COMPREHENSIVE OPERATIONS AND MAINTENANCE PLAN

FORMER PACIFIC WOOD TREATING CO. SITE
FACILITY ID 1019, CLEANUP SITE ID 3020

Prepared for
PORT OF RIDGEFIELD
RIDGEFIELD, WASHINGTON
January 22, 2024
Project No. M9003.01.055

Prepared by
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MAUL
FOSTER
ALONGI

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The material and data in this report were prepared under the supervision and direction of the undersigned.

MAUL FOSTER & ALONGI, INC.

Phil Wiescher, PhD
Principal Environmental Scientist

This digital seal certifies the signatory and document content.

1/22/2024

Josh Elliott, PE
Principal Engineer

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ACRONYMS AND ABBREVIATIONS

COE	U.S. Army Corps of Engineers
COMP	Comprehensive Operations and Maintenance Plan
Ecology	Washington State Department of Ecology
LRIS	Lake River Industrial Site
MFA	Maul Foster & Alongi, Inc.
MOU	memorandum of understanding
NGVD	National Geodetic Vertical Datum
POC	point of compliance
Port	Port of Ridgefield
Property	LRIS, Port-owned properties, Lake River, and Carty Lake
PWT	Pacific Wood Treating Co.
RNWR	Ridgefield National Wildlife Refuge
SAP	sampling and analysis plan
SMCMP	soil management and cap maintenance plan
TRM	turf reinforcement mat
USFWS	U.S. Fish and Wildlife Service
WAC	Washington Administrative Code
WWTP	wastewater treatment plant

1 INTRODUCTION

On behalf of the Port of Ridgefield (Port), Maul Foster & Alongi, Inc. (MFA) has prepared this comprehensive operations and maintenance plan (COMP) for cleanup actions completed at the former Pacific Wood Treating Co. (PWT) site in Ridgefield, Washington (the site) (see Figure 1-1). PWT operated a wood-treating facility from 1964 to 1993 at the Port's Lake River Industrial Site (LRIS), now known as The Ridgefield Waterfront. On November 5, 2013, the Port entered into Consent Decree No. 13-2-03830-1 with the State of Washington. The Consent Decree required cleanup actions to address contaminated soil, groundwater, and sediments at the site, based on the completed remedial investigation and feasibility study (MFA, 2013). The selected cleanup actions are described in the cleanup action plan (CAP) (Washington State Department of Ecology [Ecology], 2013) and have been substantively completed.

1.1 Purpose

This COMP is required by the CAP and summarizes the requirements for maintenance and monitoring of the completed cleanup actions and associated institutional controls (Washington Administrative Code [WAC] 173-340-400). Maintenance activities, such as inspection of soil caps, are conducted to ensure continued operation and protectiveness. Compliance monitoring is conducted to determine media characteristics at a particular time or over a period of time relative to defined management objectives, such as cleanup levels. Institutional controls are measures undertaken to limit or prohibit activities that may interfere with the integrity of a cleanup action.

This plan provides the site-related maintenance and monitoring plans required by the 2013 Consent Decree. A restrictive environmental covenant specifying institutional controls is incorporated as Appendix A to this document.

1.2 Site and Property Description

The site includes the LRIS, Port-owned properties, nearby surface water bodies Lake River and Carty Lake, and the off-property portion area (see Figure 1-2). Cleanup actions have been completed, in accordance with the CAP, for the LRIS, Port-owned properties, Lake River, and Carty Lake, and the associated cleanup action areas are shown in Figure 1-3. These four site areas are collectively referred to in this plan as the Property.[1] This COMP provides maintenance and monitoring plans for the Property; the four areas are briefly described below:

- LRIS—the LRIS consists of property formerly used by PWT, which operated a wood treating facility, and includes four Port-owned areas designated as Cells 1, 2, 3, and 4 and the City of Ridgefield's wastewater treatment plant (WWTP) within the Cell 2 boundary

[1] A separate Agreed Order was developed for the off-property portion and this site area is not addressed in this plan.

(tax parcels 068345-000, 067898-000, 068331-000, 067897-000, 219386-000, 068314-000, 068360-000, and 068362-000). The city WWTP is not addressed in this plan.

- Port-owned properties—this area includes the Railroad Avenue properties (two tax parcels, 067997-000 and 067991-003), the marina property (tax parcels 067998-000 and 067883-000), and an area (formerly part of McCuddy's marina) within an overpass footprint.
- Lake River—a river on the western property boundary of the LRIS.
- Carty Lake—a lake in the Ridgefield National Wildlife Refuge (RNWR) north and west of the LRIS.

1.3 Project Roles and Responsibilities

The roles and responsibilities for management of the Property are discussed below. The individuals identified below may change, and it is the responsibility of the party performing work to obtain up-to-date information.

