolidated with three landfills; West Landfill (SU1), East Landfill No.1 (SU7), and East Landfill No.2 (SU6) (see permit drawing 2). Following consolidation, these areas will be capped with low permeability caps (described below). The consolidation and capping will minimize the potential for direct contact with and infiltration of precipitation through impacted materials.

- SU2: The eastern and western portions of SU2 will be excavated and consolidated in the West Landfill (SU1). Following excavation, reactive backfill (discussed below) will be placed in SU2 to the approximate elevation of the seasonal high water table, followed by select backfill placed to grade.
- SU3 and SU5: Materials excavated from SU3 and SU5 will be consolidated within SU6. Following excavation, reactive backfill will be placed in SU3 to the approximate elevation of the seasonal high water table, followed by select backfill placed to grade. The pre-existing ditch within SU5 will also receive a combination of reactive and select backfill. The rest of the SU5 excavation will be filled with compacted select backfill and graded to prevent future ponding of the area. The final grades in these areas will be resurfaced with gravel.

- SU8: Materials excavated from SU8 will be consolidated within the East Landfill No.1 (SU7). The excavation areas within SU8 will be backfilled with general fill and a surface cover of gravel.
- SU10: Materials excavated from SU10 will be consolidated within the East Landfill No.1 (SU7). SU10 will be backfilled with general fill, followed by a new layer of soil cover and hydroseed.
  - SU10 occurs on the flood face of the levee above the OHW line of the Columbia River. Material to be excavated consists of construction debris and rubble, some of which extends below the 100-year flood elevation (22.7 ft NAVD88). No excavation below OHW is proposed.

Low Permeability Caps (SUs 1, 6, 7)

The three consolidation areas described above will be covered with a low permeability cap to prevent future exposure to the affected material. The purpose of the low permeability cap is to minimize infiltration of precipitation through the fill materials and prevent direct contact with impacted materials contained within the fill. To achieve this purpose, the cap will be constructed as follows:

- The SU6 and SU7 consolidation areas will undergo a settlement period prior to capping.
- The cap will be composed of multiple layers, including: 1) a geosynthetic clay liner to provide a physical barrier to infiltration; 2) a 12-inch sand drainage above the barrier; 3) a 6-inch layer of general backfill; and 4) a 6-inch layer of cover soil to protect the cap and promote revegetation.

Reactive Backfill (select areas, SUs 2, 3, 4, 5)

Reactive backfill will be placed in SU2, SU3, SU4, and SU5. Reactive backfill will have mineral amendments that will be used to reduce residual fluoride concentrations in groundwater flowing through the backfill. Reactive backfill will be placed as follows:

- SU2 and SU3: Following excavation, reactive backfill will be placed in SU2 and SU3 to the approximate elevation of the seasonal high water table, followed by select backfill placed to grade.
- SU4: The SU4 ditches will receive a combination of reactive and select backfill.
- SU5: The pre-existing ditch within SU5 will also receive a combination of reactive and select backfill. The remainder of SU5 excavation area will be filled with compacted select backfill and graded to prevent future ponding of the area.
- SU4 and SU5: The backfilled areas in SU4 and SU5 will be covered with a gravel mix suitable for light vehicle traffic.

Permeable Reactive Barrier

Segmented PRBs will be constructed along the northwestern perimeter of the Closed BMP and perpendicular to the contaminated groundwater flow to reduce the mobility of fluoride (permit drawing 8). The PRBs consist of two trenches backfilled with reactive media that have a minimum width of 3 feet. The northern PRB (Segment 1) is angled and is approximately 525 feet long. The southern PRB (Segment 2) is a straight trench and is approximately 650 feet long. The reactive

media in the PRBs will be installed between elevations of approximately 7 feet NAVD88 and approximately -25 feet NAVD88 (permit drawing 9).

Ditch Maintenance

The Project involves maintaining the existing roadside ditches (CD02, CD03 and CD04) located in the vicinity of East Landfill No. 1 (SU7) and East Landfill No. 2 (SU6) (see permit drawing 7). Ditch maintenance will involve regrading (select excavation and filling) to maintain the ditches stormwater storage and conveyance functions.

2.4 CONSTRUCTION SCHEDULE

Cleanup Action construction will start as soon as possible upon the receipt of all necessary permits and authorizations. Construction is anticipated to require at least two construction seasons to complete and could begin as early as March 2023.

2.5 PROPOSED CONSERVATION MEASURES

No work is proposed in the Columbia River and potential impacts to aquatic species during construction will be limited to the small risk of a spills or erosion occurring in proximity to the aquatic environment. To minimize the potential for short- and long-term effects, the cleanup will comply with federal, state and local permit conditions. These are expected to include, but are not limited to the following conservation measures and BMPs.

- No land-based construction equipment would enter any shoreline body of water.
- Typical construction BMPs for working near water will be applied, including checking equipment for leaks and other problems that could result in discharge of petroleum-based products, hydraulic fluid, or other material to the Columbia River.
- The contractor will have a spill containment kit, including oil-absorbent materials, on site to be used in the event of a spill or if any oil product is observed in or near the water.
- The contractor will be responsible for the preparation and implementation of a Spill Control plan to be used for the duration of the project. The plan will be submitted to the Project engineer prior to the commencement of any Project activities. A copy of the plan with any updates will be maintained at the work site by the contractor.
- Equipment will have properly functioning mufflers, engine-intake silencers, and engine closures according to federal standards; the contractor will inspect fuel hoses, oil or fuel transfer valves, and fittings on a regular basis for drips or leaks in order to prevent spills into the surface water.
- Proper erosion control measures would be installed prior to any excavation or backfilling to prevent the uncontrolled discharge of turbid water or sediments into waters of the state. Erosion control structures or devices would be regularly maintained and inspected to ensure their proper functioning throughout this project.
- All fuel and chemicals would be kept, stored, handled, and used in a fashion which assure no opportunity for entry of such fuel and chemicals into the water.
- The cleanup will be carried out in accordance with the BMPs listed in the Stormwater Manual for Western Washington and Construction Stormwater General Permit. These BMPs include, but are not limited to: BMP C105: Stabilized Construction Entrance / Exit

– stabilized entrance and exit would be installed and maintained through the duration of demolition, site preparation, pre-loading and construction; BMP C106: Wheel Wash – would be used if the stabilized construction entrance/exit is not preventing sediment from being tracked off site; and BMP C107: Construction Road/Parking Area Stabilization - roads, parking areas, and other onsite vehicle transportation routes would be stabilized to reduce erosion caused by construction traffic or runoff;

- Onsite Construction Equipment BMPs during construction include, but are not limited to: BMP C153: Material Delivery, Storage and Containment would be used to prevent, reduce, or eliminate the discharge of pollutants to the stormwater system or watercourses from material delivery and storage; Storage of hazardous materials onsite would be minimized to the extent feasible; Materials would be stored in a designated area, and secondary containment would be installed where needed; Refueling would occur in designated areas with appropriate spill control measures;
- Earthwork associated with remediating SU10 will not extend below the OHW mark of the Columbia River or into the adjacent wetlands.
- The footprint of the SU10 work area has been limited to that necessary to be protective of human health and the environment and otherwise comply with MTCA requirements.
- SU10 will be backfilled and restored to its original configuration following remediation and impacts will be temporary.
- NWA proposes to offset unavoidable wetland impacts by purchasing mitigation credits from the Coweeman River Joint Wetland and Conservation Bank in Cowlitz County (Grette Associates 2021). In addition to providing wetland mitigation, this bank also addresses specific elements within the Salmon Recovery Plan (LCFRB 2010) such as protecting and restoring habitat types critical and beneficial to anadromous fish (Habitat Bank 2016).

3 ENVIRONMENTAL BASELINE

3.1 DESCRIPTION OF THE PROJECT AREA

The Former Reynolds Metals Plant is located in the facility in the City of Longview, Cowlitz County, Washington State; Sections 36 and 25, Township 8N, and Range 03W W.M. It is located at approximately RM 63 of the Columbia River. The USGS HUC is 1708000304. Project latitude is 46.1364 N and longitude is -123.0047 W.

The Project area includes all locations where Project activities could occur. Remediation work would occur in discrete areas around the SUs throughout the site. Each of the Project areas would include the footprint of the SU, plus an additional 20 ft radius for machinery operations.

The Project areas for the cleanup action are shown on Figure 2.

3.2 DESCRIPTION OF THE ACTION AREA

The effects of the Project are described within a broader setting than the Project area (the location where construction would occur) to provide context for evaluating the impacts of the Project. The "action area" encompasses the Project area as well as all habitats that could be directly or indirectly affected by the proposed Project. To determine the boundaries of the action area, consideration was given to the potential reach of mechanisms that may lead to impacts on the species of concern.

For the Cleanup Project, the two impact mechanisms with the furthest reaching potential to impact listed species are: 1) sound generated during construction; and 2) sedimentation/turbidity generated by stormwater runoff.

The Project area is within an area that is currently used as a bulk materials handling and storage facility and sound generated during construction would be similar to industrial activities already occurring at the site. Based on this, the extent of potentially disruptive sound is expected to be limited to areas within approximately 300 feet of construction.

Direct sedimentation/turbidity effects are only possible from work in SU10, which is the only cleanup area located on the flood face of the levee. Stormwater from the remainder of the site will be collected and treated via the existing stormwater management system. Turbidity associated with stormwater runoff from the SU10 project area would be limited by implementing standard BMPs for working near water and would be limited to well within 300 feet. Thus, the same 300-foot action area around SU10 will be used to assess the impacts of construction noise and turbidity.

Based on this, the action area for the Project is illustrated on Figure 2, below. In total the action area encompasses approximately 210 acres of uplands and 0.3 acre of aquatic habitat[3]. The entirety of the aquatic action area is shallower than 0 feet CRD and is therefore considered part of the Active Channel Margin.

[3] Note that no work is proposed within the Columbia River. Rather the aquatic portion of the action area provides context for evaluating potential impacts (i.e., construction noise and stormwater) associated with working in proximity to the Columbia River.

