

January 24, 2025

Emily Toffol
Site Manager
State of Washington Department of Ecology
Solid Waste Management Program, Industrial Section
300 Desmond Drive SE
Lacey, WA 98504

**Subject: Data Summary Report and Remedial Investigation Work Plan
Former Grays Harbor Pulp and Paper Mill
801 23rd Street
Hoquiam, Washington
Agreed Order No. DE 17992**

Dear Ms. Toffol:

Rayonier A.M. Properties, LLC ("RAMP") has completed and is submitting the following two deliverables in accordance with Agreed Order No. DE 17992 ("Agreed Order") for the Former Grays Harbor Pulp and Paper Mill, located at 801 23rd Street within an industrialized area of Hoquiam, Washington ("Site"):

1. *Data Summary Report* (DSR; Agreed Order Task 1), prepared on behalf of RAMP by EHS Support LLC ("EHS Support") and dated January 2025
2. *Remedial Investigation Work Plan* ("Work Plan"; Agreed Order Task 2), prepared on behalf of RAMP by EHS Support and dated January 2025

Data Summary Report

The purpose of the DSR is to provide all parties with a comprehensive summary of past investigation activities and interim actions completed at the Site, which will support future remedial investigation (RI) activities. An understanding of the Site's history will promote efficient collaboration between the Washington State Department of Ecology ("Ecology") and RAMP as RI progresses. As outlined in Exhibit B of the Agreed Order, the DSR includes a general description of the Site; the Site's history and conditions; past investigations and analytical results; analytical data in tabular and figure form; and preliminary conceptual hazardous substances sources, migration pathways, and ecological receptors.

The DSR does not present data from past investigations that have not been submitted to Ecology previously; it does provide a screening of existing data against current applicable Model Toxics Control Act criteria, as required in the Agreed Order. In summary, findings from the DSR include the following:

- The primary known sources of soil impacts at the Site have been remediated by interim actions.
- Soils in localized areas of select investigation areas may remain in exceedance of current applicable screening levels, based on evaluation of past analytical data.
- Groundwater conditions appear to be related to past soil conditions, with groundwater exceedances having decreased historically after soil excavation.



Remedial Investigation Work Plan

As discussed between Ecology and RAMP technical representatives on December 12, 2024, given the complexity and size of the Site, the Work Plan provides a framework of proposed RI activities based on the evaluation of past analytical data presented within the DSR. This framework will provide Ecology and RAMP with a structure to collaboratively discuss RI activities at the Site. As outlined in Exhibit B of the Agreed Order, the Work Plan provides an overall description and schedule of RI activities, the project management strategy for implementing and reporting on RI activities, and key personnel involved in coordinating and conducting the RI.

The RI approach for the Site includes conducting the RI in manageable phases aligned with the key areas identified in the Agreed Order, including:

- **Phase I:** Former Pulp and Paper Mill (industrial upland area; center of historical operations)
- **Phase II:** Rennie Island impoundments (industrial basins occasionally used for historical operations)
- **Phase III:** Hoquiam River and Grays Harbor (where the Site's history, the conceptual site model, and results of the Phase I and Phase II investigations indicate further investigation may be warranted)

The phased RI approach follows an inside-out strategy, allowing for more efficient project execution and the ability for each RI phase to inform the next and build an understanding of the overall Site. The Work Plan outlines this approach and describes the phased work plan addenda and reporting strategy.

As noted during the December 12 meeting, RAMP proposes to meet with Ecology within the next few weeks to provide Ecology with an overview of the documents, the phased RI approach and strategy, and next steps. We will follow up the week of January 27, 2025, to schedule this meeting.

In the meantime, should you have questions or comments, please do not hesitate to contact me (854-444-9637 or catharine.parker@ehs-support.com) or Warren Snyder (904-357-3768 or warren.snyder@ryam.com).

Sincerely,

Catharine Parker
Project Manager

Enclosures: *Data Summary Report*
 Remedial Investigation Work Plan

cc (email copy): Warren Snyder
 Greg Murphy
 Tasya Gray
 Rob Webb

Remedial Investigation Work Plan

Former Grays Harbor
Pulp and Paper Mill
Hoquiam, Grays Harbor
County, Washington

Prepared for:

Rayonier A.M.
Properties, LLC

Prepared by:

EHS  **Support**SM

January 2025



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Acronyms

ASB	aeration sedimentation basin
bgs	below ground surface
COPC	constituent of potential concern
EPC	exposure point concentration
ERA	ecological risk assessment
ft	foot or feet
HASP	health and safety plan
HCE	hot caustic effluent
HHRA	human health risk assessment
IHS	indicator hazardous substances
in	inch or inches
LUST	Leaking Underground Storage Tank
MTCA	Model Toxics Control Act
NAPL	non-aqueous phase liquid
NAVD	North American Vertical Datum
NFA	No Further Action
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
PCB	polychlorinated biphenyl
pCSM	preliminary conceptual site model
ppt	parts per thousand
QAPP	quality assurance project plan
QC	quality control
RCW	Revised Code of Washington
RI	remedial investigation
RIR	remedial investigation report
SAP	sampling and analysis plan
SSL	spent sulfite liquor
TCP	Toxics Cleanup Program
TPH	total petroleum hydrocarbons
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USGS	United States Geological Service
WAC	Washington Administrative Code
WWTP	Wastewater Treatment Plant



Professional Geologist Certification

All geologic and hydrogeologic work in this Remedial Investigation Work Plan was performed under my supervision pursuant to the [Revised Code of Washington \(RCW\) 18.220](#).

The Report that I am certifying is as follows: *Remedial Investigation Work Plan* for the Former Grays Harbor Pulp and Paper Mill located at 801 23rd Street in Hoquiam, Washington.

Timothy Davis
Washington Professional Geologist License No. 20102004

January 24, 2025

Date



TIMOTHY JAY DAVIS



Executive Summary

On behalf of Rayonier A.M. Properties, LLC (“RAMP”), EHS Support LLC has prepared this Remedial Investigation Work Plan (“Work Plan”) in accordance with Agreed Order No. DE 17992 issued by the Washington State Department of Ecology (“Ecology”) for the Former Grays Harbor Pulp and Paper Mill facility located within a heavily industrialized area of Hoquiam, Grays Harbor County, Washington (“Site”). The Work Plan provides an overall description and schedule of RI activities, the project management strategy for implementing and reporting on RI activities, and key personnel involved in coordinating and conducting the RI.

The Site primarily comprises two areas, including 1) the Former Pulp and Paper Mill (industrial upland area; center of historical operations); and 2) Rennie Island impoundments (industrial basins occasionally used for historical operations). This Work Plan also addresses areas in proximity to Outfalls 1 and 2 (Washington State Department of Natural Resources Lease 51-080843-A and 51-080843-B) and areas within the Hoquiam River and Grays Harbor where the Site history and the conceptual site model indicate that constituents of potential concern (COPCs) from historical pulp and paper mill operations may be present.

Extensive past environmental investigations of soil and groundwater have been conducted at the Site. Results of the past environmental investigations led to completion of interim actions in multiple investigation areas where constituent concentrations in soils exceeded applicable screening levels and resulted in the issuance of restrictive covenants for most of the Former Pulp and Paper Mill. The restrictive covenants were a condition of the numerous No Further Action (NFA) determinations issued by Ecology and identify areas of the Former Pulp and Paper Mill restricted to industrial uses only, prohibit potable use of groundwater, and require notice be given to Ecology prior to future sale of the property.

NFA determinations were issued by Ecology for select areas based upon review of the interim actions completed within those areas or upon review of existing analytical data for those areas that did not identify a risk to soil or groundwater conditions based on applicable screening levels used by Ecology at the time. Ecology’s NFA determinations remain in effect and include the following investigation areas:

- Paper Machine Area (Paper Mill)
- Boneyard Area
- Finishing Area
- Silvichemical Area
- Log Yard Area
- Fuel Oil Tank/Utility Chase Area

Overall, the primary known sources of soil impacts at the Site have been remediated by interim actions. However, based on the evaluation of existing analytical data presented within the *Data Summary Report* for the Site (EHS Support, 2025), there may be localized areas within select investigation areas where soils in exceedance of current applicable screening levels remain. Current groundwater conditions are uncertain.

Preliminary indicator hazardous substances (IHSs) identified in select areas of the Site are largely based on results of past environmental investigations and include total petroleum hydrocarbons, metals,



polychlorinated biphenyls, and volatile organic compounds. Preliminary data gaps include assessment of these IHSs in environmental media in select areas of the Site.

Given the size and complexity of the Site, the overarching RI approach for the Site includes conducting the RI in manageable phases of work aligned with the key areas identified in the Agreed Order, including:

- **Phase I:** Former Pulp and Paper Mill (industrial upland area)
- **Phase II:** Rennie Island impoundments
- **Phase III:** Hoquiam River and Grays Harbor in proximity to Outfalls 001 and 002 and where the preliminary conceptual site model (pCSM) and results of the Phase I (Former Pulp and Paper Mill) and Phase II (Rennie Island Impoundments) investigations indicate that COPCs from historical operations may be present

The phased RI approach follows an inside-out strategy, allowing for more efficient project execution and the ability of the work to inform and build upon itself based on the results of each phase of work.

This Work Plan outlines the overarching RI approach for the project and will be supplemented by three future addenda submitted to Ecology, including:

- **Addendum I:** Will present the updated and refined pCSM for the overall Site, updated and refined RI tasks and associated Sampling and Analysis Plan (SAP) for the Phase I (Former Pulp and Paper Mill) investigation, and Quality Assurance Project Plan and Health and Safety Plan for the overall project.
- **Addendum II:** Will present the updated and refined RI tasks and associated SAP for the Phase II (Rennie Island impoundments) investigation.
- **Addendum III:** Will present the updated and refined RI tasks and associated SAP for the Phase III (Hoquiam River and Grays Harbor) investigation.

The preliminary RI tasks are outlined within this Work Plan and will be updated and refined in the addenda presented above. The preliminary RI tasks include investigation of localized areas of the Site where concentrations of COPCs in soil or groundwater may remain in exceedance of current applicable Model Toxics Control Act screening levels. These investigations include visual observation and assessment of Site features and sampling and laboratory analytical analysis of environmental media.

A remedial investigation report (RIR) presenting the results of each phase of investigation will be prepared and submitted to Ecology, including:

- **Phase I RIR:** Will present findings of Phase I of the RI focused on the Former Pulp and Paper Mill.
- **Phase II RIR:** Will present findings of Phase II of the RI focused on the Rennie Island impoundments.
- **Phase III RIR:** Will present findings of Phase III of the RI focused on select areas of the Hoquiam River and Grays Harbor where the pCSM and results of the Phase I and Phase II investigations indicate that COPCs from historical operations may be present.

The anticipated schedule of RI activities presented within this Work Plan is consistent with the schedule presented in the Agreed Order.



1 Introduction

On behalf of Rayonier A.M. Properties, LLC (“RAMP”), EHS Support LLC (“EHS Support”) has prepared this Remedial Investigation Work Plan (“Work Plan”) in accordance with Exhibit B (Scope of Work) and Exhibit C (Schedule of Deliverables) of the Agreed Order (Agreed Order) No. DE 17992 (Washington State Department of Ecology [“Ecology”], 2024) issued by Ecology for the Former Grays Harbor Pulp and Paper Mill facility located at 801 23rd Street within a heavily industrialized area of Hoquiam, Grays Harbor County, Washington (“Site”; **Figure 1**). The following subsections:

- Provide background essential to the overall Site understanding and remedial investigation (RI);
- Present the phased RI and reporting approach for the project;
- Define the purpose and objectives of the RI; and
- Present the Work Plan organization.

1.1 Background

The Site primarily comprises two areas, including 1) the Former Pulp and Paper Mill (industrial upland area; center of historical operations; **Figure 2**); and 2) Rennie Island impoundments (industrial basins occasionally used for historical operations; **Figure 3**). Per the Agreed Order, this Work Plan also addresses areas in proximity to Outfalls 1 and 2 (Washington State Department of Natural Resources Leases 51-080843-A and 51-080843-B) and areas within the Hoquiam River and Grays Harbor where the Site history and the conceptual site model indicate that constituents of potential concern (COPCs) from historical pulp and paper mill operations may be present. The Former Pulp and Paper Mill is further organized into several smaller investigation areas, discussed throughout this Work Plan (**Figure 2**):

- Paper Machine Area (Paper Mill)
- Boneyard Area
- Finishing Area
- Log Yard Area
- Fuel Oil Tank/Utility Chase Area
- Gasoline and Maintenance Area
- Silvichemical Area
- Powerhouse Area
- Wood Chip Storage Area
- Warehouse Area
- Hog Fuel Storage Area
- Shoreline Area
- Former Wastewater Treatment Plant Area (WWTP)

Extensive past environmental investigations of soil and groundwater have been conducted at the Site. These investigations, including analytical results, are detailed in Appendix F of the Data Summary Report for the Site (EHS Support, 2025). Results of the past environmental investigations led to completion of interim actions in multiple investigation areas where constituent concentrations in soils exceeded applicable screening levels and resulted in the issuance of restrictive covenants for most of the Former Pulp and Paper Mill (**Figure 4**). The restrictive covenants (**Appendix A**) were a condition of the numerous No Further Action (NFA) determinations issued by Ecology (**Appendix B**) and identify areas of the Former



Pulp and Paper Mill that are restricted to industrial purposes only, prohibit potable use of groundwater, and require notice be given to Ecology prior to future sale of the property.

NFA determinations were issued by Ecology for select areas based upon review of the interim actions completed within those areas (**Figure 4**) or upon review of existing analytical data for those areas that did not identify a risk to soil or groundwater based on applicable screening levels used by Ecology at the time. Ecology's NFA determinations remain in effect and include the following investigation areas (**Figure 2; Appendix B**):

- Paper Machine Area (Paper Mill)
- Boneyard Area
- Finishing Area
- Silvichemical Area
- Log Yard Area
- Fuel Oil Tank/Utility Chase Area

Overall, the primary known sources of soil impacts at the Site have been remediated by interim actions. However, based on the evaluation of existing analytical data presented within the *Data Summary Report* for the Site (EHS Support, 2025), there may be localized areas within select investigation areas where soils in exceedance of current applicable screening levels remain. Current groundwater conditions are uncertain.

1.2 Remedial Investigation Approach

A preliminary RI meeting was held between Ecology and RAMP technical representatives on December 12, 2024, prior to Work Plan submission to discuss the complexity of the Site, the proposed RI approach, and scope and timing of initial deliverables. Given the size and complexity of the Site, including the large, upland, industrial area (Former Pulp and Paper Mill); location at the confluence of the tidally influenced lower Hoquiam River with Grays Harbor; and occasional usage of Rennie Island impoundments for historical operations, the overarching RI approach for the Site includes conducting the RI in manageable phases of work aligned with the key areas identified in the Agreed Order (Ecology, 2024), including:

- **Phase I:** Former Pulp and Paper Mill (industrial upland area; **Figure 2**)
- **Phase II:** Rennie Island impoundments (**Figure 3**)
- **Phase III:** Hoquiam River and Grays Harbor in proximity to Outfalls 001 and 002 and where the preliminary conceptual site model (pCSM) and results of the Phase I (Former Pulp and Paper Mill) and Phase II (Rennie Island Impoundments) investigations indicate that COPCs from historical operations may be present.

The phased RI approach follows an inside-out strategy, allowing for more efficient project execution and the ability of the work to inform and build upon itself based on the results of each phase of work. Consistent with the areas presented in the Agreed Order (Ecology, 2024), the first phase of investigation (Phase I) will commence with investigation of the upland site based on the location of historical industrial operations (Former Pulp and Paper Mill). Phase I will be followed by investigation of the Rennie Island impoundments (Phase II), which were only occasionally used for historical operations. As informed by the pCSM and results of the Phase I (Former Pulp and Paper Mill) and Phase II (Rennie Island impoundments) investigations, the final phase of investigation (Phase III) will focus on select areas



of the lower Hoquiam River and Grays Harbor where the pCSM and results of the Phase I and Phase II investigations indicate that COPCs from historical operations may be present.

This Work Plan outlines the overarching RI approach for the project and will be supplemented by three future addenda submitted to Ecology, including:

- **Addendum I:** Will present the updated and refined pCSM for the overall Site, updated and refined RI tasks and associated Sampling and Analysis Plan (SAP) for the Phase I (Former Pulp and Paper Mill) investigation, and Quality Assurance Project Plan (QAPP) and Health and Safety Plan (HASP) for the overall project.
- **Addendum II:** Will present the updated and refined RI tasks and associated SAP for the Phase II (Rennie Island impoundments) investigation.
- **Addendum III:** Will present the updated and refined RI tasks and associated SAP for the Phase III (Hoquiam River and Grays Harbor) investigation.

The anticipated schedule for submittal of the addenda is provided in **Section 6**.

A remedial investigation report (RIR) presenting the results of each phase of investigation will be prepared and submitted to Ecology, including:

- **Phase I RIR:** Will present findings of Phase I of the RI focused on the Former Pulp and Paper Mill.
- **Phase II RIR:** Will present findings of Phase II of the RI focused on the Rennie Island impoundments.
- **Phase III RIR:** Will present findings of Phase III of the RI focused on select areas of the Hoquiam River and Grays Harbor where the pCSM and results of the Phase I and Phase II investigations indicate that COPCs from historical operations may be present.

Further details on reporting and the anticipated reporting schedule are provided in **Section 6**.

1.3 Purpose and Objectives

In accordance with the Agreed Order, this Work Plan includes a description and schedule of RI activities for select areas of the Site where environmental media may remain in exceedance of current applicable screening levels based on the evaluation of past analytical data presented within the *Data Summary Report* for the Site (EHS Support, 2025). This Work Plan also presents the project management strategy for implementing and reporting RI activities and identifies key personnel and organizations involved in the project. The objective of this Work Plan is to describe the RI approach and environmental field sampling activities to satisfy Task 2 of the Agreed Order.¹

1.4 Work Plan Organization

This Work Plan is organized consistent with the elements specified in Exhibit B (Scope of Work) of the Agreed Order (Ecology, 2024) and includes the following sections:

- **Section 2:** Provides a general overview of the Site's background, environmental setting, history of investigation, and interim actions completed at the Site, and presents conditions based on comparison of existing applicable data to current applicable screening criteria.

¹ Task 1 of the Agreed Order was to prepare a *Data Summary Report* for the Site, which was submitted to Ecology under separate cover on January 24, 2025 (EHS Support, 2025).



- **Section 3:** Presents the RI tasks for each phase of investigation.
- **Section 4:** Discusses the general approach for data evaluation and risk assessment.
- **Section 5:** Presents additional documents supporting the Work Plan.
- **Section 6:** Outlines the RI reporting approach and anticipated reporting schedule.
- **Section 7:** Presents the roles and responsibilities of key project personnel.
- **Section 8:** Lists the references cited in this Work Plan.



2 Site Understanding

This section provides a general overview of the Site’s background, environmental setting, history of investigation, and interim actions completed at the Site, and presents conditions based on comparison of existing applicable data to current applicable screening criteria. Additional details are provided in the *Data Summary Report* for the Site (EHS Support, 2025) and will also be presented in the updated and refined pCSM to be provided in Addendum I to this Work Plan.

2.1 Historical Operations

The Site operated as a sawmill prior to the early 1920s but was used for pulp and paper manufacturing beginning in the late 1920s. Between the 1920s and 2013, a non-integrated paper mill producing white communication paper operated at the Site. A separate pulp mill also operated at the Site between the 1920s and 1992. RAMP’s corporate predecessors, ITT Rayonier and Rayonier, Inc. (referred to herein as “Rayonier”), owned and operated the mill from the 1920s until 1992. RAMP currently owns the property on which the pulp mill and support assets were located; Peter and Irene Sing (Sings)² currently own the paper mill property (**Figure 2**).