Port of Ridgefield

The Port has conducted cleanup actions on the LRIS, the Port-owned properties, Lake River, and Carty Lake. The Port is the generator of all wastes (waste is defined in soil management and cap maintenance plan in Appendix B this report) associated with cleanup activities for as long as the Port holds ownership of the LRIS. If ownership changes, waste generation allocation will change to the current property owner. It is the Port (or current owner) that will ultimately determine whether excavated material is managed on site or off site, with the approval and assistance of Ecology. The current director of the Port is Randy Mueller, (360) 887-3873.

Maul Foster & Alongi, Inc.

MFA is the environmental consultant and engineer for the project. MFA has performed and will continue to perform technical analysis and evaluation of development plans; conduct sampling and evaluation of site activities, as necessary; document environmental conditions; and certify compliance with the monitoring plans described in this COMP. MFA will assist the Port with regulatory compliance and waste-handling determinations. Phil Wiescher, (503) 407-1036, is the current MFA project manager and the main point of contact with Ecology.

Washington State Department of Ecology

Ecology will provide environmental oversight for future redevelopment projects that will encounter impacted site media. The current Ecology project manager is Cam Penner-Ash, (360) 999-9590.

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (USFWS) manages the RNWR to the north and west of the LRIS. The Carty Lake project area is situated in the RNWR Carty Unit. The USFWS and the Port have

coordinated design of the remedy and the USFWS will continue to provide oversight. The current RNWR manager is Juliette Fernandez, (360) 887-4106.

1.4 Schedule and Required Documentation

Table 1-1 summarizes the monitoring and maintenance schedule for the Property.

Ecology requested that this COMP include a list of documents required by the 2013 Consent Decree. These documents and their status are provided in Table 1-2.

2 SOIL MANAGEMENT AND CAP MAINTENANCE PLAN

Cleanup actions, including soil removal and cap installation, were completed on the LRIS, as described in the Cells 1, 2, 3, and 4 Interim Action Completion Report (MFA, 2021). Soil capping was also completed on the Port-owned properties, consistent with actions identified in the Overpass Property Construction Completion Report (MFA, 2021b) and the Railroad Avenue Construction Completion Report (MFA, 2014a). A soil management and cap maintenance plan (SMCMP) was developed to provide guidance for all future activities during which a breach of the protective soil caps could occur, as well as guidance for monitoring, maintenance, and site controls associated with the protective caps. The properties addressed in the SMCMP include the LRIS and the Port-owned properties. A separate SMCMP was prepared for the Overpass property.

Appendix B includes the following:

- SMCMP covering the LRIS and Port-owned properties except the Overpass property
- SMCMP covering the Overpass property
- Annual protective cap monitoring documentation from 2017 to 2023

Annual protective cap monitoring has been conducted through 2023 and will continue with results reported yearly, as described in the SMCMPs. A monitoring event schedule overview is also provided as Table 1-1.

3 GROUNDWATER MONITORING PLAN

Remediation of groundwater contamination has been completed via the steam-enhanced remediation system and through removal and treatment of groundwater encountered during excavation of the concrete pond, as described in the CAP (Ecology, 2013). Groundwater monitoring has been conducted since 2002 and results indicate that contaminant levels are stable or declining. Groundwater

impacts do not pose a threat to environmental receptors or human health under current conditions, and institutional controls prohibiting groundwater use protect human health are in place (see Appendix C).

Compliance groundwater monitoring is being conducted at point of compliance (POC) monitoring wells to assess indicator hazardous substance[2] attenuation rates and to verify that the contaminants are not migrating. Groundwater cleanup standards are described in the CAP. Appendix C includes a Table summarizing POC monitoring wells and the analytical testing summary as of January 2024, based on Ecology approval (Ecology, 2022). The following recent reports are also provided in Appendix C (August 2016, January 2018, January 2020, August 2021 monitoring events) as well as a response to comments on the August 2021 report describing the Ecology-approved groundwater sampling and reporting procedures as of January 2024 (Ecology, 2022). The monitoring reports contain a figure showing the POC monitoring locations, a table describing well completion details, and a table providing an analytical testing summary (see Appendix C).

Compliance groundwater monitoring began in August 2013. Sampling was conducted on a semiannual basis for a minimum of two years, and then every 18 months thereafter. In 2022, Ecology approved reducing the sampling frequency to 30 months. The sampling dates are as follows:

- August 2013 (completed)
- January 2014 (completed)
- August 2014 (completed)
- January 2015 (completed)
- August 2016 (completed)
- January 2018 (completed)
- January 2020 (completed)
- August 2021 (completed)
- January 2024 (completed)
- August 2026 (scheduled)

Going forward, the sampling frequency is 30 months unless the monitoring program is modified to collect samples less frequently, or from fewer wells, with Ecology approval. A monitoring event schedule overview is provided as Table 1-1.