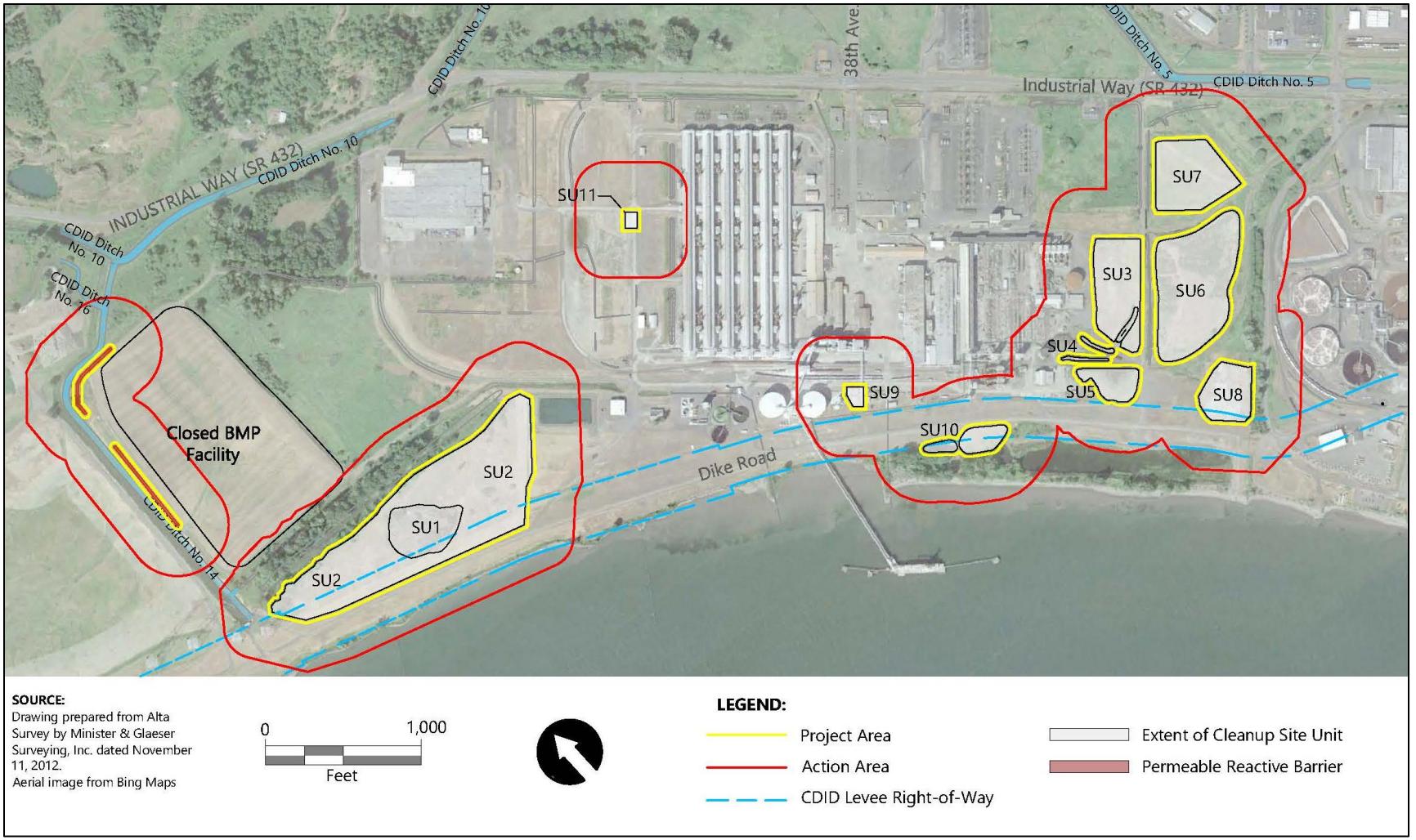


Figure 2. MTCA Cleanup project area and action area

Vegetation

Most of site has been altered from its natural condition, either as developed industrial infrastructure and facilities, constructed contaminant disposal facilities, or undeveloped areas of vegetation with historical hydrology altered by diking, ditching or fill. Shoreline vegetation and shallow water habitat are limited due to extensive diking and riprap along the Columbia at the site. A high-tension power transmission line corridor crosses the property.

The vast majority of the site (~80 percent) is comprised of paved surfaces, buildings, and unvegetated surfaces, or areas of upland grasses and forbs. Much of the upland grass and forb areas have been previously altered through grading, filling, or other development. The remainder of the site is comprised of (in decreasing order) wetland, surface water/stormwater ditches, and upland forest and scrub-shrub areas.

Vegetation in the wetlands and non-wetland ditches is dominated by emergent species, with smaller component of shrub-scrub and tree species. Non-native species including reed canary grass and Himalayan blackberry are present; reed canary grass is dominant in much of the wetland area. These wetlands provide limited water quality, wildlife support, stormwater management, and groundwater recharge functions.

Chemical Contamination

The Remedial Investigation and Feasibility Study (RI/FS) completed in 2015 presents a comprehensive description past investigations and potential contaminants at the Former Reynolds Site (Anchor QEA 2015). In summary, chemicals of concern identified at the site and addressed by the cleanup action include the following:

- Fluoride and cyanide in surface water,
- Fluoride, cyanide, carcinogenic PAHs, and petroleum in groundwater,
- Fluoride, carcinogenic PAHs, PCBs, and petroleum in soil, and
- Bioassay impacts in bioactive zone sediments near Outfall 002A[4].

4 DESCRIPTION OF THE SPECIES AND HABITAT USE

A number of populations of Pacific salmon and steelhead under jurisdiction of NOAA Fisheries in the Columbia River Basin are listed as threatened or endangered under the ESA ("listed species"). Because this Project is on the mainstem of the Columbia River and below the confluence with the Willamette River, this BE addresses all listed ocean-migrating populations in the Columbia River Basin, including those from the Willamette River Sub-Basin. These include eight Evolutionarily Significant Units (ESUs) of Pacific salmon (Chinook, coho, chum, and sockeye) and five Distinct Population Segments (DPSs) of steelhead trout (Table 1). The Columbia River at this location has been designated or proposed as critical habitat for all of these populations. Eulachon (southern DPS) and green sturgeon (southern DPS) are known to be present in the lower Columbia River. The Columbia River at this location has also been designated as critical habitat for eulachon. Critical habitat for green sturgeon has been designated in the Columbia River, but its upstream extent is River

[4] Remediation of impacted sediments adjacent to Outfall 002A (SU12) was completed in 2016.

Mile (RM) 46, approximately 17 miles downstream from the project site and therefore outside of the action area.

Based on available information, the sole aquatic species listed by USFWS that could occur in vicinity of the Project site is bull trout. Critical habitat for bull trout has been designated in the mainstem of the Columbia River.

Columbian white-tailed deer (CWTD) and streaked horned lark (STHL) may occur in vicinity of the project site. Critical habitat has not been listed or proposed for CWTD. Critical habitat for STHL does not occur near the Project site, but does occur on islands within the Columbia River downstream of the site. The yellow-billed cuckoo (YBC) was recently listed by USFWS and is included on their list for Cowlitz County. There is no expectation of its presence in the Project area based on lack of suitable habitat and the developed nature of the site and surrounding areas; however, it is included in this analysis because of its recent listing.

Other species listed by USFWS in Cowlitz County include marbled murrelet (*Brachyramphus marmoratus*), Northern spotted owl (*Strix occidentalis caurina*), golden paintbrush (*Castilleja levisecta*), Nelson's checker-mallow (*Sidalcea nelsoniana*), and Kincaid's lupine (*Lupinus sulphureus* spp. *kincaidii*). North American wolverine (*Gulo gulo luscus*) also is proposed for listing. Due to their distributions, the developed nature of the site, and the lack of suitable habitat, none of these animal or plant species are addressed in this BE, including critical habitat where designated.

Listed species at the Site have been described in recent Biological Opinions (BiOps) prepared by NOAA Fisheries (2020) and USFWS (2020) for an unrelated Project. The following sections of those BiOps are incorporated by reference and can be referenced for additional information.

1. NOAA Fisheries BiOp for the Millennium Bulk Terminals Longview Coal Export Terminal (September 11, 2020).
    - Section 2.2.1 – *Status of the Species* (page 24 through 43)
    - Table 4. *Listing classification and date, recovery plan reference, most recent status review, status summary, and limiting factors for fish species considered in this opinion* (page 25 through 34)
    - Section 2.2.2 - *Status of the Critical Habitat* (page 44 through 32)
    - Table 5 - *Critical habitat, designation date, federal register citation, and status summary for critical habitat considered in this opinion* (page 45 through 47)
    - Table 6 – *Primary constituent elements, now termed "physical and biological features" (PBFs) of critical habitats designated for ESA-listed salmon and steelhead species considered in this opinion (except SR spring/summer-run Chinook salmon, SR fall-run Chinook salmon, and SR sockeye salmon), and corresponding life history events* (page 50)
    - Table 7 – *Essential Features of critical habitats designated for SR spring/summer-run Chinook salmon, SR fall-run Chinook salmon, SR sockeye salmon, and corresponding species life history events* (page 51)

- Table 9 – *Physical or biological features of critical habitats designated for eulachon and corresponding species life history events* (page 53)

2. USFWS Biological Opinion for the Millennium Bulk Terminals Longview Coal Export Terminal (November 15, 2020).
   - Section 3.1 – *Columbian White-Tailed Deer* (page 5 through 6)
   - Section 3.2 - *Streaked Horned Lark and Designated Critical Habitat* (page 6 through 9)
   - Section 3.3 – *Western Yellow-Billed Cuckoo* (page 10 through 11)

5 EFFECTS OF THE PROJECT ON ESA LISTED SPECIES

The effects of an action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. Though previously, effects of an action were to be assessed as direct, indirect, interdependent and interrelated effects, recent guidance has collapsed all of the aforementioned types of effects such that all are evaluated as "effects of the action" without further regard for the type of effect (USFWS and NOAA 2019). Effects on ESA-listed species are presented in this section, and effects on listed and proposed critical habitat are discussed in Section 6.

Broadly, the potential effects of Project activities for ESA-listed species in the action area include the potential for temporary sedimentation/turbidity generated by stormwater runoff, unanticipated spills from construction equipment and general construction noise. The effects of these elements on the species of concern are analyzed below.

5.1 EFFECTS ON LISTED SALMONIDS

All but one of the Site Units to be remediated are located inland from the CDID levee. All stormwater generated in work areas landward of the levee will be captured and treated in the bulk terminals existing stormwater collection and treatment facility. Based on this and with implementation of the BMPs described in Section 2.5, the potential for work landward of the levee to impact water quality or salmonid habitat is considered discountable.

SU10 is situated on the flood face of the levee approximately 26 ft landward and 10 vertical feet above the OHW mark of the Columbia River. The following sections addresses the potential for effects to aquatic habitat associated with working near the shoreline.

5.1.1 Construction-Related Turbidity

Remediation of SU10 will involve excavating the former landfill, backfilling the area to grade and reseeding. During construction, the potential exists for stormwater runoff to erode exposed portions of the work area causing a temporary and localized increase in total suspended solids within the Columbia River.

The effects of this will be minimized by implementing standard BMPs for working near the water, including installing proper erosion control measures prior to any excavation or backfilling, regularly maintaining erosion control devices, and prohibiting construction equipment from operating below the OHW mark of the Columbia River. With these controls in place, runoff is not

expected to cause conditions that could result in direct mortality, harm or behavioral impacts to listed salmonids.

Overall, it is anticipated that construction related turbidity will be minimal, localized, and temporary and is not expected to negatively affect listed salmonids.

5.1.2 Unanticipated Discharges and Construction Debris

Construction equipment would not operate below the OHW mark of the Columbia River. However, there is a very small risk of minimal, localized, and temporary water quality impacts from an unintentional release of fuel, lubricants, or hydraulic fluid from construction machinery. The potential for this to occur and the potential extent would be minimized through BMPs, including regularly checking equipment for leaks and having a spill containment kit on site in the event of a spill. Thus, the potential for this occurring and resulting in adverse effects on ESA-listed species is negligible.

5.1.3 Chemical Contamination

The potential for fluoride or other chemicals of concern to impact water quality during construction is limited. The majority of the work will be completed on the upland side of the flood control levee that runs along the entirety of the shoreline. Stormwater from these areas is collected and treated via the existing stormwater management system and therefore any minor runoff generated within these areas would not impact water quality.

Site Unit 10 is the only cleanup area located on the flood face of the levee. Material to be excavated from SU10 is associated with a closed landfill that contains inert construction debris that does not include chemical contamination levels in excess of applicable screening levels. Based on this, and with the implementation of standard BMPs for working near the water, the potential for chemicals being released into the aquatic environment during construction is discountable.

The cleanup will address site contamination and the primary long-term effect of the Project on ESA listed fish will be beneficial. The benefits associated with addressing site contamination are addressed in Section 5.1.5 below.

5.1.4 Habitat Disturbance within the Riparian Zone

SU10 is located on the riverward side of the flood control levee and is bisected by a service road that leads to the river's edge. The landfill contains construction debris and remediation will involve excavating the debris and then backfilling the area to restore the slope to its original configuration. After backfilling, SU10 will receive a new layer of cover soil and hydroseed.

Remediation will remove vegetation from the entirety of the 1.3-acre footprint of SU10, including a combined total of 0.35 acre of buffer area associated with wetlands Q4 and X. Existing vegetation within the SU10 work area consists primarily of mowed levee grasses that transition to a band of riparian shrubs and non-native weedy species closer to the wetlands and shoreline.

Adverse impacts to riparian and wetland buffer vegetation have been avoided and minimized to the greatest extent practicable while still achieving the Project purpose and need. Measures intended to avoid and/or minimize the habitat impacts associated with working near the shoreline are described in Section 2.5. In summary, the footprint of SU10 has been minimized and earthwork will not extend into the wetlands or below the OHW mark of the Columbia River. The area will also be restored to its original configuration following remediation and seeded. Overall, the

potential for the Project to impact ESA listed salmonids through habitat modification is discountable.