A former WWTP was located on the eastern portion of the Former Pulp and Paper Mill; the WWTP consisted of a primary clarifier, three secondary clarifiers, an aeration sedimentation basin (ASB), a hot caustic effluent (HCE) basin, and a spent sulfite liquor (SSL) basin (**Figure 2**). The WWTP served the industrial wastewater treatment needs for the former pulp and paper mill. Wastewater treatment consisted of primary treatment followed by secondary activated sludge treatment; residuals from the wastewater treatment system were removed from the treatment basins and transported off-site for proper disposal in accordance with applicable regulations.

Operations during Rayonier’s operation of the pulp mill included occasionally pumping spent sulfite liquor from the mill, via a submerged pipeline beneath the waterway between the mill and Rennie Island, for storage in impoundments on Rennie Island. In the 1980s, the occasional storage of spent sulfite liquor within impoundments on Rennie Island ceased, and storage of solids from the pulp mill clarifier began. Rennie Island was also historically used as a disposal site for dredge spoil by the United States Army Corps of Engineers (USACE, 1979; Evans et al., 1980).

In 1992, Site operations were suspended, and in 1993, operation of the paper mill resumed and continued until 2013. Rayonier completed demolition of the pulp mill, product lines, and vanillin extraction facilities following mill closure in 1992, and environmental investigation and remediation commenced during that time. Demolitions of the powerhouse, paper mill, and the WWTP aboveground structures were completed in 2016.

² The Sings purchased the 4-acre paper mill property (Tax A-1 and A-2) at a tax deed auction in 2017 and are an “owner or operator” as defined in [Revised Code of Washington \(RCW\) 70.105D.020\(22\)](#) of a “facility” as defined in [RCW 70.105D.020\(8\)](#). Ecology issued a determination that the Sings are potentially liable persons under [RCW 70A.305.040](#).



2.2 Regulatory Background

Treated wastewater was discharged to Grays Harbor via Outfall 001 (**Figure 2**) under United States Environmental Protection Agency (USEPA) National Pollutant Discharge Elimination System (NPDES) Permit WA000307-7 (Ecology, 2003). This permit also covered stormwater discharge as well a second outfall (Outfall 002), which discharged backwash water from the filter plant to the Hoquiam River. The outfalls have been inactive since the Former Pulp and Paper Mill operations ceased. NPDES permit coverage for discharge was maintained until termination in 2014 due to the Former Pulp and Paper Mill no longer generating process wastewater (Ecology, 2014).

Upon completion of past remediation at the Site, restrictive covenants (**Appendix A**) were issued for most of the Former Pulp and Paper Mill (**Figure 4**) due to residual petroleum, polychlorinated biphenyls (PCBs), and lead concentrations in soils (Ecology, 1996a; Ecology, 1998). The restrictive covenants identify areas restricted to industrial uses only, prohibit potable use of groundwater, and require notice be given to Ecology prior to future sale of the property.

2.3 Current and Anticipated Future Land Use

The Former Pulp and Paper Mill is currently zoned industrial, as defined by the City of Hoquiam (**Figure 5**; City of Hoquiam, 2023), with future use anticipated to remain industrial as identified in the City of Hoquiam's Comprehensive Land Use Plan (City of Hoquiam, 2009). Per the City of Hoquiam, the industrial district provides a variety of manufacturing and marine-related uses in limited areas. The district also protects residential and non-manufacturing areas from potential adverse effects associated with industrial activity and promotes employment opportunities for present and future residents.

The Former Pulp and Paper Mill also meets the definition of an industrial property per [Washington Administrative Code \(WAC\) 173-340-200](#) and, furthermore, exhibits the characteristics of "traditional industrial use" as identified in [WAC 173-340-745](#). [WAC 173-340-200](#) states that industrial properties are "properties that are or have been characterized by, or are to be committed to, traditional industrial uses such as processing or manufacturing of materials, marine terminal and transportation areas and facilities, fabrication, assembly, treatment, or distribution of manufactured products, or storage of bulk materials, that are either:

- Zoned for industrial use by a city or county conducting land use planning under chapter [36.70A RCW](#) (Growth Management Act); or
- For counties not planning under chapter [36.70A RCW](#) (Growth Management Act) and the cities within them, zoned for industrial use and adjacent to properties currently used or designated for industrial purposes."

Rennie Island impoundments were occasionally used for industrial purposes related to historical Site operations, but the island is currently zoned as Natural Resource by the City of Hoquiam (**Figure 5**) and anticipated to remain so (City of Hoquiam, 2009). Per the City of Hoquiam, areas in the Natural Resource district are primarily used for the commercial production and harvesting of trees but are also available for passive recreational activities and educational uses (City of Hoquiam, 2023). These areas may also provide opportunity for future growth, but development of these areas should be compatible with adjacent land use.



It is possible that all or portions of the Former Pulp and Paper Mill and Rennie Island property owned by RAMP will be sold. However, future use of the Former Pulp and Paper Mill parcels would presumably be deed restricted to industrial activities, consistent with the current industrial zoning and restrictive covenants in place, and Rennie Island will remain as Natural Resource.

2.4 Site Setting

The Former Pulp and Paper Mill comprises 11 tax parcels totaling approximately 96 acres; 92 acres are owned by RAMP, and 4 acres are owned by the Sings² (**Figure 2**). It is bounded by Grays Harbor to the south; the Hoquiam River to the west; a railroad and industrial, commercial, and residential properties to the north; and the industrial Port of Grays Harbor to the east. Rennie Island is located south of the Former Pulp and Paper Mill in Grays Harbor and comprises two former impoundments owned by RAMP totaling approximately 88 acres (**Figure 3**). The Former Pulp and Paper Mill is largely flat with a general elevation currently between 15 and 16 feet (ft) above mean sea level (North American Vertical Datum of 1998 [NAVD 88]; **Figure 6**). The hillsides north of the Site rise steeply to elevations of 300 to 500 ft (City of Hoquiam, 2009). Due to the flat nature of the Former Pulp and Paper Mill, stormwater largely remains on-site in low paved areas or accumulates in WWTP basins and does not discharge to Grays Harbor or the Hoquiam River.

The following sections describe the current understanding of the Site's geology, hydrogeology, hydrology, and ecological setting. Regional geology and hydrogeology are presented in the *Data Summary Report* for the Site (EHS Support, 2025).

2.4.1 Geology

Site geology has been defined by the installation of 140 soil borings and monitoring wells that were advanced up to 20 ft below ground surface (bgs; soil boring logs are provided in **Appendix B**). Based on review of the boring logs, the upper 15 to 20 ft is fill material. Shallow fill material at the Site is a heterogeneous mix of alluvial river deposits; silt, sand, clay, and gravel; dredge fill from the river channels; imported fill, soil, wood chips, and other wood debris; and buried construction debris (e.g., bricks and concrete; Landau Associates, 2017). Some of the fill was potentially imported prior to Rayonier ownership as evidenced by the presence of wood material at depth, presumably from historical sawmill operations at the Site.

2.4.2 Hydrogeology

Regular studies of groundwater elevations at the Site were not conducted; however, in 1995, groundwater across the Former Pulp and Paper Mill was generally found at depths of 2 to 10 ft bgs depending on topography. The groundwater monitoring network has intersected the upper aquifer that has a local flow system based on topography. Based on existing groundwater elevation data from March, June, September, and December 1995, groundwater gradient at the Former Pulp and Paper Mill radially diverges from the center of the Site. This local flow system would ultimately discharge to Grays Harbor or the Hoquiam River. Groundwater elevation contour maps for four quarterly water level measurement events performed in 1995 are provided in **Appendix C**. It should be noted, however, that data from 1995 may not be representative of current trends in groundwater elevation, gradient, and tidal influences and should be considered preliminary until additional data are obtained. Additionally, localized flow variations are likely to be found around stormwater impoundments



(e.g., stormwater/wastewater basins) and other large aboveground features and are anticipated to be influenced by the tidal regime of the surrounding waterways.

As a condition of the restrictive covenants issued by Ecology for areas of the Former Pulp and Paper Mill (**Figure 4; Appendix A**), potable use of groundwater is prohibited. The Site also meets select criteria for non-potable groundwater as defined in [WAC 173-340-720](#). WAC 173-340-720(2)(a) and (b) note that to be considered non-potable, groundwater (a) must not serve as a current source of drinking water and (b) groundwater is not a potential future source of drinking water. The City of Hoquiam currently owns and maintains a 5,360-acre watershed north of the city that supplies surface water to the City's municipal water system. Surface water is drawn from reservoirs on Davis Creek and the West Fork Hoquiam River; surface water is anticipated to remain the source for drinking water in the future (City of Hoquiam, 2009, 2022).

2.4.3 Hydrology

The Site is located at the confluence of the tidally influenced Hoquiam River and Grays Harbor. Grays Harbor is one of two major estuaries on the Washington coast and is bound by Point Brown to the north and Point Chehalis to the south (Ecology, 2001). Water depths in Grays Harbor are generally less than 20 ft, except at the mouth of the estuary, where depths up to 80 ft have been measured and within dredged navigational channels (USACE, 2018). Several creeks and rivers flow into the estuary, including the Hoquiam River, with numerous shallow channels formed by ebbing tidal flows. At high tide, the harbor covers an area of approximately 58,000 acres, with over 60 percent of the estuary being intertidal (Oregon Sea Grant, 2003).

2.4.3.1 Tidal Regime

Grays Harbor experiences a semi-diurnal tidal regime, with two high and two low tides of approximately equal height daily, and a mean tidal range of 7.8 ft. According to the National Oceanic and Atmospheric Administration (NOAA) station 9441102 located at the entrance of Grays Harbor in Westport, Washington, the lowest tidal height observed in 2023 was -3.3 ft in June, and the highest observed was 11.7 ft in January (NOAA, 2024). Also in 2023, monthly mean tidal height ranged from 4.5 ft in June to 5.7 ft in December, with an annual mean tidal height of 5.0 ft.

2.4.3.2 Salinity Regime

Salinity varies throughout Grays Harbor, with higher salinity concentrations at the mouth of the harbor and lower salinity concentrations upstream of the Site. Salinity measurements taken near Rennie Island indicate that water near the Site ranges from oligohaline (salinity ranging from 0.5 to 5 parts per thousand [ppt]) to mesohaline (salinity ranging from 5 to 18 ppt). In 2013, salinity concentrations near Rennie Island ranged from approximately 2 ppt to 20 ppt, with an average salinity from 2011 to 2013 of 6.5 ppt (Wild Fish Conservancy, 2015). Salinity near the Site is influenced by tidal action, freshwater flows from upstream sources within the basin, and precipitation. In 2024, Hoquiam received approximately 80 inches (in) of precipitation, with the greatest amount of rainfall received from November through January (39 in) and the lowest amount of rainfall received from July through August (4 in).



2.4.3.3 Navigation Channel Dredging

Grays Harbor is the only estuary on the Washington coast with a maintained deep navigation channel and major port (Port of Grays Harbor; Oregon Sea Grant, 2003). The navigation channel is maintained at varying depths by USACE to provide deep water access for large commercial vessels. The original navigation project was authorized in 1896, which allowed for a navigation channel extending from the seaward end of Grays Harbor to the lower reach of the Chehalis River (Pacific International Engineering, 2003). The earliest records of dredging for this project within Grays Harbor (extending 12 miles downstream from Cosmopolis, Washington, past the Site) date to 1905, with regular maintenance appearing to have occurred periodically since.

The navigation channel was divided into nine distinct reaches with seven reaches dredged annually since 2018 (USACE, 2018), including the reaches adjacent to the Site: the Hoquiam reach and the Cow Point reach. The navigation channel within these reaches (**Figure 2**) is approximately 350 ft wide and is dredged annually to approximately 38 ft deep, with 500,000 to 800,000 cubic yards of sediment dredged annually. Dredging is expected to continue to occur annually through 2033 (USACE, 2018).

2.4.4 *Ecology*

The uplands portion of the Site (Former Pulp and Paper Mill) is zoned heavy industrial by the City of Hoquiam (**Figure 5**). Desktop analysis of the United States Geological Survey (USGS) National Land Cover Database (USGS, 2023) and aerial imagery, and Site observations from August 2024, indicate that land cover on-site primarily consists of developed open space (low, medium, and high intensities) and barren land, including along the shorelines. Localized areas of open water remain in the WWTP area and ASB with fragmented areas of disturbed vegetation in the central portion, west of the WWTP. The industrial setting and physically disturbed and fragmented low-quality habitat provided by the Former Pulp and Paper Mill reduces its ability to support ecological receptor communities. Ecological receptors that may occur within this area include limited plants, soil invertebrates, select reptiles and amphibians, and transient mammalian and avian receptors.

The Rennie Island impoundments are industrial features that were occasionally used for historical Site operations that now consist of woody and herbaceous wetland habitat with patches of open water around the margins. The industrialized nature of the Rennie Island impoundments reduces their ability to support ecological receptor communities. Ecological receptors within this area may include plants, invertebrates, and mammalian and avian receptors.

2.4.5 *Regional Conditions*

Regional conditions within the lower Hoquiam River and Grays Harbor surrounding the Site are influenced by the industrialized and urbanized setting and associated activities. A review of regional permitted outfalls and Ecology Toxics Cleanup Program (TCP) sites highlights numerous potential regional sources of hazardous substances to the Hoquiam River and Grays Harbor (**Figure 7**). In the general area around the Site, from Hoquiam to Cosmopolis, Washington, 188 permitted outfalls were identified in Ecology's Water Quality Atlas database. Additionally, 149 TCP cleanup sites were identified with 87 of these sites in the cleanup phase or awaiting cleanup; many of the outfalls identified are associated with the TCP cleanup sites in the area. The abundance of outfalls and TCP cleanup sites



identified demonstrates the industrialized and urbanized setting of the lower Hoquiam River and Grays Harbor waterfronts.

2.5 Preliminary Conceptual Site Model

The pCSM for the Site identifies potential sources of hazardous substances and release mechanisms, potential migration pathways, and potential human and ecological receptors. The pCSM does not quantify potential risks to human or ecological health but facilitates focused remedial investigation and actions. As such, the pCSM is subject to update and refinement as new information is gathered. The pCSM for the Site was developed with the understanding that the property will remain zoned for industrial use and activity, while Rennie Island will remain zoned as Natural Resource and potentially available for passive recreational activities. Potential primary sources, release mechanisms, migration pathways, and receptors are summarized below.

2.5.1 *Potential Sources, Release Mechanisms, and Migration Pathways*

Potential sources of hazardous substances at the Site include materials historically used or produced, directly or as byproducts, during mill operations; boiler operations; fuel and equipment use and storage; and potentially impacted material used as fill in select investigation areas. Potential release mechanisms to the environment may include:

- Historical wastewater treatment and discharge
- Historical incidental spills and leaks
- Stormwater runoff and infiltration
- Historical stack emissions and surface soil deposition
- Leaching from fill material
- Regional sources (e.g., permitted outfalls, TCP sites)

Potential migration pathways may include:

- Direct accumulation in surface soils
- Surface soil runoff to surface water
- Volatilization/wind erosion of particulates in soil to outdoor (ambient) air
- Partitioning to soil gas and volatilization of soil gas to outdoor (trench) air and indoor air
- Leaching/percolation from surface soil to subsurface soil and migration to underlying shallow groundwater
- Groundwater discharge to surface water and sediment
- Discharge (effluent, wastewater, and stormwater) to surface water
- Sediment deposition in drainage ditches, basins, or impoundments
- Bioaccumulation in biota

2.5.2 *Potential Human Health and Ecological Receptors*

Potential human health receptors include current and future on-site workers and on-site trespassers at the Former Pulp and Paper Mill and current and future on-site recreational trespassers in the Rennie Island impoundments. The industrialized setting and physically disturbed and fragmented low-quality habitat provided by the Former Pulp and Paper Mill and the Rennie Island impoundments reduce their ability to support ecological receptor communities. Ecological receptors within the Former Pulp and



Paper Mill may include limited plants, soil invertebrates, select reptiles and amphibians, and transient avian and mammalian receptors. Ecological receptors in the Rennie Island impoundments may include plants, invertebrates, and avian and mammalian receptors. Consistent with Model Toxics Control Act (MTCA) technical guidance for Terrestrial Ecological Evaluations at industrial properties (Ecology, 2017), ecological evaluation at the Former Pulp and Paper Mill will focus on the assessment and protection of terrestrial wildlife receptors.

2.6 Former Pulp and Paper Mill

An overview of the Former Pulp and Paper Mill is provided in the following subsections, including a summary of past environmental investigations and interim actions completed, review of the current regulatory status of each investigation area, and a summary of available data and conditions. Additional details related to these subsections are provided in the *Data Summary Report* for the Site (EHS Support, 2025).

A list of potential indicator hazardous substances (IHS) is also provided along with preliminary data gaps.

2.6.1 Past Investigations

Past environmental investigations within the Former Pulp and Paper Mill were conducted from 1992 to 1995 in the following areas:

- Paper Machine Area (Paper Mill) (Pacific Environmental Group, 1992a, 1993a)
- Boneyard Area (Pacific Environmental Group, 1993b; 1994a; Rayonier, 1996a)
- Finishing Area (Pacific Environmental Group, 1995a)
- Silvichemical Area (Pacific Environmental Group, 1992a, 1992b, 1993c)
- Log Yard Area (Pacific Environmental Group, 1994b, 1994c, 1995b; Rayonier, 1995)
- Fuel Oil Tank/Utility Chase Area (Pacific Environmental Group, 1994d, 1994e)
- Gasoline and Maintenance Area (Pacific Environmental Group, 1992b, 1994f)
- Powerhouse Area (Pacific Environmental Group, 1994d; Landau Associates, 2017)
- Wood Chip Storage Area (Pacific Environmental Group, 1994f)
- Warehouse Area (Pacific Environmental Group, 1994f)
- Hog Fuel Area (Pacific Environmental Group, 1994f)
- Shoreline Area (Pacific Environmental Group, 1992a, 1992b, 1996a)

Investigation activities included sampling soil borings and installing a shallow groundwater monitoring well network throughout the Former Pulp and Paper Mill. In 1995, quarterly groundwater monitoring was performed at the Former Pulp and Paper Mill to document groundwater conditions in five sub-investigation areas (Pacific Environmental Group, Inc., 1996a):

- Gasoline and Maintenance Area
- Powerhouse Area
- Fuel Oil Tank/Utility Chase Area
- General Facility Area
- Boneyard Area



2.6.2 Interim Actions

Upon completion of past environmental investigations, Ecology-approved interim actions were completed within several investigation areas. Interim actions performed included removing soils with constituent concentrations exceeding applicable screening levels at the time and either cover with an asphalt cap or backfill with clean fill (**Figure 4**). The following interim actions were completed:

- **Paper Machine Area (Paper Mill):** In 1995, over 600 tons of soil were excavated below Paper Machines #1 and #2, and the areas were backfilled with clean sand (EMS, 1996; Pacific Environmental Group, 1996b).
- **Boneyard Area:** Between 1994 and 1995, over 1,000 tons of soil were excavated, and the areas were backfilled with clean fill, after which the entire area was covered with an asphalt cap (Rayonier, 1996b).
- **Finishing Area:** Between 1994 and 1995, approximately 1,379 tons of soil were excavated, and the areas were backfilled with clean soil (Pacific Environmental Group, 1995a).
- **Log Yard Area:** In 1995, approximately 120 tons of soil was excavated, and the area was backfilled with clean soil (Rayonier, 1995).
- **Fuel Oil Tank/Utility Chase Area:** Between 1995 and 1996, approximately 460 tons of soil were excavated, and the areas were backfilled with clean soil (Pacific Environmental Group, 1996c; Rayonier, 1996c).