[2] Indicator hazardous substances in groundwater include chlorinated phenolics, polycyclic aromatic hydrocarbons, semivolatile organic compounds, volatile organic compounds, dissolved arsenic, and petroleum hydrocarbons.

4 LAKE RIVER MAINTENANCE AND MONITORING PLAN

The Lake River cleanup action was conducted to address the presence of dioxins and collocated chemicals in sediment and to eliminate the potential for erosion of contaminated soils into the aquatic environment. The cleanup action was completed in accordance with the requirements of the CAP (Ecology, 2013) and all permits, certifications, and substantive requirements, as described in the Lake River Construction Completion Report (MFA, 2018). Post-remedy procedures to ensure effective maintenance and monitoring of the remedy area are provided in this section and a monitoring event schedule overview is provided as Table 1-1. Supporting documents for the Lake River maintenance and monitoring plan are provided in Appendix D.

4.1 Sediment Chemical Monitoring

The CAP specifies monitoring of sediments to ensure that actions have attained cleanup standards and to confirm the long-term effectiveness of the action (see WAC 173-340-410 and 173-340-720 through 760).

Baseline sampling of dioxins in remedy area sediments was conducted in June 2015 after completion of dredging and enhanced natural recovery sand placement. Monitoring was conducted consistent with the Lake River sampling and analysis plan (SAP) (provided as Appendix D-1) describing sampling objectives, methods, and reporting. The Ecology-approved baseline monitoring report showed that the remedy area meets the cleanup standard (see Appendix D-2). This report is also provided as a template for future long-term monitoring event reporting.

Long-term monitoring for dioxins in remedy area sediments will be conducted consistent with the SAP at the end of years two, five, and ten, after baseline sampling (see Table 1-1)(see Appendix D-3). The need for subsequent sampling events will be determined by Ecology if after review of year ten (2025) sampling there are indications that concentrations could increase above expected levels.

4.2 Bank Integrity Monitoring

Constructed bank stabilization elements are described in the Lake River Construction Completion Report (MFA, 2018). To prevent erosion of the bank, fish mix rounded rock material was installed at the toe of the slope and transitions to a planted turf reinforcement mat (TRM), placed between +11 and +14 National Geodetic Vertical Datum (NGVD), that extends to the top of the bank (approximately +22 NGVD).

Bank integrity monitoring procedures are provided in Appendix D-4. Monitoring was conducted and results reported yearly until year 5 after remedy completion (2020) (see Table 1-1). Bank areas coinciding with the upland clean soil cap (previously installed above approximately +11 NGVD) are also subject to the SMCMP requirements (see Section 2) and continue to be monitored yearly.

Monitoring reports between 2017 and 2022 are provided in Appendix D-4. The last bank monitoring event was completed in 2022.

4.3 Vegetation Maintenance and Monitoring

Landscaping was installed along the riverbank as described in the Lake River Construction Completion Report (MFA, 2018). Native trees and shrubs were clustered into three distinct groves, and open areas between the groves were planted with native grasses to minimize erosion and provide structural diversity while protecting scenic views.

4.3.1 Permit Maintenance and Monitoring

The three planting groves spanning approximately 500 lineal feet were subject to Nationwide Permit 38 (NWS-2013-875) requirements and was monitored and maintained consistent with the Lake River riparian enhancement plan (see Appendix D-5). This permit-required monitoring was conducted yearly, until year 5 after remedy completion (2020). All permit-required monitoring has been completed. The monitoring results were submitted yearly to the U.S. Army Corps of Engineers (COE), and a copy provided to Ecology. Paul Brothers, Inc., was under contract until October 2018, followed by Sound Native Plants through 2019, to meet all permit-required performance standards. In 2020, the Port took on maintenance activities and continues to mow and remove competing vegetation.

An as-built construction report and as-built drawings of the plantings have been submitted to the COE. Vegetation monitoring reports are provided in Appendix D-6.

4.3.2 Riverbank Vegetation Maintenance

All permit-required monitoring has been completed. Recommended vegetation maintenance procedures for the entire riverbank adjacent to the LRIS (now known as The Ridgefield Waterfront), including areas not subject to permit requirements, are provided in Appendix D-7. This plan provides recommended procedures for limiting invasive-species encroachment in the vegetated and fish-mix portions of the riverbank, as well as recommended procedures for promoting native plantings in the planting groves and the open areas between groves.