5.1.5 Benefits of the Project

The cleanup will address site contamination and the primary impact of the Project will be beneficial. Impacted soils and fill deposits will be removed and either disposed of off-site or consolidated on-site. Impacted material that is consolidated on-site will be capped to prevent direct contact between impacted materials and site ground and surface water. Reactive backfill and groundwater treatment (PRBs) will further protect ground and surface water receptors from the migration of site fluoride. Consolidation of fill deposits, sediments, and landfill materials from SU10 would remove waste materials located on the riverward side of the levee that are not currently capped in compliance with current standards. Overall, the cleanup will bring the site into compliance with current MTCA standards intended to be protective of aquatic receptors, including ESA listed fish. Thus, the primary long-term effect of the Project on ESA listed fish will be beneficial.

A secondary benefit will result from NWA's proposed wetland mitigation plan. Specifically, the cleanup includes wetland and buffer impacts that NWA proposes to mitigate for by purchasing credits from the Coweeman River Joint Wetland and Conservation Bank (the Bank). This dual purpose bank, in addition to providing wetland benefits, also addresses specific elements within the Salmon Recovery Plan (LCFRB 2010). These include improvements to the following priority attributes that benefit Chinook, chum, and coho salmon, as defined within the Recovery Plan (Habitat Bank 2016):

- Flow: The bank improved water connectivity between tributary streams and the wetland complex that provides access to cool permanent flow to areas for juvenile salmonids to forage and rear during low-water periods.
- Habitat Diversity: The Bank includes in-river refuge points with habitat features to provide a variety of habitat improvement for juvenile and adult fish. These include newly created off-channel habitat and clusters of large woody debris.
- Sediment Loading: Channel stability was improved by re-grading the banks, installing large woody debris and replanting with native woody vegetation.
- Temperature: The bank design preserves the cold-water tributary sources to the wetland complex and Coweeman River. Riparian and wetland plantings also provide shade to maintain cold water temperatures.

Overall, NWA's proposed mitigation plan for offsetting wetland impacts will also benefit ESA listed salmonids.

5.2 EFFECTS ON EULACHON

The Project will address a potential source of ground and surface water contamination and will improve water quality conditions over the long-term. Based on this, the primary effect of the Project on eulachon will be beneficial (see Section 5.1.5, above). There is the potential for short-term impacts on eulachon during Project construction from stormwater runoff from the SU10 work area, but these effects will be largely avoided because no work is proposed below the OHW mark of the Columbia River. Potential impacts associated with turbidity will be further minimized by implementing standard construction BMPs for working near the water.

In the unlikely event that stormwater runoff generates turbid conditions in the river, the extent would be limited to the marginal edge of the river where adults or larvae are least likely to be present. Specifically, larval eulachon are transported passively either in the water column or along with incubating eggs in the substrate. It is unlikely that passively-transported larvae or eggs would be present in the nearshore portion of the action area where turbidity may occur, as this area experiences low current energy due to existing groins. It is also unlikely that migrating adults would be present in this nearshore, low-energy area outside of the current.

Even if present, the levels of highly localized and temporary turbidity would not result in direct mortality, gill damage, stress, or increased susceptibility to disease for the very small subset of eulachon experiencing it. The potential for impacts to eulachon by turbidity would be negligible and discountable. Over the long-term, the Project will benefit eulachon by addressing a source of contamination to the Columbia River.

5.3 EFFECTS ON GREEN STURGEON

Green sturgeon presence in tidal freshwater areas of the Columbia River is generally low, but may not be discountable. If present, green sturgeon are unlikely to enter the action area based on its shallow, nearshore nature.

In the unlikely event that an adult green sturgeon enters the action area during construction, it could temporarily experience minimally elevated turbidity in highly localized areas. As described above for salmonids and eulachon, TSS levels are not expected to result in mortality or other adverse effects. If anything, conditions would discourage green sturgeon from entering this habitat. Should this behavioral response occur, it would not impede migration or exclude green sturgeon from a unique or important habitat type. This type of response would not adversely affect green sturgeon. Therefore, effects of temporarily, highly localized, and minimal increases in turbidity and TSS during or shortly after construction are expected to be negligible and would not adversely affect green sturgeon.

Overall, based on the small, shallow, and nearshore area of potential turbidity, and the short-term duration, the potential for construction related impacts to green sturgeon is negligible and discountable. As described above for salmon and eulachon, the Project will address impacted ground and surface water and the long-term effect of the Project on green sturgeon will be beneficial.

5.4 EFFECTS ON TERRESTRIAL SPECIES

Actions in the upland would include excavation, backfilling, and soil consolidation in efforts to remove and isolate impacted soils and fill material at the site. Overall, this action would be beneficial for upland ESA species. Remediation would result in minor impacts during construction, including noise from construction equipment, and temporary and permanent impacts to vegetation, including wetlands and wetland buffers.

5.4.1 Streaked Horned Lark

Vegetated portions of the Project area are typically mowed grasses and herbaceous vegetation with some areas of shrubby vegetation. Because the vegetation is typically continuous rather than patchy and does not include much bare ground (sandy or otherwise), it is considered to have low habitat-suitability for STHL. These areas were examined through breeding-season surveys in 2013 and 2014 (Grette Associates 2014a, 2014b). STHL were not detected during those surveys. The nearest highly-suitable occupied habitat, as described in the critical habitat listing (USFWS 2013),

is located approximately five miles downstream at the Crims Island dredged-material shoreline disposal site.

Based on the lack of detections during the field surveys at the site and the low suitability of existing habitat, there is a low likelihood that STHL would be present in the action area. The effects of construction noise on STHL would therefore be discountable. Preferred habitat for larks does not exist on the site and the project would not adversely affect lark habitat.

5.4.2 Columbia White-Tailed Deer

The site is within the historic range of the Columbia River DPS and is adjacent to areas which may be occupied by the Upper Estuary Islands subpopulation. However, wooded riparian habitat at the site is limited and does not represent the proper matrix of cover and foraging habitats preferred by CWTD. Further, onsite habitat suitable for CWTD has been permanently fragmented from adjacent riparian habitat by the CDID dike, and from other nearby habitats by residential, agricultural, and industrial developments. Overall, the site provides neither high-quality habitat to CWTD nor a corridor through which more suitable habitat could be accessed. Based on these conditions, regular occurrence of CWTD within the action area is considered unlikely. Nevertheless, to be protective, the potential impacts of construction noise and temporary habitat disturbance on CWTD is discussed below.

The potential for deer to be disturbed by anthropogenic noise has been studied under a variety of circumstances, including reactions to very loud noise sources such as jet aircraft and sonic booms, highway traffic, and recreational vehicles (i.e., snowmobiles and off-road vehicles) (Dufour 1980, Manci et al. 1988, Weisenberger et al. 1996, Kaseloo and Tyson 2004). In general, findings from these and other research indicate that when deer experience a disturbance frequently, and when that disturbance does not precede a true harassment event, they tend to become habituated to it (Weisenberger et al. 1996, Stankowich 2008). Further, mammals in general are known to habituate more rapidly to mechanical noise than to human presence (Gabrielson and Smith 1995). Construction noise would likely be somewhat greater than typical day-to-day operations on site, but would be consistent with existing noise at the site. Further, noise would be short-term and limited. Extreme noise-generating activities such as pile driving or blasting is not proposed.

Vegetated portions of the Project area are typically mowed grasses and herbaceous vegetation with some areas of shrubby vegetation, including wetlands. Excavation and backfilling associated with the Project will necessitate temporary ground disturbance and vegetation removal. However due to the poor habitat quality and low likelihood that CWTD would be present, construction is not likely to adversely affect habitat being preferentially used by this species.

Wetlands within the Project area provide low to moderate habitat functions. None of the wetlands provide the mix of wooded and foraging habitat preferred by CWTD. The proximity of these wetlands to active and ongoing operations generally limits the value of their habitat quality. Based on the lack of high-quality habitat for CWTD, ground disturbance (including within wetlands and their buffers) is likely to have a de minimis impact on this species.

Overall, noise produced during construction would be typical of the Longview industrial area. Any CWTD present in the action area are expected to be habituated to the types and levels of noise typical of existing conditions. As a result, it is unlikely that construction activities in the Project area would result in disturbance to CWTD. Based on the low likelihood that CWTD would be present in the action area combined with the low-quality habitat conditions at the site, short term

impacts associated with construction would not have a measurable impact on the species. Over the long term, remediation could improve wildlife habitat conditions at the site, including any CWTD that might be present, by eliminating a known source of contamination.

5.4.3 Yellow-Billed Cuckoo

Because it is extremely unlikely that YBC currently breed within or seasonally occupy Cowlitz County, their presence is generally discountable within the action area. This includes potentially suitable habitat. Based on the lack of suitable habitat within and adjacent to the Project area, YBC are not expected to be present in these areas at any time. Overall, any effects of the Project would be discountable with respect to YBC.

5.5 CUMULATIVE IMPACTS

From an ESA perspective, the analysis of cumulative effects considers future non-Federal actions (i.e., non-Federal projects that do not require Federal permits) that may affect habitats and listed species in the action area. No such actions have been identified. Any future project that entails in-water work will require appropriate Federal and ESA review.

6 CRITICAL HABITAT EVALUATION

6.1 SALMON AND STEELHEAD CRITICAL HABITAT

Although no work is proposed within the Columbia River, the action area extends into aquatic areas that are designated critical habitat for all Chinook ESUs, coho salmon, chum salmon, sockeye salmon, and all DPSs of steelhead trout (NOAA 2005 and 2016). At the time of listing, NOAA defined six Primary Constituent Elements (PCEs, i.e., physical and biological features) of critical habitat for 14 ESUs and DPSs of listed salmonids in Washington, Oregon, and Idaho, including all listed species addressed herein (2005 and 2016). Although the rules have been updated and no longer define critical habitat according to PCEs, the PCE concept is still a valuable tool for evaluating effects to critical habitat. The analysis below discusses Project impacts for non-spawning freshwater areas (PCEs 2 and 3). Because the PCEs are the same for all salmonid ESUs and DPSs, analysis for all salmonid critical habitat is completed together.

6.1.1 PCE 2: Freshwater Rearing Sites

PCE 2 is defined as "Freshwater rearing sites with water quantity and floodplain connectivity to form and maintain physical habitat conditions and support juvenile growth and mobility; water quality and forage supporting juvenile development; and natural cover such as shade, submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks" (NOAA 2005). Analyses of effects of the Project on PCE 2 within the action area are presented below.

Water Quantity and Floodplain Connectivity

The project would not change water quantity at the site and would not affect floodplain connectivity.

Water Quality

The effects of the Project on water quality are addressed in Sections 5.1.1, 5.1.2 and 5.1.3 of this document. As discussed, Project construction may generate temporary and highly localized

increases in turbidity. Suspended sediment concentrations will not reach levels that could cause direct harm to salmonids. The risk of a spills or debris reaching the Columbia River during construction will be minimized by implementing standard BMPs for working near the shoreline. Overall, in consideration of standard avoidance and minimization measures, short-term effects are anticipated to be limited in scope and duration and are considered insignificant.

The cleanup action will address site contamination and a potential source of fluoride and other chemicals of concern (COC) to the Columbia River and the primary impact of the Project on water quality will be beneficial (see Section 5.1.5 for a discussion of Project benefits).

Forage

The effects of the Project on salmonid prey are addressed in Section 5.1.4 (*Habitat Disturbance within the Riparian Zone*) of this document. As discussed, loss of riparian vegetation has been minimized by limiting the SU10 footprint to the extent practicable. Following remediation, disturbed areas will be backfilled to reestablish the original contours, covered with topsoil and reseeded. Based on this, impacts are expected to be temporary in nature. Overall, the Project is not expected to have a measurable effect on salmonid foraging in the action area.

Natural Cover

The SU10 Project area is setback approximately 26 feet from the OHW mark of the Columbia River and would have no effect on elements contributing to natural cover (large cobbles, boulders, large wood or overhanging vegetation).