In addition to the soil excavation interim actions presented above, the following interim actions were also completed:

- **Gasoline and Maintenance Area:** In 1994, an underground 1,000-gallon unleaded gasoline tank, pump dispenser, and associated facilities were removed from the Former Pulp and Paper Mill (Ecology, 1995).
- **Wastewater Treatment Plant:** Between 2014 and 2015, Grays Harbor Public Utility District drained the ASB, breached the northwest corner of the basin, and removed the bottom solids for disposal off-site in accordance with applicable regulations (Landau Associates, 2017). This was conducted as part of closure activities for the WWTP.

In addition to the investigation areas presented above where interim actions were completed, several investigation areas within the Former Pulp and Paper Mill did not warrant interim action based on the analytical results of past environmental investigations and comparison to applicable screening levels at the time. These areas include:

- Silvichemical Area
- Powerhouse Area
- Wood Chip Storage Area
- Warehouse Area
- Hog Fuel Storage Area
- Shoreline Area

2.6.3 Current Regulatory Status

A review of the current regulatory status of the investigation areas within the Former Pulp and Paper Mill is provided in the following sections.



2.6.3.1 Areas with No Further Action Status

The following investigation areas within the Former Pulp and Paper Mill were issued NFA determinations from Ecology based upon their review of the interim actions completed or upon review of analytical results that did not identify a risk to soil or groundwater conditions (**Appendix B**):

- Paper Machine Area (Paper Mill) (Ecology, 1996b)
- Boneyard Area (Ecology, 1996c)
- Finishing Area (Ecology, 1996d)
- Silvichemical Area (Ecology, 1993)
- Log Yard Area (Ecology, 1996e)
- Fuel Oil Tank/Utility Chase Area³

Ecology's NFA determinations remain in effect and were conditioned on Rayonier's recording of a restrictive covenant on the property deed, which was completed by Rayonier (**Figure 4; Appendix A**).

2.6.3.2 Areas Without No Further Action Status

The following investigation areas within the Former Pulp and Paper Mill have not yet received regulatory closure through an Ecology-issued NFA determination:

- Gasoline and Maintenance Area
- Powerhouse Area
- Wood Chip Storage Area
- Warehouse Area
- Hog Fuel Storage Area
- Shoreline Area
- WWTP

Detections of lead, total petroleum hydrocarbons (TPH), and benzene in soil prompted Ecology to designate the Gasoline and Maintenance Area as a Leaking Underground Storage Tank (LUST) site in 1995 (Ecology, 1995).

As discussed in further detail in the *Data Summary Report* for the Site (EHS Support, 2025), several of these investigation areas—including the Silvichemical Area, Wood Chip Storage Area, and Hog Fuel Storage Area—may warrant issuance of an NFA determination. An NFA issuance would be based on the results of past environmental investigations and conditions, indicating that soil conditions do not exceed applicable MTCA screening levels and that the areas are not a source of impacts at the Site.

2.6.4 Data Summary and Conditions

Extensive past environmental investigation has been conducted in the Former Pulp and Paper Mill. Soil borings throughout the Former Pulp and Paper Mill were sampled at depths ranging from 0–1 ft to 14.5 ft bgs (**Figure 8**). Groundwater monitoring wells were installed between 13.5 and 20 ft bgs with screening intervals of either 10 or 15 ft bgs (**Figure 9**). Soil and groundwater data from these

³ In letters dated January 22, 1996, Rayonier requested that Ecology review the results of interim action at the Fuel Oil Tank/Utility Chase Area and issue a NFA determination (Rayonier, Inc., 1996b). This area was understood to be recorded in Ecology's database as having received an NFA determination (Landau Associates, 2017).



investigations were screened against current applicable MTCA screening levels, as described in Section 5 of the *Data Summary Report* for the Site (EHS Support, 2025). The updated screening of past data indicated that soils in localized areas of select investigation areas within the Former Pulp and Paper Mill may remain in exceedance of current applicable screening levels. Conditions are summarized below:

- **Paper Machine Area (Paper Mill):** Distinct localized areas had remaining soil exceeding TPH constituent screening levels, but the exceedances are inhibited by subsurface infrastructure. Additional investigation is constrained by the presence of concrete rubble from demolition activities. Groundwater samples adjacent to the area exhibited no exceedances for data collected after interim action was complete.
- **Boneyard Area:** The Boneyard Area remains protective of potential receptor exposure to soil based on the existing asphalt cap and restrictive covenants in place, as well as past action taken to stabilize the shoreline in 2021 (USACE, 2021). An assessment of existing groundwater data collected in June, September, and December 1995, after the interim action soil excavation was completed in April 1995, indicated infrequent exceedances of applicable screening levels for unfiltered lead, TPH constituents, and PCBs.
- **Finishing Area:** No remaining soil sample concentrations exceeded current applicable screening levels. Groundwater samples adjacent to the area exhibited no exceedances for data collected after interim action was complete.
- **Log Yard Area:** No remaining soil or groundwater sample concentrations exceeded current applicable screening levels. Groundwater samples adjacent to the area exhibited no exceedances for data collected after interim action was complete.
- **Fuel Oil Tank/Utility Chase Area:** Localized exceedances of current applicable screening levels for TPH constituents were observed in soil samples from two distinct areas after interim action was complete. Groundwater samples adjacent to the area exhibited no exceedances for data collected after interim action was complete.
- **Gasoline and Maintenance Area:** No soil concentrations exceeded current applicable screening levels, but groundwater exceedances of current applicable screening levels were observed for unfiltered lead, TPH constituents, and benzene, primarily in the monitoring well in the southwest corner of the area.
- **Silvichemical Area:** No soil concentrations exceeded current applicable screening levels, but irregular groundwater exceedances of current applicable screening levels were observed for unfiltered chromium and TPH constituents.
- **Powerhouse Area:** Exceedances of current applicable screening levels for TPH constituents and benzo(a)pyrene were observed in soil. Groundwater exceedances of current applicable screening levels were observed for unfiltered chromium and TPH constituents. No. 6 fuel oil may remain in the area but is constrained by substantial subsurface infrastructure with concrete slabs thicker than 2 ft.
- **Wood Chip Storage Area:** No soil concentrations exceeded current applicable screening levels, and groundwater data were not collected as analytical results from past soil investigations indicated that impacts to surface or subsurface soil were not a concern.
- **Warehouse Area:** A localized exceedance of current applicable screening levels for TPH constituents was observed in soil samples from one distinct area. Groundwater samples adjacent to the area exhibited no exceedances for data collected after interim action was complete.
- **Hog Fuel Storage Area:** No soil concentrations exceeded current applicable screening levels, but inconsistent groundwater exceedances of current applicable screening levels were observed for TPH constituents.



- **Shoreline Area:** Soil data were only available at one location, but no exceedances of current applicable screening levels were observed. Groundwater exceedances of current applicable screening levels for unfiltered lead and TPH constituents were observed in select wells along the shoreline.
- **WWTP Area:** No soil data were available to review in the WWTP Area. Groundwater exceedances of current applicable screening levels were observed for TPH constituents.

2.6.5 Preliminary Indicator Hazardous Substances

Preliminary IHSs were identified in select investigation areas of the Former Pulp and Paper Mill based on historical Site operations, results from past environmental investigations, and assessment of conditions. These preliminary IHSs are presented in **Table 2-1** below by investigation area and may be subject to future update.

Table 2-1 Preliminary Indicator Hazardous Substances – Former Pulp and Paper Mill

Investigation Area	Constituent Group			
	TPH	Metals	PCBs	VOCs
Paper Machine Area (Paper Mill)	●	--	--	--
Boneyard Area	●	●	●	--
Finishing Area	--	--	--	--
Log Yard Area	●	●	--	--
Fuel Oil Tank/Utility Chase Area	●	--	--	--
Gasoline and Maintenance Area	●	●	--	●
Silvichemical Area	●	●	--	--
Powerhouse Area	●	●	--	●
Wood Chip Storage Area	--	--	--	--
Warehouse Area	●	--	--	--
Hog Fuel Storage Area	●	--	--	--
Shoreline Area	●	●	--	--
Wastewater Treatment Plant Area	●	--	--	--

Notes:

- = constituent identified as a preliminary IHS
- = constituent not identified as a preliminary IHS
- IHS = indicator hazardous substance
- PCB = polychlorinated biphenyl
- TPH = total petroleum hydrocarbon
- VOC = volatile organic compound

2.6.6 Preliminary Data Gaps

The primary known sources of soil impacts within the Former Pulp and Paper Mill have been remediated by interim actions. Groundwater conditions appeared to be related to past soil conditions, with



groundwater exceedances having decreased historically after soil excavation. However, remaining preliminary data gaps at select investigation areas within the Former Pulp and Paper Mill were identified based on past investigation findings and assessment of conditions. Preliminary data gaps are presented in **Table 2-2** below by investigation area.

Table 2-2 Preliminary Data Gaps – Former Pulp and Paper Mill

Investigation Area	Environmental Media		
	Soil	Groundwater	Stormwater/ Wastewater and Solids
Paper Machine Area (Paper Mill)	●	●	--
Boneyard Area	--	●	--
Finishing Area	--	--	--
Log Yard Area	--	●	--
Fuel Oil Tank/Utility Chase Area	●	--	--
Gasoline and Maintenance Area	●	●	--
Silvichemical Area	--	●	--
Powerhouse Area	●	●	--
Wood Chip Storage Area	--	--	--
Warehouse Area	●	--	--
Hog Fuel Storage Area	●	●	--
Shoreline Area	●	●	--
Wastewater Treatment Plant Area	●	--	●
Drainage Ditches	--	--	●

Notes:

- = preliminary data gap identified
- = no preliminary data gap identified

2.7 Rennie Island Impoundments

An overview of the Rennie Island impoundments is provided in the following subsections, including a summary of past environmental investigations, available data, and conditions. Additional details related to these subsections are provided in the *Data Summary Report* for the Site (EHS Support, 2025). A list of potential IHSs is also provided along with preliminary data gaps.

2.7.1 Past Investigations, Data Summary, and Conditions

Past environmental investigation at the Rennie Island impoundments was conducted in 1992 (Pacific Environmental Group, 1992c). Investigation included drilling and sampling 10 soil borings, four of which were converted into groundwater sample locations with groundwater sampled at a depth of 8 ft bgs at



three locations and 13 ft bgs at the fourth location (**Figure 10**). One surface water sample from the southern portion of the western impoundment was also collected.

An updated screening of past data was conducted, as described in Section 5 of the *Data Summary Report* for the Site (EHS Support, 2025). Results from this screening indicated no soil exceedances of current applicable screening levels and only one exceedance in groundwater for bis(2-ethylhexyl) phthalate.

2.7.2 Preliminary Indicator Hazardous Substances

Preliminary IHSs were identified in the Rennie Island impoundments based on historical Site operations, results from past investigations, and assessment of conditions. These preliminary IHSs are presented in **Table 2-3** below and may be subject to future update.

Table 2-3 Preliminary Indicator Hazardous Substances – Rennie Island

Investigation Area	Constituent Group				
	TPH	Metals	PCBs	VOCs	SVOCs
Rennie Island Impoundments	--	--	--	--	●

Notes:

- = constituent identified as a preliminary IHS
- = constituent not identified as a preliminary IHS
- IHS = indicator hazardous substance
- PCB = polychlorinated biphenyl
- SVOC = semi-volatile organic compound
- VOC = volatile organic compound

2.7.3 Preliminary Data Gaps

Existing soil and groundwater data in the Rennie Island impoundments indicated that no interim action in this area was warranted. However, the soil analytical list was limited, and a current understanding of water in the impoundments is unknown. Preliminary data gaps are presented in **Table 2-4** below.

Table 2-4 Preliminary Data Gaps – Rennie Island Impoundments

Investigation Area	Environmental Media			
	Soil	Groundwater	Stormwater	Sediment ¹
Rennie Island Impoundments	●	●	●	--

Notes:

¹ To be informed by investigation of other environmental media and considered, if necessary, in future RI.

- = preliminary data gap identified
- = no preliminary data gap identified

2.8 Hoquiam River and Grays Harbor

An initial overview of the data gaps for the Hoquiam River and Grays Harbor, as the waterbodies relate to historical Site operations, is provided below. The understanding of these areas will continue to be



updated and refined as information is collected during the Phase I (Former Pulp and Paper Mill) and Phase II (Rennie Island impoundments) investigations described in **Section 3 (Figure 11)**.

2.8.1 Preliminary Indicator Hazardous Substances and Preliminary Data Gaps

IHSs within the Hoquiam River and Grays Harbor will be identified based upon results of the Phase I and Phase II investigations in the context of regional conditions presented in **Section 2.4.5**. Preliminary data gaps for the Hoquiam River and Grays Harbor include conditions of areas in proximity to Outfalls 001 and 002 and will be further updated and refined based on the results of the Phase I and Phase II investigations as discussed in **Section 3**.



3 Remedial Investigation Tasks

The overarching RI approach for the Site includes conducting the RI in manageable phases of work aligned with the key areas identified in the Agreed Order (Ecology, 2024), including:

- **Phase I** – Former Pulp and Paper Mill (industrial upland area)
- **Phase II** – Rennie Island impoundments
- **Phase III** – Hoquiam River and Grays Harbor, including areas in proximity to Outfalls 001 and 002, and areas where the pCSM and results of the Phase I and Phase II investigations indicate that COPCs from historical operations may be present

The phased RI approach follows an inside-out strategy, allowing for more efficient project execution and ability of the work to inform and build upon itself based on the results of each phase of work. The following subsections present an overview of the preliminary RI tasks for each phase of investigation and will be further updated and refined in addenda to this Work Plan for each phase of investigation as follows:

- **Addendum I:** Will present the updated and refined pCSM for the overall Site, updated and refined RI tasks and associated SAP for the Phase I (Former Pulp and Paper Mill) investigation, and QAPP and HASP for the overall project.
- **Addendum II:** Will present the updated and refined RI tasks and associated SAP for the Phase II (Rennie Island impoundments) investigation.
- **Addendum III:** Will present the updated and refined RI tasks and associated SAP for the Phase III (Hoquiam River and Grays Harbor) investigation.

3.1 Phase I – Former Pulp and Paper Mill

Phase I of the RI (**Figure 11**) includes investigation of localized areas within the Former Pulp and Paper Mill where concentrations of COPCs in soil or groundwater may remain in exceedance of current applicable MTCA screening levels based on the evaluation of existing analytical data presented in the *Data Summary Report* for the Site (EHS Support, 2025). Phase I RI tasks may include:

- Visual observation and assessment of:
 - Past groundwater monitoring well network to confirm which monitoring wells have been abandoned and which monitoring wells are still installed and potentially viable wells for gauging and sampling;
 - Boneyard Area cap to confirm its continued protection of potential receptor exposure; and
 - Subsurface infrastructure at the former Powerhouse building area to confirm it remains intact and likely to contain the previously identified non-aqueous phase liquid (NAPL) described in Appendix F of the *Data Summary Report* for the Site (EHS Support, 2025).
- Sampling and laboratory analytical analysis of:
 - Soil and groundwater in localized areas of individual investigation areas to address preliminary data gaps identified in **Section 2.6.6**;
 - Water and sediment in drainage ditches along the northern and eastern property boundaries to address preliminary data gaps; and
 - Stormwater in the WWTP ponds and basins to address preliminary data gaps.

Additional details regarding the Phase I RI tasks and the associated SAP will be provided in Addendum I to this Work Plan.



3.2 Phase II – Rennie Island Impoundments

Phase II of the RI (**Figure 11**) will include investigation of the Rennie Island impoundments. Phase II RI tasks may include:

- Sampling and laboratory analytical analysis of:
 - Soil in the western and eastern impoundments to address preliminary data gaps identified in **Section 2.7.3**.
- Water in the western and eastern impoundments, if present, to address preliminary data gaps.

Further details regarding the Phase II RI tasks and the associated SAP will be provided in Addendum II to this Work Plan. Phase II RI tasks will be updated and refined based on results of the Phase I investigation.

3.3 Phase III – Hoquiam River and Grays Harbor

Phase III of the RI (**Figure 11**) will include investigation of select areas in the Hoquiam River and Grays Harbor where the pCSM and results of the Phase I (Former Pulp and Paper Mill) and Phase II (Rennie Island impoundments) investigations indicate that COPCs from historical operations may be present (e.g., areas in proximity to Outfalls 001 and 002). Phase III RI tasks may include:

- Visual observation and assessment of:
 - Potential evidence of seeps along the shoreline at select locations.
- Sampling and laboratory analytical analysis of:
 - Sediment proximal to Outfalls 001 and 002 to address preliminary data gaps identified in **Section 2.8.1**.

Additional details on the Phase III RI tasks and the associated SAP will be provided in Addendum III to this Work Plan. Phase III RI tasks will be updated and refined based on results of the Phase I (Former Pulp and Paper Mill) and Phase II (Rennie Island impoundments) investigations.



4 Data Evaluation and Risk Assessment

Descriptions of methods for data verification and validation, as well as human health risk assessment and ecological risk assessment, are provided below.

4.1 Data Verification and Validation

Data verification involves examining the data for errors or omissions as well as examining the results for compliance with quality control (QC) acceptance criteria. Field sampling data will be verified daily by each person performing the tasks and before leaving the site where data was collected. Laboratory results will be reviewed and verified by qualified and experienced lab staff. It will be expected that the laboratory conducted a sufficient quality review of the data before reporting and that any problems were communicated to the Project Manager during the analysis. Laboratory results will be verified to ensure the following:

- Data are consistent, correct, and complete, with no errors or omissions.
- Results for QC samples accompany the sample results.
- Established criteria for QC results were met.
- Data qualifiers are properly assigned where necessary.
- Correct data were obtained.
- Methods and protocols specified in the QAPP were followed.

Data validation is an analyte- and sample-specific process that goes beyond data verification to determine the analytical quality of a specific data set. It involves a detailed examination of the data package by the Analytical Quality Control Manager (**Section 7**) to determine whether measurement quality objectives were met for precision, bias, and sensitivity. The level of review for each subset of data will be designated based on the goals of that stage of the project.

Additional details on field and laboratory data verification and validation methods will be provided in the QAPP provided in Addendum I to this Work Plan.

4.2 Human Health Risk Assessment

A site-specific human health risk assessment (HHRA) will be conducted for each phase of investigation (**Section 3**). The objectives of the HHRA will be to determine whether releases of chemical constituents in environmental media pose unacceptable risks to human health under site-specific current and potential future exposure conditions; and to provide risk characterization sufficient for remedial decision-making consistent with the MTCA requirements.

The HHRA will be conducted in accordance with MTCA Cleanup Regulations ([WAC 173-340](#)), specifically [Section 708](#), Human Health Risk Assessment Procedures, as well as USEPA *Risk Assessment Guidance for Superfund* (USEPA, 1989) and other relevant risk assessment guidance as identified throughout the RI process. Consistent with these guidance documents, the HHRA approach will consist of the following basic steps:

- **Hazard identification:** The hazard identification step will compare the analytical data to applicable MTCA screening levels to identify COPCs.