4.4 Site Controls

Institutional controls are not required for Lake River. To ensure the protectiveness of riverbank fish mix, dredged/backfill, and enhanced natural recovery areas in Lake River is maintained, the Port is required to contact Ecology and Washington State Department of Natural Resources if any in-water construction or dredging is planned and must receive Ecology approval for proposed work before commencing such work. Additionally, the Department of Natural Resources' existing leases for aquatic land within Lake River include notations about the cleanup. If new uses were to be proposed within Lake River and significant sediment disturbance was determined to be possible, the Department of Natural Resources' internal processes would identify previous cleanups and subsequently contact Ecology. Characterization of current sediment conditions in coordination with the Portland Sediment Evaluation Team would be required before any activities resulting in significant sediment disturbance,

such as in-water construction or dredging, are initiated as described in the *Sediment Evaluation Framework for the Pacific Northwest* (RSET 2018). In addition, riverbank areas are also monitored yearly to ensure stability, consistent with the SMCMP requirements (see Section 2).

4.5 Contingency and Emergency Planning and Response

The Port will contact Ecology if the performance criteria described in Lake River monitoring and maintenance plan are exceeded to discuss the need for further analysis or determine a plan for corrective action. Actions to correct exceedances will not be initiated without consultation with Ecology. All other affected jurisdictions will be notified of corrective actions and the Port will secure all necessary permits before taking action or starting work.

5 CARTY LAKE MAINTENANCE AND MONITORING PLAN

The Carty Lake cleanup action was conducted to address the presence of dioxins and collocated chemicals in sediment and to stabilize embankment soils, eliminating the potential for erosion of contaminated soils into the aquatic environment. The wetland and upland banks were vegetated with native plants. The cleanup action was completed in accordance with the requirements of the CAP and all permits, certifications, and substantive requirements, as described in the Carty Lake Construction Completion Report (MFA, 2015b). Post-remedy procedures to ensure effective maintenance and monitoring of the remedy area are provided in this section and a monitoring event schedule overview is provided as Table 1-1. Supporting documents for the Carty Lake maintenance and monitoring plan are provided in Appendix E.

5.1 Sediment Chemical Monitoring

The CAP specifies monitoring of sediments to ensure that actions have attained cleanup standards and to confirm the long-term effectiveness of the action (see WAC 173-340-410 and 173-340-720 through 760).

Long-term monitoring for dioxins in remedy area sediments was completed consistent with the Carty Lake SAP describing sampling objectives, methods, and reporting (see Appendix E-1). Monitoring was conducted in 2019, five years after the remedy has been substantively completed, which demonstrated that the Carty Lake remedial action has been effective and that the targeted risk reduction has been achieved (MFA, 2020). Future sediment monitoring will be conducted in coordination with Ecology, if determined necessary for evaluating whether site controls on fishing need to remain in place.

5.2 Bank Integrity Monitoring

Constructed embankment stabilization elements are described in the Carty Lake Construction Completion Report (MFA, 2015b). To prevent erosion of the embankment, fish mix rounded rock material was installed at the toe of the slope and structural fill material was placed to construct the embankments. TRM was installed on the final constructed topsoil surface and planted.

Bank integrity monitoring procedures are provided in Appendix E-2. Monitoring was conducted, and results reported yearly until year 5 after completion of plant installation (2020). Monitoring reports between 2017 and 2020 are provided in Appendix E-2.

5.3 Vegetation Maintenance and Monitoring

Landscaping was installed in the remedy area, as described in the Carty Lake Construction Completion Report (MFA, 2015b). Plantings were designed to provide structural habitat, protect scenic views, and meet Nationwide Permit 38 (NWS-2013-1209) required mitigation objectives.

5.3.1 Permit Maintenance and Monitoring

Construction resulted in short-term, temporary impacts to 1.2 acres of wetland in the sediment excavation area (the mitigation area). Nationwide Permit 38 (NWS-2013-1209) requires that plantings in the mitigation area be monitored and maintained consistent with the Carty Lake mitigation plan (see Appendix E-3). This permit-required monitoring was conducted yearly, until year 5 after remedy completion (2020). All permit-required monitoring has been completed. The monitoring results were submitted yearly to the COE, and copy provided to Ecology. Paul Brothers, Inc., was under contract until October 2018, followed by Sound Native Plants through 2019, to meet all permit-required performance standards.

Permanent impacts to up to 0.23 acre of the wetland resulted from the construction of the embankment stabilization elements. These impacts were mitigated by the purchase of mitigation credits consistent with a bank use plan describing off-site mitigation. The mitigation credits purchase documentation is provided as Appendix E-4.

An as-built mitigation construction report and as-built drawings of the mitigation area have been submitted to the COE. Vegetation monitoring reports are provided in Appendix E-5.

5.3.2 Remedy Area Maintenance

All permit-required monitoring has been completed. Recommended vegetation maintenance procedures for the entire remedy area, including areas not subject to permit requirements, are provided in Appendix E-6. This plan provides recommended procedures for promoting native plantings and limiting invasive-species encroachment in the wetland and upland portions of the remedy area.