6.1.2 PCE 3: Freshwater Migration Corridors

PCE 3 is defined as "Freshwater migration corridors free of obstruction with water quantity and quality conditions and natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, side channels, and undercut banks supporting juvenile and adult mobility and survival" (NOAA 2005). Analyses of effects of the Project on PCE 3 within the action area are presented below.

Obstructions

The Columbia River is approximately half a mile wide at the Project site. Temporary turbidity over a localized area would not constitute an obstruction to the migration corridor. Over the long-term, the Project would be neutral to this element of PCE #3 without positive or negative effects to the function of the action area as a migration corridor.

Water Quality, Quantity, and Natural Cover

Please see the analyses for these components under Sections 6.1.1 above. Overall, the Project would not adversely affect these elements of PCE #3 within the action area.

6.2 EULACHON CRITICAL HABITAT

The aquatic portion of the action area includes designated critical habitat for the Southern DPS of eulachon (NOAA 2011).

Freshwater spawning and incubation sites with water flow, quality and temperature conditions and substrate supporting spawning and incubation.

The entirety of the Project area is located within the upland limits of the site and there would be no change to the baseline condition for water flow, temperature conditions or substrates that

support spawning and incubation. The potential for eulachon to be temporarily affected by elevated TSS concentration during construction is discussed in Section 5.1. There would be no long-term changes to substrates or water quality conditions as a result of the Project. The proposed project will have no adverse impacts on eulachon freshwater spawning and incubation.

Freshwater and estuarine migration corridors free of obstruction and with water flow, quality and temperature conditions supporting larval and adult mobility, and with abundant prey items supporting larval feeding after the yolk sac is depleted.

The potential effects of the cleanup would be limited to short term water quality impairment and a minor reduction in prey resources associated with riparian vegetation removal. Standard BMPs, such as the use of silt curtains, will significantly reduce the likelihood of elevated turbidity during construction. Overall, temporary impacts are not expected to have a measurable impact on migration corridors for eulachon. No long-term adverse impacts on freshwater migration corridors are expected.

7 CONCLUSIONS AND DETERMINATIONS

It is expected that implementation of the cleanup action will have negligible short-term effects on ESA listed species. The Project's long-term effect will be beneficial, because it addresses a source of chemical contamination.

7.1 DETERMINATION OF EFFECTS - SPECIES

Based on the analysis in this BE, the Project ***may affect,*** but is ***not likely to adversely affect*** ESA listed fish species, including all five ESUs of Chinook salmon, lower Columbia River coho salmon, Columbia River chum salmon, Snake River sockeye salmon, five DPSs of Steelhead trout, Conterminous U.S. bull trout, southern eulachon and green sturgeon. The Project will have ***no effect*** on streaked horned lark, Columbia white-tailed deer or yellow-billed cuckoo.

7.2 DETERMINATION OF EFFECTS - CRITICAL HABITAT

Based on the analysis in this BE, the Project ***may affect,*** but is ***not likely to adversely affect*** designated critical habitat for all 13 ESUs/DPSs of Chinook salmon, coho salmon, chum salmon, sockeye salmon, and steelhead trout critical habitat. Similarly, the project ***may affect,*** but is ***not likely to adversely affect*** southern eulachon critical habitat.

8 REFERENCES

Anchor QEA, LLC. 2015. Former Reynolds Metals Reduction Plant – Longview Remedial Investigation and Feasibility Study. Prepared for Northwest Alloys, Inc., and Millennium Bulk Terminals – Longview, LLC. January 2015.

Anchor QEA, LLC. 2021. Former Reynolds Metals Reduction Plant – Longview Revised Engineering Design Report. Prepared for Northwest Alloys, Inc. and Millennium Bulk Terminals – Longview, LLC. July 2021.

Dufour, P. 1980. Effects of noise on wildlife and other animals: review of research since 1971. Report for the U.S. Environmental Protection Agency. National Technical Information Ser., Washington. NTIS No. PB82-139973. 97 pages. Available:

http://www.fs.fed.us/eng/techdev/IM/sound_measure/Dufour_1980.pdf (January 2017).

Ecology (Department of Ecology). 2018. Cleanup Action Plan Former Reynolds Metals Reduction Plant – Longview, Cowlitz County, Washington. October 2018. URL: https://fortress.wa.gov/ecy/gsp/CleanupSiteDocuments.aspx?csid=11796

Gabrielson, G. and E. Smith. 1995. Physiological responses of wildlife to disturbance. Pages 95-107 *in* R.L. Knight and K.J. Gutzwiller, K.J., editors. Wildlife and Recreationists. Island Press, Washington, District of Columbia.

Grette Associates. 2014a. Technical Memorandum: Streaked Horned Lark Survey at Millennium Bulk Terminals Longview (MBTL). January 2014. Prepared for Millennium Bulk Terminals - Longview, LLC. Grette Associates, LLC, Wenatchee, Washington.a

Grette Associates. 2014b. Technical Memorandum: Streaked Horned Lark Survey at Millennium Bulk Terminals Longview (MBTL). September 2014. Prepared for Millennium Bulk Terminals - Longview, LLC. Grette Associates, LLC, Wenatchee, Washington.

Grette Associates. 2021. Former Reynolds Metals Reduction Plant Longview Model Toxics Control Act Cleanup Action (Consent Decree No. 18 2 01312-08) Mitigation Bank Use Plan. Prepared for Northwest Alloys, Inc.

Habitat Bank. 2016. Coweeman River Mitigation Bank Mitigation Banking Instrument, Kelso, Washington. March 2016.

Kaseloo, P. and K. Tyson. 2004. Synthesis of Noise Effects on Wildlife Populations. FHWA Report. Publication No. FHWA-HEP-06-016, September 2004. Available: https://www.fhwa.dot.gov/environment/noise/noise_effect_on_wildlife/effects/effects.pdf (January 2017).

LCFRB (Lower Columbia Fish Recovery Board. 2010. Washington Lower Columbia salmon recovery and fish and wildlife subbasin plan, chapter H – Coweeman Subbasin: Longview, Washington. Lower Columbia Fish Recovery Board. May 2010.

Manci, K., D. Gladwin, R. Villella, and M. Cavendish. 1988. Effects of aircraft noise and sonic booms on domestic animals and wildlife: a literature synthesis. U.S. Fish and Wildlife Service Technical Report NERC 88. Available: http://www.fs.fed.us/eng/techdev/IM/sound_measure/Manci_et_al_1988.pdf (January 2017).

NOAA (National Oceanic and Atmospheric Administration). 2005. Endangered and Threatened Species; Designation of Critical Habitat for 12 Evolutionary Significant Units of West Coast Salmon and Steelhead in Washington, Oregon, and Idaho. Final Rule. Federal Register 70:170(2 September, 2005):52630-52858.

NOAA (National Oceanic and Atmospheric Administration). 2011. Endangered and Threatened Species, Designation of Critical Habitat for Southern Distinct Population Segment of Eulachon. Federal Register 76:203(20 October, 2011):65324-65352.

NOAA Fisheries (National Oceanic and Atmospheric Administration National Marine Fisheries Service). 2020. Endangered Species Act Biological Opinion, Conference Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Millennium Coal Export Terminal, Columbia River (5th Field HUC

1708000302), Cowlitz County, Washington (Corps No.: NWS-2010-1225). September 11, 2020.

Stankowich, T. 2008. Ungulate flight responses to human disturbance: a review and meta-analysis. Biological Conservation. 141, 2159–2173. Available: http://web.csulb.edu/~tstankow/Stankowich2008BiolCons.pdf (January 2017).

USFWS (U.S. Fish and Wildlife Service). 2013. Endangered and threatened wildlife and plants: designation of critical habitat for Taylor's checkerspot butterfly and streaked horned lark; final rule. Federal Register 78:192(3 October 3, 2013):61506 – 61589.

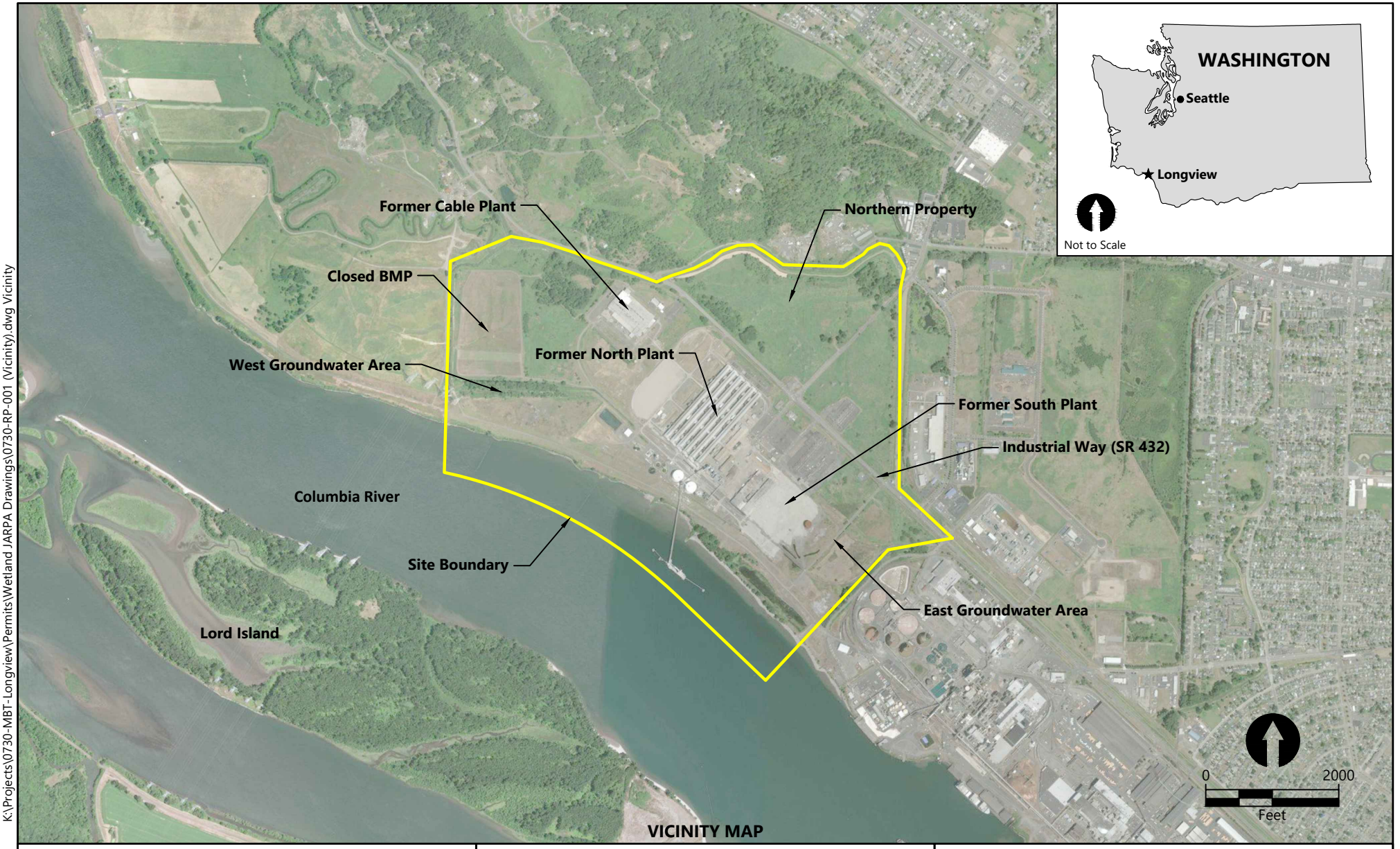
USFWS (U.S. Fish and Wildlife Service). 2020. Biological Opinion Millennium Bulk Terminals Longview Coal Export Terminal, Cowlitz County, Washington. (Corps No.: NWS-2010-1225). November 15, 2020.

Weisenberger, M.E., P.R. Krausman, M.C. Wallace, D.W. De Young, and O.E. Maughan. 1996. Effects of simulated jet aircraft noise on heart rate and behavior of desert ungulates. The Journal of Wildlife Management 60(1):52–61. Available: http://www.rosemonteis.us/files/references/045882.pdf (January 2017).