- **Exposure assessment:** The exposure assessment step will incorporate the pCSM that describes the potentially complete exposure pathways to potential human receptors, as well as determine exposure point concentrations (EPCs) and exposure factors for reasonable maximum exposures expected to occur under both current and potential future site use conditions.
- **Toxicity assessment:** The toxicity assessment step will identify scientific literature-based toxicity values as measures of carcinogenic and noncarcinogenic effect for each COPC using a robust hierarchy of sources consistent with MTCA and USEPA guidance.
- **Risk characterization:** The risk characterization step will calculate carcinogenic risks and noncarcinogenic hazard quotients for each COPC and exposure pathway using the EPCs, exposure factors, and toxicity values.
- **Uncertainty analysis:** Uncertainties are inherent in the risk assessment process because of the numerous assumptions that are made in estimating exposure, toxicity, and potential risk. Key factors and assumptions that contributed to uncertainty in the HHRA will be discussed.

The HHRA will provide cumulative cancer risk estimates and non-cancer hazard indices for potential receptors under current and reasonably anticipated future land uses. Risk results will be compared with MTCA's target cumulative excess cancer risk level of one in one hundred thousand (1×10^{-5}) and a hazard index of 1 for groups of toxicants that affect the same target organ by similar modes of action. Findings of the site-specific HHRA will support derivation of modified Method C site-specific screening levels for constituents of concern contributing to unacceptable risks and hazards, if identified, for each potential human receptor.

4.3 Ecological Risk Assessment

An ecological risk assessment (ERA) will be conducted for each phase of investigation (**Section 3**) to evaluate the potential risk to ecological receptors posed by exposure to environmental conditions at the Site. The ERAs will provide additional basis for determining whether remedial action is necessary as well as the extent of remedial action required. The functions of an ERA are to:

- Document whether actual or potential ecological risks exist at the Site;
- Identify which contaminants present at the Site pose an ecological risk; and
- Generate data to be used in evaluating remedial action options (USEPA, 1997).

The ERA will be conducted in accordance with MTCA Cleanup Regulations ([WAC 173-340](#)), specifically [Sections 7490](#), Terrestrial Ecological Evaluation Procedures, as well as USEPA *Guidelines for Ecological Risk Assessment* (USEPA, 1998) and other relevant risk assessment guidance as identified throughout the RI process.

The ERA approach consists of three steps:

- **Problem Formulation:** The problem formulation step will identify the purpose for the assessment, define the problem, and determine a plan for analyzing and characterizing risk.
- **Analysis:** The analysis step will be directed by the products of problem formulation. Data will be evaluated to determine how exposure to stressors is likely to occur and, given the exposure, the potential and type of ecological effects that can be expected.
- **Risk Characterization:** The risk characterization step will summarize assumptions, scientific uncertainties, and strengths and limitations of the analyses. This will result in a risk description and interpretation of ecological adversity and descriptions of uncertainty and lines-of-evidence (USEPA, 1998).



Remedial actions based upon ecological concerns will be supported by the ERA, which will establish actual or potential ecological threat(s) at the Site for each phase of the investigation. The ERA may also identify contamination levels that bound a threshold for adverse effects and provide a reference for evaluating the effectiveness of remedial options.



5 Supporting Documents

Supporting documents to this Work Plan include the updated and refined pCSM for the overall Site, SAPs for each phase of investigation, and QAPP and HASP for the overall project. Each SAP will be specific to its respective phase of investigation, while the pCSM, QAPP, and HASP will be prepared for the overall Site or project. If revisions to the pCSM, QAPP, or HASP are necessary in the future, an addendum to the original document will be provided to Ecology under separate cover.

5.1 Preliminary Conceptual Site Model

The pCSM for the overall Site will provide a technical basis for RI rationale and data collection strategies via detailed discussion of Site history, Site setting, a current understanding of the nature and extent of potential impacts to environmental media, conceptualized release mechanisms and factors that may influence constituent fate and transport, and identification of key data gaps. The pCSM will be prepared following guidance in [WAC 173-204-550](#) and per the definition in [WAC 173-340-200](#). The updated and refined pCSM will be included in Addendum I to this Work Plan.

5.2 Sampling and Analysis Plans

The SAP for each phase of investigation will be designed to ensure appropriate data are acquired and QC is appropriate throughout the data lifecycle (acquisition, analysis, validation, use/reporting). The SAPs will provide the methodologies associated with field sampling and data acquisition activities proposed during implementation of RI tasks. The SAP for each phase of investigation will conform to the guidance provided in [WAC 173-340-820](#), which outlines the purpose of and requirements for sampling and analysis plans, and in [WAC 173-340-830](#), which specifies requirements for sampling and analysis activities. A SAP for each phase of investigation will be included in future addenda to this Work Plan, including Addendum I (Former Pulp and Paper Mill), Addendum II (Rennie Island impoundments), and Addendum III (Hoquiam River and Grays Harbor).

5.3 Quality Assurance Project Plan

The QAPP will establish the sampling and analysis tasks and methods that will be completed in conformance with the project and technical requirements identified. Quality Assurance/QC procedures will also be detailed regarding the sampling and analysis operations. The QAPP will conform to the guidance provided in Ecology's *Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies* (Ecology, 2016). A QAPP for the overall project will be included in Addendum I to this Work Plan.

5.4 Health and Safety Plan

The HASP will delineate procedures that will allow personnel to work safely and respond quickly and appropriately to Site emergencies. All Site work will be conducted in accordance with Occupational Safety and Health Administration (OSHA) regulations in the [29 Code of Federal Regulations Parts 1904, 1910, and 1926](#). A HASP for the overall project covering all known and anticipated hazards will be included in Addendum I to this Work Plan.



6 Reporting and Schedule

This RI will be conducted in multiple phases, and addenda to this Work Plan will be developed as data are collected and analyzed to allow more efficient project execution and the ability of the work to inform and build upon itself based on the results of each phase of work. In addition, technical RI reports will be developed to facilitate updates to the pCSM and support subsequent scopes of work. These reports will document the work conducted and the preliminary findings of the investigations and recommendations for supplemental data collection or studies.

With this understanding, a general schedule for completion of the RI activities described above is presented in **Table 6-1**. Not listed are the quarterly Progress Reports to be submitted to Ecology by the 10th day of the month in which they are due.

Table 6-1 Anticipated Schedule of Remedial Investigation Activities

Deliverable/Task	Date
<i>Phase I: Former Pulp and Paper Mill</i>	
Submit Work Plan	January 24, 2025 Within 60 calendar days following effective date of the Agreed Order
Submit Work Plan Addendum I, including updated and refined pCSM, Phase I SAP, QAPP, and HASP	Within 60 calendar days following Ecology's written notification that a Work Plan Addendum is necessary
Initiate implementation of Work Plan Addendum I	Within 30 days following Ecology approval of Work Plan Addendum I
Complete Work Plan Addendum I Fieldwork	Within 12 months following Ecology approval of Work Plan Addendum I
Submit Phase I RIR	Within 90 calendar days following final receipt of Phase I laboratory data
<i>Phase II: Rennie Island Impoundments</i>	
Submit Work Plan Addendum II, including Phase II SAP	Within 60 calendar days following Ecology's written notification that a Work Plan Addendum is necessary
Initiate implementation of Work Plan Addendum II	Within 30 days following Ecology approval of Work Plan Addendum II
Complete Work Plan Addendum II Fieldwork	Within 12 months following Ecology approval of Work Plan Addendum II
Submit Phase II RIR	Within 90 calendar days following final receipt of Phase II laboratory data
<i>Phase III: Hoquiam River and Grays Harbor</i>	
Submit Work Plan Addendum III, including Phase III SAP	Within 60 calendar days following Ecology's written notification that a Work Plan Addendum is necessary
Initiate implementation of Work Plan Addendum III	Within 30 days following Ecology approval of Work Plan Addendum III



Deliverable/Task	Date
Complete Work Plan Addendum III Fieldwork	Within 12 months following Ecology approval of Work Plan Addendum III
Submit Phase III RIR	Within 90 calendar days following final receipt of Phase III laboratory data



7 Key Project Personnel

The roles and responsibilities of key project team members are presented in **Table 7-1** below. Ecology will be notified in writing if changes to roles and/or responsibilities change for key project team members.

Table 7-1 Roles and Responsibilities of Key Project Team Members

Title/Role	Name	Organization	Responsibilities
Ecology Project Manager	Emily Toffol	Ecology	Oversees the project on behalf of the Washington State Department of Ecology
Project Coordinator	Warren Snyder	RAMP	Oversees, organizes, and communicates project information and tasks between Ecology and the project team
Consultant Project Coordinator	Greg Murphy	EHS Support	Oversees project execution amongst consultant project team
Consultant Project Manager	Catharine Parker	EHS Support	Supervises, coordinates, and manages all work for the project, including planning, scheduling, and project financials
Licensed Geologist	Timothy Davis	EHS Support	Supervises and directs all geologic and hydrogeologic work for the project
Consulting Technical Support	Rob Webb; Tasya Gray	Dalton, Olmsted & Fuglevand (“DOF”)	Provides technical support and review of technical deliverables
Analytical Quality Control Manager	Amy Coats	EHS Support	Performs or coordinates data validation, consults on project chemistry issues (e.g., lab and method selection)
Data Validator	Amy Coats or designee	EHS Support	Performs data review/data validation sufficient to meet goals of the study
Field Investigation Execution	Multiple	EHS Support & DOF	Leads, coordinates, and executes field activities
Health and Safety Manager	Gregg Hicks	EHS Support	Responsible for review and implementation of the project Health and Safety Plan



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Figures



Legend

- Approximate Upland Site Boundary
- Rennie Island Impoundments

Grays Harbor

Rennie Island

Washington

Site Location

Site Location

Site Location

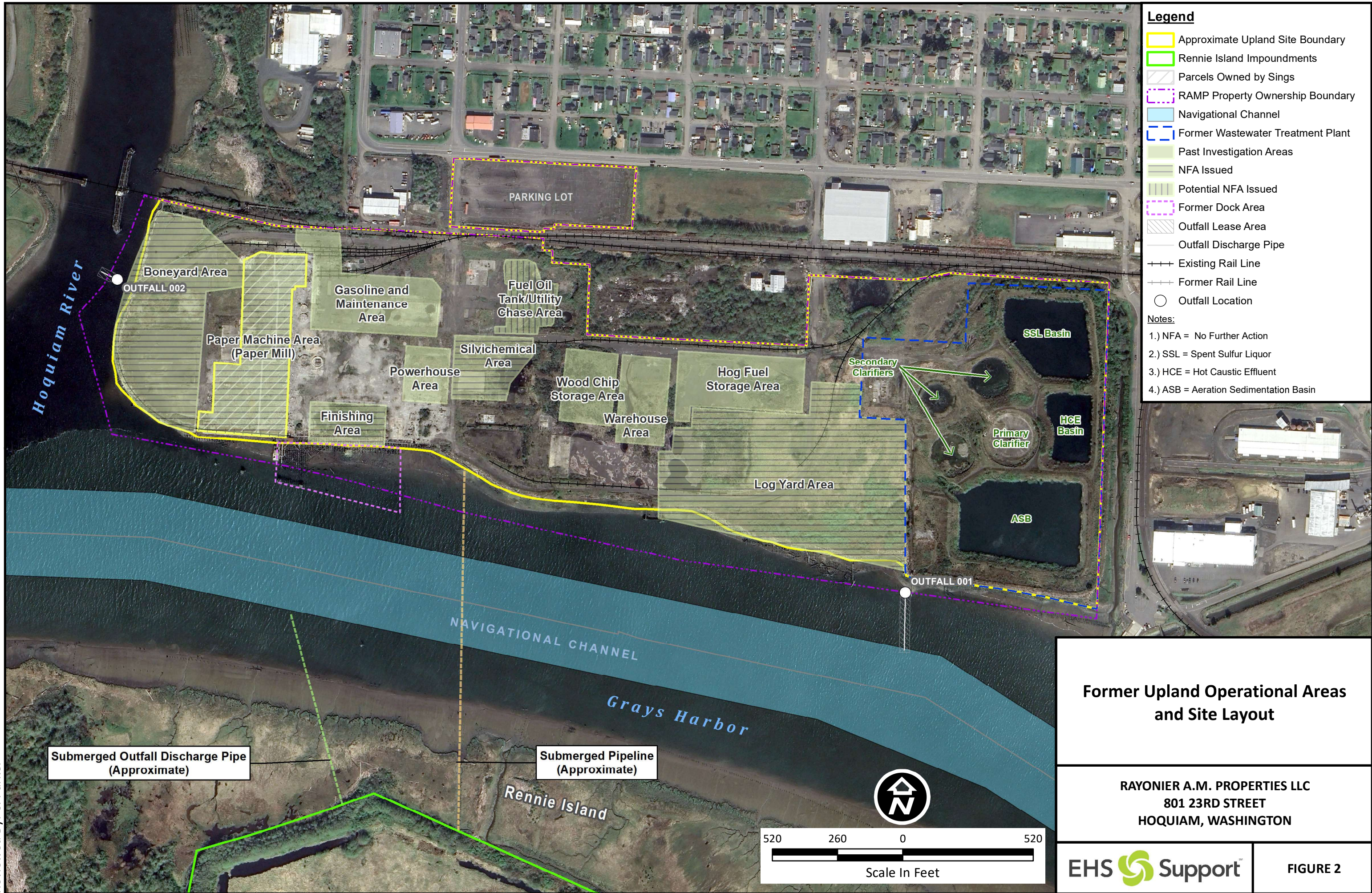
RAYONIER A.M. PROPERTIES LLC
801 23RD STREET
HOQUIAM, WASHINGTON

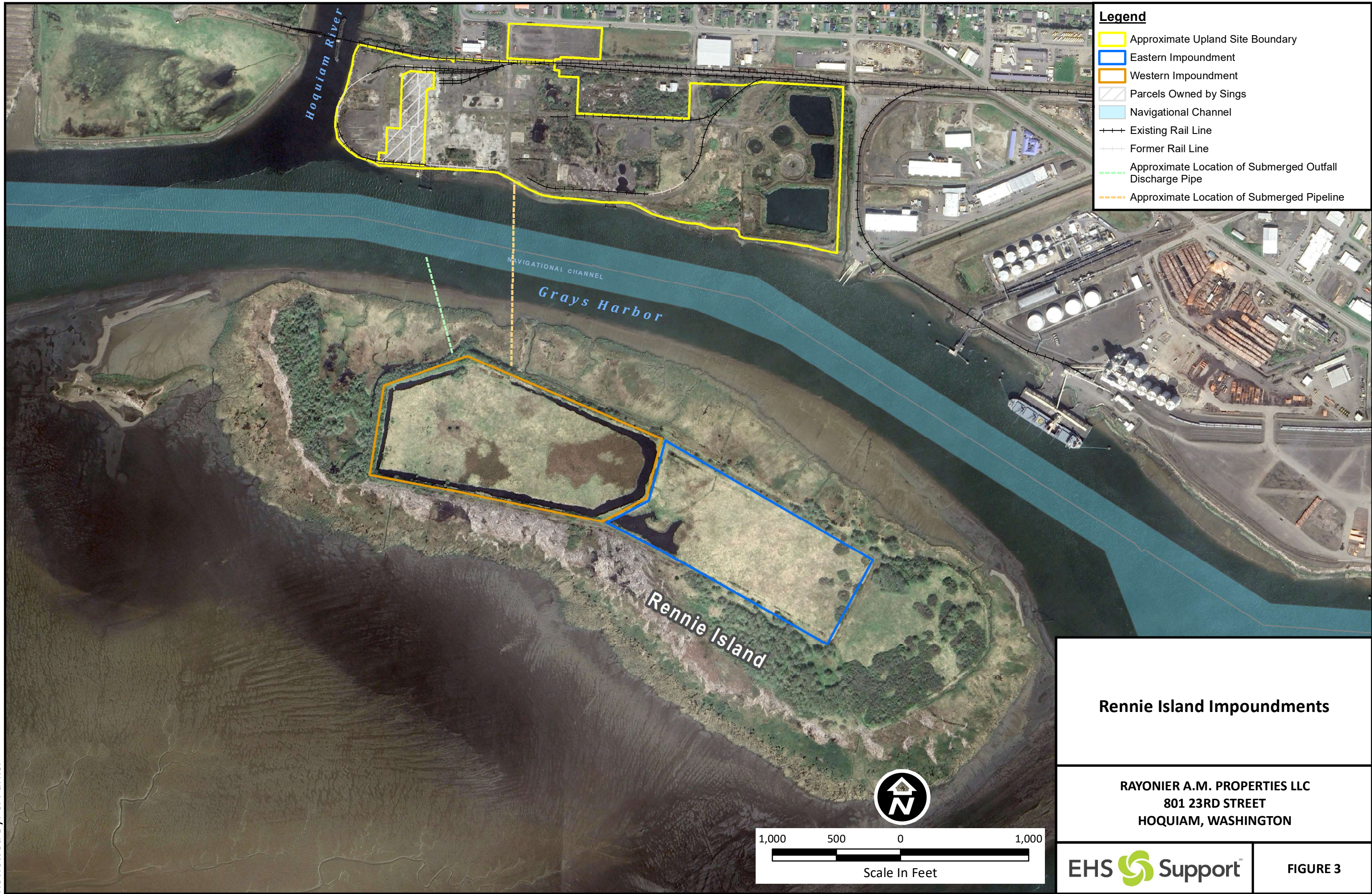


FIGURE 1



Reviewed By: C. Parker







Legend

- Past Investigation Areas
- NFA Issued
- Potential NFA Issued
- ASB Closure Complete

Restrictive Covenants

- Parcel A
- Parcel B
- Parcel C
- Parcel D

Interim Actions

- Approximate Soil Excavation Areas
- Asphalt Cap

Notes:

- 1.) Parcels surveyed by Berglund, Schmidt & Associates, Inc. in 1993.
- 2.) Restrictive covenants identify areas of the Site restricted to industrial purposes only, as defined by the City of Hoquiam; prohibit potable use of groundwater; and require notice be given to Ecology prior to future sale of the property.
- 3.) ASB = Aeration Sedimentation Basin
- 4.) NFA = No Further Action
- 5.) In 2014, the ASB was drained and bottom solids dredged for off-site disposal by the Grays Harbor Public Utility District.