5.4 Site Controls

For protection of human health, the CAP requires controls to limit fish consumption in areas of the lake with concentrations above the cleanup standards. These site controls are in place. Based on confirmation sampling completed in 2019, targeted risk reduction has been achieved in the Carty Lake remedial action area (see Section 5.1) and, fishing access to Carty Lake is restricted by the USFWS. Previously, access to the lake was primarily via "free-roam" from adjacent areas; the USFWS has restricted "free-roam" access because of the introduction of the endangered Columbian white-tailed deer, and human traffic is limited to the trail system which does not access the lake. The USFWS confirmed in 2023 it does not anticipate any rule change to allow access for fishing at Carty Lake (USFWS 2023). In the unlikely event there was a rule change that allowed for fishing access, the USFWS will inform the Port, and the Port will notify Ecology to determine if additional measures are needed to limit fishing access.

5.5 Contingency and Emergency Planning and Response

If the performance criteria described in the Carty Lake monitoring and maintenance plan are exceeded, the Port will contact Ecology to discuss the need for further analysis or determine a plan for corrective action. Actions to correct exceedances will not be initiated without consultation with Ecology. All other affected jurisdictions will be notified of corrective actions and the Port will secure all necessary permits before taking action or starting work.

6 HEALTH AND SAFETY PLAN

All contractors that engage in work pertaining to the maintenance and monitoring procedures described in this COMP will be required to prepare their own health and safety plan that includes health and safety procedures and identifies the site hazards.

LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

REFERENCES

Ecology. 2013. Cleanup action plan, former Pacific Wood Treating Co. site. Washington State Department of Ecology. November 5.

Ecology. 2022. Memo Re: Ecology Response to October 15, 2021, letter regarding August 2021 Groundwater Monitoring for the Former Pacific Wood Treating Co. Site, Port of Ridgefield, Lake River Industrial Site. From A. Smith (Ecology) to L. Olin (Port of Ridgefield). July 19.

MFA. 2013. Former PWT site remedial investigation and feasibility study. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc., Vancouver, Washington. July.

MFA 2014a. Railroad Avenue construction completion report. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc., Vancouver, Washington. January.

MFA 2015b. Carty Lake construction completion report. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc., Vancouver, Washington. November.

MFA. 2018. Lake River construction completion report. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc., Vancouver, Washington. October.

MFA. 2020. Carty Lake 2019 Sediment Monitoring Report. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc., Vancouver, Washington. January.

MFA 2021a. Cells 1, 2, 3, and 4 interim action completion report. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc., Vancouver, Washington. July.

MFA 2021b. Overpass property construction completion report. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc., Vancouver, Washington. October.

RSET. 2018. *Sediment Evaluation Framework for the Pacific Northwest.* Prepared by the Northwest Regional Sediment Evaluation Team Agencies. May.

USFWS. 2023. Juliette Fernandez, Refuge Manager. *Response to Carty Lake.* Email to Randy Mueller, Port of Ridgefield. November 1.

TABLES

Table 1-1
Monitoring Event Schedule
Comprehensive Operations and Maintenance Plan
Former PWT Site
Ridgefield, Washington

Property Area	Monitoring Event	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Post 2026	Plan Reference Location
LRIS and Port-owned Properties	Protective Cap Monitoring[a]	X (01-12)	X (01-12)	X (01-12)	X (01-12)	X (01-12)	X (01-12)	X (01-12)	X (01-12)	X (01-12)	X (01-12)	X (01-12)	X (01-12)	Yearly	Section 2
Site-wide	Groundwater Monitoring[b]	X (01)	X (08)	--	X (01)	--	X (01)	X (08)	--	--	X (01)	--	X (08)	30 month Interval	Section 3
Lake River	Project Year	Year 0[c]	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year	--
	Baseline Sediment Chemical Monitoring	X (01-06)	Completed												Section 4.1
	Long-term Sediment Chemical Monitoring[d]	--	--	X (01-12)	--	--	X (01-12)	--	--	--	--	X (01-12)	--	TBD	Section 4.1
	Bank Integrity Monitoring	--	X (01-12)	X (01-12)	X (01-12)	X (01-12)	X (01-12)	Ongoing yearly monitoring[i]							Section 4.2
	Vegetation Monitoring[e] and Maintenance	--	X (06-10)	X (06-10)	X (06-10)	X (06-10)	X (06-10)	Completed							Section 4.3
Carty Lake	Project Year	Year 1[f]	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	--	--
	Long-term Sediment Chemical Monitoring[g]	--	--	--	--	X (01-12)	--	Completed							Section 5.1
	Bank Integrity Monitoring	--	X (01-12)	X (01-12)	X (01-12)	X (01-12)	X (01-12)								Section 5.2
	Vegetation Monitoring[h] and Maintenance	--	X (06-10)	X (06-10)	X (06-10)	X (06-10)	X (06-10)								Section 5.3

Table 1-1
Monitoring Event Schedule
Comprehensive Operations and Maintenance Plan
Former PWT Site
Ridgefield, Washington

NOTES:

Shading indicates monitoring has been conducted.