FORMER REYNOLDS METALS REDUCTION PLANT LONGVIEW MODEL TOXICS CONTROL ACT CLEANUP ACTION (CONSENT DECREE NO. 18 2 01312-08)

BIOLOGICAL EVALUATION

PERMIT DRAWINGS



VICINITY MAP

REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

ADJACENT PROPERTY OWNERS:
1 - NIPPON DYNAWAVE PACKAGING, INC.
2 - MOELLER LAND/CATTLE CO., INC.
3 - TERRA FIRMA, INC.
4 - BONNEVILLE POWER ADMINISTRATION

NAME: FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

PROPOSED: EXCAVATION, CONSOLIDATION, CAP,
AND COVER OF WASTE MATERIAL

DATUM: NAVD88
LATITUDE: 46°08'3.4"N
LONGITUDE: -122°59'45"W
S-T-R: 36 & 38-8N-3W

IN: COLUMBIA RIVER
NEAR/AT: LONGVIEW
COUNTY: COWLITZ
STATE: WASHINNGTON

DATE: JULY 2021

ANCHOR QEA
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Seattle, WA 98101
206-287-9130

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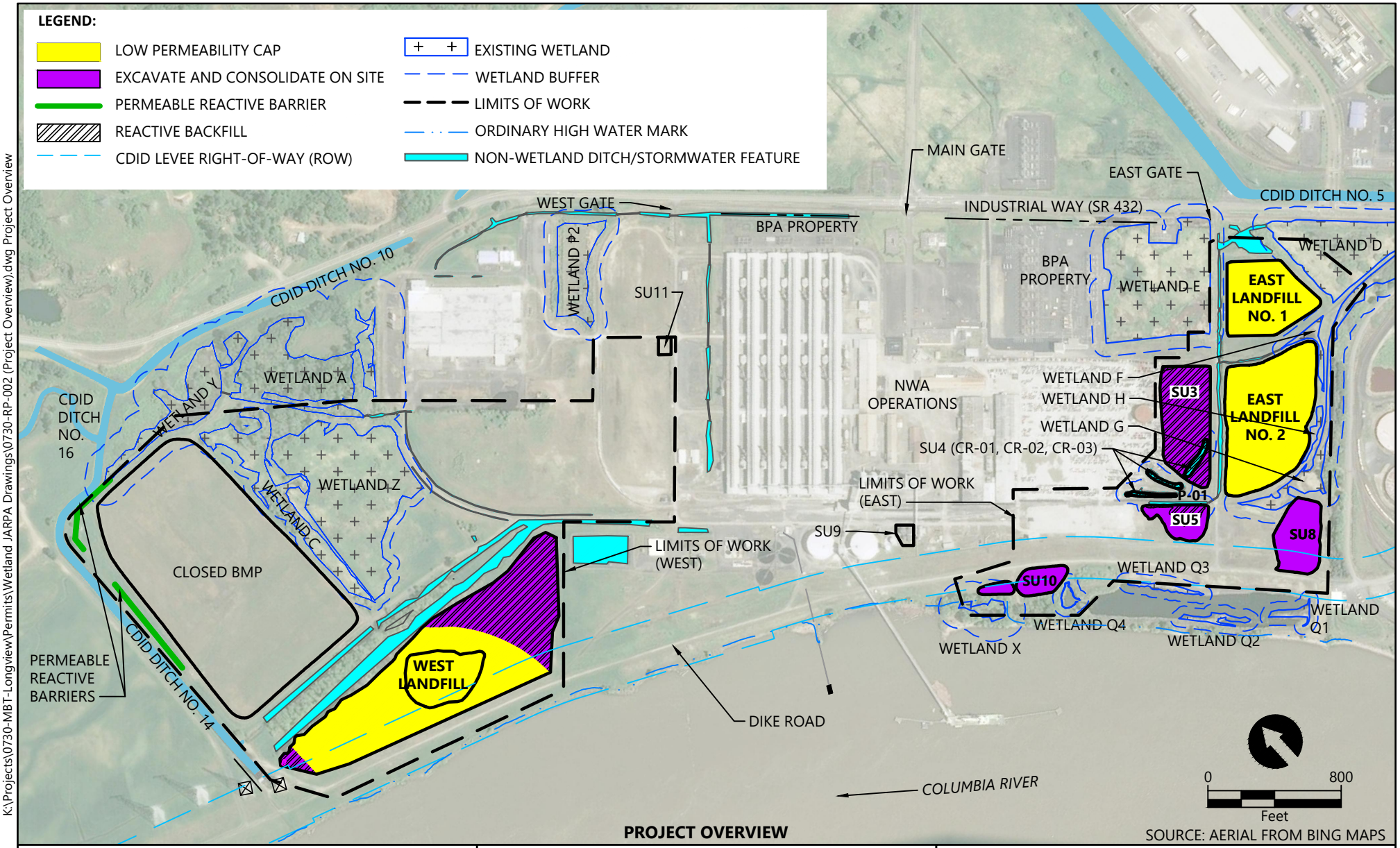

PROJECT OVERVIEW

SOURCE: AERIAL FROM BING MAPS

REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

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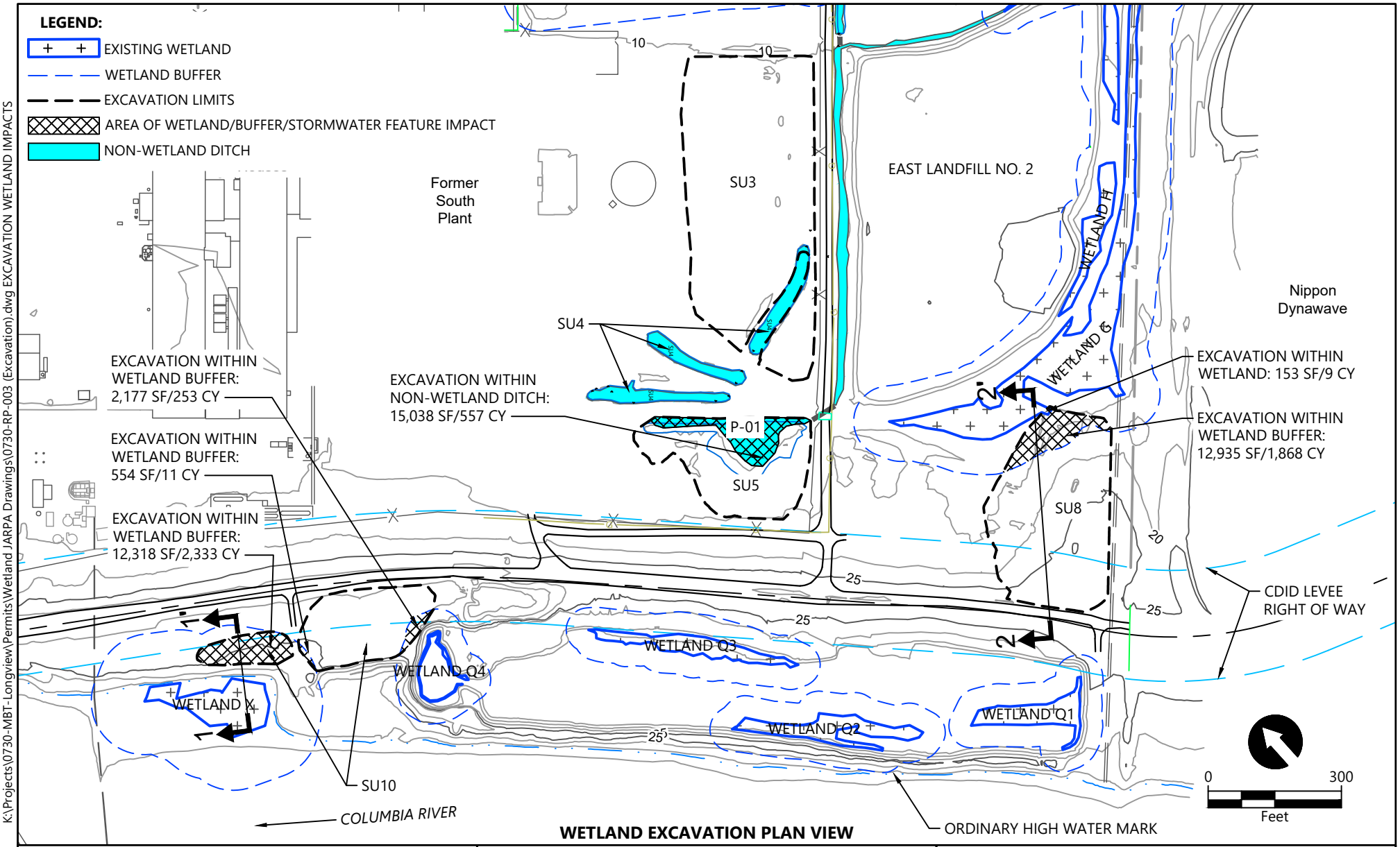

WETLAND EXCAVATION PLAN VIEW

REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

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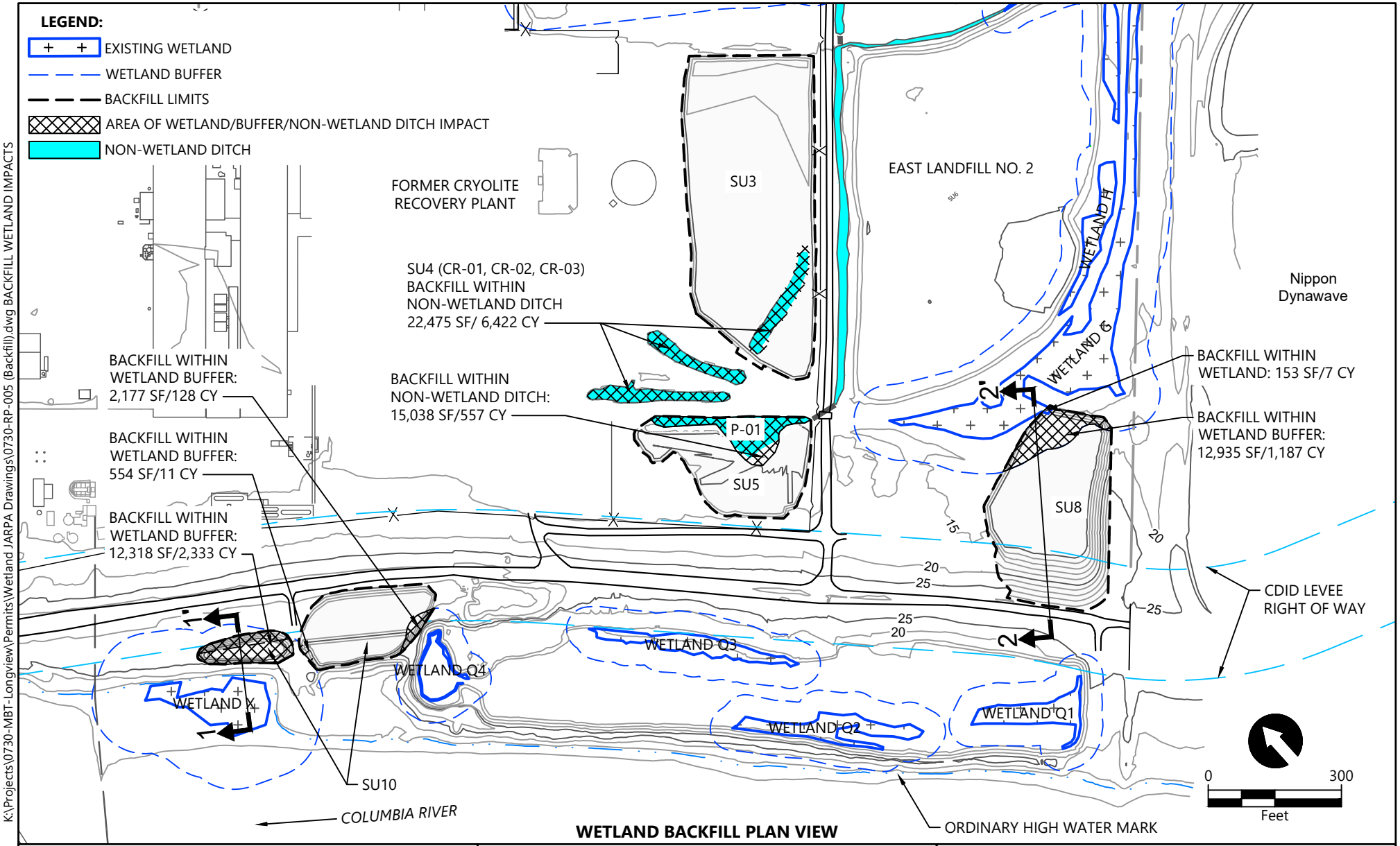