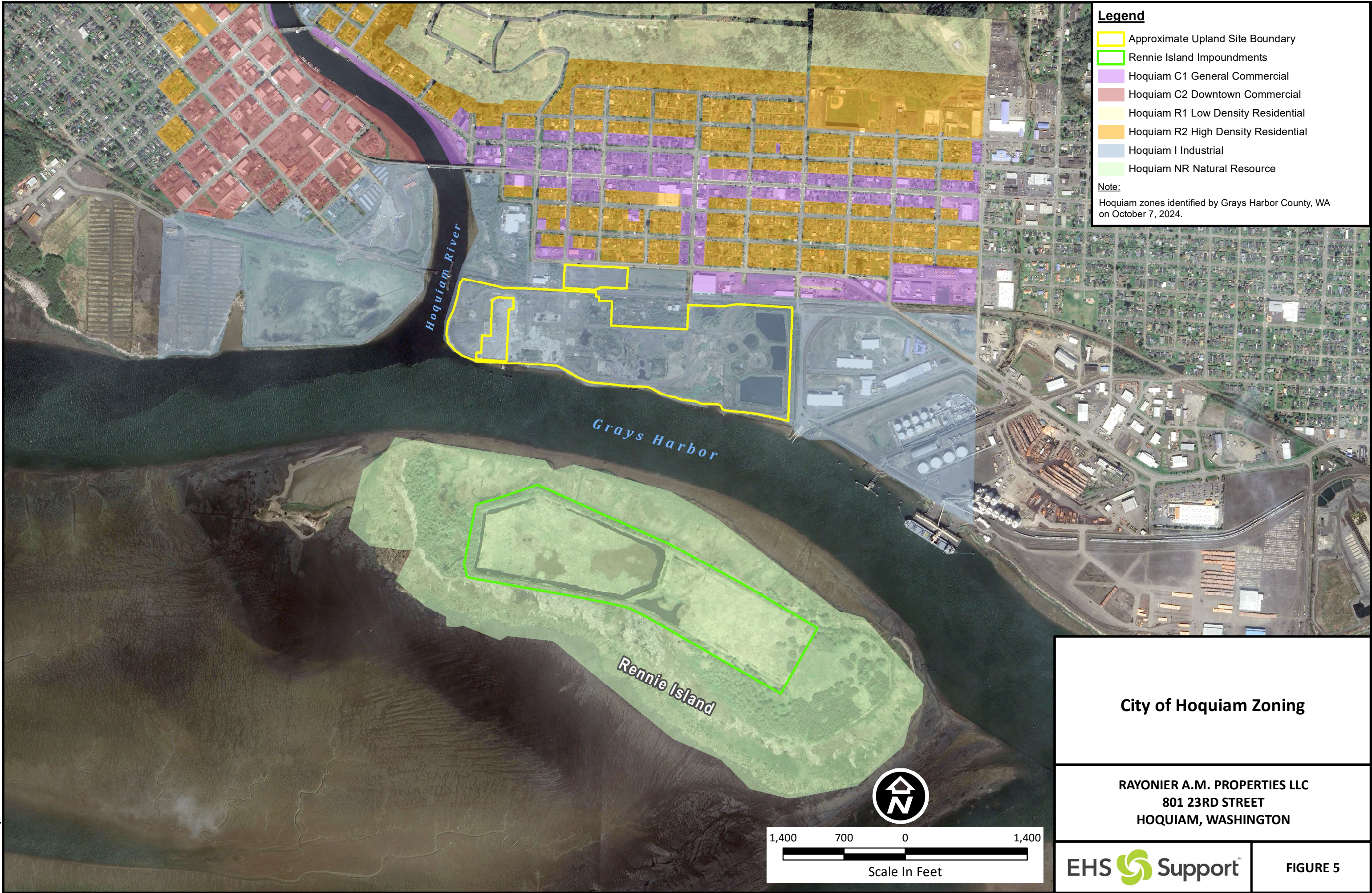
Interim Actions, NFAs, and Restrictive Covenants

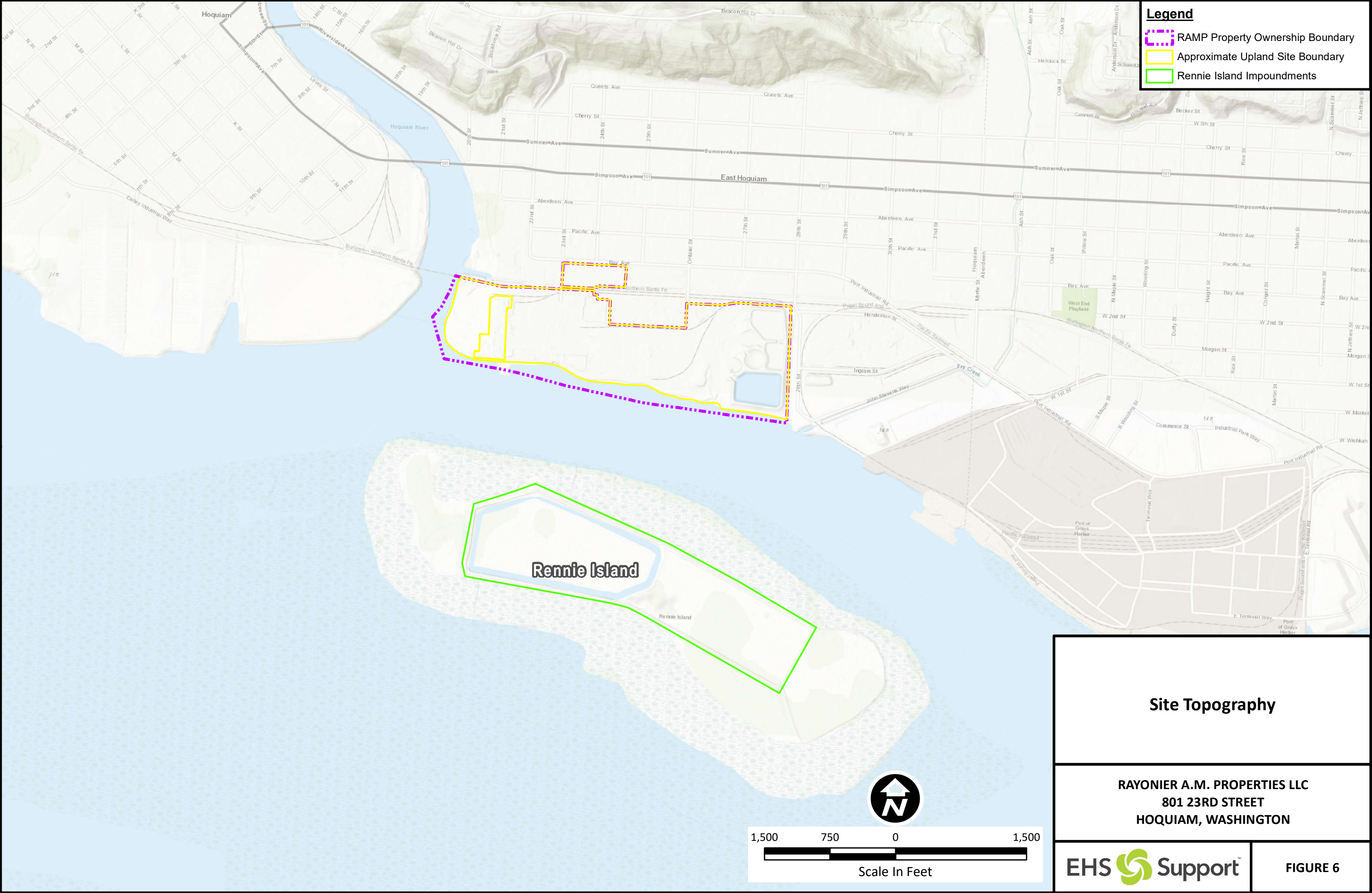
RAYONIER A.M. PROPERTIES LLC
801 23RD STREET
HOQUIAM, WASHINGTON

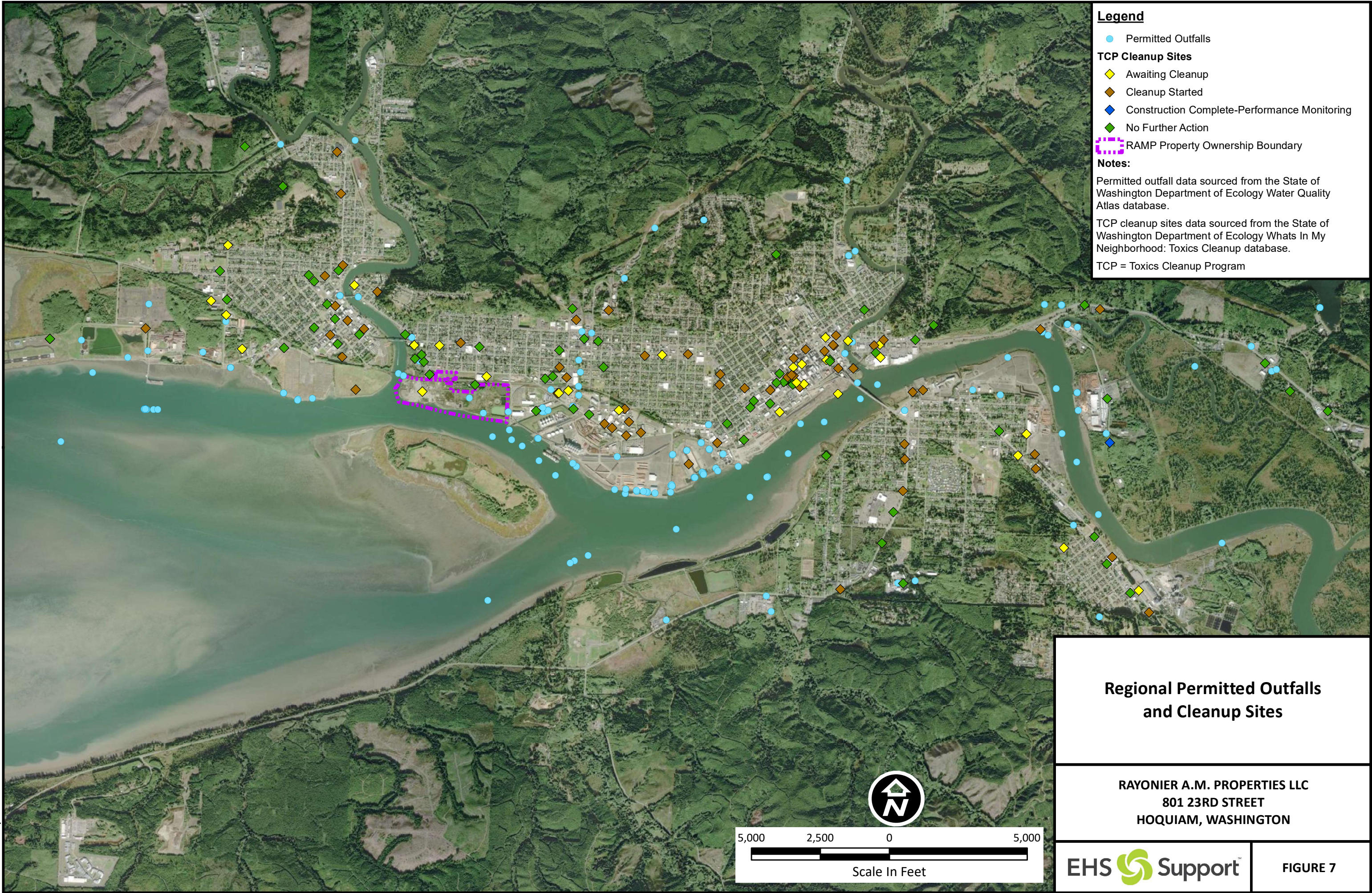


FIGURE 4







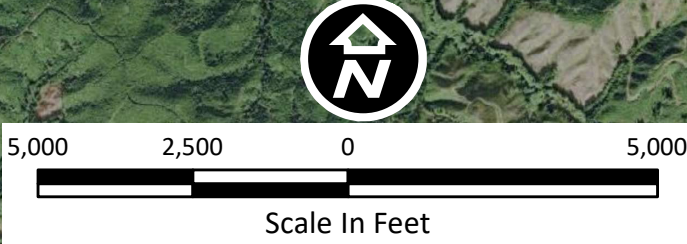


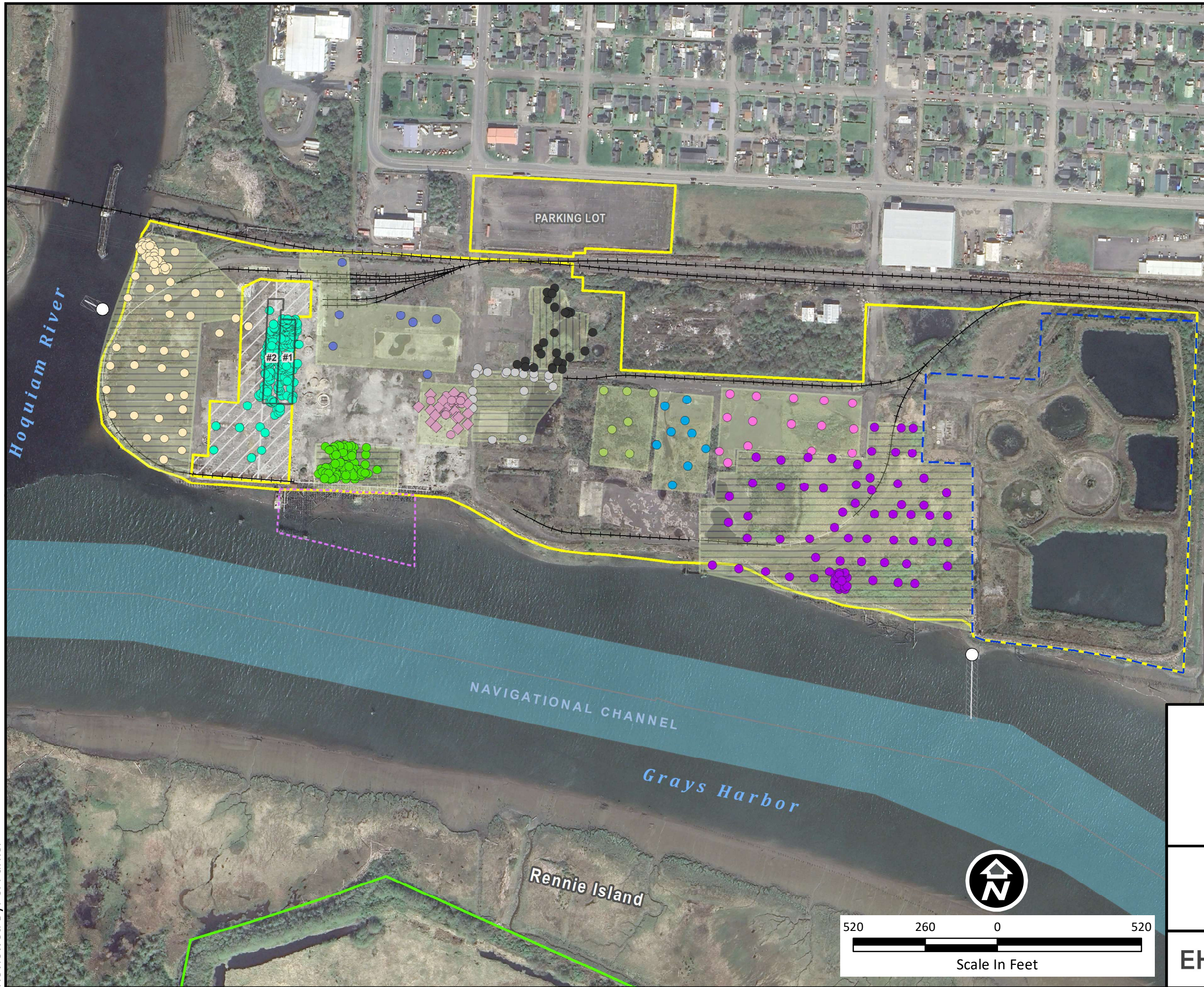
**Regional Permitted Outfalls
and Cleanup Sites**

**RAYONIER A.M. PROPERTIES LLC
801 23RD STREET
HOQUIAM, WASHINGTON**



FIGURE 7





Legend

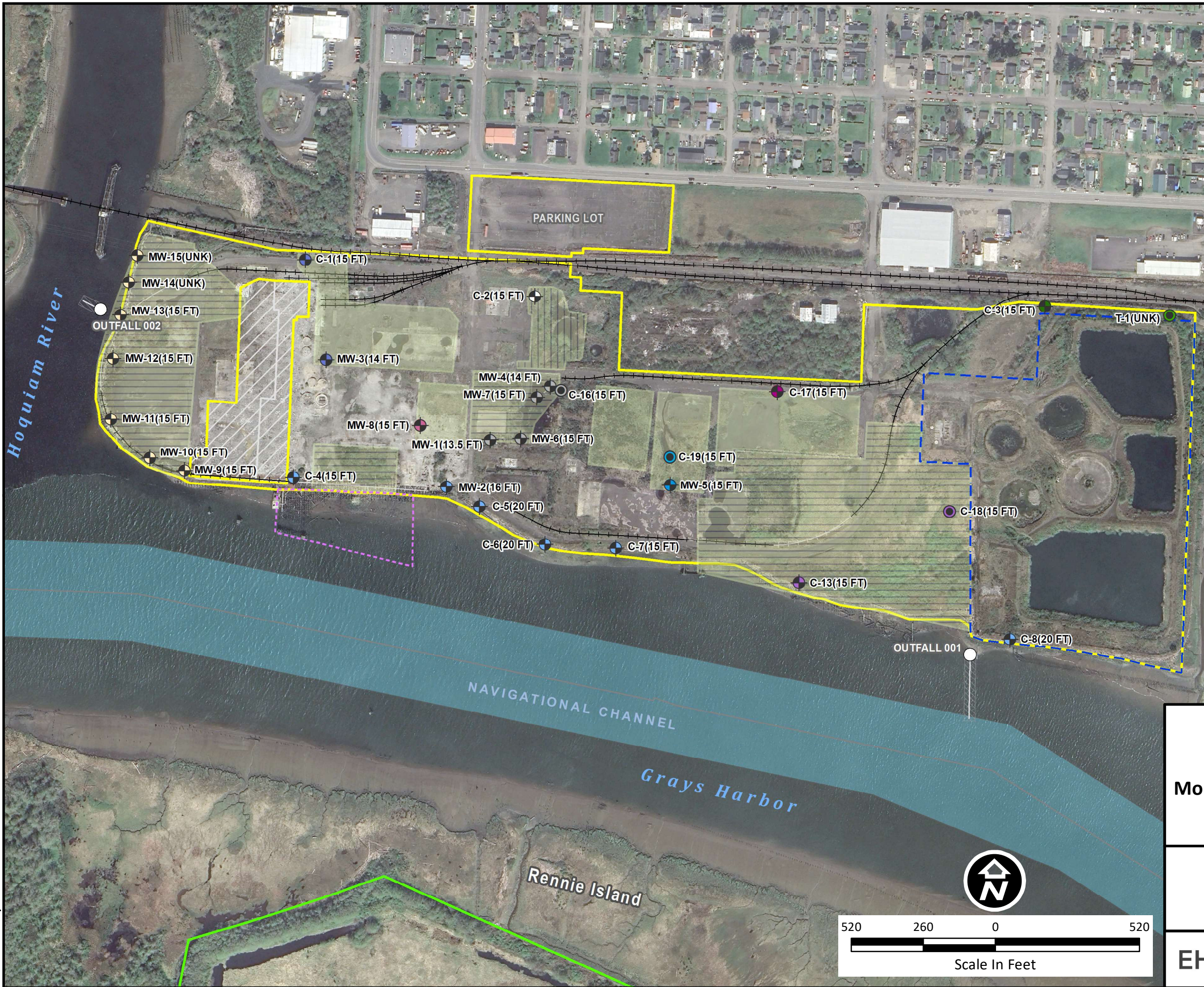
- Approximate Upland Site Boundary
- Rennie Island Impoundments
- Paper Machines #1 and #2
- Parcels Owned by Sings
- Navigational Channel
- Former Wastewater Treatment Plant
- Past Investigation Areas
- NFA Issued
- Potential NFA Issued
- Former Dock Area
- Outfall Lease Area
- Outfall Discharge Pipe
- Existing Rail Line
- Former Rail Line
- Outfall Location
- Boneyard Area Soil Sample Locations
- Finishing Area Soil Sample Locations
- Gasoline and Maintenance Area Soil Sample Locations
- Hog Fuel Area Soil Sample Locations
- Log Yard Area Soil Sample Locations
- Fuel Oil Tank/Utility Chase Area Soil Sample Locations
- Paper Machine Area (Paper Mill) Soil Sample Locations
- Powerhouse Area Soil Sample Locations
- Powerhouse Area NAPL Field Screening Locations
- Silvichemical Area Soil Sample Locations
- Warehouse Area Soil Sample Locations
- Wood Chip Storage Area Soil Sample Locations

Past Upland Site Soil Sample Locations

RAYONIER A.M. PROPERTIES LLC
801 23RD STREET
HOQUIAM, WASHINGTON



FIGURE 8



Past Upland Site Groundwater Monitoring Well Locations and Depths

RAYONIER A.M. PROPERTIES LLC
801 23RD STREET
HOQUIAM, WASHINGTON







Appendix A Restrictive Covenants

3
1
6

990506051

VERN STATE
GRAYS HARBOR CO-AUDITOR

AFTER RECORDING RETURN TO:

'98 MAY 6 AM 10 15

Donald F. Verfurth
Carney, Badley, Smith & Spellman, P.S.
701 Fifth Avenue, Suite 2200
Seattle, WA 98104

RESTRICTIVE COVENANT

The property that is the subject of this Restrictive Covenant has been the subject of a voluntary independent remedial action under RCW Chapter 70.105D 030(i)(f) & (g). This Declaration of Restrictive Covenant is made by Grays Harbor Paper, L.P., its successors and assigns and the State of Washington, Department of Ecology, its successors and assigns (hereafter "Ecology.")