Ecology = Washington State Department of Ecology.

LRIS = Lake River Industrial Site.

Port = Port of Ridgefield.

PWT = Pacific Wood Treating Co.

UD = undetermined. See footnote (b).

[a]Monitoring to be conducted annually for the life of the cap.

[b]Monitoring to be conducted until groundwater standards are met. Monitoring currently conducted every 30 months.

[c]Cleanup and planting substantively completed.

[d]The need for subsequent sampling events will be determined by Ecology if after review of year ten sampling there are indications that concentrations could increase above expected levels.

[e]Consistent with U.S. Army Corps of Engineers permit NWP-2013-875.

[f]Planting substantively completed. Cleanup substantively completed in 2014 (year zero).

[g]The need for subsequent sampling events will be evaluated if determined necessary for evaluating whether institutional controls on fishing need to remain in place.

[h]Consistent with U.S. Army Corps of Engineers permit NWP-2013-1209.

[i] Riverbank continues to be monitored yearly, as part of LRIS protective cap monitoring, to ensure stability consistent with the PWT Site SMCMP requirements.

Table 1-2
Documentation Status
Comprehensive Operations and Maintenance Plan
Former PWT Site
Ridgefield, Washington

Area	Documentation	Status	Document Date
Performance Documentation			
LRIS	LRIS Interim Action Completion Report	Completed	7/15/2021
Port-owned Properties	Railroad Avenue EDR	Completed	8/5/2013
	Railroad Avenue Construction Plans and Specifications	Completed	8/5/2013
	Railroad Avenue Construction Completion Report	Completed	1/13/2014
	Overpass Property EDR	Completed	3/13/2014
	Overpass Property Construction Plans and Specifications	Completed	3/13/2014
	Overpass Property Construction Completion Report	Completed	10/22/2021
Lake River	Lake River EDR	Completed	3/3/2014
	Lake River Construction Plans and Specifications	Completed	3/3/2014
	Lake River Construction Completion Report	Completed	10/01/2018
Carty Lake	Carty Lake EDR	Completed	10/22/2014
	Carty Lake Construction Plans and Specifications	Completed	10/22/2014
	Carty Lake Construction Completion Report	Completed	11/17/2015
Monitoring Documentation			
LRIS and Port-owned Properties	Soil Management and Cap Maintenance Plan	Completed[(a)]	11/8/2023
Lake River	Lake River Sediment and Bank Operations and Maintenance and Monitoring Plan	Completed[(b)]	4/9/2015
Carty Lake	Carty Lake Sediment and Bank Operations and Maintenance and Monitoring Plan	Completed[(b)]	3/2/2016
LRIS and Port-owned Properties	Environmental Covenant	Completed[(a)]	12/5/2023
Site	Final Comprehensive Operations and Maintenance Plan	Completed	2024

Table 1-2
Documentation Status
Comprehensive Operations and Maintenance Plan
Former PWT Site
Ridgefield, Washington

NOTES:

EDR = engineering design report.

LRIS = Lake River Industrial Site.

Port = Port of Ridgefield.