WETLAND BACKFILL PLAN VIEW

K:\Projects\0730-MBT-Longview\Permits\Wetland JARPA Drawings\0730-RP-005 (Backfill).dwg BACKFILL WETLAND IMPACTS

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REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

ADJACENT PROPERTY OWNERS:
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3 - TERRA FIRMA, INC.
4 - BONNEVILLE POWER ADMINISTRATION

NAME: FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

PROPOSED: EXCAVATION, CONSOLIDATION, CAP, AND COVER OF WASTE MATERIAL

DATUM: NAVD88
LATITUDE: 46°08'3.4"N
LONGITUDE: -122°59'45"W
S-T-R: 36 & 38-8N-3W

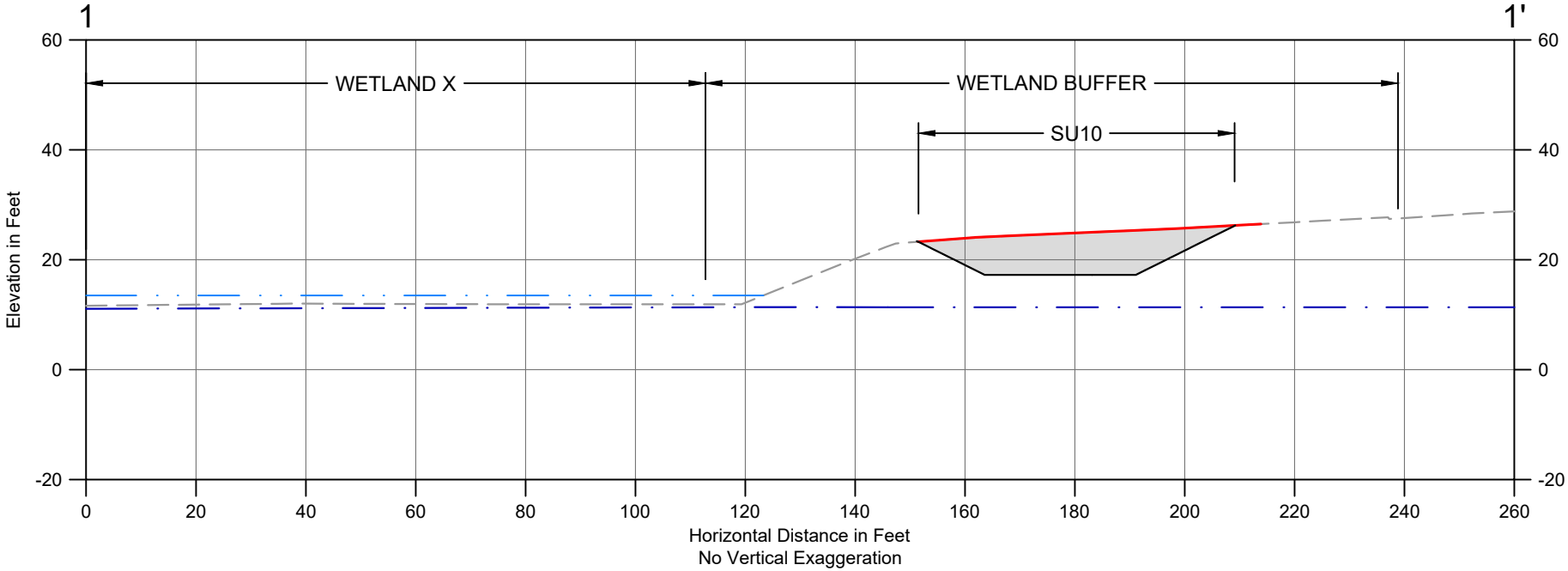
IN: COLUMBIA RIVER
NEAR/AT: LONGVIEW
COUNTY: COWLITZ
STATE: WASHINNGTON

DATE: JULY 2021

ANCHOR QEA
1201 3rd Ave, Suite 2600
Seattle, WA 98101
206-287-9130

LEGEND:

EXISTING GRADE
PROPOSED EXCAVATION GRADE
PROPOSED GENERAL BACKFILL AND GRADE
WET WEATHER GROUNDWATER CONDITIONS
DRY WEATHER GROUNDWATER CONDITIONS
ORDINARY HIGH WATER MARK



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Feet

EXCAVATION AND BACKFILL SECTION 1-1'

REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

ADJACENT PROPERTY OWNERS:
1 - NIPPON DYNAWAVE PACKAGING, INC.
2 - MOELLER LAND/CATTLE CO., INC.
3 - TERRA FIRMA, INC.
4 - BONNEVILLE POWER ADMINISTRATION

NAME: FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

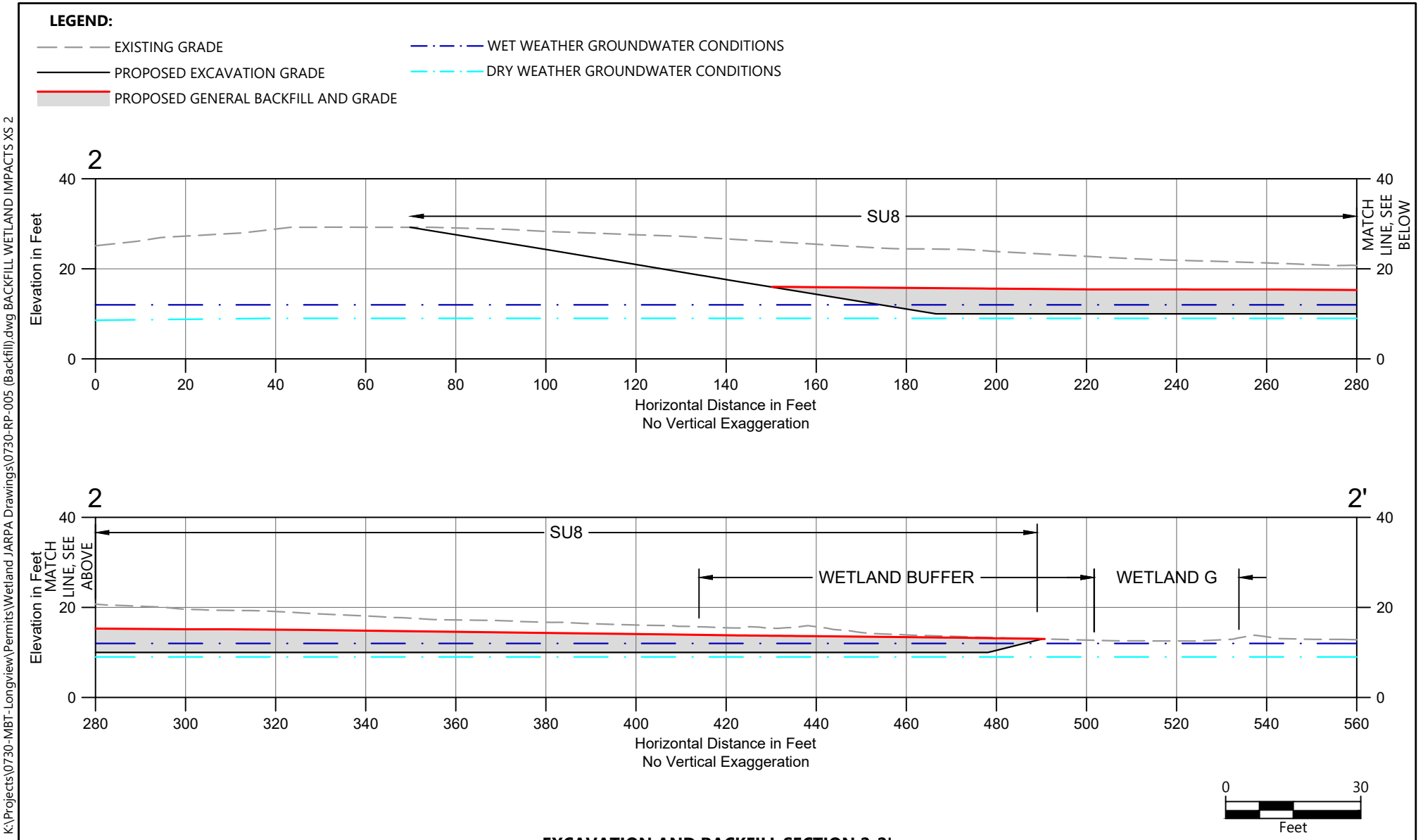
PROPOSED: EXCAVATION, CONSOLIDATION, CAP, AND COVER OF WASTE MATERIAL

DATUM: NAVD88
LATITUDE: 46°08'3.4"N
LONGITUDE: -122°59'45"W
S-T-R: 36 & 38-8N-3W

IN: COLUMBIA RIVER
NEAR/AT: LONGVIEW
COUNTY: COWLITZ
STATE: WASHINNGTON

DATE: JULY 2021

ANCHOR QEA
1201 3rd Ave, Suite 2600
Seattle, WA 98101
206-287-9130



EXCAVATION AND BACKFILL SECTION 2-2'

REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

ADJACENT PROPERTY OWNERS:
1 - NIPPON DYNAWAVE PACKAGING, INC.
2 - MOELLER LAND/CATTLE CO., INC.
3 - TERRA FIRMA, INC.
4 - BONNEVILLE POWER ADMINISTRATION