The remedial action consisted of excavating PCB and petroleum contaminated soil and removing it from the site. Clean sand was used for replacement. In addition, the concrete support columns under the existing building were pressure-washed. Where the PCBs could not be removed fully, they were encased in plastic resin.

This restrictive covenant is required by WAC 173-340-440 because the remedial action resulted in residual petroleum and polychlorinated biphenyl (PCB) concentrations which exceeded the Model Toxics Control Act Method A cleanup levels for soil and groundwater as established by WAC 173-340-720 and 740.

The undersigned, Grays Harbor Paper, L.P., is the fee owner of real property in Hoquiam, Grays Harbor County, State of Washington, legally described as follows:

Parcel A:

Tax Parcel Identification No. _____

056400200202

That portion of Lots 2 and 4 in Tract 2 of Hoquiam Tide Lands, as shown on the official plat thereof on file in the Office of the Commissioner of Public Lands at Olympia, Washington, and of that portion, if any, of vacated portion of Railroad (formerly Bay) Avenue, as vacated by Ordinance No. 2102 of the City of Hoquiam, more particularly described as follows:

Beginning at the Southeast corner of said Lot 4 in Tract 2; Thence North, along the East line of said Lot 4 and along the East line of said Lot 2 a distance of 199.196 feet; Thence West a distance of 309.030 feet to the true point of beginning of the tract herein described;
Thence South 0° 28' 42.

9822709

5" West a distance of 33.17 feet;
Thence North 89° 31' 17.5" West a distance of 233.33 feet;
Thence North 0° 28' 42.5" East a distance of 75.17 feet;
Thence South 89° 31' 17.5" East a distance of 53.33 feet;
Thence North 0° 28' 42.5" East a distance of 200 feet;
Thence South 89° 31' 17.5" East a distance of 106.92 feet;
Thence North 0° 28' 42.5" East a distance of 417.45 feet;
Thence North 59° 59' 42.5" East a distance of 74.03 feet;
Thence South 89° 31' 17.5" East a distance of 64.61 feet;
Thence South 0° 28' 42.5" West a distance of 105.00 feet;
Thence North 89° 31' 17.5" West a distance of 18.21 feet;
Thence South 0° 28' 42.5" West a distance of 350.00 feet;
Thence North 89° 31' 17.5" West a distance of 37.12 feet;
Thence South 0° 28' 42.5" West a distance of 242.00 feet to the true point of beginning;
Situate in the County of Grays Harbor, State of Washington

Parcel B:

Tax Parcel Identification No. _____

056400200201

That portion of Lots 2 and 4 in Tract 2 of Hoquiam Tide Lands as shown on Plat 2 of the official map thereof, on file in the Office of Commissioner of Public Lands at Olympia, Washington, more particularly described as follows:

Beginning at the Southeast corner of said Lot 4 in Tract 2; Thence North, along the East line of said Lot 4 and along the East line of said Lot 2, a distance of 199.196 feet;
Thence West a distance of 203.70 feet to the true point of beginning of the tract herein described;

Thence South 0° 28' 42.5" West a distance of 33.17 feet;
Thence North 89° 31' 17.5" West a distance of 105.33 feet;
Thence North 0° 28' 42.5" East a distance of 275.17 feet;
Thence South 89° 31' 17.5" East a distance of 37.12 feet;
Thence North 0° 28' 42.5" East a distance of 350.00 feet;
Thence South 89° 31' 17.5" East a distance of 18.21 feet;
Thence North 0° 28' 42.5" East a distance of 105.00 feet;
Thence South 89° 31' 17.5" East a distance of 118.00 feet;
Thence South 0° 28' 42.5" West a distance of 127.00 feet;
Thence North 89° 31' 17.5" West a distance of 40.00 feet;
Thence South 0° 28' 42.5" West a distance of 10.00 feet;
Thence North 89° 31' 17.5" West a distance of 28.00 feet;
Thence South 0° 28' 42.5" West a distance of 560.00 feet, to the point of beginning;

Situate in County of Grays Harbor, State of Washington.

and hereafter referred to as the "Property." Grays Harbor Paper, L.P. makes the following declaration as to limitations, restrictions, and uses to which the Property may be put, and specifies that such declarations shall constitute covenants to run with the land, as provided by law, and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or any interest in the Property (hereafter "Owner.")

Section 1: A portion of the Property contains soil contaminated by PCB's, located under the western side of the building extending to the center of the building. The Owner shall not alter, modify or remove the existing structure in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology.

Section 2: The Property shall be used only for traditional industrial uses as defined in and allowed under City of Hoquiam Ordinance 10.24.090 as of the date of this covenant, and RCW 70.105D.020(23). In addition, groundwater from the Property shall not be utilized for agricultural or domestic uses nor for drinking water purposes.

Section 3: Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.

Section 4: The Owner of the Property must give thirty (30) days advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.

Section 5: The Owner must restrict leases to uses and activities consistent with the Restrictive Covenant and notify all lessees of the restrictions of the use of the Property.

Section 6: The Owner must notify and obtain approval from Ecology or a successor agency, thirty (30) days prior to any use of the property that is inconsistent with the terms of this Restrictive Covenant. If Ecology approves the proposed changes of use this Restrictive Covenant must be amended to reflect the change.

Section 7: The Owners of the Property and the Owner's assigns and successors in interest reserve the right to record an instrument providing that the restrictive covenants contained in this instrument shall no longer limit the use of the Property or be of any further force or effect. However, such an instrument may be recorded only with the consent of Ecology.

Dated this 22 day of April, 1998.

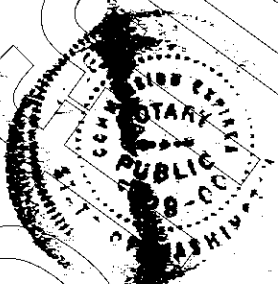
GRAYS HARBOR PAPER, L.P.

By William Adams
Its: President

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

On this 22 day of April, 1998, before me personally appeared Wm Adams, to me known to be the individual who executed the within and foregoing instrument, and acknowledged said instrument to be _____ free and voluntary act and deed, for the uses and purposes therein mentioned.

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



Valerie Maxfield
Valerie Maxfield
(Print Name)
Notary Public in and for the State of Washington
residing at Casimopolis
My Commission Expires: 5-29-2000

G:\docs\j\RESTRICTIVE COVENANT.doc

Rayonier

Specialty Pulp Products

Research Center

December 20, 1996

Marc Crooks
Washington Dept. of Ecology
715 Woodview Drive, SE
Lacey, WA 98504-7706

RE: Grays Harbor Mill Site - Boiler Area

Dear Mr. Crooks:

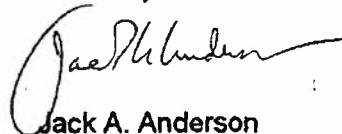
Rayonier has completed its remediation of the known contamination at its former Grays Harbor pulp mill site with the exception of the area under the power boilers.

Within the small crawl space (~ two feet) under the boilers' concrete slab, is a layer of hard, immobile #6 oil. Satisfactory removal of the material while the boilers are operation would be very difficult and very dangerous. Since the material is immobile and "encapsulated", it our intent to leave the material undisturbed until the boilers are no longer in use and can be removed.

As an additional safeguard, the restrictive covenant Rayonier is preparing for the Grays Harbor site will show that the boiler area property cannot be sold without notification being provided to Washington DOE. This restriction will ensure that DOE is able to review any future sale of the property. The restrictive covenant has been submitted for recording and we anticipate sending to you a copy of the recorded document as soon as we receive it.

Should you have any additional comments please call or contact me at your convenience.

Sincerely,



Jack A. Anderson

cc: Dennis Snyder - Stamford
Don Schwendiman
Dana Dolloff - Stamford

4474 Savannah Highway • P. O. Box 1278 • Jesup, GA 31545
Telephone (912) 588-8000 • Fax (912) 588-8300

JAN. 31. 1997 4:46PM

RAYONIER

NO. 0354 P. 2/5

970113007

WASHINGTON STATE COUNTY AUDITOR/RECORDER'S
INDEXING FORM (Cover Sheet)

Return Address
Rayonier Inc.
P.O. Box 34162
Seattle, WA 98124-1162

A-130593

VERN SPATZ
GRAYS HARBOR CO. AUDITOR

'97 JAN 10 PM 2 11

FILED REQUEST OF:

Rayonier Inc

Please print or type information

Document Title(s) (or transactions contained therein):

1. Restrictive Covenant
- 2.
- 3.
- 4.

Reference Number(s) of Documents assigned or released:

1. N/A
- 2.
3. ☐ Additional references on page ___ of document.

Grantor(s) (Last name first, then first name and initials):

1. GHP Leasing Co.
- 2.
- 3.
- 4.
5. ☐ Additional names on page ___ of document.

Grantee(s) (last name first, then first name and initials):

1. N/A
- 2.
- 3.
- 4.
5. ☐ Additional names on page ___ of document.

Legal description (abbreviated: i.e. lot, block, plat or section, township, range):

A portion of Lots 2 and 4 in Tract 2 of Hoquiam Tide Lands, Grays Harbor
County

☐ Additional legal is on page(s) 1 and 2 of document.

Assessor's Property Tax Parcel/Account Number(s): 056400200300

The Auditor/Recorder will rely on the information provided on the form. The staff will not read the document to verify the accuracy or completeness of the indexing information provided herein.

97 00718

AFTER RECORDING RETURN TO:

Donald L. Schwendiman
Rayonier Inc.
P.O. Box 34162
Seattle, WA 98124

RESTRICTIVE COVENANT

The property that is the subject of this restrictive covenant has been the subject of a voluntary independent remedial action under Chapter 70.105D RCW. This restrictive covenant is required by WAC 173-380-440 because the remedial action resulted in residual petroleum and polychlorinated biphenyl (PCB) which exceeded the Model Toxics Control Act Method A cleanup levels.

The undersigned, GHP Leasing Co., fee owner of real property in Hoquiam, Grays Harbor County, State of Washington, legally described as follows:

Parcel A:

That portion of Lots 2 and 4 in Tract 2 of Hoquiam Tide Lands, as shown on the official plat thereof on file in the Office of the Commissioner of Public Lands at Olympia, Washington, and of that portion, if any, of vacated portion of Railroad (formerly Bay) Avenue, as vacated by Ordinance No. 2102 of the City of Hoquiam, more particularly described as follows:

Beginning at the Southeast corner of said Lot 4 in Tract 2; Thence North, along the East line of said Lot 4 and along the East line of said Lot 2 a distance of 199.196 feet; Thence West a distance of 309.030 feet to the true point of beginning of the tract herein described;

Thence South 0° 28' 42.5" West a distance of 33.17 feet;
Thence North 89° 31' 17.5" West a distance of 233.33 feet;
Thence North 0° 28' 42.5" East a distance of 75.17 feet;
Thence South 89° 31' 17.5" East a distance of 53.33 feet;
Thence North 0° 28' 42.5" East a distance of 200 feet;
Thence South 89° 31' 17.5" East a distance of 106.92 feet;
Thence North 0° 28' 42.5" East a distance of 417.45 feet;
Thence North 59° 59' 42.5" East a distance of 74.03 feet;
Thence South 89° 31' 17.5" East a distance of 64.61 feet;
Thence South 0° 28' 42.5" West a distance of 105.00 feet;

Thence North 89° 31' 17.5" West a distance of 18.21 feet;
Thence South 0° 28' 42.5" West a distance of 350.00 feet;
Thence North 89° 31' 17.5" West a distance of 37.12 feet;
Thence South 0° 28' 42.5" West a distance of 242.00 feet to the true point
of beginning;
Situate in the County of Grays Harbor, State of Washington

Parcel B:

That portion of Lots 2 and 4 in Tract 2 of Hoquiam Tide Lands as shown on
Plat 2 of the official map thereof, on file in the Office of Commissioner of
Public Lands at Olympia, Washington, more particularly described as
follows:

Beginning at the Southeast corner of said Lot 4 in Tract 2; Thence North,
along the East line of said Lot 4 and along the East line of said Lot 2, a
distance of 199.196 feet; Thence West a distance of 203.70 feet to the true
point of beginning of the tract herein described;

Thence South 0° 28' 42.5" West a distance of 33.17 feet;
Thence North 89° 31' 17.5" West a distance of 105.33 feet;
Thence North 0° 28' 42.5" East a distance of 275.17 feet;
Thence South 89° 31' 17.5" East a distance of 37.12 feet;
Thence North 0° 28' 42.5" East a distance of 350.00 feet;
Thence South 89° 31' 17.5" East a distance of 18.21 feet;
Thence North 0° 28' 42.5" East a distance of 105.00 feet;
Thence South 89° 31' 17.5" East a distance of 118.00 feet;
Thence South 0° 28' 42.5" West a distance of 127.00 feet;
Thence North 89° 31' 17.5" West a distance of 40.00 feet;
Thence South 0° 28' 42.5" West a distance of 10.00 feet;
Thence North 89° 31' 17.5" West a distance of 28.00 feet;
Thence South 0° 28' 42.5" West a distance of 560.00 feet, to the point of
beginning;

Situate in County of Grays Harbor, State of Washington.

hereafter referred to as the "Property", makes the following declaration as to limitations,
restrictions, and uses to which the Property may be put, and specifies that such declarations
shall constitute covenants to run with the land, as provided by law, and shall be binding on
all parties and all persons claiming under them, including all current and future owners of
any portion of or interest in the Property.

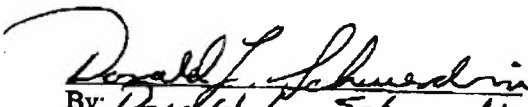
Section 1. The Property shall be used only for industrial purposes, as defined in the City of Hoquiam zoning code. In addition, ground water from the Property shall not be utilized for drinking purposes.

Section 2. The owner of the Property must give notice to the Department of Ecology, or successor agency, of the owner's intent to convey any interest in the Property.

Section 3. The owner must notify and obtain approval from the Department of Ecology, or to a successor agency, prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant. If the Department of Ecology approves the proposed changes of use this restrictive covenant must be amended to reflect the change.

Section 4. The owners of the Property and the owner's assigns and successors in interest reserve the right to record an instrument providing that the restrictive covenants contained in this instrument shall no longer limit the use of the Property or be of any further force or effect. However, such an instrument may be recorded only with the consent of the Department of Ecology, or of a successor agency.

GHP LEASING CO.


By: Donald L. Schwendman
Its: Attorney-in-fact

Date: January 9, 1997

1
3
970102166

AFTER RECORDING RETURN TO:

A130593
Donald L. Schwendiman
Rayonier Inc.
P.O. Box 34162
Seattle, WA 98124

RESTRICTIVE COVENANT

The property that is the subject of this restrictive covenant has been the subject of a voluntary independent remedial action under Chapter 70.105D RCW. This restrictive covenant is required by WAC 173-380-440 because the remedial action resulted in residual petroleum and lead which exceeded the Model Toxics Control Act Method A cleanup levels.

The undersigned, Rayonier Inc., fee owner of real property in Hoquiam, Grays Harbor County, State of Washington, described in Exhibit A, attached hereto and by this reference made a part hereof, hereafter referred to as the "Property", makes the following declaration as to limitations, restrictions, and uses to which the Property may be put, and specifies that such declarations shall constitute covenants to run with the land, as provided by law, and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property.

Section 1. The Property shall be used only for industrial purposes, as defined in the City of Hoquiam zoning code. In addition, ground water from the Property shall not be utilized for drinking purposes.

Section 2. The owner of the Property must give notice to the Department of Ecology, or successor agency, of the owner's intent to convey any interest in the Property.

Section 3. The owner must notify and obtain approval from the Department of Ecology, or to a successor agency, prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant. If the Department of Ecology approves the proposed changes of use this restrictive covenant must be amended to reflect the change.

Section 4. The owners of the Property and the owner's assigns and successors in interest reserve the right to record an instrument providing that the restrictive covenants contained in this instrument shall no longer limit the use of the Property or be of any further force or effect. However, such an instrument may be recorded only with the consent of the Department of Ecology, or of a successor agency.

Dated this 9th day of December, 1996.

RAYONIER INC.

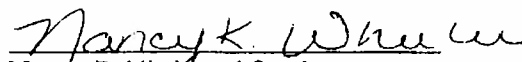


Donald L. Schwendiman
Assistant Secretary

State of Washington)
)ss.
County of King)

I certify that I know or have satisfactory evidence that Donald L. Schwendiman is the person who appeared before me, and that said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute this instrument and acknowledged it as the Assistant Secretary of Rayonier Inc. to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Given under my hand and official seal this 30th day of December 1996.


Notary Public in and for the
State of Washington
Residing at Rayonier

My appointment expires: 7/9/99

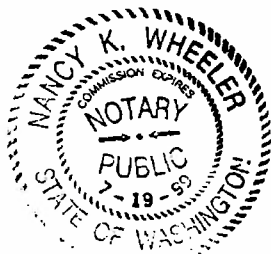


EXHIBIT A

PARCEL "A"

A portion of Blocks Twenty-Seven thru Block Thirty-One, Edward Campbell's Addition to the City of Hoquiam, as per plat recorded in Volume 2 of Plats, page 11, Records of Grays Harbor County, State of Washington;

TOGETHER with vacated streets and alleys as would attach by operation of law;

ALSO a portion of Block 56 and Block 61 thru 63, Ontario Addition to the City of Hoquiam, as recorded in Volume 3 of Plats, page 42, Records of Grays Harbor County;

TOGETHER with vacated streets and alleys as would attach by operation of law;

The perimeter of the above being more particularly described as follows:

Beginning at the Southwest corner of Block 31 of said Plat of Edward Campbell's Addition;
Thence North 86°31'44" West along the Southerly boundary of said plat also being coincident with the Hoquiam Tidelands meander line a distance of 14.93 feet to an angle point;
Thence continue along said plat boundary North 46°31'44" West a distance of 499.86 feet to the Southwest corner of Block 30 of said Edward Campbell's Addition;
Thence continue North 46°31'44" West a distance of 150.45 feet to an intersection with the centerline of vacated Railroad Avenue;
Thence North 90°00'00" East along said centerline a distance of 69.96 feet to an intersection with the centerline of Vacated 22nd Street;
Thence North 0°25'45" East along said centerline of 22nd Street a distance of 0.24 feet to the centerline of Vacated Railroad Avenue bearing East;
Thence South 89°35'37" East along said centerline of Railroad Avenue a distance of 190.14 feet to a point Southerly of the Southwest corner of Lot 10, Block 27, of said Edward Campbell's Addition;
Thence North 0°25'57" East a distance of 301.45 feet to the Southerly right-of-way line of Bay Avenue;
Thence South 89°35'37" East along said right-of-way line a distance of 120.15 feet;
Thence continue along right-of-way South 48°23'43" East a distance of 53.14 feet;
Thence continue along right-of-way South 89°35'37" East a distance of 60.00 feet;
Thence continue along right-of-way North 49°13'59" East a distance of 53.16 feet;

Thence continue along right-of-way South 89°35'37" East a distance of 660.18 feet to the Northeast corner of Lot 4, Block 56 of said Ontario Addition;
 Thence leave right-of-way South 0°25'47" West a distance of 242.00 feet to the Southeast corner of Lot 15 of said Block 56;
 Thence North 89°35'37" West along the South line of said Block 56 and its Westerly extension a distance of 349.92 feet to the centerline of Vacated 24th Street;
 Thence South 0°26'29" West along said centerline a distance of 145.86 feet;
 Thence South 89°35'05" East parallel to and 46.0 feet Southerly of the North line of Block 61 of said Ontario Addition a distance of 189.94 feet;
 Thence South 0°27'01" West a distance of 286.02 feet to the South line of said Block 61;
 Thence South 89°34'10" East along said South line a distance of 875.38 feet to the centerline of Vacated Ontario Street;
 Thence continue South 89°34'10" East a distance of 1201.13 feet to a point 70.0 feet West of the Northeast corner of Block 64 of said Ontario Addition;
 Thence South 0°00'00" East parallel with the East line of Block 64 a distance of 6.91 feet to an intersection with the Hoquiam Tidelands meander line according to the official plat thereof on file in the office of the Commissioner of Public Lands at Olympia, Washington;
 Thence South 78°28'16" West along said meander line a distance of 790.52 feet to an angle point;
 Thence continue along meander line North 86°31'44" West a distance of 1535.27 feet to the Southeast corner of Block 31 of said Plat of Edward Campbell's Addition;
 Thence continue along said meander line North 86°31'44" West a distance of 300.64 feet to the Point of Beginning.