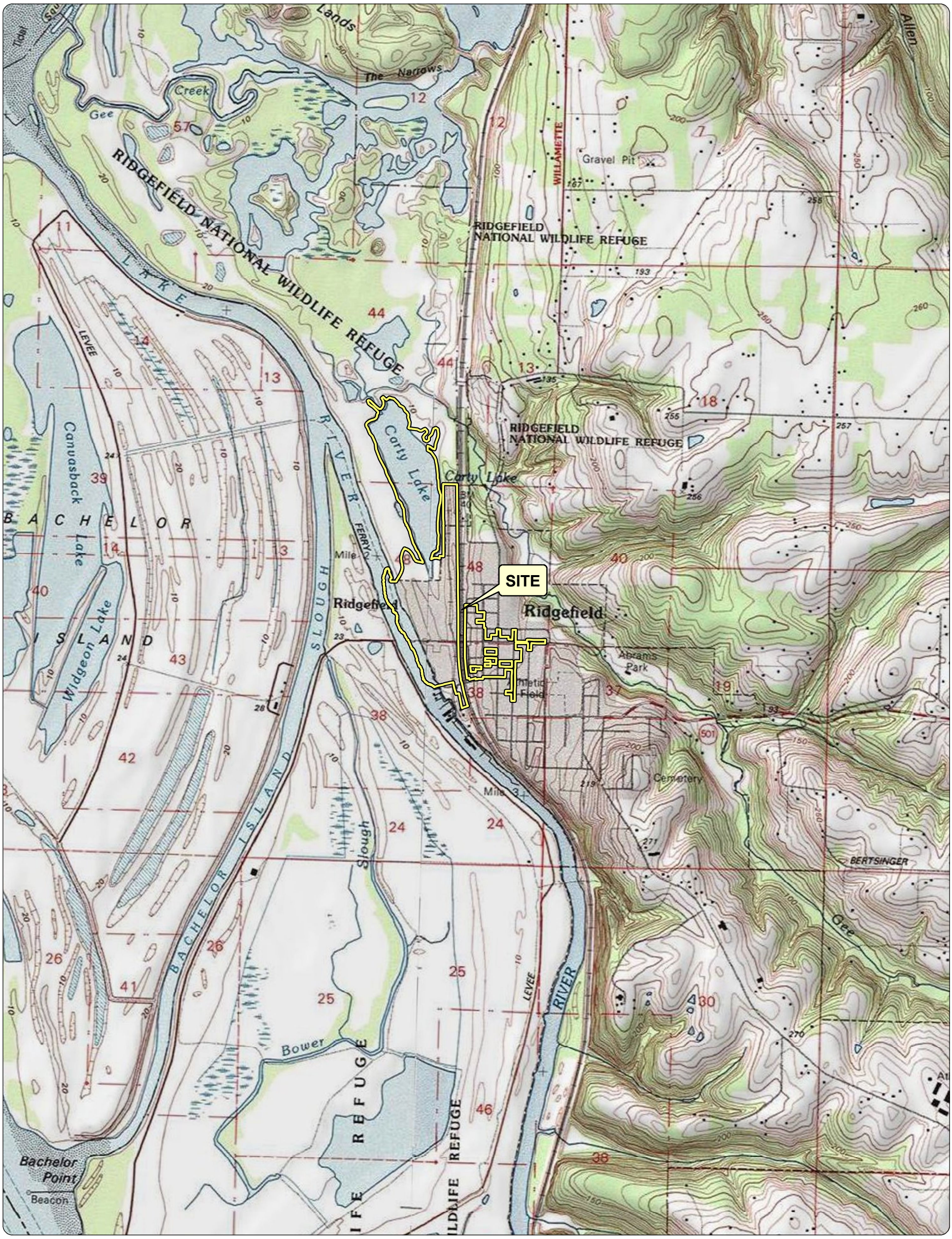
PWT = Pacific Wood Treating Co.

Submitted = Document provided to Ecology for review/approval.

[a]Provided in the Comprehensive Operations and Maintenance Plan.

[b]Associated sediment and permit-required vegetation monitoring documents have been completed. Associated bank monitoring and vegetation maintenance documents are provided in the Comprehensive Operations and Maintenance Plan.

FIGURES



Source: Topographic Quadrangle obtained from ArcGIS Online Services/NGS-USGS TOPO/US Geological Survey (1999)
7.5-minute topographic quadrangle: Ridgefield
Address: Lake River Industrial Site
111 W. Division Street, Ridgefield, WA 98642
Section: 24 Township: 4N Range: 1W Of Willamette Meridian

Note:
PWT = Pacific Wood Treating.

Legend

Former PWT Site

Figure 1-1
Site Location

Former PWT Site
Ridgefield, Washington

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0 820 1,640
Feet

Source: Aerial photograph (2014), tax lots, and zoning data obtained from Clark County GIS.

Notes:
BNSF = Burlington Northern Sante Fe.
LRIS = Lake River Industrial Site.
Port = Port of Ridgefield.
PWT = Pacific Wood Treating.
RNWR = Ridgefield National Wildlife Refuge.
WWTP = Wastewater Treatment Plant.

Legend

- Clark County Tax Lots (2014)

Area Designations

- Port Overpass Property
- LRIS
- City of Ridgefield WWTP
- Port Railroad Avenue Property
- McCuddy's Marina Property
- RNWR-Carty Unit
- RNWR-River S Unit
- BNSF Railroad Property
- Off-Property Portion
- Port Marina Property