NAME: FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

PROPOSED: EXCAVATION, CONSOLIDATION, CAP, AND COVER OF WASTE MATERIAL

DATUM: NAVD88
LATITUDE: 46°08'3.4"N
LONGITUDE: -122°59'45"W
S-T-R: 36 & 38-8N-3W

IN: COLUMBIA RIVER
NEAR/AT: LONGVIEW
COUNTY: COWLITZ
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1201 3rd Ave, Suite 2600
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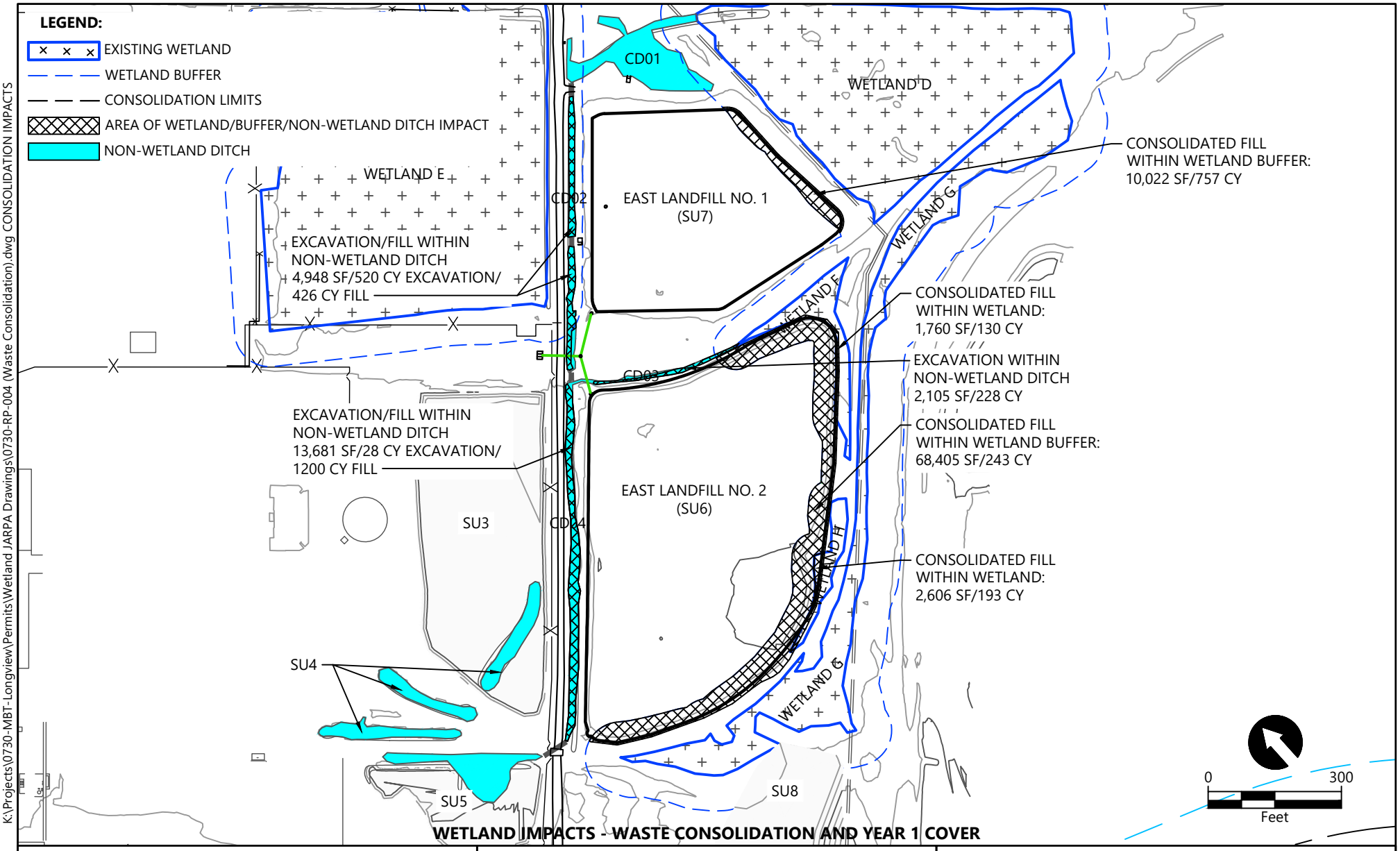


WETLAND IMPACTS - WASTE CONSOLIDATION AND YEAR 1 COVER

REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

ADJACENT PROPERTY OWNERS:
1 - NIPPON DYNAWAVE PACKAGING, INC.
2 - MOELLER LAND/CATTLE CO., INC.
3 - TERRA FIRMA, INC.
4 - BONNEVILLE POWER ADMINISTRATION

NAME: FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

PROPOSED: EXCAVATION, CONSOLIDATION, CAP, AND COVER OF WASTE MATERIAL

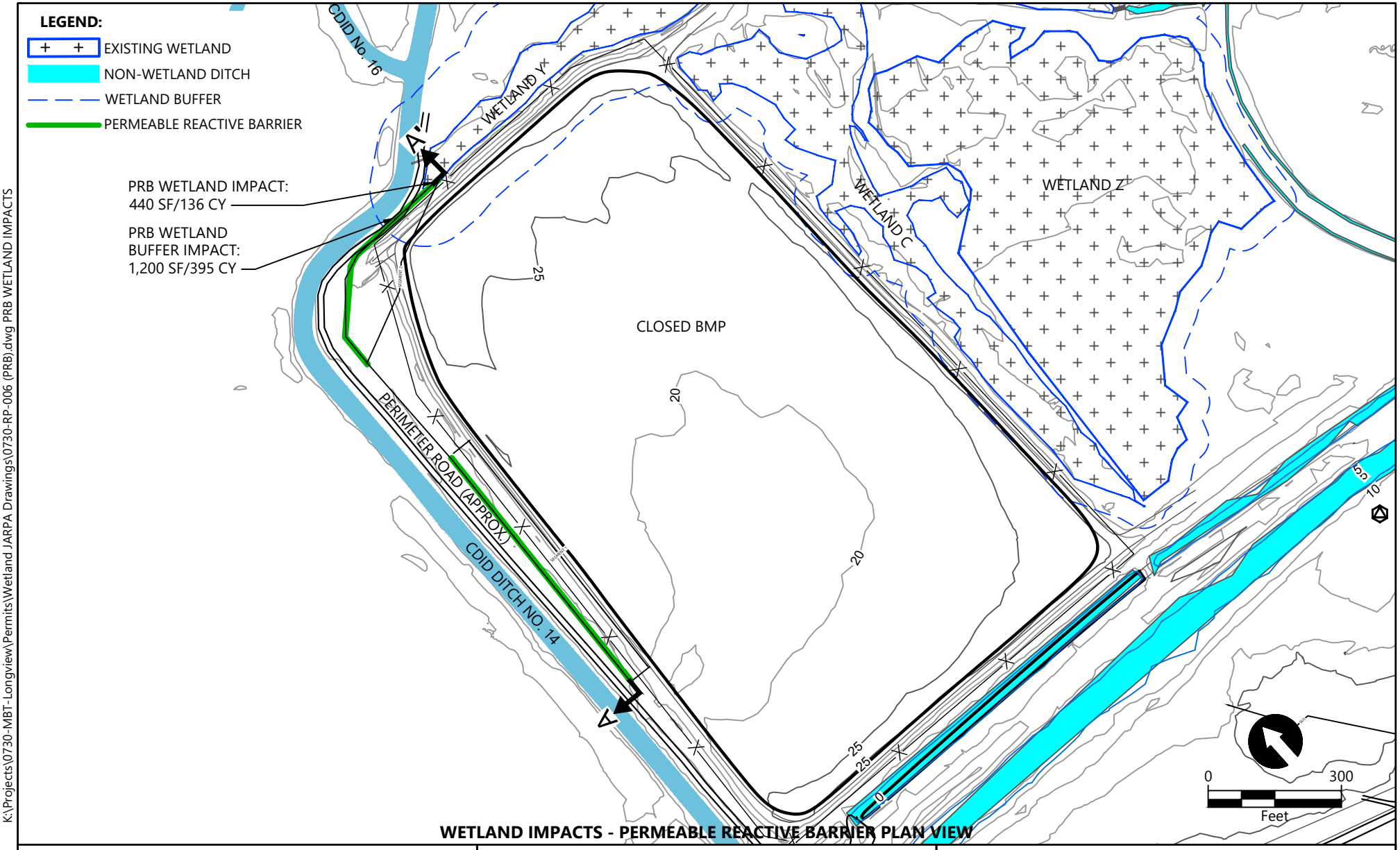
DATUM: NAVD88
LATITUDE: 46°08'3.4"N
LONGITUDE: -122°59'45"W
S-T-R: 36 & 38-8N-3W

IN: COLUMBIA RIVER
NEAR/AT: LONGVIEW
COUNTY: COWLITZ
STATE: WASHINNGTON

DATE: JULY 2021

ANCHOR QEA
1201 3rd Ave, Suite 2600
Seattle, WA 98101
206-287-9130

K:\Projects\0730-MBT-Longview\Permits\Wetland JARPA Drawings\0730-RP-004 (Waste Consolidation).dwg CONSOLIDATION IMPACTS
Jul 15, 2021 8:34am chewett



WETLAND IMPACTS - PERMEABLE REACTIVE BARRIER PLAN VIEW

REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

ADJACENT PROPERTY OWNERS:
1 - NIPPON DYNAWAVE PACKAGING, INC.
2 - MOELLER LAND/CATTLE CO., INC.
3 - TERRA FIRMA, INC.
4 - BONNEVILLE POWER ADMINISTRATION

NAME: FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

PROPOSED: EXCAVATION, CONSOLIDATION, CAP,
AND COVER OF WASTE MATERIAL

DATUM: NAVD88
LATITUDE: 46°08'3.4"N
LONGITUDE: -122°59'45"W
S-T-R: 36 & 38-8N-3W

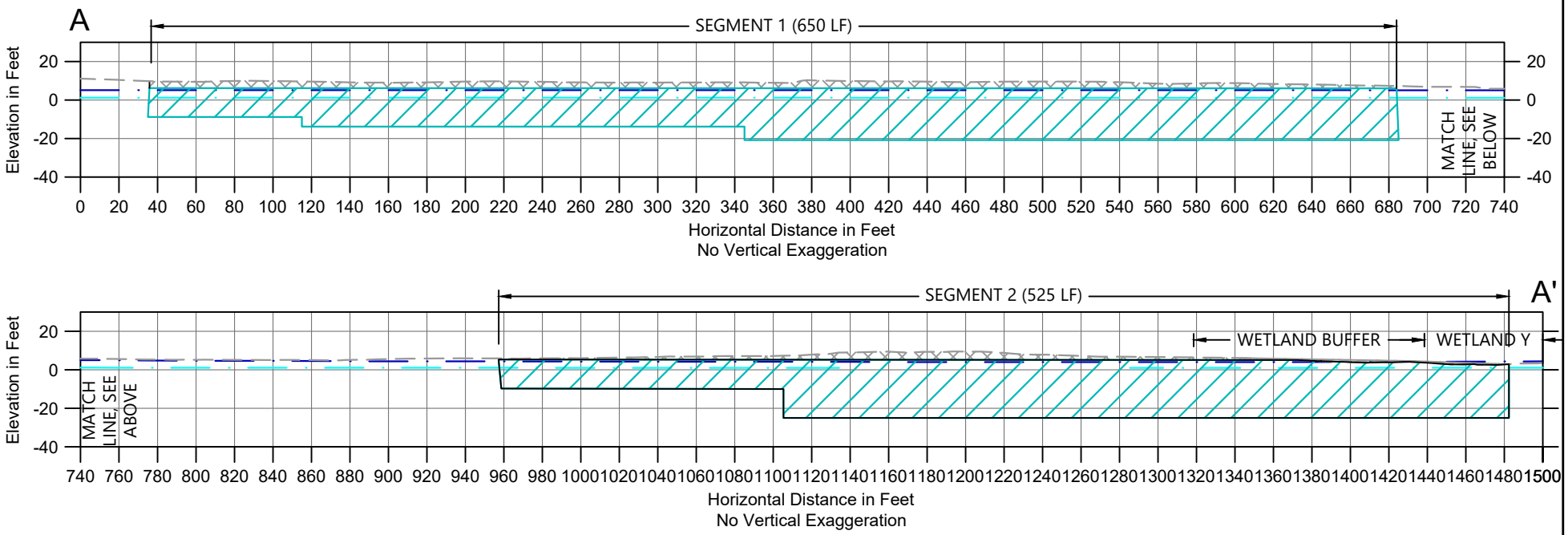
IN: COLUMBIA RIVER
NEAR/AT: LONGVIEW
COUNTY: COWLITZ
STATE: WASHINNGTON

DATE: JULY 2021

ANCHOR QEA
1201 3rd Ave, Suite 2600
Seattle, WA 98101
206-287-9130

LEGEND:

- EXISTING GRADE
- REACTIVE MATERIAL EXTENTS
- GENERAL BACKFILL
- WET WEATHER GROUNDWATER ELEVATION
- DRY WEATHER GROUNDWATER ELEVATION



0 80
Feet

PERMEABLE REACTIVE BARRIER CROSS SECTION

REFERENCE #: N/A

APPLICANT: NORTHWEST ALLOYS, INC.

LOCATION: 4029 INDUSTRIAL WAY
LONGVIEW, WASHINGTON 98632

ADJACENT PROPERTY OWNERS:
1 - NIPPON DYNAWAVE PACKAGING, INC.
2 - MOELLER LAND/CATTLE CO., INC.
3 - TERRA FIRMA, INC.
4 - BONNEVILLE POWER ADMINISTRATION

NAME: FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

PROPOSED: EXCAVATION, CONSOLIDATION, CAP, AND COVER OF WASTE MATERIAL

DATUM: NAVD88
LATITUDE: 46°08'3.4"N
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DATE: JULY 2021

ANCHOR QEA
1201 3rd Ave, Suite 2600
Seattle, WA 98101
206-287-9130

FORMER REYNOLDS METALS REDUCTION PLANT LONGVIEW MODEL TOXICS CONTROL ACT CLEANUP ACTION (CONSENT DECREE NO. 18 2 01312-08)

BIOLOGICAL EVALUATION

ATTACHMENT 1
ESSENTIAL FISH HABITAT ASSESSMENT

FORMER REYNOLDS METALS REDUCTION PLANT LONGVIEW
MODEL TOXICS CONTROL ACT CLEANUP ACTION
(CONSENT DECREE NO. 18 2 01312-08)

ESSENTIAL FISH HABITAT ASSESSMENT
DECEMBER 17, 2021

Essential Fish Habitat Designation

Pursuant to the Magnuson-Stevens Fishery and Conservation Act (MSFCMA) and the 1996 Sustainable Fisheries Act (SFA), an Essential Fish Habitat (EFH) evaluation of impacts is necessary for the Project. EFH is defined by the MSFCMA in 50 CFR 600.905-930 as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." The lower Columbia River, including the action area, is designated as freshwater EFH for coho and Chinook salmon (PFMC 2021). The Project area is used for rearing and oceanward migration by juvenile fish and return migration by adult spawners. There is no spawning in the Project or action area for this Project.

Description of the Project Action

Northwest Alloys (NWA) proposes to conduct a Model Toxics Control Act (MTCA) cleanup action at the Former Reynolds Metals Reduction Plant in Longview, Washington. The cleanup will remediate 11 distinct Site Units (SUs) and two areas of affected groundwater at the site. The cleanup would entail a combination of excavation/capping, backfill, consolidation, and offsite disposal. Section 2 of the Biological Evaluation to which this EFH assessment is appended contains a detailed description of the Project, construction methods, timing and conservation measures and can be referenced for additional information.

Analysis of Effects on EFH

Potential Project impacts to salmonid EFH and proposed conservation measures that avoid and minimize impacts are identified in Table 1. Additional discussion of the Project effects is presented in Sections 5 and 6.

Table 1. Affected EFH by Project element and proposed conservation measures.

Project Element	Affected Salmon EFH	Impact Mechanism	Applicable Conservation Measures
Excavation, backfilling, waste consolidation and capping	water column (water quality)	The majority of the Project area is located on the inland side of the CDID levee where any turbid stormwater generated during construction would be captured, collected, and treated. SU10 is located on the river side of the flood control levee and is the only cleanup site located in an area where surface water is not captured by the treatment system. The potential exists for work in this area to cause localized, temporary increases in turbidity. Standard BMPs for working adjacent to aquatic areas will be implemented while work is occurring in and around SU10. With controls in place, the potential for erosion or stormwater runoff (and resulting turbidity) to effect water column EFF will be minor.	1, 6, 8, 10, 11 and 12
		Construction equipment would not operate below the OHW mark of the Columbia River. However, there is a nominal chance that an unintentional release of fuel, lubricants, or hydraulic fluid from the construction equipment could lead to adverse impacts to water column EFH. The potential for a spill or release of construction debris to impact water column EFH will be minimized through the implementation of standard BMPs. No long-term adverse impacts to water quality are expected.	1, 2, 3, 4, 5, 7, 9 and 10
		The Project area falls within an area with landfill deposits, soils and groundwater with chemical concentrations in excess of applicable screening criteria. The potential for chemicals of concern (COCs) to impact water quality during construction is limited. The majority of the work will be completed on the upland side of the levee and any stormwater generated from these areas will be treated. SU10 is the only cleanup area located on the flood face of the levee. However, this area contains inert construction debris that does not include chemical contamination levels in excess of applicable screening levels. Based on this and with the implementation of standard BMPs for working near the water, the potential for COCs to impact water column EFH is discountable. Over the long-term, the cleanup will have a beneficial effect on salmonid EFH by bring the site into compliance with current MTCA standards intended to be protective of aquatic receptors, including surface water quality in the Columbia River.	1, 6, 8, 9,10 and 11

List of Applicable BMPs and Conservation Measures for the Project

1. No land-based construction equipment would enter any shoreline body of water.
2. Typical construction BMPs for working near water would be applied, including checking equipment for leaks and other problems that could result in discharge of petroleum-based products, hydraulic fluid, or other material to the Columbia River.

3. The contractor would have a spill containment kit, including oil-absorbent materials, on site to be used in the event of a spill or if any oil product is observed in the water.
4. The contractor would be responsible for the preparation and implementation of a Spill Control plan to be used for the duration of the project. The plan will be submitted to the Project engineer prior to the commencement of any Project activities. A copy of the plan with any updates will be maintained at the work site by the contractor.
5. Equipment would have properly functioning mufflers, engine-intake silencers, and engine closures according to federal standards; the contractor will inspect fuel hoses, oil or fuel transfer valves, and fittings on a regular basis for drips or leaks in order to prevent spills into the surface water.
6. Proper erosion control measures would be installed prior to any excavation or backfilling to prevent the uncontrolled discharge of turbid water or sediments into waters of the state. Erosion control structures or devices would be regularly maintained and inspected to ensure their proper functioning throughout this project.
7. All fuel and chemicals would be kept, stored, handled, and used in a fashion which assure no opportunity for entry of such fuel and chemicals into the water.
8. The cleanup will be carried out in accordance with the BMPs listed in the Stormwater Manual for Western Washington and Construction Stormwater General Permit. These BMPs include, but are not limited to: BMP C105: Stabilized Construction Entrance / Exit – stabilized entrance and exit would be installed and maintained through the duration of demolition, site preparation, pre-loading and construction; BMP C106: Wheel Wash – would be used if the stabilized construction entrance/exit is not preventing sediment from being tracked off site; and BMP C107: Construction Road/Parking Area Stabilization - roads, parking areas, and other onsite vehicle transportation routes would be stabilized to reduce erosion caused by construction traffic or runoff;
9. Onsite Construction Equipment BMPs during construction include, but are not limited to: BMP C153: Material Delivery, Storage and Containment would be used to prevent, reduce, or eliminate the discharge of pollutants to the stormwater system or watercourses from material delivery and storage; Storage of hazardous materials onsite would be minimized to the extent feasible; Materials would be stored in a designated area, and secondary containment would be installed where needed; Refueling would occur in designated areas with appropriate spill control measures;
10. Earthwork associated with remediating SU10 will not extend below the OHW mark of the Columbia River or into the adjacent wetlands.
11. The footprint of the SU10 work area has been limited to that necessary to be protective of human health and the environment and otherwise comply with MTCA requirements.
12. SU10 will be backfilled and restored to its original configuration following remediation and impacts will be temporary.
13. NWA proposes to offset unavoidable wetland impacts by purchasing mitigation credit from the Coweeman River Joint Wetland and Conservation Bank in Cowlitz County (Grette Associates 2021). In addition to providing wetland mitigation, this bank also addresses specific elements within the Salmon Recovery Plan (LCFRB 2010) such as protecting and restoring habitat types critical and beneficial to anadromous fish (Habitat Bank 2016).

CONCLUSIONS AND DETERMINATION OF EFFECTS

The impacts of the Project on salmonid EFH are shown in Table 1. While Project construction may result in temporary effects, including elevated turbidity and effects generally related to working near the aquatic environment, none of these effects will be permanent and will be avoided and minimized by implementing BMPs during construction.

In summary, it is expected that implementation of the proposed Project will have negligible short-term effects on water column EFH. The Project's long-term effect on salmonid EFH is beneficial, because it removes landfill debris and a source of chemical contamination. Overall, the Project ***will not adversely affect*** salmon EFH.

REFERENCES

Grette Associates. 2021. Former Reynolds Metals Reduction Plant Longview Model Toxics Control Act Cleanup Action (Consent Decree No. 18 2 01312-08) Mitigation Bank Use Plan. Prepared for Northwest Alloys, Inc.

Habitat Bank. 2016. Coweeman River Mitigation Bank Mitigation Banking Instrument, Kelso, Washington. March 2016.

LCFRB (Lower Columbia Fish Recovery Board. 2010. Washington Lower Columbia salmon recovery and fish and wildlife subbasin plan, chapter H – Coweeman Subbasin: Longview, Washington. Lower Columbia Fish Recovery Board. May 2010.

National Marine Fisheries Service (NMFS). 2020. EFH Mapper. Queried 3/14/20. URL: https://www.habitat.noaa.gov/application/efhmapper/index.html.

Pacific Fishery Management Council (PFMC). 2021. Pacific Coast Salmon Fishery Management Plan for Commercial and Recreational Salmon Fisheries off the Coasts of Washington, Oregon, and California as Amended through Amendment 20. Appendix A. Identification and Description of Essential Fish Habitat, Adverse Impacts, and Recommended Conservation Measures for Salmon. PFMC, Portland, Oregon. 81 pgs.

FORMER REYNOLDS METALS REDUCTION PLANT LONGVIEW MODEL TOXICS CONTROL ACT CLEANUP ACTION (CONSENT DECREE NO. 18 2 01312-08)

BIOLOGICAL EVALUATION

ATTACHMENT 2
OFFICIAL USFWS SPECIES LIST

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington Fish And Wildlife Office
510 Desmond Drive Se, Suite 102
Lacey, WA 98503-1263
Phone: (360) 753-9440 Fax: (360) 753-9405
http://www.fws.gov/wafwo/

In Reply Refer To: December 17, 2021
Consultation Code: 01EWFW00-2022-SLI-0374
Event Code: 01EWFW00-2022-E-00962
Project Name: Former Reynolds Metals Reduction Plant Longview MTCA Cleanup Action

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated and proposed critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. The species list is currently compiled at the county level. Additional information is available from the Washington Department of Fish and Wildlife, Priority Habitats and Species website: http://wdfw.wa.gov/mapping/phs/ or at our office website: http://www.fws.gov/wafwo/species_new.html. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether or not the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species, and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:
http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.). You may visit our website at http://www.fws.gov/pacific/eagle/for information on disturbance or take of the species and information on how to get a permit and what current guidelines and regulations are. Some projects affecting these species may require development of an eagle conservation plan: (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Also be aware that all marine mammals are protected under the Marine Mammal Protection Act (MMPA). The MMPA prohibits, with certain exceptions, the "take" of marine mammals in U.S. waters and by U.S. citizens on the high seas. The importation of marine mammals and marine mammal products into the U.S. is also prohibited. More information can be found on the MMPA website: http://www.nmfs.noaa.gov/pr/laws/mmpa/.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Related website:
National Marine Fisheries Service: http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Washington Fish And Wildlife Office
510 Desmond Drive Se, Suite 102
Lacey, WA 98503-1263
(360) 753-9440

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

Oregon Fish And Wildlife Office
2600 Southeast 98th Avenue, Suite 100
Portland, OR 97266-1398
(503) 231-6179

Project Summary

Consultation Code: 01EWFW00-2022-SLI-0374
Event Code: Some(01EWFW00-2022-E-00962)
Project Name: Former Reynolds Metals Reduction Plant Longview MTCA Cleanup Action
Project Type: LAND - RESTORATION / ENHANCEMENT
Project Description: Remediate 11 distinct site units and two areas of affected groundwater at the site.
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@46.1366943,-122.99292235623372,14z

Counties: Oregon and Washington

Endangered Species Act Species

There is a total of 9 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Columbian White-tailed Deer *Odocoileus virginianus leucurus* Population: Columbia River DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/154	Threatened

Birds

NAME	STATUS
Marbled Murrelet *Brachyramphus marmoratus* Population: U.S.A. (CA, OR, WA) There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/4467	Threatened
Northern Spotted Owl *Strix occidentalis caurina* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened
Streaked Horned Lark *Eremophila alpestris strigata* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7268	Threatened
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Fishes

NAME	STATUS
Bull Trout *Salvelinus confluentus*	Threatened

Population: U.S.A., conterminous, lower 48 states
There is **final** critical habitat for this species. Your location overlaps the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/8212

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

Flowering Plants

NAME	STATUS
Golden Paintbrush *Castilleja levisecta*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/7706

NAME	STATUS
Nelson's Checker-mallow *Sidalcea nelsoniana*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/7340

Critical habitats

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Bull Trout *Salvelinus confluentus*	Final

https://ecos.fws.gov/ecp/species/8212#crithab