EXCEPT:

Lots 1, 2, 3, 10, 11 and 12, Block 27, Campbell's Addition to the City of Hoquiam, as per plat recorded in Volume 2 of Plats, page 11, records of Grays Harbor County, TOGETHER WITH the vacated 10 foot strip of 23rd Street along the East side of Lots 1 and 12, and the North Half of vacated Railroad Avenue along the South side of Lots 10-12; AND the South 9.55 feet of vacated Bay Avenue along the North side of Lots 1, 2, and 3; AND the vacated alley along said Lots 1, 2, 3, 10, 11 and 12; EXCEPT that portion conveyed to the City of Hoquiam by Quit Claim Deed dated July 31, 1967 recorded December 28, 1967 as Auditor's File No. 198257, records of Grays Harbor County; Situate in the County of Grays Harbor, State of Washington.

PARCEL "B"

Block 60 of Ontario Addition to the City of Hoquiam, as per plat recorded in Volume 3 of Plats, page 42, records of Grays Harbor County;

TOGETHER with one-half Vacated Ontario Street abutting thereon that would attach by operation of law;

TOGETHER with Vacated Railroad Avenue "A";

EXCEPT the East 70 feet as conveyed to the City of Hoquiam for street purposes;

ALSO EXCEPT the North 46 feet of Railroad right-of-way West of Northern Pacific Railroad Spur Track;

ALSO EXCEPT the North 12 feet of Railroad right-of-way East of Northern Pacific Railroad Spur Track;

ALSO EXCEPT Northern Pacific Railroad Spur Track to Posey's;

Situate in the County of Grays Harbor, State of Washington.

PARCEL "C"

Portions of Tracts 1 and 2, Vacated Waterway No. 1, Vacated Railroad Avenue and Vacated 22nd Street, Hoquiam Tide and Shorelands, according to the official plat thereof on file in the Office of the Commissioner of Public Lands at Olympia, Washington, being more particularly described as follows:

Beginning at the Southeast corner of Lot 4, said Tract 2;
Thence North 80°51'22" West along the Southerly line of said Lot 4 also being the Inner Harbor Line a distance of 213.81 feet;
Thence continue along said Inner Harbor Line North 83°39'29" West a distance of 685.22 feet;
Thence continue along Inner Harbor Line North 16°08'30" West a distance of 494.93 feet;
Thence continue along Inner Harbor Line North 37°51'30" East a distance of 199.31 feet;
Thence continue along Inner Harbor Line North 34°00'09" East a distance of 162.66 feet;
Thence continue along Inner Harbor Line North 09°46'07" East a distance of 202.66 feet;
Thence leave said Inner Harbor Line and continue South 80°39'00" East along the centerline of vacated Railroad Avenue a distance of 297.37 feet;
Thence continue South 80°39'00" East along said centerline a distance of 203.57 feet;
Thence continue along said centerline North 90°00'00" East a distance of 253.56 feet to an intersection with the Hoquiam Tidelands meander line;
Thence South 46°31'44" East along said meander line a distance of 146.17 feet to an intersection with the Easterly line of Vacated 22nd Street;
Thence continue along meander line South 46°31'44" East a distance of 504.13 feet;
Thence continue along meander line South 86°31'44" East a distance of 14.17 feet to the Northwest corner of Vacated Waterway No. 1;

96 48853

Thence continue South 00°00'00" West along the West line of Vacated Waterway No. 1 to its intersection with the Inner Harbor Line;

Thence continue along Inner Harbor Line North 80°51'21" West a distance of 384.89 feet to the Southwest corner of Lot 3, of said Tract 2;

Thence continue along Inner Harbor Line North 80°51'21" West a distance of 81.03 feet to the Point of Beginning.

EXCEPT that parcel described as follows:

That portion of Lots 2 and 4 in Tract 2 of Hoquiam Tide Lands, as shown on the official plat thereof on file in the Office of the Commissioner of Public Lands at Olympia, Washington, and of that portion, if any, of vacated portion of Railroad (formerly Bay) Avenue, as vacated by Ordinance No. 2102 of the City of Hoquiam, more particularly described as follows:

Beginning at the Southeast corner of said Lot 4 in Tract 2; Thence North, along the East line of said Lot 4 and along the East line of said Lot 2 a distance of 199.196 feet;

Thence West a distance of 309.030 feet to the true point of beginning of the tract herein described;

Thence South 0°28'42.5" West a distance of 33.17 feet;
Thence North 89°31'17.5" West a distance of 233.33 feet;
Thence North 0°28'42.5" East a distance of 75.17 feet;
Thence South 89°31'17.5" East a distance of 53.33 feet;
Thence North 0°28'42.5" East a distance of 200 feet;
Thence South 89°31'17.5" East a distance of 106.92 feet;
Thence North 0°28'42.5" East a distance of 417.45 feet;
Thence North 59°59'42.5" East a distance of 74.03 feet;
Thence South 89°31'17.5" East a distance of 64.61 feet;
Thence South 0°28'42.5" West a distance of 105.00 feet;
Thence North 89°31'17.5" West a distance of 18.21 feet;
Thence South 0°28'42.5" West a distance of 350.00 feet;
Thence North 89°31'17.5" West a distance of 37.12 feet;
Thence South 0°28'42.5" West a distance of 242.00 feet to the true point of beginning;

Situate in the County of Grays Harbor, State of Washington.

That portion of Lots 2 and 4 in Tract 2 of Hoquiam Tide Lands as shown on Plat 2 of the official map thereof on file in the Office of the Commissioner of Public Lands at Olympia, Washington, more particularly described as follows:

Beginning at the Southeast corner of said Lot 4 in Tract 2; Thence North, along the East line of said Lot 4 and along the East line of said Lot 2, a distance of 199.196 feet; Thence West a distance of 203.70 feet to the true point of beginning of the tract herein described;

Thence South 0°28'42.5" West a distance of 33.17 feet;
 Thence North 89°31'17.5" West a distance of 105.33 feet;
 Thence North 0°28'42.5" East a distance of 275.17 feet;
 Thence South 89°31'17.5" East a distance of 37.12 feet;
 Thence North 0°28'42.5" East a distance of 350.00 feet;
 Thence South 89°31'17.5" East a distance of 18.21 feet;
 Thence North 0°28'42.5" East a distance of 105.00 feet;
 Thence South 89°31'17.5" East a distance of 118.00 feet;
 Thence South 0°28'42.5" West a distance of 127.00 feet;
 Thence North 89°31'17.5" West a distance of 40.00 feet;
 Thence South 0°28'42.5" West a distance of 10.00 feet;
 Thence North 89°31'17.5" West a distance of 28.00 feet;
 Thence South 0°28'42.5" West a distance of 560.00 feet, to
 the point of beginning;
 Situate in the County of Grays Harbor, State of Washington.

PARCEL "D"

Portions of Tract 1, Vacated Waterway No. 1, Vacated Ontario Street and Vacated Railroad Avenue "A", Hoquiam Tide and Shorelands, accodring to the official plat thereof on file in the Office of the Commissioner of Public Lands at Olympia, Washington, being more particularly described as follows:

Commencing at the Southeast corner of Lot 2, said Tract 1;
 Thence North 84°52'37" West along the South line of said Lot 2, also being the Inner Harbor Line, a distance of 70.28 feet to the True Point of Beginning;
 Thence North 00°00'00" West parallel and 70.00 feet Westerly of the East line of said Tract 1 a distance of 979.45 feet to its intersection with the Hoquiam Tidelands meander line;
 Thence South 78°28'16" West along said meander line a distance of 790.52 feet to an angle point;
 Thence North 86°31'44" West along the meander line a distance of 1536.13 feet to an intersection with the east right-of-way line of Vacated Waterway No. 1;
 Thence North 86°31'44" West along the meander line a distance of 300.55 feet to the West line of Vacated Waterway No. 1;
 Thence South 00°00'00" West along the West line of Vacated Waterway No. 1 to its intersection with the Inner Harbor Line;
 Thence easterly along the Inner Harbor Line to the Point of Beginning.

VERN SPAIZ
 GRAYS HARBOR CO. AUCTION

96 DEC 31 PM 3 09

FILE REQUEST ON

Kaplan

96 48855



Appendix B No Further Action Letters

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

October 14, 1996

Mr. Tom Sauer
International Paper
International Place I
6400 Poplar Avenue
Memphis, TN 38197

RE: Grays Harbor Mill Site - Paper Machine Area

Dear Mr. Sauer:

Thank you for submitting the results of your independent remedial action for Department of Ecology (Ecology) review. Ecology appreciates your initiative in pursuing this administrative option under the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

The Washington State Department of Ecology's Industrial Section has reviewed the following information regarding the Grays Harbor Mill Site - Paper Machine Area that was formerly part of the Rayonier/International Paper Sulfite Pulp Mill Facility located at 803 23rd Street, Hoquiam, Washington:

1. Independent remedial action report
2. Documents submitted:

Leroy Ho letter dated April 23, 1996

Request for Review/Independent Remedial Action Report

Independent Remedial Action Report Summary

Independent remedial Action Report Detail

General Map of Mill Site

Detailed Map of Mill Site

Map of Initial Contamination

Map of Final Contamination Above Cleanup Standards

8/30/93 Report by Pacific Environmental Group on the Sample Results

3/1/96 Report by Pacific Environmental Group on the Excavation Activity

3/12/96 Report by EMS Inc. on the Concrete Cleaning Activity

The above-named reports were prepared without Ecology oversight such as would occur under an Agreed Order or Consent Decree. However, based upon the information summarized in these reports and a site visit, Ecology has determined that, at this time, the site no longer poses a threat to human health or the environment.

This no further action determination is conditioned on your recording of a Restrictive Covenant on the property deed at the Grays Harbor County records office no later than December 31, 1996. Jack Anderson, Rayonier, Inc., can provide further details as necessary. Recording the Restrictive Covenant on the deed for your property is a condition to maintain Ecology's no further action determination. Also, failure to abide by any portion(s) of the Restrictive Covenant may result in Ecology's withdrawal of its no further action determination. In addition, this no further action determination does not apply to any remedial actions determined necessary as a result of confirmational monitoring.

Therefore, Ecology is issuing this determination that no further action is necessary at this site under the Model Toxics Control Act (MTCA), Ch. 70.105D RCW. However, please note that because your actions were not conducted under a consent decree with Ecology, this letter is not a settlement by the state under RCW 70.105D.040(4). Although Ecology is issuing the determination that no further action appears to be necessary to protect human health and the environment, this determination does not release you from any maintenance at the site. Failure to conduct necessary maintenance may result in Ecology's withdrawal of this no further action determination.

This determination is made only with respect to the release identified in the independent remedial action report. This no further action determination applies only to the area of the property affected by the release identified in the report at the Paper Machine Area. It does not apply to any other release or potential release at the property, any other areas on the property, nor any other properties owned or operated by Rayonier/International Paper. [This no further action determination does not apply to remedial actions determined necessary as a result of confirmational monitoring.]

Ecology does not assume any liability for any release, threatened release or other conditions at the site, or for any actions taken or omitted by any person or his/her agents or employees with regard to the release, threatened release, or other conditions at the site. Ecology reserves the right to require further action at the site with regard to the soil or other contaminated media

if new or different information other than that presented in the above reports becomes known or available.

Ecology will update its database to reflect this "No Further Action" determination. Your site will not appear in future publications of the Confirmed & Suspected Contaminated Sites Report (previously known as the Affected Media And Contaminants Report).

If you have any questions, please call me at (360) 407-6934.

Sincerely,

Marc E Crooks

Marc E. Crooks, P.E.
Pulp and Paper Mill Specialist
Industrial Section

cc: Paul Skillingstad, Ecology
Mike Palko, Ecology
Jack Anderson, Rayonier



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

October 21, 1996

Mr. Jack A. Anderson
Rayonier, Inc.
409 East Harvard Avenue
Shelton, WA 98584-3771

RE: Grays Harbor Mill Site - Boneyard Area at Grays Harbor Mill Site

Dear Mr. Anderson:

Thank you for submitting the results of your independent remedial action for Ecology's review. Ecology appreciates your initiative in pursuing this administrative option under the Model Toxics Control Act.

The Washington State Department of Ecology's Industrial Section has reviewed the following information regarding the Grays Harbor Mill Site - Boneyard Area that was formerly part of the Rayonier Sulfite Pulp Mill Facility located at 803 23rd Street, Hoquiam, Washington:

1. Independent remedial action report dated January 9, 1995.

2. Documents submitted:

Jack Anderson letter dated January 9, 1995.

Request for Review/Independent Remedial Action Report

Independent Remedial Action Report Summary

Independent remedial Action Report Detail

General Map of Mill Site

Areas Exceeding Cleanup Standards

Estimated Costs for Remediation Options

Estimate of Capping by Berglund, Schmidt & Assoc., Inc.

Drawing of Proposed Capping Plan

September 1993 Boneyard Assessment Report by Pacific
Environmental Group



No Further Action Letter
October 21, 1996
Page 2

June 1994 Boneyard Assessment Report by Pacific Environmental Group

September 1994 Groundwater Monitoring Report for 2nd Quarter

November 2, 1994 Report on Excavation of Soil Near BY-16

November 9, 1994 Soil Assessment Report Near BY-3

January 1995 Groundwater Monitoring Report for 3rd and 4th Quarter of 1994

The above-named reports were prepared without Ecology oversight such as would occur under an Agreed Order or Consent Decree. However, based upon the information summarized in these reports and a site visit; Ecology has determined that, at this time, the site no longer poses a threat to human health or the environment.

This no further action determination is conditioned on your recording of a Restrictive Covenant on the property deed at the Grays Harbor County records office no later than December 31, 1996. Recording the Restrictive Covenant on the deed for your property is a condition to maintain Ecology's no further action determination. Also, failure to abide by any portion(s) of the Restrictive Covenant may result in Ecology's withdrawal of its no further action determination. In addition, this no further action determination does not apply to any remedial actions determined necessary as a result of confirmational monitoring.

Therefore, Ecology is issuing this determination that no further action is necessary at this site under the Model Toxics Control Act (MTCA), Ch. 70.105D RCW. However, please note that because your actions were not conducted under a consent decree with Ecology, this letter is not a settlement by the state under RCW 70.105D.040(4). Although Ecology is issuing the determination that no further action appears to be necessary to protect human health and the environment, this determination does not release you from any maintenance at the site. Failure to conduct necessary maintenance may result in Ecology's withdrawal of this no further action determination.

This determination is made only with respect to the release identified in the independent remedial action report. This no further action determination applies only to the area of the property affected by the release identified in the report at the Boneyard Area. It does not apply to any other release or potential release at the property, any other areas on the property, nor any other properties owned or operated by Rayonier. [This no further action determination does not apply to remedial actions determined necessary as a result of confirmational monitoring.]

No Further Action Letter

October 21, 1996

Page 3

Ecology does not assume any liability for any release, threatened release or other conditions at the site, or for any actions taken or omitted by any person or his/her agents or employees with regard to the release, threatened release, or other conditions at the site. Ecology reserves the right to require further action at the site with regard to the soil or other contaminated media if new or different information other than that presented in the above reports becomes known or available.

Ecology will update its database to reflect this "No Further Action" determination. Your site will not appear in future publications of the Confirmed & Suspected Contaminated Sites Report (previously known as the Affected Media And Contaminants Report).

If you have any questions, please call me at (360) 407-6934.

Sincerely,

Marc E Crooks

Marc E. Crooks, P.E.
Pulp and Paper Mill Specialist
Industrial Section

cc: Paul Skyllingstad, Ecology
Mike Palko, Ecology



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

October 31, 1996

Mr. Jack A. Anderson
Rayonier, Inc.
409 East Harvard Avenue
Shelton, WA 98584-3771

RE: Grays Harbor Mill Site - Finishing Area

Dear Mr. Anderson:

Thank you for submitting the results of your independent remedial action for Ecology's review. Ecology appreciates your initiative in pursuing this administrative option under the Model Toxics Control Act.

The Washington State Department of Ecology's Industrial Section has reviewed the following information regarding the Grays Harbor Mill Site - Finishing Area that was formerly part of the Rayonier Sulfite Pulp Mill Facility located at 803 23rd Street, Hoquiam, Washington:

1. Independent remedial action report dated February 1, 1996.
2. Documents submitted:

Jack Anderson letter dated February 1, 1996.

Request for Review/Independent Remedial Action Report

Independent Remedial Action Report Summary

Independent remedial Action Report Detail

General Map of Mill Site

Detailed Site Map

4/1/94 Discussion of Situation by Pacific Environmental

9/22/95 Report by Pacific Environmental

The above-named reports were prepared without Ecology oversight such as would occur under an Agreed Order or Consent Decree. However, based upon the above listed information, and a site visit, Ecology has determined that, at this time, the site no longer poses a threat to human health or the environment.



No Further Action Letter

October 31, 1996

Page 2

This no further action determination is conditioned on your recording of a Restrictive Covenant on the property deed at the Grays Harbor County records office no later than December 31, 1996. Recording the Restrictive covenant on the deed for your property is a condition to maintain Ecology's no further action determination. Also, failure to abide by any portion(s) of the Restrictive Covenant may result in Ecology's withdrawal of its no further action determination. In addition, this no further action determination does not apply to any remedial actions determined necessary as a result of confirmational monitoring.

Therefore, Ecology is issuing this determination that no further action is necessary at this site under the Model Toxics Control Act (MTCA), Ch. 70.105D RCW. However, please note that because your actions were not conducted under a consent decree with Ecology, this letter is not a settlement by the state under RCW 70.105D.040(4). Although Ecology is issuing the determination that no further action appears to be necessary to protect human health and the environment, this determination does not release you from any maintenance at the site. Failure to conduct necessary maintenance may result in Ecology's withdrawal of this no further action determination.