Figure 1-2
Site Vicinity Diagram
Former PWT Site
Ridgefield, Washington

0 250 500
Feet

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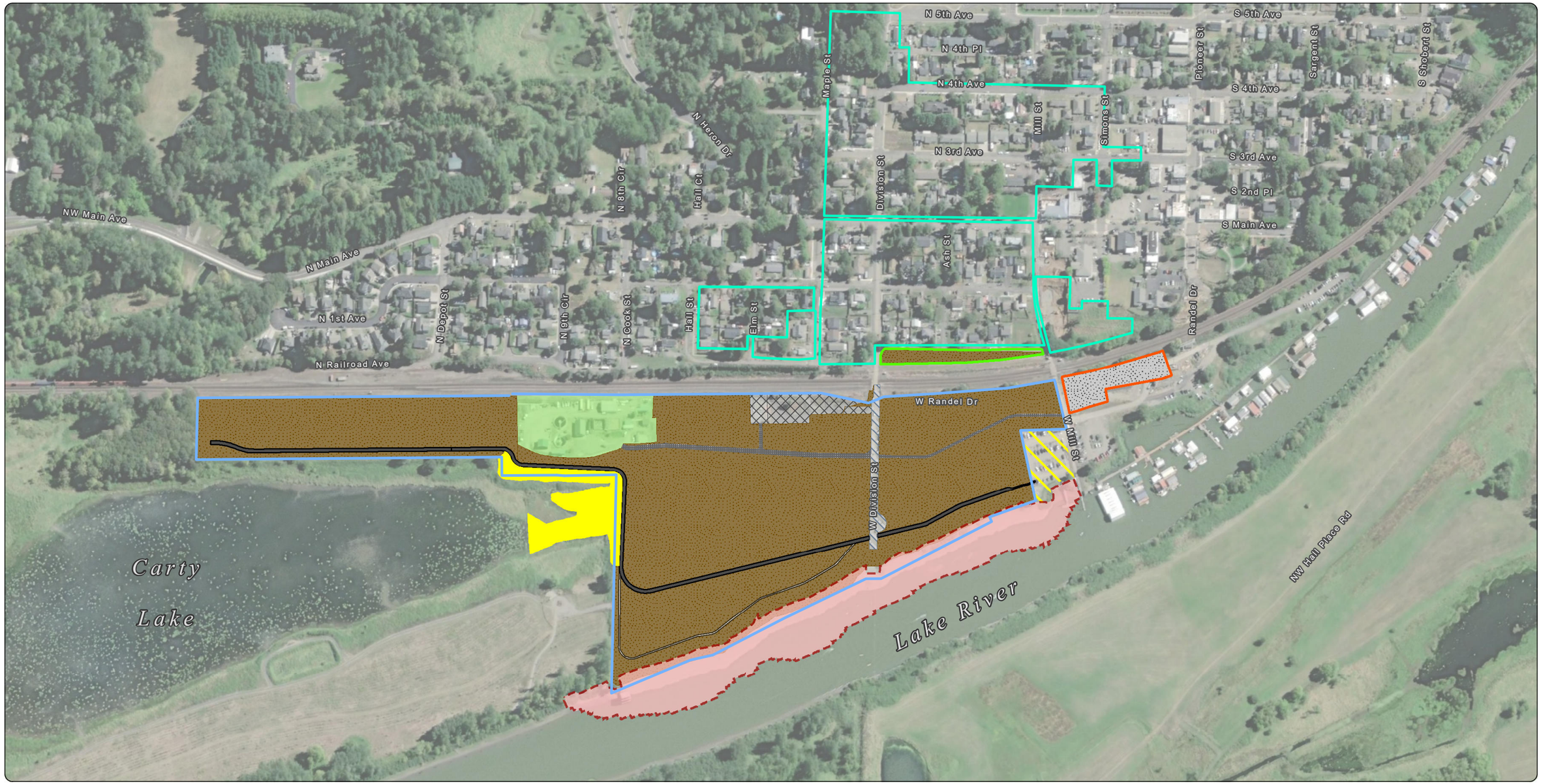
Path: X:\9003.01 Port of Ridgefield\55\Fig1-2_Site_Vicinity_Diagram.mxd
Print Date: 1/16/2024
Approved By: P. Wiescher
Produced By: rroberts
Project: M9003.01.49



Source: Aerial photograph (2014) and streets obtained from Clark County GIS.

Notes:
LRIS = Lake River Industrial Site.
PWT = Pacific Wood Treating.
WWTP = wastewater treatment plant.

Legend

- Clark County Tax Lots (2014)

Cleanup Areas

- Soil Cap
- Gravel Cap
- Lake River Remedy
- Carty Lake Remedy
- Off-Property Portion
- Overpass Property
- Railroad Avenue Property
- Port Marina Property (existing asphalt)
- WWTP
- Outer LRIS Boundary
- Asphalt Cap and Building
- Division Street
- Hard Trail
- Soft Trail
- Access Road

Figure 1-3
Past Cleanup Areas

Former PWT Site
Ridgefield, Washington

0 150 300
Feet

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Approved By: M. Novak
Produced By: jroberts
Project: 9003.01.39