This determination is made only with respect to the release identified in the independent remedial action report. This no further action determination applies only to the area of the property affected by the release identified in the report at the Finishing Area. It does not apply to any other release or potential release at the property, any other areas on the property, nor any other properties owned or operated by Rayonier. [This no further action determination does not apply to remedial actions determined necessary as a result of confirmational monitoring.]

Ecology does not assume any liability for any release, threatened release or other conditions at the site, or for any actions taken or omitted by any person or his/her agents or employees with regard to the release, threatened release, or other conditions at the site. Ecology reserves the right to require further action at the site with regard to the soil or other contaminated media if new or different information other than that presented in the above reports becomes known or available.

Ecology will update its database to reflect this "No Further Action" determination. Your site will not appear in future publications of the Confirmed & Suspected Contaminated Sites Report (previously known as the Affected Media And Contaminants Report).

If you have any questions, please call me at (360) 407-6934.

Sincerely,

Marc E. Crooks

Marc E. Crooks, P.E.
Pulp and Paper Mill Specialist

cc: Paul Skyllingstad, Ecology
Mike Palko, Ecology



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. BOX 47600 • Olympia, Washington 98504-7600 • (206) 459-6000

December 15, 1993

Mr. Jack A. Anderson
ITT Rayonier Inc.
Research Center
409 East Harvard Ave.
Shelton, WA 98584

Post-It™ brand fax transmittal memo 7671		# of pages - 2
To Jack Anderson	From P. Sky Kingstad	
Co. ITT Shelton	Co. WOOE	
Dept.	Phone # 407-6949	
Fax # 426-7537	Fax #	

Dear Mr. Anderson:

Thank you for submitting the results of your independent remedial action for Ecology's review. Ecology appreciates your initiative in pursuing this administrative option under the Model Toxics Control Act.

The Washington State Department of Ecology's Industrial Section has reviewed the following information regarding the silvichemical site located within the ITT Rayonier Grays Harbor Division pulp mill property at 22nd St. and Railroad Ave Hoquiam, Washington:

1. Independent Remedial Action Report submitted December 6, 1993.
2. Several Environmental Site Assessments by Pacific Environmental Group, Inc. received February 4, 1993.
3. Calculation of Cleanup Standards, Grays Harbor Pulp Facility, Hoquiam, Washington, received February 4, 1993.

Based upon the above listed information Ecology has determined that, at this time, the site does not pose a threat to human health or the environment as a result of the release addressed in the independent remedial action report.

Therefore, Ecology is issuing this determination that no further action is necessary at this site under the Model Toxics Control Act (MTCA), Ch. 70.105D RCW. However, please note that because your actions were not conducted under a consent decree with Ecology, this letter is not a settlement by the state under RCW 70.105D.040(4).

This determination is made only with respect to the release identified in the independent remedial action report dated December 6, 1993 and with the exception of your compliance with the following actions:

1. Deed restriction of removal of ground water beneath the facility for drinking water purposes.
2. Notification of the Department of Ecology of further changes of ownership of the Silvichemical section of the property.

The deed restriction is required at the site because levels of chromium VI found in the upper aquifer are unknown at this time and could exceed both the Method A and Method B cleanup standards found in WAC 173-340-720. Data has been submitted for total chromium but not chromium VI and III. The deed restriction may not be required; if further data is available from monitoring wells MW-1, MW-6, and MW-7 concerning levels of chromium VI beneath the site

and the levels are found to be below cleanup standards. If this data is available please submit it to the Department for review.

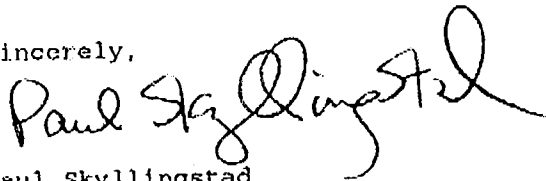
This no further action determination applies only to the area of the property affected by the release identified in the report of December 6, 1993. It does not apply to any other release or potential release at the property, any other areas on the property, nor any other properties owned or operated by ITT Rayonier, Grays Harbor Division.

Ecology does not assume any liability for any release, threatened release or other conditions at the site, or for any actions taken or omitted by any person or his/her agents or employees with regard to the release, threatened release, or other conditions at the site.

Ecology will update its database to reflect this "No Further Action" determination. Your site will not appear in future publications of the Confirmed & Suspected Contaminated Sites Report (previously know as the Affected Media And Contaminants Report.)

If you have any questions, please contact Paul Skyllingstad of the Industrial Section at 407-6949.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Skyllingstad". The signature is fluid and cursive, with the last name being particularly prominent.

Paul Skyllingstad
Industrial Section

pes:



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

October 23, 1996

Mr. Jack A. Anderson
Rayonier, Inc.
409 East Harvard Avenue
Shelton, WA 98584-3771

RE: Grays Harbor Mill Site - Log Yard

Dear Mr. Anderson:

Thank you for submitting the results of your independent remedial action for Ecology's review. Ecology appreciates your initiative in pursuing this administrative option under the Model Toxics Control Act.

The Washington State Department of Ecology's Industrial Section has reviewed the following information regarding the Grays Harbor Mill Site - Log Yard Area that was formerly part of the Rayonier Sulfite Pulp Mill Facility located at 803 23rd Street, Hoquiam, Washington:

1. Independent remedial action report dated December 11, 1995.
2. Documents submitted:

Jack Anderson letter dated December 11, 1995.

Request for Review/Independent Remedial Action Report

Independent Remedial Action Report Summary

Sampling reports by Pacific Environmental Group on the Site
Sampling Results dated November 4, 1994; November 7, 1994;
February 7, 1995; and May 24, 1996.

Dr. James E. Bruya's letter dated November 23, 1994.

The above-named reports were prepared without Ecology oversight such as would occur under an Agreed Order or Consent Decree. However, based upon the information summarized in these reports, and site visits, Ecology has determined that, at this time, the site no longer poses a threat to human health or the environment.

This no further action determination is conditioned on your recording of a Restrictive Covenant on the property deed at the Grays Harbor County records office no later than December 31, 1996. Recording the Restrictive Covenant on the deed for your property is a condition to maintain Ecology's



No Further Action Letter
October 23, 1996
Page 2

no further action determination. Also, failure to abide by any portion(s) of the Restrictive Covenant may result in Ecology's withdrawal of its no further action determination. In addition, this no further action determination does not apply to any remedial actions determined necessary as a result of confirmational monitoring.

Therefore, Ecology is issuing this determination that no further action is necessary at this site under the Model Toxics Control Act (MTCA), Ch. 70.105D RCW. However, please note that because your actions were not conducted under a consent decree with Ecology, this letter is not a settlement by the state under RCW 70.105D.040(4). Although Ecology is issuing the determination that no further action appears to be necessary to protect human health and the environment, this determination does not release you from any maintenance at the site. Failure to conduct necessary maintenance may result in Ecology's withdrawal of this no further action determination.

This determination is made only with respect to the release identified in the independent remedial action report. This no further action determination applies only to the area of the property affected by the release identified in the report at the Log Yard Area. It does not apply to any other release or potential release at the property, any other areas on the property, nor any other properties owned or operated by Rayonier. [This no further action determination does not apply to remedial actions determined necessary as a result of confirmational monitoring.]

Ecology does not assume any liability for any release, threatened release or other conditions at the site, or for any actions taken or omitted by any person or his/her agents or employees with regard to the release, threatened release, or other conditions at the site. Ecology reserves the right to require further action at the site with regard to the soil or other contaminated media if new or different information other than that presented in the above reports becomes known or available.

Ecology will update its database to reflect this "No Further Action" determination. Your site will not appear in future publications of the Confirmed & Suspected Contaminated Sites Report (previously known as the Affected Media And Contaminants Report). If you have any questions, please call me at (360) 407-6934.

Sincerely,



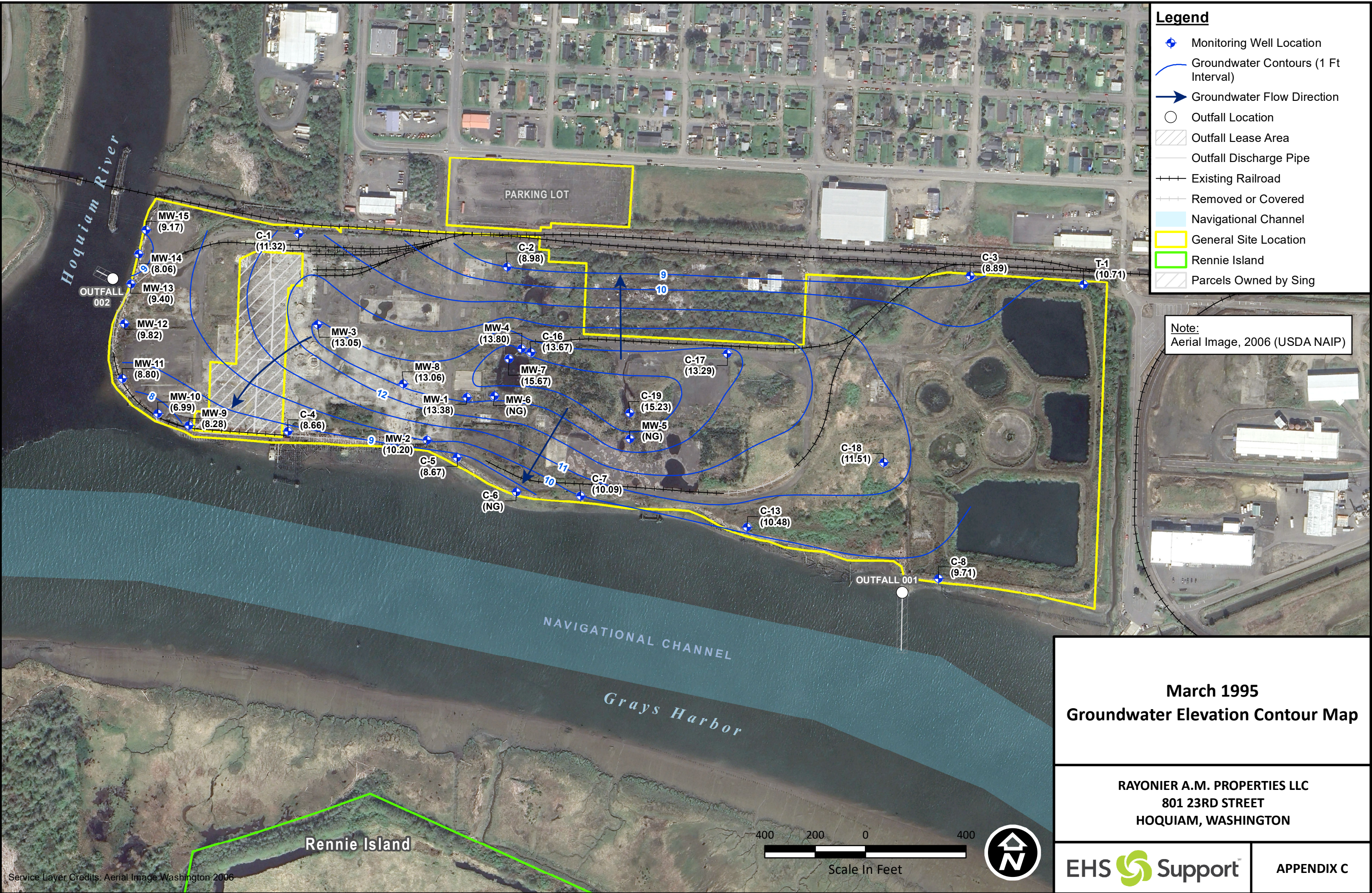
Marc E. Crooks, P.E.
Pulp and Paper Mill Specialist
Industrial Section

cc: Paul Skyllingstad, Ecology
Mike Palko, Ecology

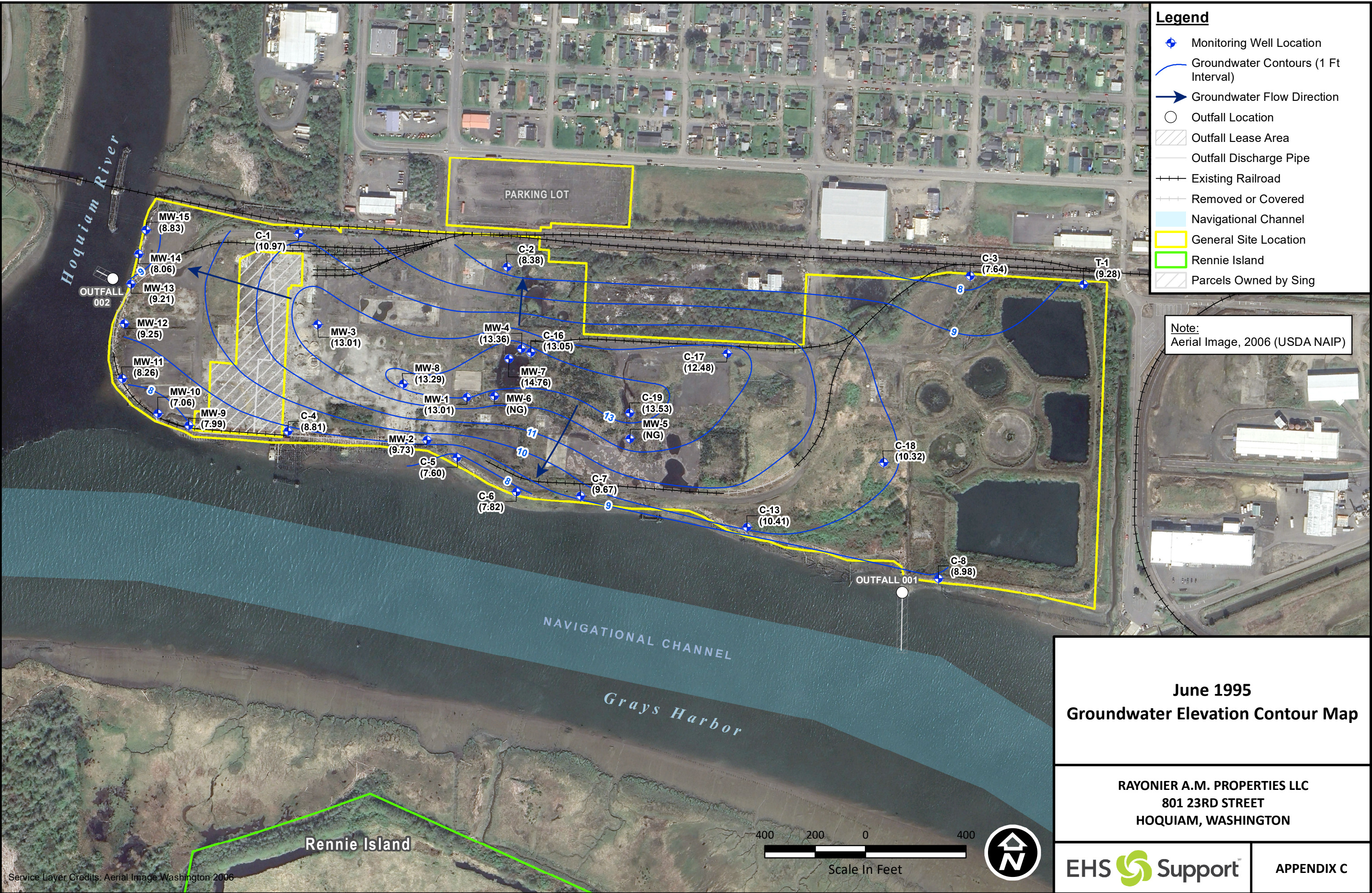


Appendix C 1995 Groundwater Elevations

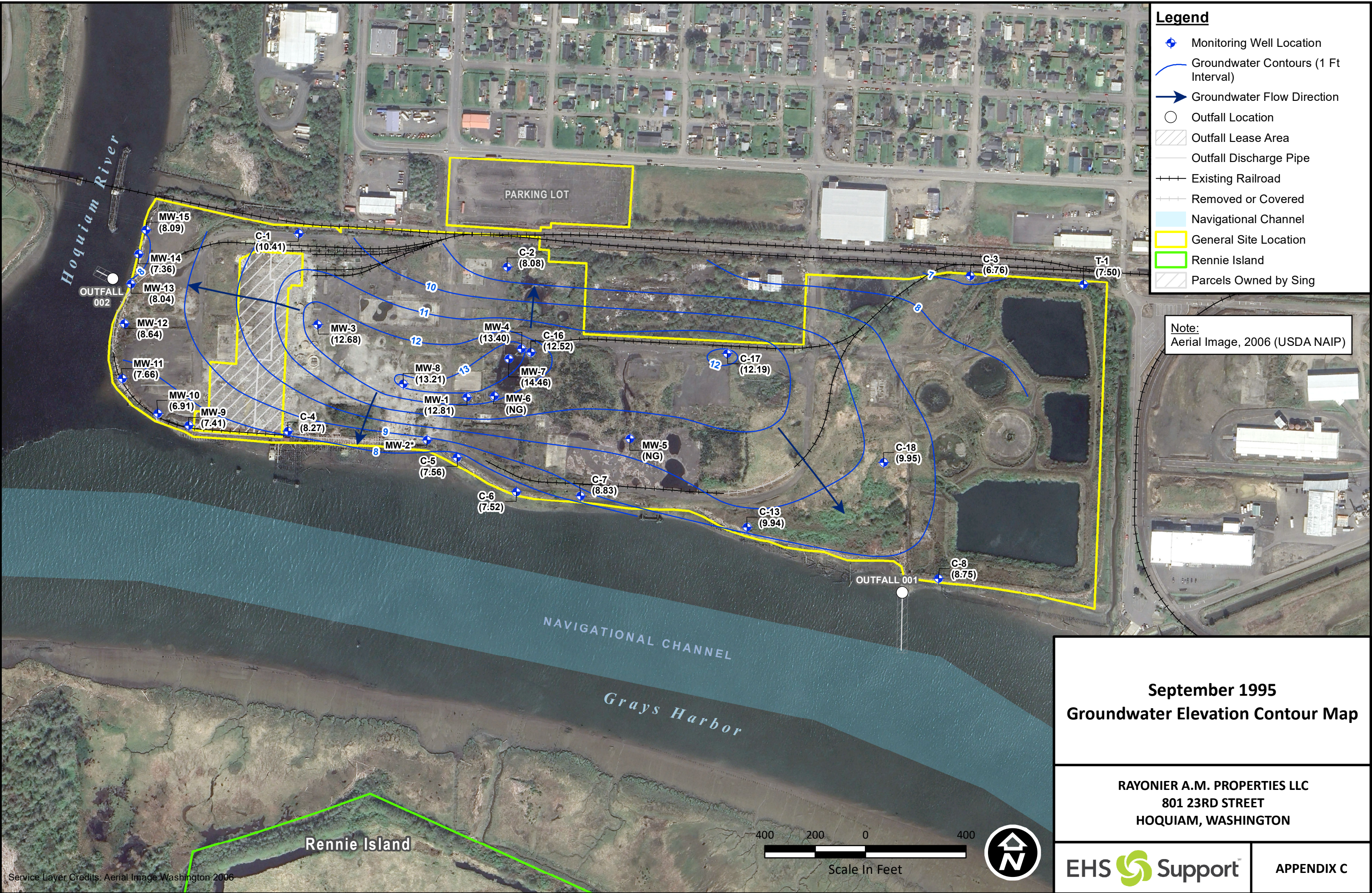
Reviewed By:



Reviewed By:



Reviewed By:



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Printed 11/5/2024 11:09:24 AM by Kaitlyn Buffington

Reviewed By:

