FARALLON CONSULTING

# T E C H N I C A L  M E M O R A N D U M

**TO:** Rob Hood, Natural Specialist 4
Oregon Department of Environmental Quality

**FROM:** Sam Jackson, Senior Environmental Engineer
Chuck Esler, Principal Environmental Scientist

**DATE:** May 3, 2024

**RE:** **PRELIMINARY SITE ASSESSMENT**
**2997 SOUTH MOODY AVENUE**
**PORTLAND, OREGON**
**FARALLON PN: 2243-005**
**DEQ ECSI FILE NO. 6295**

On behalf of Tri-County Metropolitan Transportation District of Oregon's (TriMet), Farallon Consulting, L.L.C. (Farallon) has prepared this Preliminary Site Assessment (PSA) to document baseline environmental conditions at the former Moody Light Rail and Storage Property at 2997 South Moody Avenue in Portland, Oregon (herein referred to as the Subject Property). The area of focus for the PSA includes the Subject Property and adjacent properties within 0.1 mile of the Subject Property (herein referred to as the Project Area). The Project Area and Subject Property boundaries are shown on Figures 1 and 2. On September 9, 2022, an email scope of work (SOW) was provided to the Oregon Department of Environmental Quality (DEQ), including: (1) compiling existing data; (2) performing a screening-level evaluation of the property; and (3) documenting findings and recommendations from those efforts in a technical memo. This Technical Memorandum (TM) was performed in accordance with that SOW.

The purpose of the PSA was to identify whether environmental features of concern (EFOCs), which could be indicative of contaminated media, are present within the Subject Property, and if present, whether they pose an unacceptable risk to human health and ecological receptors under current and likely future site use scenarios. The PSA consisted of a desktop records review (Task 01) and a site reconnaissance (Task 02), which are presented below.

**Task 01 Desk Top Records Review**

Farallon performed a historical fire insurance map review, historical aerial photograph review, and desktop records review of reasonably ascertainable sources from federal and state regulatory

databases for information pertaining to the Subject Property and Project Area. The records search conducted by Farallon provides a cursory review of EFOCs to evaluate hazardous chemicals likely associated with the historical or current activities conducted within the Project Area. In this context, the term "hazardous substance" includes those chemicals listed as hazardous substances in the Code of Federal Regulations (CFR 171.8) and the Oregon Administrative Rules (OAR 837-090-1000), including petroleum products.

**Task 02 Site Reconnaissance**

This Section includes a description and land use of the Subject Property and surrounding properties, the March 27, 2024 site visit, and a summary of observations.

## BACKGROUND

The Subject Property consists of Multnomah County Parcel No. 1S1E10BA-00200, a 2.33-acre, narrow, rectangular-shaped strip of land located within the South Waterfront Neighborhood approximately 1,000 feet west of the Willamette River and 1 mile south of downtown Portland, Oregon. Adjacent structures include Marquam Bridge to the north, South Moody Avenue to the east, Ross Island Bridge to the south, and Interstate 5 and associated right-of-way (ROW) to the west. The land is developed with transportation rail lines on the northern and central portions and vegetated areas, a gravel access road, a stormwater control facility, and fenced storage areas on the southern portion. Adjoining properties include South Sheridan Street to the north, South Moody Avenue to the east, commercial retail property to the south, and the Interstate 5 and the associated ROW to the west. Historically, rail lines were present on the Subject Property and adjacent properties from at least the 1880s to the present.

A 2017 Phase I Environmental Site Assessment Report[1] for the Subject Property identified a recognized environmental condition for potential soil and groundwater impacts in the Project Area based on historical use of the Subject Property and adjacent properties. To further evaluate the recognized environmental condition, additional soil and groundwater sampling was performed and documented in the *2997 SW Moody Avenue, Portland, Oregon: Phase II Environmental Site Assessment* dated March 26, 2018[2] and the *Groundwater Assessment at 2997 SW Moody Avenue, Portland, Oregon* dated September 21, 2018.[3] Soil and groundwater samples collected indicated the presence of metals and petroleum impacts above applicable DEQ risk-based criteria (RBCs). Based upon the presence of those constituents in soil and groundwater above applicable RBCs, DEQ listed the Subject Property in the Environmental Cleanup Site Information (ECSI) File No.

[1] Maul Foster Alongi (MFA). 2017. *Phase I Environmental Site Assessment, 2997 SW Moody Avenue, Portland, Oregon.* December 28 (2017 Phase I Report).
[2] MFA. 2018. *Phase II Environmental Site Assessment, 2997 SW Moody Avenue, Portland, Oregon*. March 26 (2018 Phase II Report).
[3] MFA. 2018. *Groundwater Assessment at 2997 SW Moody Avenue, Portland, Oregon*. September 21 (2018 Groundwater Report).

6295. Additional detail regarding the 2018 Phase II Report and 2018 Groundwater Report are provided in the *Ecological Risk Evaluation* Section of this Technical Memorandum.

## DESKTOP RECORDS REVIEW

Farallon reviewed the following federal and state environmental regulatory databases to identify listed facilities in the Project Area that were considered to have a potential to adversely impact the Subject Property. The focus of the review was on hazardous waste generators, environmental cleanup sites, and storage tank sites that may have impacted soil and/or groundwater on properties in the Project Area, along with facilities with National Pollutant Discharge Elimination System permits. Findings are reported under each section below.

According to previous environmental studies conducted in the Project Area, discussed below, groundwater was encountered at a depth of approximately 21 feet below ground surface.

### U.S. ENVIRONMENTAL PROTECTION AGENCY ENVIROFACTS

Envirofacts provides a single point of access to multiple U.S. Environmental Protection Agency (EPA) databases to provide information about environmental activities that may affect air, water, and land throughout the United States. Farallon searched the EPA Envirofacts Warehouse[4] for database listings in the Project Area. No National Pollutant Discharge Elimination System Permit (NPDES) Compliance Site listings were identified in the Project Area as of April 24, 2024.. Four hazardous waste handlers were identified as listed in the summary below.

| Facility Name | Facility Address | NAICS Code | Haz. Waste Handler ID | Location/Distance from Project Area | Operational Status |
|---|---|---|---|---|---|
| Zidell Waterfront Property/ Zidell Resources, Inc. (Zidell Property) | 3121 SW Moody Avenue Portland, OR | 531120 | ORQ000029045 | Southeast-adjacent across South Moody Avenue | Historical |
| TriMet Willamette River Transit Bridge | 3121B SW Moody Avenue Portland, OR | 56291 | ORQ000029289 | Southeast-adjacent across South Moody Avenue | Historical |
| Oregon Health and Science University/ Portland State University (OHSU/PSU Property) | 2730 and 2750 SW Moody Avenue Portland, OR | 62211, 56291, 61131 | ORD092289552, ORQ000036206, ORQ000033352 | East-adjacent across South Moody Avenue | Current |
| Westwood Swinerton Construction (Westwood Swinerton Property) | 3030 SW Moody Avenue Portland, OR | 23622 | ORQ000008813 | East-adjacent across South Moody Avenue | Historical |

[4] EPA Envirofacts Warehouse, https://enviro.epa.gov/?name=Envirofacts%20Data%20Warehouse, accessed April 24, 2024.

## OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY DATABASES

### Facility Profiler-Lite Database

The DEQ Facility Profiler-Lite database[5] contains information on current and past operations and activities, including environmental cleanup sites, hazardous waste sites, leaking underground storage tanks (USTs) and heating oil tanks, solid waste facilities, and water quality underground injection control sites. Farallon searched the DEQ Facility Profiler-Lite database for listings in the Project Area. Five facility listings were identified in the Project Area, as listed in the summary below, as of April 24, 2024.

| Facility Name and Address | Database(s) | Location and Distance from Project Area |
|---|---|---|
| South Waterfront – ODOT Property<br>SW Moody and Interstate 5<br>Portland, OR | Environmental Cleanup Site Information | Within the Project Area |
| OHSU/PSU Property<br>2730 and 2750 SW Moody Avenue<br>Portland, OR | Hazardous Waste | East-adjacent across South Moody Avenue |
| Westwood Swinerton Property<br>3030 SW Moody Avenue, Portland, OR | Environmental Cleanup Site Information | East-adjacent across South Moody Avenue |
| | Hazardous Waste | |
| | Leaking Underground Storage Tanks | |
| Zidell Property<br>3121 SW Moody Avenue, Portland, OR | Environmental Cleanup Site Information | Southeast-adjacent across South Moody Avenue |
| | Hazardous Waste | |
| | Water Quality Site Information System | |
| | Water Quality Underground Injection Control | |

### Environmental Cleanup Site Information Database

The ECSI Database[6] lists sites in Oregon with known or potential contamination from hazardous substances. It includes facilities where investigation or cleanup has been initiated and facilities where a release of hazardous substances is suspected. Four ECSI listings were identified in the Project Area, as listed in the summary below, as of April 24, 2024.

[5] DEQ Facility Profiler-Lite, https://hdcgcx1.deq.state.or.us/Html5viewer291/?viewer=FacilityProfilerLite, accessed April 24, 2024.
[6] ESCI Database, https://www.deq.state.or.us/lq/ECSI/ecsiquery.asp?listtype=lis&listtitle=Environmental+Cleanup+Site%20Information+Database accessed April 24, 2024.

| ECSI No. | Facility and Address | Contaminants Of Interests | Media Impacted | Cleanup Status | Location and Distance from Project Area |
|---|---|---|---|---|---|
| 6295 | TriMet Light Rail and Storage Property, 2997 SW Moody Avenue Portland, OR | Total petroleum hydrocarbons (TPH), polynuclear aromatic hydrocarbons (PAHs), herbicides, creosote, pentachlorophenol, chromated copper arsenate, heavy metals | Soil, groundwater | Contamination Suspected | Within Project Area |
| 4818 | South Waterfront – ODOT Property, SW Moody and Interstate 5 Portland, OR | TPH, PAHs, heavy metals | Soil, groundwater | Project Completed | Within Project Area |
| 1923 | Westwood Swinerton Property, 3030 SW Moody Avenue Portland, OR | TPH, PAHs, polychlorinated biphenyls (PCBs) | Soil | No Further Action | East-adjacent across South Moody Avenue |
| 689 | Zidell Property 3121 SW Moody Avenue Portland, OR | TPH, PAHs, PCBs, heavy metals, tributyltin | Soil, groundwater, sediment | Operation and Maintenance | Southeast-adjacent across South Moody Avenue |

## Leaking Underground Storage Tank Cleanup Site Database

The DEQ Leaking Underground Storage Tanks Cleanup Site Database (LUST)[7] identifies facilities that are currently or have been under investigation for leaking USTs. This database contains records for regulated and heating oil USTs. One record of a LUST site was identified in the Project Area as of April 24, 2024. Summary information is provided in the DEQ LUST site summary below. The summary report from the DEQ website is provided in Attachment C.

| LUST ID No. | Facility ID No. | Facility and Address | Contaminants | Media Impacted | Cleanup Status | Location and Distance from Project Area |
|---|---|---|---|---|---|---|
| 26-93-0128 | 7351 | Westwood Swinerton Property, 3030 SW Moody Avenue Portland, OR | Diesel | Soil, groundwater | No Further Action | East-adjacent across South Moody Avenue |

## Underground Storage Tank Facility List

The DEQ Underground Storage Tank Facility List shows facilities with registered regulated (non-heating oil) USTs in operation and/or decommissioned in Oregon. Four records were identified in

[7] DEQ Leaking Underground Storage Tanks Cleanup Site Database, https://www.deq.state.or.us/lq/tanks/lust/LustPublicLookup.asp, accessed April 24, 2024.

the Project Area as of April 24, 2024. Information is provided in the DEQ Regulated Underground Storage Tanks summary below.

| Facility ID No. | Facility Name | Address | Active Tank Quantity | Decommissioned Tank Quantity | Location and Distance from Project Area |
|---|---|---|---|---|---|
| 6321 | Schnitzer Investment Corp (OHSU/PSU Property) | 2750 SW Moody Avenue Portland, OR | 0 | 2 | East-adjacent across South Moody Avenue |
| 7351 | Westwood Corp (Westood Swinerton Property) | 3030 SW Moody Avenue Portland, OR | 0 | 4 | East-adjacent across South Moody Avenue |
| 10435 | Westwood Holding Corp (Westood Swinerton Property) | | 0 | 1 | |
| 8038 | Zidell Explorations, Inc. (Zidell Property | 3121 SW Moody Avenue Portland, OR | 0 | 3 | Southeast-adjacent across South Moody Avenue |

## OREGON STATE FIRE MARSHAL COMMUNITY RIGHT-TO-KNOW HAZARDOUS SUBSTANCE INCIDENT SEARCH

The Oregon State Fire Marshal Community Right-to-Know Hazardous Substance Incident Search[8] identifies sites with a spill or where hazardous materials were encountered that required a hazardous materials response team. No records were identified in the Project Area as of April 24, 2024.

## CITY OF PORTLAND UNDERGROUND STORAGE TANK PERMITS

Information specific to individual Multnomah County map taxlots can be found at www.portlandmaps.com. Farallon reviewed historical UST permits found on www.portlandmaps.com associated with the Multnomah County map taxlots in the Project Area. There were no historical UST permit listings identified in the Project Area as of April 24, 2024.

## SANBORN FIRE INSURANCE MAPS

Farallon requested Sanborn Fire Insurance Maps (Sanborn maps) through Environmental Data Resources (EDR). Maps were available for 1889, 1901, 1909, 1950, and 1969 for the southern portion of the Project Area. Additionally, Farallon reviewed Multnomah County Public Library's Digital Sanborn Collection for the northern portion of the Project Area.

[8] Oregon State Fire Marshal Community Right-to-Know Hazardous Substance Incident Search, https://www.oregon.gov/osp/programs/sfm/Pages/Community-Right-To-Know.aspx, accessed April 24, 2024.

The Multnomah County map taxlots between South Grover Street and South Baker Street from 1889 to 1909 consisted mainly of single-family residences with sheds and vacant land. Two single-family residences were apparent on the southernmost portion of the Project Area in 1909, and by 1969 the single-family residences were no longer apparent. The Multnomah County map taxlots within the Project Area consisted mainly of commercial and industrial properties in 1950 and 1960, with a few single-family residences. The Sanborn maps provided by the EDR Report are provided in Attachment D.

### HISTORICAL AERIAL PHOTOGRAPHS

Farallon requested historical aerial photographs (aerial photos) through EDR. Aerial photos were available for 1948, 1951, 1955, 1960, 1963, 1970, 1975, 1981, 1990, 1994, 2000, 2005, 2009, 2012, and 2016. Additional aerial photos obtained from Google Earth were available for 1952, 1970, 1985, 1990, and 2000 through 2021. The aerial photos provided by EDR are provided in Attachment E.

## SITE RECONNAISSANCE

On March 27, 2024, Farallon conducted a site reconnaissance of accessible portions of the Subject Property to observe and document general site characteristics and any physical evidence of EFOCs. The site reconnaissance consisted of a walk around the perimeter of the Subject Property and multiple transects across the interior areas. Representative site reconnaissance photographs are provided in Attachment A.

### Limiting Conditions

During the site reconnaissance, the presence of homeless encampments and blackberry vines prevented Farallon from accessing and observing the entire ground surface of the Subject Property. Based on information obtained from the Desk Top Review, these limiting conditions are not expected to affect the conclusions of the PSA.

### EXTERIOR OBSERVATIONS

Farallon's observations are shown in the table below and details regarding those observations follow.

| EXTERIOR OBSERVATIONS | YES | NO |
|---|---|---|
| Odor | | X |
| Staining and/or Corrosion | | X |
| Storage Tank(s), Vent Pipe(s), and/or Fuel Port(s) | | X |
| Drum(s) and/or Other Container(s) | | X |
| Pool(s) of Liquid | | X |

| EXTERIOR OBSERVATIONS | YES | NO |
|---|---|---|
| Hazardous Material(s) and/or Petroleum Product(s) | | X |
| Hazardous Waste | | X |
| Pit(s), Pond(s), and/or Lagoon(s) | | X |
| Stressed Vegetation | | X |
| Solid (Nonhazardous) Waste—Evidence of Dumping | X | |
| Wastewater | | X |
| Domestic Water | | X |
| Water Well(s) | | X |
| Septic/Sewer System | | X |
| Stormwater | X | |
| Transformer(s) | | X |
| Significant Amount of Fill Material | | X |

**Exterior Observation Comments**

Solid (Nonhazardous) Waste—Evidence of Dumping

Farallon observed limited evidence of garbage and homeless encampments in the central and western portions of the Subject Property. A limited number of creosote-treated wood timbers were observed near the storage area on the southeastern area of the Subject Property.

Stormwater

Stormwater on the Subject Property either infiltrates directly into the permeable ground surface or is directed into a stormwater swale with an impermeable liner. Water flows through the swale for retention and evaporation, with overflow leaving the outlet on the south end of the swale, which ultimately discharges to the municipal stormwater system.

**Structures**

An active signals/communications building for the Tilikum bridge train signals network, which consists of a steel-sided shed (~10 feet wide by ~25 feet long), is located in the central portion of the Subject Property. No buildings are present on the Subject Property.

# ECOLOGICAL RISK EVALUATION

In accordance with DEQ's Site Ecology Scoping Report Outline,[9] Farallon prepared a Site Ecology Scoping Report for the Subject Property (Attachment B). The findings of the Ecology Scoping Report indicate there are no potentially complete exposure pathways to ecological receptors on the Subject Property; and that a risk assessment is not warranted on the Subject Property and no further action is necessary.

## OTHER RESOURCES PROVIDED BY TRIMET

Farallon was provided with the 2018 Phase II Report and the 2018 Groundwater Report.

The 2018 Phase II Report was prepared in response to the findings of the 2017 Phase I Report, which Farallon was not provided. According to the 2018 Phase II Report, the 2017 Phase I Report identified a recognized environmental condition for potential soil and groundwater impacts in the Project Area based the historical use of the Project Area and the variability of the groundwater flow direction. Specifically, wooden railroad ties were observed in the Project Area. Historically, railroad ties were treated with creosote, pentachlorophenol, chromated copper arsenate, and/or associated chemicals of concern. Railway lines are known to be sprayed with oil solutions containing petroleum projects, and herbicides. Cinder, slag, and other readily available aggregate or industrial by-products are sometimes used to build the base for the rail lines and can be a potential source of metals in soil and groundwater.

The 2018 Phase II investigation included a collection of five soil samples and one groundwater sample to determine whether contamination was present in the southern portion of the Project Area (see Figure 2 for sample locations). The two surface soil samples were collected at 3 feet below ground surface (bgs), and the three deeper soil samples were collected at 7.5, 25, and 27.5 feet bgs. The groundwater sample was collected from boring B-01 at 21 feet bgs. Samples were analyzed for metals, organochlorine pesticides, PCBs, organophosphorus pesticides, chlorinated herbicides, volatile organic compounds, semivolatile organic compounds, polyaromatic hydrocarbons, TPH as diesel-range organics, TPH as oil-range organics, and TPH.

Analytical results are presented in Tables 1 and 2. Soil and groundwater results were screened against the DEQ risk-based concentrations (RBCs) for the following pathways: direct contact for urban residential, volatilization to outdoor air and vapor intrusion into buildings for urban residential and occupational workers, leaching to groundwater. All constituents, with the exception of the metals antimony and arsenic, were present at concentrations less than screening levels in four of the five soil samples. In the fifth sample collected at 7.5 feet bgs, antimony, copper, lead, and zinc were detected at concentrations slightly exceeding the DEQ clean fill criteria and the Oregon background metals concentrations for the Portland Basin; and select PAHs: benzo(a)pyrene, dibenzo(a,h)anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene were detected at concentrations exceeding the DEQ clean fill criteria. Metals, volatile organic

[9] Oregon Department of Environmental Quality (DEQ). 2020. *Appendices for: Conducting Ecological Risk Assessments.*

compounds, semivolatile organic compounds, and PAHs were detected at concentrations less than all DEQ RBCs in all samples.

One reconnaissance groundwater sample was collected from location B-01. Pesticides, herbicides, and PCBs were not detected in the groundwater sample. Arsenic and lead were detected at concentrations exceeding the RBCs for ingestion for urban residential and occupational workers. Total petroleum hydrocarbons as diesel-range organics were detected at concentrations exceeding the RBCs for ingestion and inhalation for urban residential receptors.

Based on the results of the 2018 Phase II Report, MFA recommended that a cap be placed for future development to prevent direct contact with the observed soil impacts observed at 7.5 feet bgs. If future construction was to be performed in the Project Area, MFA recommended that any excavated soil should be properly characterized and appropriately managed in accordance with local, state, and federal regulations.

The 2018 Groundwater Report prepared by MFA summarized previous environmental investigations within the Project Area. Groundwater impacts in the Project Area were detected at concentrations exceeding the DEQ RBC for urban residential ingestion and were less than the DEQ RBCs for all other receptors. However, there is no evidence that off-site impacted groundwater has migrated into the Project Area. The 2018 Groundwater Report concluded that groundwater conditions in the Project Area are understood sufficiently, and additional groundwater data were not warranted.

## SUMMARY OF ENVIRONMENTAL FEATURES OF CONCERN

The following facilities were identified to be EFOCs in the Project Area. The location of each site is shown on Figure 2.

| Facility Name and Address | Environmental Feature(s) of Concern | Regulatory Status |
|---|---|---|
| TriMet Light Rail and Storage Property,<br>2997 SW Moody Avenue,<br>Portland, Oregon | Historical and current uses that indicate the potential for a current or historical release(s) of hazardous substances to the subsurface. | Remedial Action for this site is complete. Requires maintenance of engineered cap and containment system beneath Porter Avenue light rail station west of Tilikum Crossing. |
| South Waterfront – ODOT Property<br>SW Moody and Interstate 5,<br>Portland, Oregon | Historical uses indicate the known release(s) of hazardous substances to the subsurface, including TPH, PAHs, and heavy metals. | Open ECSI File No. 6295. |

The following adjacent properties have the potential to be EFOCs. The location of each site is shown on Figure 2.

| Facility Name and Address | Environmental Feature(s) of Concern | Regulatory Status |
|---|---|---|
| Westwood Swinerton Property<br>3030 SW Moody Avenue,<br>Portland, OR | • Five decommissioned USTs<br>• Leaking UST (closed)<br>• Hazardous waste handler<br>• Historical uses indicate the potential and known release(s) of hazardous substances to the subsurface, including TPH, PAHs, and PCBs. | Obtained a limited No Further Action determination from DEQ's UST Section in August 1996, for the former UST area on the southeastern side of the Subject Property. |
| Zidell Property<br>3121 SW Moody Avenue,<br>Portland, OR | • Three decommissioned USTs<br>• Hazardous waste handler<br>• Underground injection control facility<br>• Historical uses that indicated the potential for a current or historical release(s) of hazardous substances to the subsurface. | A long-term environmental management plan was submitted to DEQ in 2018. The plan outlines ongoing monitoring requirements for both the upland and in-water caps to and beyond 2031. |
| Schnitzer Investment Corp.<br>(OHSU/PSU Property)<br>2750 SW Moody Avenue,<br>Portland, OR | Two decommissioned USTs | |

## CURRENT AND LIKELY FUTURE LAND USE

The Property Area is developed with transportation rail lines on the northern and central portions; and vegetated areas, a gravel access road, a stormwater facility (drainage ditch and inlet with an impermeable liner), and a fenced storage area on the southern portion. An active signals/communications building for the Tilikum bridge train signals network, which consists of a steel-sided shed (~10 feet wide by ~25 feet long), is located in the central portion of the Subject Property. No inhabited buildings are present on the property. Drinking water is supplied by the City of Portland and no water supply wells are on the Subject Property.

There is no planned change to the land and water use on the property.

## ECOLOGICAL RISK EVALUATION

As documented herein and in the ERA Report provided in Appendix E, there are no potentially complete exposure pathways to ecological receptors on the Subject Property. A risk assessment is not warranted on this Subject Property and no further action is necessary.

## CONCLUSIONS AND RECOMMENDATIONS

Although residual soil and groundwater contamination exceeding DEQ RBCs has been identified in the Project Area, there are no complete exposure pathways based upon current and anticipated future use of the property. In the unlikely scenario that excavation work would occur in areas where impacted soil has been identified, this potential risk can be effectively managed by a contaminated media management plan (CMMP). Consistent with DEQ guidance, the CMMP plan would consist of:

- A description of the type, magnitude and extent of contaminants detected in soil samples;
- Procedures for the management of known contaminated soil that may be encountered during construction activities;
- Procedures for the management of Unanticipated and Unknown Soil Contamination, should any be encountered during construction activities;
- Measures to control any contaminated media present at the Site during construction activities; and
- Measures to control off-site migration of contaminated soil via erosion and/or track-off.

In addition, the plan would outline a soil sampling and analysis program to characterize excavated soil to determine appropriate disposal/reuse options and for worker health and safety purposes.

Based upon the absence of completed exposure pathways associated with current and future planned property use, no unacceptable risks to human or ecological receptors are present in the Project Area. Consequently, the Subject Property regulatory closure of ECSI File No. 6295 is requested.

Attachments: Figure 1, *Project Area Map*
Figure 2, *Project Area*
Table 1, *Summary of Soil Analytical Results*
Table 2, *Summary of Groundwater Analytical Results*
Attachment A, Site Reconnaissance Photographs
Attachment B, Ecological Risk Assessment Scoping Report
Attachment C, LUST Summary Reports
Attachment D, Sanborn Maps
Attachment E, Aerial Photographs

SJ/CE:cm

## GENERAL LIMITATIONS

The conclusions contained in this Technical Memorandum are based on professional opinions with regard to the subject matter and are subject to the following inherent limitations:

- **Accuracy of Information.** Farallon obtained, reviewed, and evaluated certain information used in this report/assessment from sources that were believed to be reliable. Farallon's conclusions, opinions, and recommendations are based in part on such information. Farallon's services did not include verification of its accuracy or authenticity. Should the information upon which Farallon relied prove to be inaccurate or unreliable, Farallon reserves the right to amend or revise its conclusions, opinions, and/or recommendations.

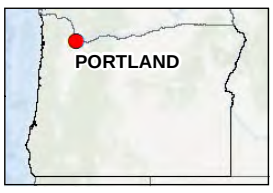
This report/assessment has been prepared in accordance with the *Professional Services Contract No. RC190192KN-D2* dated November 5, 2021 between Farallon and TriMet.

# FIGURES

PRELIMINARY SITE ASSESSMENT
2997 South Moody Avenue
Portland, Oregon

Farallon PN: 2243-005


REFERENCE: 7.5 MINUTE USGS QUADRANGLE PORTLAND, OREGON, DATED 2013

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Portland | Baker City

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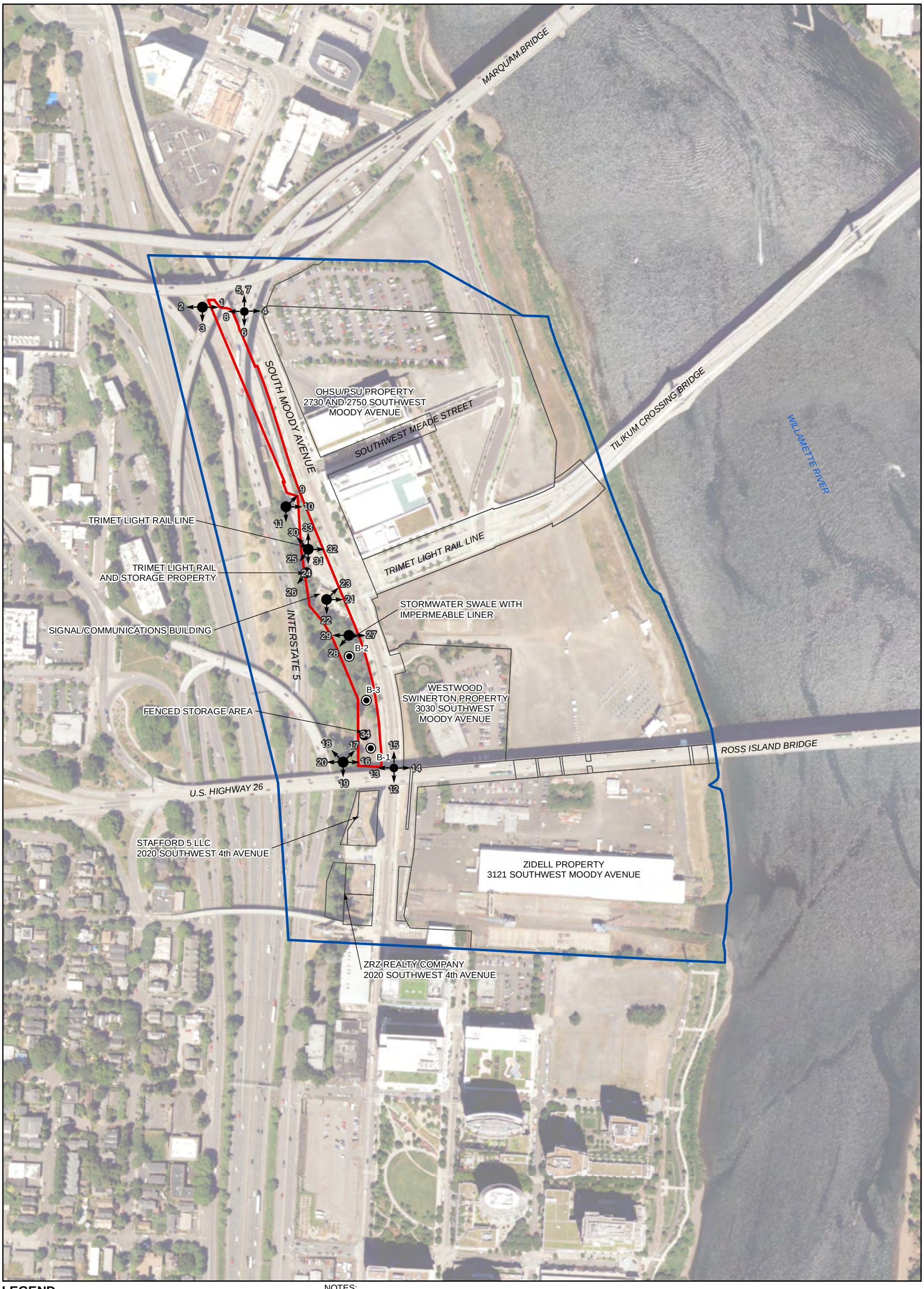
Oakland | Irvine

# FIGURE 1

SUBJECT PROPERTY LOCATION
2997 SOUTH MOODY AVENUE
PORTLAND, OREGON

FARALLON PN: 2243-005

Drawn By:aguse | Checked By: SJ | Date: 7/5/2023 | Disc Reference:
\\192.168.0.252\gis\Projects\2243 TriMet\005 2997 South Moody Ave\Mapfiles\003\Figure-01_SubjectPropertyLocation.mxd




**LEGEND**

- PICTURE LOCATION AND DIRECTION
- BORING LOCATION (MAUL FOSTER & ALONGI, 2018)
- SITE BOUNDARY
- PROJECT AREA VICINITY BOUNDARY
- 1 = PICTURE REFERENCE NUMBER

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NOTES:
1. ALL LOCATIONS ARE APPROXIMATE.
2. FIGURES WERE PRODUCED IN COLOR. GRAYSCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION.


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# FIGURE 2

PROJECT AREA
2997 SOUTH MOODY AVENUE
PORTLAND, OREGON

FARALLON PN: 2243-005

Drawn By: aguse | Checked By: SJ | Date: 5/3/2024 | Disc Reference:

Path: \\192.168.0.248\gis\Projects\2243 TriMet\005 2997 South Moody Ave\Mapfiles\005\Figure-02_ProjectArea.mxd

# TABLES

PRELIMINARY SITE ASSESSMENT
2997 South Moody Avenue
Portland, Oregon

Farallon PN: 2243-005

**Table 1**
**Summary of Soil Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| Location | | | | B01 | | B02 | B03 | |
|---|---|---|---|---|---|---|---|---|
| Sample Name | | | | B01-SO-7 | B01-SO-27.5 | B02-SO-3 | B03-SO-3 | B03-SO-25 |
| Collection Date | | | | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 |
| Collection depth (feet bgs) | | | | 7.0 | 27.5 | 3.0 | 3.0 | 25.0 |

| Parameter | Oregon Background Metals, Portland Basin | RBC: Soil, Leaching to Groundwater[1] | | RBC: Soil, Ingestion, Dermal Contact, and Inhalation[1] | | | | RBC: Soil, Volatilization to Outdoor Air[1] | | RBC: Soil, Vapor Intrusion into Building[1] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Urban Residential | Occupational | Urban Residential | Occupational | Construction Worker | Excavation Worker | Urban Residential | Occupational | Urban Residential | Occupational | | | | | |
| **Metals[2] (mg/kg)** | | | | | | | | | | | | | | | | |
| Antimony | 0.56 | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | 1.99 J | 1.5 J | 2.35 J | 1.62 J | 1.76 J |
| Arsenic | 8.8 | NV | NV | 1 | 1.9 | 15 | 420 | NV | NV | NV | NV | 6.82 | 2.52 | 4.2 | 4.36 | 3.03 |
| Beryllium | 2 | NV | NV | 310 | 2,300 | 700 | 19,000 | NV | NV | NV | NV | 0.871 | 0.497 | 0.697 | 0.696 | 0.571 |
| Cadmium | 0.63 | NV | NV | 160 | 1,100 | 350 | 9,700 | NV | NV | NV | NV | 0.269 J | 0.105 J | 0.189 J | 0.119 J | 0.127 J |
| Chromium | 76 | NV | NV | 230,000[3] | NV | 530,000[3] | NV | NV | NV | NV | NV | 29.3 | 22.8 | 25.6 | 20 | 21.3 |
| Copper | 34 | NV | NV | 6,200 | 47,000 | 14,000 | 390,000 | NV | NV | NV | NV | 41.1 | 33.4 | 28.4 | 20.9 | 23.1 |
| Cyanide | NV | NV | NV | 94 | 700 | 210 | 5,900 | NV | NV | NV | NV | 0.0742 J | < 0.0457 | < 0.0499 | < 0.0507 | < 0.0487 |
| Lead | 79 | 30 | 30 | 400 | 800 | 800 | 800 | NV | NV | NV | NV | 79.2 | 6.72 | 9.41 | 7.03 | 4.95 |
| Mercury | 0.23 | NV | NV | 47 | 350 | 110 | 2,900 | NV | NV | NV | NV | 0.161 | < 0.0334 | < 0.0283 | < 0.0357 | < 0.025 J |
| Nickel | 47 | NV | NV | 3,100 | 22,000 | 7,000 | 190,000 | NV | NV | NV | NV | 26.2 | 20.9 | 30.6 | 31 | 23.2 |
| Selenium | 0.71 | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.987 | < 0.866 | < 0.948 | < 0.962 | < 0.924 |
| Silver | 0.82 | NV | NV | 780 | 5,800 | 1,800 | 49,000 | NV | NV | NV | NV | < 0.374 | < 0.328 | < 0.359 | < 0.364 | < 0.35 |
| Thallium | 5.2 | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.867 | < 0.761 | < 0.832 | < 0.845 | < 0.811 |
| Zinc | 180 | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | 131 | 64 | 116 | 64.1 | 58.2 |
| **Organochlorine Pesticides[4] (mg/kg)** | | | | | | | | | | | | | | | | |
| 4,4'-DDD | NV | 3.7 | 2.6 | 6.6 | 12 | 94 | 2,600 | NV | NV | NV | NV | 0.00679 J | < 0.00183 | < 0.002 | < 0.00203 | < 0.00195 |
| 4,4'-DDE | NV | 7.4 | 7.5 | 4.5 | 8.2 | 66 | 1,800 | NV | NV | NV | NV | 0.00303 J | < 0.0018 | < 0.00197 | < 0.002 | < 0.00192 |
| 4,4'-DDT | NV | 46 | 70 | 4.6 | 8.5 | 66 | 1,800 | NV | NV | NV | NV | < 0.00267 | < 0.00234 | < 0.00256 | < 0.0026 | < 0.0025 |
| Aldrin | NV | 0.1 | 0.1 | 0.08 | 0.13 | 1.1 | 30 | NV | NV | NV | NV | < 0.0018 | < 0.00158 | < 0.00173 | < 0.00175 | < 0.00169 |
| alpha-BHC | NV | 0.024 | 0.023 | 0.21 | 0.36 | 3 | 83 | NV | NV | NV | NV | < 0.00181 | < 0.00159 | < 0.00174 | < 0.00177 | < 0.0017 |
| beta-BHC | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00214 | < 0.00187 | < 0.00205 | < 0.00208 | < 0.002 |
| Chlordane | NV | 2.1 | 2.1 | 4.2 | 7.4 | 61 | 1,700 | NV | NV | NV | NV | < 0.052 | < 0.0457 | < 0.0499 | < 0.0507 | < 0.0487 |
| delta-BHC | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00191 | < 0.00167 | < 0.00183 | < 0.00186 | < 0.00179 |
| Dieldrin | NV | 0.037 | 0.03 | 0.085 | 0.14 | 1.2 | 33 | NV | NV | NV | NV | < 0.00203 | < 0.00178 | < 0.00195 | < 0.00198 | < 0.0019 |
| Endosulfan I | NV | NV | NV | 760 | 4,900 | 1,600 | 45,000 | NV | NV | NV | NV | < 0.00199 | < 0.00174 | < 0.00191 | < 0.00194 | < 0.00186 |
| Endosulfan II (beta) | NV | NV | NV | 760 | 4,900 | 1,600 | 45,000 | NV | NV | NV | NV | < 0.00214 | < 0.00187 | < 0.00205 | < 0.00208 | < 0.002 |
| Endosulfan sulfate | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00201 | < 0.00177 | < 0.00193 | < 0.00196 | < 0.00189 |
| Endrin | NV | NV | NV | 38 | 250 | 80 | 2,200 | NV | NV | NV | NV | < 0.00209 | < 0.00184 | < 0.00201 | < 0.00204 | < 0.00196 |
| Endrin aldehyde | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00172 | < 0.00151 | < 0.00165 | < 0.00168 | < 0.00161 |

**Table 1**
**Summary of Soil Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | **Location** | B01 | | B02 | B03 | |
| | | | | | | | | | | | | **Sample Name** | B01-SO-7 | B01-SO-27.5 | B02-SO-3 | B03-SO-3 | B03-SO-25 |
| | | | | | | | | | | | | **Collection Date** | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 |
| | | | | | | | | | | | | **Collection depth (feet bgs)** | 7.0 | 27.5 | 3.0 | 3.0 | 25.0 |
| **Parameter** | **Oregon Background Metals, Portland Basin** | **RBC: Soil, Leaching to Groundwater[1]** | | **RBC: Soil, Ingestion, Dermal Contact, and Inhalation[1]** | | | | **RBC: Soil, Volatilization to Outdoor Air[1]** | | **RBC: Soil, Vapor Intrusion into Building[1]** | | | | | | |
| | | **Urban Residential** | **Occupational** | **Urban Residential** | **Occupational** | **Construction Worker** | **Excavation Worker** | **Urban Residential** | **Occupational** | **Urban Residential** | **Occupational** | | | | | |
| **Organochlorine Pesticides[4] (mg/kg) (continued)** | | | | | | | | | | | | | | | | |
| **Endrin ketone** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0022 | < 0.00193 | < 0.00211 | < 0.00214 | < 0.00206 |
| **Heptachlor** | **NV** | **0.063** | **0.048** | **0.28** | **0.45** | **4** | **110** | **42** | **230** | **42** | **230** | < 0.00205 | < 0.0018 | < 0.00197 | < 0.002 | < 0.00192 |
| **Heptachlor epoxide** | **NV** | **0.018** | **0.016** | **0.14** | **0.24** | **2** | **56** | **66** | **NV** | **66** | **NV** | < 0.00215 | < 0.00189 | < 0.00206 | < 0.00209 | < 0.00201 |
| **Hexachlorobenzene** | **NV** | **0.083** | **0.084** | **0.67** | **0.93** | **11** | **320** | **2.4** | **13** | **2.4** | **13** | < 0.00165 | < 0.00145 | < 0.00159 | < 0.00161 | < 0.00155 |
| **Lindane** | **NV** | **0.13** | **0.13** | **1.2** | **2.1** | **17** | **470** | **NV** | **NV** | **NV** | **NV** | < 0.00193 | < 0.0017 | < 0.00186 | < 0.00188 | < 0.00181 |
| **Methoxychlor** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.00238 | < 0.00208 | < 0.00228 | < 0.00231 | < 0.00222 |
| **Toxaphene** | **NV** | **1.2** | **0.93** | **1.2** | **2.1** | **17** | **470** | **NV** | **NV** | **NV** | **NV** | < 0.048 | < 0.0422 | < 0.0461 | < 0.0468 | < 0.0449 |
| **PCBs[5] (mg/kg)** | | | | | | | | | | | | | | | | |
| **Aroclor 1016** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.00467 | < 0.0041 | < 0.00448 | < 0.00455 | < 0.00437 |
| **Aroclor 1221** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.00717 | < 0.00629 | < 0.00688 | < 0.00698 | < 0.0067 |
| **Aroclor 1232** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.00556 | < 0.00488 | < 0.00534 | < 0.00542 | < 0.00521 |
| **Aroclor 1242** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.00424 | < 0.00372 | < 0.00407 | < 0.00413 | < 0.00397 |
| **Aroclor 1248** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0042 | < 0.00369 | < 0.00403 | < 0.00409 | < 0.00393 |
| **Aroclor 1254** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0063 | < 0.00553 | < 0.00604 | < 0.00613 | < 0.00589 |
| **Aroclor 1260** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.00659 | < 0.00578 | < 0.00633 | < 0.00642 | < 0.00617 |
| **Total PCBs (ND = 0)[6]** | **NV** | **1.1** | **1.1** | **0.33** | **0.59** | **4.9** | **140** | **NV** | **NV** | **NV** | **NV** | < 0.00717 | < 0.00629 | < 0.00688 | < 0.00698 | < 0.0067 |
| **Organophosphorus Pesticides[7] (mg/kg)** | | | | | | | | | | | | | | | | |
| **Coumaphos** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.00907 | < 0.00796 | < 0.00871 | < 0.00884 | < 0.00849 |
| **Demeton** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.00452 | < 0.00397 | < 0.00434 | < 0.00441 | < 0.00423 |
| **Diazinon** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.00596 | < 0.00523 | < 0.00572 | < 0.00581 | < 0.00558 |
| **Dichlorvos** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0129 | < 0.0113 | < 0.0124 | < 0.0126 | < 0.0121 |
| **Dimethoate** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0264 | < 0.0232 | < 0.0254 | < 0.0257 | < 0.0247 |
| **Disulfoton** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.00665 | < 0.00583 | < 0.00638 | < 0.00647 | < 0.00622 |
| **Dursban** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0123 | < 0.0108 | < 0.0118 | < 0.012 | < 0.0115 |
| **Ethoprop** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0062 | < 0.00544 | < 0.00595 | < 0.00604 | < 0.00581 |
| **Fensulfothion** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0226 | < 0.0198 | < 0.0216 | < 0.022 | < 0.0211 |
| **Fenthion** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.00811 | < 0.00712 | < 0.00779 | < 0.0079 | < 0.00759 |
| **Guthion** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.00504 | < 0.00443 | < 0.00484 | < 0.00491 | < 0.00472 |
| **Merphos** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.00719 | < 0.00631 | < 0.0069 | < 0.007 | < 0.00673 |

**Table 1**
**Summary of Soil Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| Location | | | | | | | | | | | | B01 | | B02 | B03 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name | | | | | | | | | | | | B01-SO-7 | B01-SO-27.5 | B02-SO-3 | B03-SO-3 | B03-SO-25 |
| Collection Date | | | | | | | | | | | | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 |
| Collection depth (feet bgs) | | | | | | | | | | | | 7.0 | 27.5 | 3.0 | 3.0 | 25.0 |
| Parameter | Oregon Background Metals, Portland Basin | RBC: Soil, Leaching to Groundwater[1] | | RBC: Soil, Ingestion, Dermal Contact, and Inhalation[1] | | | | RBC: Soil, Volatilization to Outdoor Air[1] | | RBC: Soil, Vapor Intrusion into Building[1] | | | | | | |
| | | Urban Residential | Occupational | Urban Residential | Occupational | Construction Worker | Excavation Worker | Urban Residential | Occupational | Urban Residential | Occupational | | | | | |
| **Organophosphorus Pesticides[7] (mg/kg) (continued)** | | | | | | | | | | | | | | | | |
| **Methyl parathion** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00893 | < 0.00783 | < 0.00857 | < 0.00869 | < 0.00835 |
| **Mevinphos** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0136 | < 0.0119 | < 0.0131 | < 0.0133 | < 0.0127 |
| **Naled** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00558 | < 0.00489 | < 0.00535 | < 0.00543 | < 0.00522 |
| **Parathion** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00762 | < 0.00669 | < 0.00731 | < 0.00742 | < 0.00713 |
| **Phorate** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00628 | < 0.00551 | < 0.00603 | < 0.00612 | < 0.00588 |
| **Ronnel** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00583 | < 0.00512 | < 0.0056 | < 0.00568 | < 0.00546 |
| **Santox** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00683 | < 0.00599 | < 0.00656 | < 0.00665 | < 0.00639 |
| **Stirofos** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00717 | < 0.00629 | < 0.00688 | < 0.00698 | < 0.0067 |
| **Sulfotepp** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00515 | < 0.00452 | < 0.00494 | < 0.00502 | < 0.00482 |
| **Sulprofos** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00739 | < 0.00649 | < 0.00709 | < 0.0072 | < 0.00692 |
| **Sumitox** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00934 | < 0.0082 | < 0.00896 | < 0.0091 | < 0.00874 |
| **Tetraethylpyrophosphate** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.209 | < 0.184 | < 0.201 | < 0.204 | < 0.196 |
| **Tokuthion** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00806 | < 0.00707 | < 0.00773 | < 0.00785 | < 0.00754 |
| **Trichloronate** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00886 | < 0.00777 | < 0.0085 | < 0.00863 | < 0.00829 |
| **Chlorinated Herbicides[8] (mg/kg)** | | | | | | | | | | | | | | | | |
| **2,4,5-T** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0114 | < 0.00998 | < 0.0109 | < 0.0111 | < 0.0106 |
| **2,4-D** | NV | **8.5** | **16** | **1,300** | **8,200** | **2,700** | **74,000** | NV | NV | NV | NV | < 0.00937 | < 0.00822 | < 0.00899 | < 0.00912 | < 0.00876 |
| **2,4-DB** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0396 | < 0.0348 | < 0.038 | < 0.0386 | < 0.0371 |
| **Dalapon** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0151 | < 0.0132 | < 0.0145 | < 0.0147 | < 0.0141 |
| **Dicamba** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0209 | < 0.0184 | < 0.0201 | < 0.0204 | < 0.0196 |
| **Dichlorprop** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0327 | < 0.0287 | < 0.0314 | < 0.0318 | < 0.0306 |
| **Dinoseb** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0093 | < 0.00816 | < 0.00893 | < 0.00906 | < 0.0087 |
| **MCPA** | NV | **0.41** | **0.61** | **63** | **410** | **130** | **3,700** | NV | NV | NV | NV | < 0.591 | < 0.519 | < 0.567 | < 0.576 | < 0.553 |
| **MCPP (Mecoprop)** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.49 | < 0.43 | < 0.47 | < 0.477 | < 0.458 |
| **Silvex** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0143 | < 0.0125 | < 0.0137 | < 0.0139 | < 0.0134 |

**Table 1**
**Summary of Soil Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| Location | | | | B01 | | B02 | B03 | |
|---|---|---|---|---|---|---|---|---|
| Sample Name | | | | B01-SO-7 | B01-SO-27.5 | B02-SO-3 | B03-SO-3 | B03-SO-25 |
| Collection Date | | | | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 |
| Collection depth (feet bgs) | | | | 7.0 | 27.5 | 3.0 | 3.0 | 25.0 |
| | | RBC: Soil, Leaching to Groundwater[1] | | RBC: Soil, Ingestion, Dermal Contact, and Inhalation[1] | | | | RBC: Soil, Volatilization to Outdoor Air[1] | | RBC: Soil, Vapor Intrusion into Building[1] | | | | | |
| Parameter | Oregon Background Metals, Portland Basin | Urban Residential | Occupational | Urban Residential | Occupational | Construction Worker | Excavation Worker | Urban Residential | Occupational | Urban Residential | Occupational | | | | | |
| **VOCs[9] (mg/kg)** | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00035 | < 0.00031 | < 0.00034 | < 0.00034 | < 0.00033 |
| 1,1,1-Trichloroethane | NV | 430 | 880 | 110,000 | 870,000 | 470,000 | NV | NV | NV | NV | NV | < 0.00038 | < 0.00034 | < 0.00037 | < 0.00037 | < 0.00036 |
| 1,1,2,2-Tetrachloroethane | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00049 | < 0.00043 | < 0.00047 | < 0.00047 | < 0.00046 |
| 1,1,2-Trichloroethane | NV | 0.019 | 0.029 | 6.3 | 26 | 54 | 1,500 | 6.7 | 24 | 0.38 | 4.2 | < 0.00037 | < 0.00032 | < 0.00036 | < 0.00036 | < 0.00035 |
| 1,1-Dichloroethane | NV | 0.2 | 0.2 | 190 | 260 | 3,200 | 89,000 | 130 | 240 | 1.1 | 5.9 | < 0.00027 | < 0.00023 | < 0.00026 | < 0.00026 | < 0.00025 |
| 1,1-Dichloroethene | NV | 16 | 32 | 3,500 | 29,000 | 13,000 | 370,000 | NV | NV | 54 | 680 | < 0.0004 | < 0.00036 | < 0.00039 | < 0.00039 | < 0.00038 |
| 1,1-Dichloropropene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00042 | < 0.00037 | < 0.00041 | < 0.00041 | < 0.0004 |
| 1,2,3-Trichlorobenzene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00041 | < 0.00036 | < 0.00039 | < 0.0004 | < 0.00038 |
| 1,2,3-Trichloropropane | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00099 | < 0.00087 | < 0.00095 | < 0.00096 | < 0.00093 |
| 1,2,3-Trimethylbenzene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00038 | < 0.00034 | < 0.00037 | < 0.00037 | < 0.00036 |
| 1,2,4-Trichlorobenzene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00052 | < 0.00045 | < 0.0005 | < 0.0005 | < 0.00048 |
| 1,2,4-Trimethylbenzene | NV | 5.6 | 12 | 220 | 2,000 | 2,000 | 54,000 | 230 | 980 | 16 | 210 | < 0.00028 | < 0.00025 | < 0.00027 | < 0.00027 | < 0.00026 |
| 1,2-Dibromo-3-chloropropane | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0014 | < 0.00123 | < 0.00134 | < 0.00136 | < 0.00131 |
| 1,2-Dibromoethane | NV | 0.00056 | 0.00056 | 0.53 | 0.73 | 9 | 250 | 0.35 | 0.65 | 0.028 | 0.16 | < 0.00046 | < 0.0004 | < 0.00044 | < 0.00045 | < 0.00043 |
| 1,2-Dichlorobenzene | NV | 86 | 160 | 4,400 | 36,000 | 20,000 | 560,000 | NV | NV | NV | NV | < 0.00041 | < 0.00036 | < 0.00039 | < 0.0004 | < 0.00038 |
| 1,2-Dichloroethane | NV | 0.013 | 0.013 | 12 | 16 | 200 | 5600 | 8.1 | 15 | 0.18 | 1 | < 0.00035 | < 0.00031 | < 0.00034 | < 0.00034 | < 0.00033 |
| 1,2-Dichloropropane | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00048 | < 0.00042 | < 0.00046 | < 0.00047 | < 0.00045 |
| 1,3,5-Trimethylbenzene | NV | 110 | 110 | 1,600 | 12,000 | 3,500 | 98,000 | NV | NV | NV | NV | < 0.00036 | < 0.00031 | < 0.00034 | < 0.00035 | < 0.00033 |
| 1,3-Dichlorobenzene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00032 | < 0.00028 | < 0.00031 | < 0.00031 | < 0.0003 |
| 1,3-Dichloropropane | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00028 | < 0.00024 | < 0.00027 | < 0.00027 | < 0.00026 |
| 1,4-Dichlorobenzene | NV | 0.27 | 0.25 | 62 | 64 | 1,300 | 36,000 | 19 | 36 | 2.3 | 13 | < 0.0003 | < 0.00027 | < 0.00029 | < 0.00029 | < 0.00028 |
| 2,2-Dichloropropane | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00037 | < 0.00033 | < 0.00036 | < 0.00036 | < 0.00035 |
| 2-Butanone | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00624 | < 0.00548 | < 0.00599 | < 0.00608 | < 0.00584 |
| 2-Chlorotoluene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0004 | < 0.00035 | < 0.00039 | < 0.00039 | < 0.00038 |
| 4-Chlorotoluene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00032 | < 0.00028 | < 0.00031 | < 0.00031 | < 0.0003 |
| 4-Isopropyltoluene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00027 | < 0.00024 | < 0.00026 | < 0.00027 | < 0.00026 |
| 4-Methyl-2-pentanone | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00251 | < 0.0022 | < 0.00241 | < 0.00244 | < 0.00235 |
| Acetone | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0133 | < 0.0117 | < 0.0128 | < 0.013 | < 0.0125 |
| Acrylonitrile | NV | 0.0016 | 0.0017 | 2.5 | 4 | 40 | 1,100 | 3.1 | 5.8 | 0.19 | 1 | < 0.00239 | < 0.0021 | < 0.00229 | < 0.00233 | < 0.00223 |

**Table 1**
**Summary of Soil Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| Location | | | | B01 | | B02 | B03 | |
|---|---|---|---|---|---|---|---|---|
| Sample Name | | | | B01-SO-7 | B01-SO-27.5 | B02-SO-3 | B03-SO-3 | B03-SO-25 |
| Collection Date | | | | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 |
| Collection depth (feet bgs) | | | | 7.0 | 27.5 | 3.0 | 3.0 | 25.0 |

| Parameter | Oregon Background Metals, Portland Basin | RBC: Soil, Leaching to Groundwater[1] | | RBC: Soil, Ingestion, Dermal Contact, and Inhalation[1] | | | | RBC: Soil, Volatilization to Outdoor Air[1] | | RBC: Soil, Vapor Intrusion into Building[1] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Urban Residential | Occupational | Urban Residential | Occupational | Construction Worker | Excavation Worker | Urban Residential | Occupational | Urban Residential | Occupational | | | | | |
| **VOCs[9] (mg/kg) (continued)** | | | | | | | | | | | | | | | | |
| **Benzene** | NV | 0.1 | 0.1 | 24 | 37 | 380 | 11,000 | 27 | 50 | 0.38 | 2.1 | < 0.00036 | < 0.00032 | < 0.00035 | < 0.00035 | < 0.00034 |
| **Bromobenzene** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00038 | < 0.00033 | < 0.00036 | < 0.00037 | < 0.00036 |
| **Bromodichloromethane** | NV | 0.01 | 0.01 | 12 | 15 | 230 | 6,300 | 5.7 | 11 | 0.1 | 0.53 | < 0.00034 | < 0.0003 | < 0.00033 | < 0.00033 | < 0.00032 |
| **Bromoform** | NV | 0.2 | 0.22 | 170 | 260 | 2,700 | 74,000 | 190 | 360 | 19 | 110 | < 0.00057 | < 0.0005 | < 0.00054 | < 0.00055 | < 0.00053 |
| **Bromomethane** | NV | 0.19 | 0.4 | 92 | 750 | 370 | 10,000 | 170 | 700 | 1.3 | 17 | < 0.00179 | < 0.00157 | < 0.00172 | < 0.00174 | < 0.00167 |
| **Carbon tetrachloride** | NV | 0.06 | 0.06 | 21 | 34 | 320 | 8,900 | 35 | 65 | 0.28 | 1.6 | < 0.00044 | < 0.00038 | < 0.00042 | < 0.00043 | < 0.00041 |
| **Chlorobenzene** | NV | 14 | 27 | 1,100 | 8,700 | 4,700 | 130,000 | NV | NV | 77 | NV | < 0.00028 | < 0.00025 | < 0.00027 | < 0.00028 | < 0.00027 |
| **Chloroethane** | NV | 620 | 1,300 | 320,000 | NV | NV | NV | NV | NV | NV | NV | < 0.00126 | < 0.00111 | < 0.00121 | < 0.00123 | < 0.00118 |
| **Chloroform** | NV | 0.016 | 0.015 | 22 | 26 | 410 | 11,000 | 9.2 | 17 | 0.074 | 0.41 | < 0.00031 | < 0.00027 | < 0.00029 | < 0.0003 | < 0.00029 |
| **Chloromethane** | NV | 4.3 | 9.1 | 2,900 | 25,000 | 25,000 | 700,000 | NV | NV | 24 | 300 | < 0.0005 | < 0.00044 | < 0.00048 | < 0.00049 | < 0.00047 |
| **cis-1,2-Dichloroethene** | NV | 2.3 | 4.5 | 310 | 2,300 | 710 | 20,000 | NV | NV | NV | NV | < 0.00031 | < 0.00028 | < 0.0003 | < 0.00031 | < 0.00029 |
| **cis-1,3-Dichloropropene** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00035 | < 0.00031 | < 0.00034 | < 0.00034 | < 0.00033 |
| **Dibromochloromethane** | NV | 0.011 | 0.011 | 12 | 17 | 210 | 5,800 | 7.8 | 14 | 0.53 | 2.9 | < 0.0005 | < 0.00044 | < 0.00048 | < 0.00049 | < 0.00047 |
| **Dibromomethane** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00051 | < 0.00045 | < 0.00049 | < 0.0005 | < 0.00048 |
| **Dichlorodifluoromethane** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00095 | < 0.00084 | < 0.00091 | < 0.00093 | < 0.00089 |
| **Ethylbenzene** | NV | 0.94 | 0.9 | 110 | 150 | 1,700 | 49,000 | 85 | 160 | 3 | 17 | < 0.0004 | < 0.00035 | < 0.00038 | < 0.00039 | < 0.00037 |
| **Freon 113** | NV | NV | NV | 800,000 | NV | NV | NV | NV | NV | NV | NV | < 0.00049 | < 0.00043 | < 0.00047 | < 0.00047 | < 0.00046 |
| **Hexachlorobutadiene** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00046 | < 0.0004 | < 0.00044 | < 0.00044 | < 0.00043 |
| **Isopropyl Ether** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00033 | < 0.00029 | < 0.00032 | < 0.00032 | < 0.00031 |
| **Isopropylbenzene** | NV | 280 | | 7,000 | 57,000 | 27,000 | 750,000 | NV | NV | NV | NV | < 0.00032 | < 0.00029 | < 0.00031 | < 0.00032 | < 0.0003 |
| **Methyl tert-butyl ether** | NV | 0.5 | 0.54 | 730 | 1,100 | 12,000 | 320,000 | 810 | 1,500 | 20 | 110 | < 0.00028 | < 0.00025 | < 0.00027 | < 0.00028 | < 0.00027 |
| **Methylene chloride** | NV | 0.44 | 2.4 | 170 | 1,600 | 2,100 | 58,000 | NV | NV | 48 | 950 | < 0.00133 | < 0.00117 | < 0.00128 | < 0.0013 | < 0.00125 |
| **Naphthalene** | NV | 0.37 | 0.34 | 25 | 23 | 580 | 16,000 | 15 | 83 | 15 | 83 | < 0.00133 | < 0.00117 | < 0.00128 | < 0.0013 | < 0.00125 |
| **n-Butylbenzene** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00034 | < 0.0003 | < 0.00033 | < 0.00034 | < 0.00032 |
| **n-Propylbenzene** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00028 | < 0.00024 | < 0.00026 | < 0.00027 | < 0.00026 |
| **sec-Butylbenzene** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00027 | < 0.00024 | < 0.00026 | < 0.00026 | < 0.00025 |
| **Styrene** | NV | 430 | 800 | 16,000 | 130,000 | 56,000 | NV | NV | NV | NV | NV | < 0.00031 | < 0.00027 | < 0.0003 | < 0.0003 | < 0.00029 |
| **tert-Butylbenzene** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00028 | < 0.00024 | < 0.00026 | < 0.00027 | < 0.00026 |
| **Tetrachloroethene** | NV | 1.9 | 1.9 | 540 | 1,000 | 1,800 | 50,000 | NV | NV | 6.6 | 36 | < 0.00037 | < 0.00032 | < 0.00035 | < 0.00036 | < 0.00035 |

**Table 1**
**Summary of Soil Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| Location | | | | | | | | | | | | B01 | | B02 | B03 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name | | | | | | | | | | | | B01-SO-7 | B01-SO-27.5 | B02-SO-3 | B03-SO-3 | B03-SO-25 |
| Collection Date | | | | | | | | | | | | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 |
| Collection depth (feet bgs) | | | | | | | | | | | | 7.0 | 27.5 | 3.0 | 3.0 | 25.0 |
| Parameter | Oregon Background Metals, Portland Basin | RBC: Soil, Leaching to Groundwater[1] | | RBC: Soil, Ingestion, Dermal Contact, and Inhalation[1] | | | | RBC: Soil, Volatilization to Outdoor Air[1] | | RBC: Soil, Vapor Intrusion into Building[1] | | | | | | |
| | | Urban Residential | Occupational | Urban Residential | Occupational | Construction Worker | Excavation Worker | Urban Residential | Occupational | Urban Residential | Occupational | | | | | |
| **VOCs[9] (mg/kg) (continued)** | | | | | | | | | | | | | | | | |
| Toluene | NV | 310 | 490 | 12,000 | 88,000 | 28,000 | 770,000 | NV | NV | NV | NV | < 0.00058 | < 0.00051 | < 0.00056 | < 0.00056 | < 0.00054 |
| trans-1,2-dichloroethene | NV | 26 | 51 | 3,100 | 23,000 | 7,100 | 200,000 | NV | NV | NV | NV | < 0.00035 | < 0.00031 | < 0.00034 | < 0.00034 | < 0.00033 |
| trans-1,3-Dichloropropene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00036 | < 0.00031 | < 0.00034 | < 0.00035 | < 0.00033 |
| Trichloroethene | NV | 0.053 | 0.087 | 17 | 51 | 470 | 13,000 | 33 | 96 | 0.26 | 2.3 | < 0.00037 | < 0.00033 | < 0.00036 | < 0.00036 | < 0.00035 |
| Trichlorofluoromethane | NV | 140 | 280 | 15,000 | 130,000 | 69,000 | NV | NV | NV | 190 | NV | < 0.00051 | < 0.00045 | < 0.00049 | < 0.0005 | < 0.00048 |
| Vinyl chloride | NV | 0.0014 | 0.01 | 0.8 | 4.4 | 34 | 950 | 6.5 | 89 | 0.053 | 2.2 | < 0.00039 | < 0.00034 | < 0.00037 | < 0.00038 | < 0.00036 |
| Xylenes (total) | NV | 49 | 100 | 2,900 | 25,000 | 20,000 | 560,000 | NV | NV | 160 | NV | < 0.00093 | < 0.00082 | < 0.00089 | < 0.00091 | < 0.00087 |
| **SVOCs[10] (mg/kg)** | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0117 | < 0.0103 | < 0.0112 | < 0.0114 | < 0.0109 |
| 2,4,6-Trichlorophenol | NV | 8.9 | 8.9 | 120 | 210 | 270 | 7,400 | NV | NV | NV | NV | < 0.0104 | < 0.00912 | < 0.00998 | < 0.0101 | < 0.00973 |
| 2,4-Dichlorophenol | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00995 | < 0.00873 | < 0.00955 | < 0.00969 | < 0.00931 |
| 2,4-Dimethylphenol | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0628 | < 0.0551 | < 0.0603 | < 0.0612 | < 0.0588 |
| 2,4-Dinitrophenol | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.131 J | < 0.115 J | < 0.125 J | < 0.127 J | < 0.122 J |
| 2,4-Dinitrotoluene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0081 J | < 0.00711 J | < 0.00777 J | < 0.00789 J | < 0.00758 J |
| 2,6-Dinitrotoluene | NV | 0.035 | 0.049 | 0.9 | 1.5 | 13 | 350 | NV | NV | NV | NV | < 0.00983 | < 0.00863 | < 0.00944 | < 0.00958 | < 0.0092 |
| 2-Chloronaphthalene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00853 | < 0.00748 | < 0.00818 | < 0.0083 | < 0.00798 |
| 2-Chlorophenol | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0111 | < 0.00973 | < 0.0106 | < 0.0108 | < 0.0104 |
| 2-Nitrophenol | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0173 | < 0.0152 | < 0.0166 | < 0.0169 | < 0.0162 |
| 3,3-Dichlorobenzidine | NV | 0.67 | 1 | 3 | 5.1 | 42 | 1,200 | NV | NV | NV | NV | < 0.106 | < 0.093 | < 0.102 | < 0.103 | < 0.0991 |
| 4,6-Dinitro-2-methylphenol | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.165 | < 0.145 | < 0.159 | < 0.161 | < 0.155 |
| 4-Bromophenylphenyl ether | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0152 | < 0.0133 | < 0.0146 | < 0.0148 | < 0.0142 |
| 4-Chloro-3-methylphenol | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00637 | < 0.00559 | < 0.00611 | < 0.0062 | < 0.00595 |
| 4-Chlorophenylphenyl ether | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00837 | < 0.00734 | < 0.00803 | < 0.00815 | < 0.00783 |
| 4-Nitrophenol | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0701 | < 0.0615 | < 0.0672 | < 0.0682 | < 0.0655 |
| Acenaphthene | NV | NV | NV | 9,400 | 70,000 | 21,000 | 590,000 | NV | NV | NV | NV | **0.0279** J | < 0.00752 | < 0.00822 | < 0.00834 | < 0.00801 |
| Acenaphthylene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | **0.151** | < 0.00786 | < 0.00859 | < 0.00872 | < 0.00838 |
| Anthracene | NV | NV | NV | 47,000 | 350,000 | 110,000 | NV | NV | NV | NV | NV | **0.339** | < 0.0074 | < 0.00809 | < 0.00821 | < 0.00789 |
| Benzidine | NV | 0.00012 | 0.0007 | 0.0012 | 0.01 | 0.082 | 2.3 | NV | NV | NV | NV | < 0.085 | < 0.0746 | < 0.0816 | < 0.0828 | < 0.0795 |
| Benzo(a)anthracene | NV | 2.3 | 8.8 | 0.34 | 2.9 | 24 | 660 | NV | NV | NV | NV | **0.553** | < 0.00501 | < 0.00548 | < 0.00556 | < 0.00534 |

**Table 1**
**Summary of Soil Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| Location | | | | B01 | | B02 | B03 | |
|---|---|---|---|---|---|---|---|---|
| Sample Name | | | | B01-SO-7 | B01-SO-27.5 | B02-SO-3 | B03-SO-3 | B03-SO-25 |
| Collection Date | | | | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 |
| Collection depth (feet bgs) | | | | 7.0 | 27.5 | 3.0 | 3.0 | 25.0 |
| Parameter | Oregon Background Metals, Portland Basin | RBC: Soil, Leaching to Groundwater[1] | | RBC: Soil, Ingestion, Dermal Contact, and Inhalation[1] | | | | RBC: Soil, Volatilization to Outdoor Air[1] | | RBC: Soil, Vapor Intrusion into Building[1] | | | | | | |
| | | Urban Residential | Occupational | Urban Residential | Occupational | Construction Worker | Excavation Worker | Urban Residential | Occupational | Urban Residential | Occupational | | | | | |
| **SVOCs[10] (mg/kg) (continued)** | | | | | | | | | | | | | | | | |
| **Benzo(a)pyrene** | NV | **1.9** | NV | **0.034** | **0.29** | **2.4** | **67** | NV | NV | NV | NV | **0.404** | < 0.00642 | < 0.00702 | < 0.00712 | < 0.00684 |
| **Benzo(b)fluoranthene** | NV | NV | NV | **0.34** | **2.9** | **24** | **670** | NV | NV | NV | NV | **0.534** | < 0.00814 | < 0.0089 | < 0.00903 | < 0.00868 |
| **Benzo(ghi)perylene** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | **0.189** | < 0.00844 | < 0.00923 | < 0.00937 | < 0.009 |
| **Benzo(k)fluoranthene** | NV | NV | NV | **3.4** | **29** | **240** | **6,700** | NV | NV | NV | NV | **0.201** | < 0.00681 | < 0.00745 | < 0.00756 | < 0.00727 |
| **Bis(2-chloro-1-methylethyl)ether** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0101 | < 0.0089 | < 0.00973 | < 0.00988 | < 0.00949 |
| **Bis(2-chloroethoxy)methane** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0103 | < 0.00902 | < 0.00986 | < 0.01 | < 0.00961 |
| **Bis(2-chloroethyl)ether** | NV | **0.0002** | **0.0009** | **0.96** | **1.3** | **16** | **450** | **1.2** | **6.9** | **1.2** | **6.9** | < 0.012 | < 0.0105 | < 0.0115 | < 0.0116 | < 0.0112 |
| **Bis(2-ethylhexyl)phthalate** | NV | NV | NV | **97** | **160** | **1,300** | **37,000** | NV | NV | NV | NV | **0.02** J | < 0.0141 | < 0.0154 | < 0.0156 | < 0.015 |
| **Butylbenzylphthalate** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0137 | < 0.0121 | < 0.0132 | < 0.0134 | < 0.0129 |
| **Chrysene** | NV | NV | NV | **34** | **290** | **2,400** | **67,000** | NV | NV | NV | NV | **0.495** | < 0.0065 | < 0.00711 | < 0.00721 | < 0.00693 |
| **Dibenzo(a,h)anthracene** | NV | NV | NV | **0.034** | **0.29** | **2.4** | **67** | NV | NV | NV | NV | **0.0491** | < 0.00961 | < 0.0105 | < 0.0107 | < 0.0102 |
| **Diethyl phthalate** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00922 | < 0.00809 | < 0.00885 | < 0.00898 | < 0.00863 |
| **Dimethyl phthalate** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00721 | < 0.00632 | < 0.00692 | < 0.00702 | < 0.00674 |
| **Di-n-butyl phthalate** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | **0.025** J | < 0.0128 | < 0.014 | < 0.0142 | < 0.0136 |
| **Di-n-octyl phthalate** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0121 | < 0.0106 | < 0.0116 | < 0.0118 | < 0.0113 |
| **Fluoranthene** | NV | NV | NV | **4,800** | **30,000** | **10,000** | **280,000** | NV | NV | NV | NV | **1.64** | < 0.00581 | < 0.00635 | < 0.00645 | < 0.00619 |
| **Fluorene** | NV | NV | NV | **6,300** | **47,000** | **14,000** | **390,000** | NV | NV | NV | NV | **0.199** | < 0.00799 | < 0.00873 | < 0.00886 | < 0.00851 |
| **Hexachlorobenzene** | NV | **0.083** | **0.084** | **0.67** | **0.93** | **11** | **320** | **2.4** | **13** | **2.4** | **13** | < 0.0114 | < 0.01 | < 0.011 | < 0.0111 | < 0.0107 |
| **Hexachlorobutadiene** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0133 | < 0.0117 | < 0.0128 | < 0.013 | < 0.0125 |
| **Hexachlorocyclopentadiene** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0783 | < 0.0687 | < 0.0752 | < 0.0763 | < 0.0733 |
| **Hexachloroethane** | NV | **0.095** | **0.087** | **24** | **32** | **180** | **5,100** | **19** | **36** | **1.4** | **7.6** | < 0.0179 | < 0.0157 | < 0.0172 | < 0.0174 | < 0.0167 |
| **Indeno(1,2,3-cd)pyrene** | NV | NV | NV | **0.34** | **2.9** | **24** | **670** | NV | NV | NV | NV | **0.176** | < 0.00904 | < 0.00989 | < 0.01 | < 0.00964 |
| **Isophorone** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00697 | < 0.00611 | < 0.00668 | < 0.00678 | < 0.00652 |
| **Naphthalene** | NV | **0.37** | **0.34** | **25** | **23** | **580** | **16,000** | **15** | **83** | **15** | **83** | **0.13** | < 0.0104 | < 0.0114 | < 0.0116 | < 0.0111 |
| **Nitrobenzene** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00927 | < 0.00814 | < 0.0089 | < 0.00903 | < 0.00868 |
| **N-Nitrosodimethylamine** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.0863 | < 0.0758 | < 0.0829 | < 0.0841 | < 0.0808 |
| **N-Nitrosodiphenylamine** | NV | **39** | **45** | **280** | **470** | **3,800** | **110,000** | NV | NV | NV | NV | < 0.00793 | < 0.00696 | < 0.00761 | < 0.00772 | < 0.00742 |
| **N-Nitrosodipropylamine** | NV | **0.0038** | **0.0054** | **0.19** | **0.33** | **2.7** | **74** | NV | NV | NV | NV | < 0.0121 | < 0.0106 | < 0.0116 | < 0.0118 | < 0.0113 |
| **Pentachlorophenol** | NV | **0.23** | **0.17** | **2.6** | **4** | **34** | **960** | NV | NV | NV | NV | < 0.0641 | < 0.0562 | < 0.0615 | < 0.0624 | < 0.0599 |
| **Phenanthrene** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | **1.29** | < 0.00618 | < 0.00676 | < 0.00686 | < 0.00659 |
| **Phenol** | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00927 | < 0.00814 | < 0.0089 | < 0.00903 | < 0.00868 |
| **Pyrene** | NV | NV | NV | **3,600** | **23,000** | **7,500** | **210,000** | NV | NV | NV | NV | **0.963** | < 0.0144 | < 0.0158 | < 0.016 | < 0.0154 |

**Table 1**
**Summary of Soil Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| Location | | | | B01 | | B02 | B03 | |
|---|---|---|---|---|---|---|---|---|
| Sample Name | | | | B01-SO-7 | B01-SO-27.5 | B02-SO-3 | B03-SO-3 | B03-SO-25 |
| Collection Date | | | | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 |
| Collection depth (feet bgs) | | | | 7.0 | 27.5 | 3.0 | 3.0 | 25.0 |
| Parameter | Oregon Background Metals, Portland Basin | RBC: Soil, Leaching to Groundwater[1] | | RBC: Soil, Ingestion, Dermal Contact, and Inhalation[1] | | | | RBC: Soil, Volatilization to Outdoor Air[1] | | RBC: Soil, Vapor Intrusion into Building[1] | | | | | |
| | | Urban Residential | Occupational | Urban Residential | Occupational | Construction Worker | Excavation Worker | Urban Residential | Occupational | Urban Residential | Occupational | | | | |
| **PAHs[11] (mg/kg)** | | | | | | | | | | | | | | | |
| 1-Methylnaphthalene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | **0.0812** | < 0.00234 | < 0.00256 | < 0.0026 | < 0.0025 |
| 2-Chloronaphthalene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | < 0.00267 | < 0.00234 | < 0.00256 | < 0.0026 | < 0.0025 |
| 2-Methylnaphthalene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | **0.0664** | < 0.00234 | < 0.00256 | < 0.0026 | < 0.0025 |
| Acenaphthene | NV | NV | NV | 9,400 | 70,000 | 21,000 | 590,000 | NV | NV | NV | NV | **0.0486** | < 0.0007 | < 0.00077 | < 0.00078 | < 0.00075 |
| Acenaphthylene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | **0.197** | < 0.0007 | < 0.00077 | < 0.00078 | < 0.00075 |
| Anthracene | NV | NV | NV | 47,000 | 350,000 | 110,000 | NV | NV | NV | NV | NV | **0.465** | < 0.0007 | < 0.00077 | < 0.00078 | < 0.00075 |
| Benzo(a)anthracene | NV | 2.3 | 8.8 | 0.34 | 2.9 | 24 | 660 | NV | NV | NV | NV | **0.702** | < 0.0007 | **0.00191** J | < 0.00078 | < 0.00075 |
| Benzo(a)pyrene | NV | 1.9 | NV | 0.034 | 0.29 | 2.4 | 67 | NV | NV | NV | NV | **0.464** | < 0.0007 | **0.00197** J | < 0.00078 | < 0.00075 |
| Benzo(b)fluoranthene | NV | NV | NV | 0.34 | 2.9 | 24 | 670 | NV | NV | NV | NV | **0.459** | < 0.0007 | **0.00272** J | < 0.00078 | < 0.00075 |
| Benzo(ghi)perylene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | **0.222** | < 0.0007 | **0.00349** J | < 0.00078 | < 0.00075 |
| Benzo(k)fluoranthene | NV | NV | NV | 3.4 | 29 | 240 | 6,700 | NV | NV | NV | NV | **0.215** | < 0.0007 | **0.00122** J | < 0.00078 | < 0.00075 |
| Chrysene | NV | NV | NV | 34 | 290 | 2,400 | 67,000 | NV | NV | NV | NV | **0.585** | < 0.0007 | **0.00175** J | < 0.00078 | < 0.00075 |
| Dibenzo(a,h)anthracene | NV | NV | NV | 0.034 | 0.29 | 2.4 | 67 | NV | NV | NV | NV | **0.0422** | < 0.0007 | < 0.00077 | < 0.00078 | < 0.00075 |
| Fluoranthene | NV | NV | NV | 48,00 | 30,000 | 10,000 | 280,000 | NV | NV | NV | NV | **1.47** | < 0.0007 | **0.00258** J | < 0.00078 | < 0.00075 |
| Fluorene | NV | NV | NV | 6,300 | 47,000 | 14,000 | 390,000 | NV | NV | NV | NV | **0.288** | < 0.0007 | < 0.00077 | < 0.00078 | < 0.00075 |
| Indeno(1,2,3-cd)pyrene | NV | NV | NV | 0.34 | 2.9 | 24 | 670 | NV | NV | NV | NV | **0.226** | < 0.0007 | **0.00184** J | < 0.00078 | < 0.00075 |
| Naphthalene | NV | 0.37 | 0.34 | 25 | 23 | 580 | 16,000 | 15 | 83 | 15 | 83 | **0.0975** | < 0.0234 J | < 0.0256 J | < 0.0026 | < 0.025 J |
| Phenanthrene | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | NV | **1.44** | < 0.0007 | **0.00127** J | < 0.00078 | < 0.00075 |
| Pyrene | NV | NV | NV | 3,600 | 23,000 | 7,500 | 210,000 | NV | NV | NV | NV | **1.3** | < 0.0007 | **0.00261** J | < 0.00078 | < 0.00075 |

**Table 1**
**Summary of Soil Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Location** | | | | | | | | | | | | B01 | | B02 | B03 | |
| **Sample Name** | | | | | | | | | | | | B01-SO-7 | B01-SO-27.5 | B02-SO-3 | B03-SO-3 | B03-SO-25 |
| **Collection Date** | | | | | | | | | | | | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 | 01/19/2018 |
| **Collection depth (feet bgs)** | | | | | | | | | | | | 7.0 | 27.5 | 3.0 | 3.0 | 25.0 |
| **Parameter** | **Oregon Background Metals, Portland Basin** | **RBC: Soil, Leaching to Groundwater[1]** | | **RBC: Soil, Ingestion, Dermal Contact, and Inhalation[1]** | | | | **RBC: Soil, Volatilization to Outdoor Air[1]** | | **RBC: Soil, Vapor Intrusion into Building[1]** | | | | | | |
| | | **Urban Residential** | **Occupational** | **Urban Residential** | **Occupational** | **Construction Worker** | **Excavation Worker** | **Urban Residential** | **Occupational** | **Urban Residential** | **Occupational** | | | | | |
| **TPH (mg/kg)** | | | | | | | | | | | | | | | | |
| **Gasoline-Range Organics[12]** | **NV** | **31** | **130** | **2,500** | **20,000** | **9,700** | **NV** | **5,900** | **69,000** | **94** | **NV** | **0.0549** J | < 0.0397 | < 0.0434 | < 0.0441 | < 0.0423 |
| **Diesel-Range Organics[13]** | **NV** | **9,500** | **NV** | **2,200** | **14,000** | **4,600** | **NV** | **NV** | **NV** | **NV** | **NV** | **68.3** | **1.92** J | < 1.69 | < 1.72 | **2.29** J |
| **Residual-Range Organics[13]** | **NV** | **9,500[14]** | **NV** | **2,200[14]** | **14,000[14]** | **4,600[14]** | **NV** | **NV** | **NV** | **NV** | **NV** | **182** | **28.2** | < 4.23 | < 4.29 | **16** |

Notes:

Results in **bold** indicate analyte detected at or exceeding the method detection limit (MDL).
Results in **bold** and shaded **yellow** indicate exceedance of Oregon DEQ RBCs or Oregon Background Metals, Portland Basin concentrations.
< denotes analyte not detected at or exceeding the listed MDL.

[1]State of Oregon Department of Environmental Quality Risk-Based Concentrations Table, November 1, 2015.
[2]Analyzed by US Environmental Protection Agency (EPA) Method 6010B, 6020, 7471A, or 4500CN E-2011.
[3]RBC for trivalent chromium is applied, as value for total chromium is not available.
[4]Analyzed by EPA Method 8081.
[5]Analyzed by EPA Method 8082.
[6]Total PCBs are sum of all PCB Aroclors. Results are summed at one-half the reported value when non-detect. When all PCB Aroclor results are non-detect, the highest value is reported.
[7]Analyzed by EPA Method 8141.
[8]Analyzed by EPA Method 8151.
[9]Analyzed by EPA Method 8260B.
[10]Analyzed by EPA Method 8270.
[11]Analyzed by EPA Method 8270D/SIM.
[12]Analyzed by Northwest Method NWTPH-Gx.
[13]Analyzed by Northwest Method NWTPH-Dx.
[14]Value is for generic diesel/heating oil, since generic residual-range hydrocarbon values are not available.

bgs = below ground surface
DEQ = Oregon Department of Environmental Quality
J = Result is an estimate
mg/kg = milligrams per kilogram
NV = no value, value exceeds 1,000,000 mg/kg, or RBC exceeds limit of three-phase equilibrium partitioning
PAH = polycyclic aromatic hydrocarbon
PCB = polychlorinated biphenyl
R = result is rejected
RBCs = risk-based concentrations
SVOC = semivolatile organic compound
TPH = total petroleum hydrocarbons
VOC = volatile organic compound

**Table 2**
**Summary of Groundwater Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | **Location** | B01 |
| | | | | | | | **Sample Name** | B01-GW |
| | | | | | | | **Collection Date** | 01/19/2018 |
| **Parameter** | **RBC: Groundwater, Ingestion and Inhalation from Tap Water[1]** | | **RBC: Groundwater in Excavation[1]** | **RBC: Groundwater, Volatilization to Outdoor Air[1]** | | **RBC: Groundwater, Vapor Intrusion into Building[1]** | | |
| | **Urban Residential** | **Occupational** | **Construction and Excavation Worker** | **Urban Residential** | **Occupational** | **Urban Residential** | **Occupational** | |
| **Total Metals[2] (µg/l)** | | | | | | | | |
| **Antimony** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **0.922** J |
| **Arsenic** | **0.21** | **0.31** | **6,300** | **NV** | **NV** | **NV** | **NV** | **31** |
| **Beryllium** | **150** | **330** | **270,000** | **NV** | **NV** | **NV** | **NV** | < 5.66 |
| **Cadmium** | **73** | **160** | **130,000** | **NV** | **NV** | **NV** | **NV** | **0.861** J |
| **Chromium** | **110,000[3]** | **250,000[3]** | **9,400[3]** | **NV** | **NV** | **NV** | **NV** | **137** |
| **Copper** | **2,900** | **6,500** | **5,400,000** | **NV** | **NV** | **NV** | **NV** | **270** |
| **Cyanide** | **44** | **98** | **81,000** | **NV** | **NV** | **NV** | **NV** | < 1.8 |
| **Lead** | **15** | **15** | **NV** | **NV** | **NV** | **NV** | **NV** | **62.3** |
| **Mercury** | **22** | **49** | **NV** | **NV** | **NV** | **NV** | **NV** | **0.12** J |
| **Nickel** | **1,500** | **3,300** | **13,446,802** | **NV** | **NV** | **NV** | **NV** | **137** |
| **Selenium** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 7.4 |
| **Silver** | **370** | **820** | **1,100,000** | **NV** | **NV** | **NV** | **NV** | < 2.8 |
| **Thallium** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **0.97** J |
| **Zinc** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **446** |
| **Organochlorine Pesticides[4] (µg/l)** | | | | | | | | |
| **4,4'-DDD** | **0.1** | **0.074** | **31** | **NV** | **NV** | **NV** | **NV** | < 0.017 |
| **4,4'-DDE** | **0.21** | **0.21** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0164 |
| **4,4'-DDT** | **0.92** | **1.4** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0177 |
| **Aldrin** | **0.0042** | **0.0042** | **3.5** | **NV** | **NV** | **NV** | **NV** | < 0.00813 |
| **alpha-BHC** | **0.028** | **0.027** | **18** | **NV** | **NV** | **NV** | **NV** | < 0.0166 |

**Table 2**
**Summary of Groundwater Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | **Location** | B01 |
| | | | | | | | **Sample Name** | B01-GW |
| | | | | | | | **Collection Date** | 01/19/2018 |
| | **RBC: Groundwater, Ingestion and Inhalation from Tap Water[1]** | | **RBC: Groundwater in Excavation[1]** | **RBC: Groundwater, Volatilization to Outdoor Air[1]** | | **RBC: Groundwater, Vapor Intrusion into Building[1]** | | |
| **Parameter** | **Urban Residential** | **Occupational** | **Construction and Excavation Worker** | **Urban Residential** | **Occupational** | **Urban Residential** | **Occupational** | |
| **beta-BHC** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0184 |
| **Chlordane** | **0.2** | **0.21** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0977 |
| **delta-BHC** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0197 |
| **Dieldrin** | **0.0061** | **0.005** | **2.4** | **NV** | **NV** | **NV** | **NV** | < 0.00751 |
| **Endosulfan I** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0179 |
| **Endosulfan II (beta)** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0176 |
| **Endosulfan sulfate** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0196 |
| **Endrin** | **9.5** | **8.6** | **170** | **NV** | **NV** | **NV** | **NV** | < 0.0189 |
| **Endrin aldehyde** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0142 |
| **Endrin ketone** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.017 |
| **Heptachlor** | **0.0051** | **0.0039** | **1.8** | **NV** | **NV** | **NV** | **NV** | < 0.0108 |
| **Heptachlor epoxide** | **0.0059** | **0.0053** | **3.2** | **NV** | **NV** | **NV** | **NV** | < 0.0175 |
| **Hexachlorobenzene** | **0.045** | **0.045** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0134 |
| **Lindane** | **0.16** | **0.16** | **100** | **NV** | **NV** | **NV** | **NV** | < 0.0176 |
| **Methoxychlor** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0193 |
| **Toxaphene** | **0.053** | **0.04** | **18** | **NV** | **NV** | **NV** | **NV** | < 0.168 |
| **PCB Aroclors[5] (µg/l)** | | | | | | | | |
| **Aroclor 1016** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.1 |
| **Aroclor 1221** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.073 |
| **Aroclor 1232** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.042 |
| **Aroclor 1242** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.047 |
| **Aroclor 1248** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.086 |
| **Aroclor 1254** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.047 |

**Table 2**
**Summary of Groundwater Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | **Location** | B01 |
| | | | | | | | **Sample Name** | B01-GW |
| | | | | | | | **Collection Date** | 01/19/2018 |
| | **RBC: Groundwater, Ingestion and Inhalation from Tap Water[1]** | | **RBC: Groundwater in Excavation[1]** | **RBC: Groundwater, Volatilization to Outdoor Air[1]** | | **RBC: Groundwater, Vapor Intrusion into Building[1]** | | |
| **Parameter** | **Urban Residential** | **Occupational** | **Construction and Excavation Worker** | **Urban Residential** | **Occupational** | **Urban Residential** | **Occupational** | |
| **Aroclor 1260** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.12 |
| **Total PCBs (ND = 0)[6]** | **0.028** | **0.028** | **30** | **NV** | **NV** | **NV** | **NV** | < 0.12 |
| **Organophosphorus Pesticides[7] (µg/l)** | | | | | | | | |
| **Coumaphos** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.277 |
| **Demeton** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.341 |
| **Diazinon** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.377 |
| **Dichlorvos** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.212 |
| **Dimethoate** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.105 |
| **Disulfoton** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.277 |
| **Dursban** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.245 |
| **Ethoprop** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.354 |
| **Fensulfothion** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.13 |
| **Fenthion** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.266 |
| **Guthion** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.348 |
| **Merphos** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.267 J |
| **Methyl parathion** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.257 |
| **Organophosphorus Pesticides[7] (µg/l) (continued)** | | | | | | | | |
| **Mevinphos** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.118 |
| **Naled** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.289 |
| **Parathion** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.292 |
| **Phorate** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.282 |
| **Ronnel** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.252 |
| **Santox** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.261 |

**Table 2**
**Summary of Groundwater Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | **Location** | B01 |
| | | | | | | | **Sample Name** | B01-GW |
| | | | | | | | **Collection Date** | 01/19/2018 |
| | **RBC: Groundwater, Ingestion and Inhalation from Tap Water[1]** | | **RBC: Groundwater in Excavation[1]** | **RBC: Groundwater, Volatilization to Outdoor Air[1]** | | **RBC: Groundwater, Vapor Intrusion into Building[1]** | | |
| **Parameter** | **Urban Residential** | **Occupational** | **Construction and Excavation Worker** | **Urban Residential** | **Occupational** | **Urban Residential** | **Occupational** | |
| **Stirofos** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.226 |
| **Sulfotepp** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.202 |
| **Sulprofos** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.205 |
| **Sumitox** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.173 |
| **Tetraethylpyrophosphate (TEPP)** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | 9.74 R |
| **Tokuthion** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.254 |
| **Trichloronate** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.213 |
| **Chlorinated Herbicides[8] (µg/l)** | | | | | | | | |
| **2,4,5-T** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.843 |
| **2,4-D** | **670** | **1,200** | **77,000** | **NV** | **NV** | **NV** | **NV** | < 0.744 |
| **2,4-DB** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.775 |
| **Dalapon** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 1.04 |
| **Dicamba** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.813 |
| **Dichlorprop** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.778 |
| **Dinoseb** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.795 |
| **MCPA** | **30** | **47** | **1,700** | **NV** | **NV** | **NV** | **NV** | < 13.1 |
| **MCPP (Mecoprop)** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 7.15 |
| **Silvex** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.845 |
| **VOCs[9] (µg/l)** | | | | | | | | |
| **1,1,1,2-Tetrachloroethane** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.385 |
| **1,1,1-Trichloroethane** | **30,000** | **37,000** | **1,100,000** | **NV** | **NV** | **NV** | **NV** | < 0.319 |
| **1,1,2,2-Tetrachloroethane** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.13 |
| **1,1,2-Trichloroethane** | **1.3** | **1.3** | **49** | **5,600** | **21,000** | **1,000** | **11,000** | < 0.383 |
| **1,1-Dichloroethane** | **13** | **13** | **10,000** | **37,000** | **68,000** | **2,600** | **14,000** | < 0.259 |
| **1,1-Dichloroethene** | **1,100** | **1,400** | **44,000** | **570,000** | **2,400,000** | **29,000** | **360,000** | < 0.398 |
| **1,1-Dichloropropene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.352 |
| **1,2,3-Trichlorobenzene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.23 |
| **1,2,3-Trichloropropane** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.807 |
| **1,2,3-Trimethylbenzene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.321 |

**Table 2**
**Summary of Groundwater Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | **Location** | B01 |
| | | | | | | | **Sample Name** | B01-GW |
| | | | | | | | **Collection Date** | 01/19/2018 |
| | **RBC: Groundwater, Ingestion and Inhalation from Tap Water[1]** | | **RBC: Groundwater in Excavation[1]** | **RBC: Groundwater, Volatilization to Outdoor Air[1]** | | **RBC: Groundwater, Vapor Intrusion into Building[1]** | | |
| **Parameter** | **Urban Residential** | **Occupational** | **Construction and Excavation Worker** | **Urban Residential** | **Occupational** | **Urban Residential** | **Occupational** | |
| **1,2,4-Trichlorobenzene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.355 |
| **1,2,4-Trimethylbenzene** | **54** | **61** | **1,700** | **NV** | **NV** | **5,800** | **NV** | < 0.373 |
| **1,2-Dibromo-3-chloropropane** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 1.33 |
| **1,2-Dibromoethane** | **0.034** | **0.034** | **27** | **430** | **790** | **110** | **590** | < 0.381 |
| **1,2-Dichlorobenzene** | **1,200** | **1,400** | **37,000** | **NV** | **NV** | **NV** | **NV** | < 0.349 |
| **1,2-Dichloroethane** | **0.78** | **0.78** | **630** | **4,900** | **9,000** | **700** | **3,900** | < 0.361 |
| **1,2-Dichloropropane** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.306 |
| **1,3,5-Trimethylbenzene** | **500** | **600** | **15,000** | **NV** | **NV** | **NV** | **NV** | < 0.387 |
| **1,3-Dichlorobenzene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.22 |
| **1,3-Dichloropropane** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.366 |
| **1,4-Dichlorobenzene** | **2.3** | **2.1** | **1,500** | **12,000** | **21,000** | **1,300** | **7,100** | < 0.274 |
| **2,2-Dichloropropane** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.321 |
| **2-Butanone** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 3.93 |
| **2-Chlorotoluene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.375 |
| **4-Chlorotoluene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.351 |
| **4-Isopropyltoluene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.35 |
| **4-Methyl-2-pentanone** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 2.14 |
| **Acetone** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 10 |
| **Acrolein** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | 8.87 R |
| **Acrylonitrile** | **0.23** | **0.25** | **250** | **5,300** | **9,800** | **1,700** | **9,200** | < 1.87 |
| **Benzene** | **2** | **2.1** | **1,800** | **7,400** | **14,000** | **510** | **2,800** | < 0.331 |

**Table 2**
**Summary of Groundwater Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | **Location** | B01 |
| | | | | | | | **Sample Name** | B01-GW |
| | | | | | | | **Collection Date** | 01/19/2018 |
| | **RBC: Groundwater, Ingestion and Inhalation from Tap Water[1]** | | **RBC: Groundwater in Excavation[1]** | **RBC: Groundwater, Volatilization to Outdoor Air[1]** | | **RBC: Groundwater, Vapor Intrusion into Building[1]** | | |
| **Parameter** | **Urban Residential** | **Occupational** | **Construction and Excavation Worker** | **Urban Residential** | **Occupational** | **Urban Residential** | **Occupational** | |
| **Bromobenzene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.352 |
| **Bromodichloromethane** | **0.62** | **0.6** | **450** | **3200** | **6,000** | **420** | **2,300** | < 0.38 |
| **Bromoform** | **15** | **16** | **14,000** | **300,000** | **550,000** | **85,000** | **470,000** | < 0.469 |
| **VOCs[9] (µg/l) (continued)** | | | | | | | | |
| **Bromomethane** | **28** | **36** | **1,200** | **32,000** | **130,000** | **2,100** | **27,000** | < 0.866 |
| **Carbon tetrachloride** | **2** | **2.1** | **1,800** | **4,200** | **7,700** | **220** | **1,200** | < 0.379 |
| **Chlorobenzene** | **290** | **350** | **10,000** | **NV** | **NV** | **67,000** | **NV** | < 0.348 |
| **Chloroethane** | **76,000** | **88,000** | **2,400,000** | **NV** | **NV** | **2,800,000** | **NV** | < 0.453 |
| **Chloroform** | **1** | **0.98** | **720** | **3,400** | **6,300** | **290** | **1,600** | < 0.324 |
| **Chloromethane** | **690** | **790** | **22,000** | **440,000** | **1,800,000** | **26,000** | **330,000** | < 0.276 |
| **cis-1,2-Dichloroethene** | **140** | **260** | **18,000** | **NV** | **NV** | **NV** | **NV** | < 0.26 |
| **cis-1,3-Dichloropropene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.418 |
| **Dibromochloromethane** | **0.77** | **0.77** | **610** | **9,300** | **17,000** | **2,300** | **13,000** | < 0.327 |
| **Dibromomethane** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.346 |
| **Dichlorodifluoromethane** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **6.33** |
| **Ethylbenzene** | **6.7** | **6.4** | **4,500** | **23,000** | **43,000** | **1,500** | **8,200** | < 0.384 |
| **Freon 113** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.303 |
| **Hexachlorobutadiene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.256 |
| **Isopropyl Ether** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.32 |
| **Isopropylbenzene** | **1,800** | **2,000** | **51,000** | **NV** | **NV** | **NV** | **NV** | < 0.326 |
| **Methyl tert-butyl ether** | **64** | **68** | **63,000** | **830,000** | **1,500,000** | **160,000** | **870,000** | < 0.367 |
| **Methylene chloride** | **37** | **200** | **79,000** | **1,900,000** | **12,581,128** | **160,000** | **3,300,000** | < 1 |
| **Naphthalene** | **0.78** | **0.72** | **500** | **8,500** | **16,000** | **2,000** | **11,000** | < 1 |
| **n-Butylbenzene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.361 |
| **n-Propylbenzene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.349 |
| **sec-Butylbenzene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.365 |
| **Styrene** | **4,600** | **5,700** | **170,000** | **NV** | **NV** | **NV** | **NV** | < 0.307 |

**Table 2**
**Summary of Groundwater Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | **Location** | B01 |
| | | | | | | | **Sample Name** | B01-GW |
| | | | | | | | **Collection Date** | 01/19/2018 |
| | **RBC: Groundwater, Ingestion and Inhalation from Tap Water[1]** | | **RBC: Groundwater in Excavation[1]** | **RBC: Groundwater, Volatilization to Outdoor Air[1]** | | **RBC: Groundwater, Vapor Intrusion into Building[1]** | | |
| **Parameter** | **Urban Residential** | **Occupational** | **Construction and Excavation Worker** | **Urban Residential** | **Occupational** | **Urban Residential** | **Occupational** | |
| **tert-Butylbenzene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.399 |
| **Tetrachloroethene** | **49** | **48** | **5,600** | **150,000** | **NV** | **8,700** | **48,000** | < 0.372 |
| **Toluene** | **4,400** | **6,300** | **220,000** | **NV** | **NV** | **NV** | **NV** | **1.06** |
| **trans-1,2-dichloroethene** | **1,400** | **2,600** | **180,000** | **NV** | **NV** | **NV** | **NV** | < 0.396 |
| **trans-1,3-Dichloropropene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.419 |
| **Trichloroethene** | **2** | **3.3** | **3,000** | **6,900** | **20,000** | **430** | **3,700** | < 0.398 |
| **Trichlorofluoromethane** | **4,200** | **5,200** | **160,000** | **780,000** | **NV** | **36,000** | **460,000** | < 1.2 |
| **Vinyl chloride** | **0.066** | **0.49** | **960** | **430** | **5,900** | **21** | **880** | < 0.259 |
| **Xylenes (total)** | **710** | **830** | **23,000** | **NV** | **NV** | **86,000** | **NV** | **1.32** J |
| **SVOCs[10] (ug/L)** | | | | | | | | |
| **1,2,4-Trichlorobenzene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.355 |
| **2,4,6-Trichlorophenol** | **17** | **16** | **1,700** | **NV** | **NV** | **NV** | **NV** | < 0.297 |
| **2,4-Dichlorophenol** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.284 |
| **2,4-Dimethylphenol** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.264 |
| **2,4-Dinitrophenol** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 3.25 |
| **2,4-Dinitrotoluene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 1.65 |
| **2,6-Dinitrotoluene** | **0.19** | **0.27** | **830** | **NV** | **NV** | **NV** | **NV** | < 0.279 |
| **2-Chloronaphthalene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.33 |
| **2-Chlorophenol** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.283 |
| **2-Nitrophenol** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.32 |
| **3,3-Dichlorobenzidine** | **0.69** | **1** | **NV** | **NV** | **NV** | **NV** | **NV** | < 2.02 |
| **4,6-Dinitro-2-methylphenol** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 2.62 |
| **4-Bromophenylphenyl ether** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.335 |
| **4-Chloro-3-methylphenol** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.263 |
| **4-Chlorophenylphenyl ether** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.303 |
| **4-Nitrophenol** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 2.01 |
| **Acenaphthene** | **2,400** | **2,500** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.316 |
| **Acenaphthylene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.309 |

**Table 2**
**Summary of Groundwater Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | **Location** | B01 |
| | | | | | | | **Sample Name** | B01-GW |
| | | | | | | | **Collection Date** | 01/19/2018 |
| | **RBC: Groundwater, Ingestion and Inhalation from Tap Water[1]** | | **RBC: Groundwater in Excavation[1]** | **RBC: Groundwater, Volatilization to Outdoor Air[1]** | | **RBC: Groundwater, Vapor Intrusion into Building[1]** | | |
| **Parameter** | **Urban Residential** | **Occupational** | **Construction and Excavation Worker** | **Urban Residential** | **Occupational** | **Urban Residential** | **Occupational** | |
| **Anthracene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.291 |
| **Benzidine** | **0.00034** | **0.0019** | **17** | **NV** | **NV** | **NV** | **NV** | < 4.32 |
| **Benzo(a)anthracene** | **0.043** | **0.17** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0975 |
| **Benzo(a)pyrene** | **0.011** | **0.064** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.34 |
| **Benzo(b)fluoranthene** | **0.11** | **0.64** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0896 |
| **Benzo(ghi)perylene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.161 |
| **Benzo(k)fluoranthene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.355 |
| **Bis(2-chloro-1-methylethyl)ether** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.445 |
| **SVOCs[10] (ug/L) (continued)** | | | | | | | | |
| **Bis(2-chloroethoxy)methane** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.329 |
| **Bis(2-chloroethyl)ether** | **0.062** | **0.063** | **51** | **13,000** | **30,000** | **5,500** | **30,000** | < 1.62 |
| **Bis(2-ethylhexyl)phthalate** | **22** | **33** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.709 |
| **Butylbenzylphthalate** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.275 |
| **Chrysene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.332 |
| **Dibenzo(a,h)anthracene** | **0.011** | **0.064** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.279 |
| **Diethyl phthalate** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.282 |
| **Dimethyl phthalate** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.283 |
| **Di-n-butyl phthalate** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.266 |
| **Di-n-octyl phthalate** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.278 |
| **Fluoranthene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.31 |
| **Fluorene** | **1400** | **1300** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.323 |
| **Hexachlorobenzene** | **0.045** | **0.045** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.341 |
| **Hexachlorobutadiene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.329 |
| **Hexachlorocyclopentadiene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 2.33 |
| **Hexachloroethane** | **1.5** | **1.3** | **700** | **12,000** | **22,000** | **1,400** | **7,500** | < 0.365 |

**Table 2**
**Summary of Groundwater Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | **Location** | B01 |
| | | | | | | | **Sample Name** | B01-GW |
| | | | | | | | **Collection Date** | 01/19/2018 |
| | **RBC: Groundwater, Ingestion and Inhalation from Tap Water[1]** | | **RBC: Groundwater in Excavation[1]** | **RBC: Groundwater, Volatilization to Outdoor Air[1]** | | **RBC: Groundwater, Vapor Intrusion into Building[1]** | | |
| **Parameter** | **Urban Residential** | **Occupational** | **Construction and Excavation Worker** | **Urban Residential** | **Occupational** | **Urban Residential** | **Occupational** | |
| **Indeno(1,2,3-cd)pyrene** | **0.11** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.279 |
| **Isophorone** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.272 |
| **Naphthalene** | **0.78** | **0.72** | **500** | **8,500** | **16,000** | **2,000** | **11,000** | < 0.372 |
| **Nitrobenzene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.367 |
| **N-Nitrosodimethylamine** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 1.26 |
| **N-Nitrosodiphenylamine** | **49** | **57** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.304 |
| **N-Nitrosodipropylamine** | **0.043** | **0.062** | **370** | **NV** | **NV** | **NV** | **NV** | < 0.403 |
| **Pentachlorophenol** | **0.15** | **0.12** | **53** | **NV** | **NV** | **NV** | **NV** | < 0.313 |
| **Phenanthrene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.366 |
| **Phenol** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **0.802** J |
| **Pyrene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.33 |
| **PAHs[11] (µg/l)** | | | | | | | | |
| **1-Methylnaphthalene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **0.0251** J |
| **2-Chloronaphthalene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.00647 |
| **2-Methylnaphthalene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **0.0401** J |
| **Acenaphthene** | **2,400** | **2,500** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.01 |
| **Acenaphthylene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.012 |
| **Anthracene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.014 |
| **Benzo(a)anthracene** | **0.043** | **0.17** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0041 |
| **Benzo(a)pyrene** | **0.011** | **0.064** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0116 |
| **Benzo(b)fluoranthene** | **0.11** | **0.64** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.05 J |
| **Benzo(ghi)perylene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.05 J |
| **Benzo(k)fluoranthene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0136 |

**Table 2**
**Summary of Groundwater Analytical Results**
**2997 South Moody Avenue**
**Portland, Oregon**
**Farallon PN: 2243-005**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | **Location** | B01 |
| | | | | | | | **Sample Name** | B01-GW |
| | | | | | | | **Collection Date** | 01/19/2018 |
| | **RBC: Groundwater, Ingestion and Inhalation from Tap Water[1]** | | **RBC: Groundwater in Excavation[1]** | **RBC: Groundwater, Volatilization to Outdoor Air[1]** | | **RBC: Groundwater, Vapor Intrusion into Building[1]** | | |
| **Parameter** | **Urban Residential** | **Occupational** | **Construction and Excavation Worker** | **Urban Residential** | **Occupational** | **Urban Residential** | **Occupational** | |
| **Chrysene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0108 |
| **Dibenzo(a,h)anthracene** | **0.011** | **0.064** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.00396 |
| **Fluoranthene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0157 |
| **Fluorene** | **1,400** | **1,300** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0085 |
| **Indeno(1,2,3-cd)pyrene** | **0.11** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0148 |
| **Naphthalene** | **0.78** | **0.72** | **500** | **8,500** | **16,000** | **2,000** | **11,000** | < 0.25 J |
| **Phenanthrene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0082 |
| **Pyrene** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | **NV** | < 0.0117 |
| **TPH (µg/l)** | | | | | | | | |
| **Gasoline-Range Organics[12]** | **110** | **450** | **14,000** | **NV** | **NV** | **22,000** | **NV** | < 31.6 |
| **Diesel-Range Organics[13]** | **100** | **430** | **NV** | **NV** | **NV** | **NV** | **NV** | **228** |
| **Residual-Range Organics[13]** | **100[14]** | **430[14]** | **NV** | **NV** | **NV** | **NV** | **NV** | **287** |

Notes:

Results in **bold** indicate analyte detected at or exceeding the method detection limit (MDL).
Results in **bold** and shaded **yellow** indicate exceedance of Oregon DEQ RBCs.
< denotes analyte not detected at or exceeding the listed MDL.

[1]State of Oregon Department of Environmental Quality Risk-Based Concentrations Table, November 1, 2015.

[2]Analyzed by US Environmental Protection Agency (EPA) Method 6010, 6020, 7470A, or 4500CN-E-2011.

[3]RBC for trivalent chromium is applied, as value for total chromium is not available.

[4]Analyzed by EPA Method 8081.

[5]Analyzed by EPA Method 8082.

[6]Total PCBs are sum of all PCB Aroclors. Results are summed at one-half the reported value when non-detect. When all PCB Aroclor results are non-detect, the highest value is reported.

[7]Analyzed by EPA Method 8141.

[8]Analyzed by EPA Method 8151.

[9]Analyzed by EPA Method 8260B.

[10]Analyzed by EPA Method 8270.

[11]Analyzed by EPA Method 8270D/SIM.

[12]Analyzed by Northwest Method NWTPH-Gx.

[13]Analyzed by Northwest Method NWTPH-Dx.

[14]Value is for generic diesel/heating oil, since generic residual-range hydrocarbon values are not available.

DEQ = Oregon Department of Environmental Quality.
J = result is an estimate
NV = no value or value exceeds the solubility limit.
PAH = polycyclic aromatic hydrocarbon
PCB = polychlorinated biphenyl
R = result is rejected
RBCs = risk-based concentrations
SVOC = semivolatile organic compound
TPH = total petroleum hydrocarbons
VOC = volatile organic compound
µg/l = micrograms per liter

**ATTACHMENT A**
**SITE RECONNAISSANCE PHOTOGRAPHS**

PRELIMINARY SITE ASSESSMENT
2997 South Moody Avenue
Portland, Oregon

Farallon PN: 2243-005

# SITE PHOTOGRAPHS
## Preliminary Site Assessment
## 2997 South Moody Avenue
## Portland, Oregon
## Farallon PN: 2243-005

**Photograph 1.** Northwest corner, looking east.
**Photograph 2.** Northwest corner, looking west.
**Photograph 3.** Northwest corner, looking south.
**Photograph 4.** Northeast corner, looking east.
**Photograph 5.** Northeast corner, looking north.
**Photograph 6.** Northeast corner, looking south.
**Photograph 7.** Northeast corner, looking north.
**Photograph 8.** Northeast corner, looking west.
**Photograph 9.** South Meade Street, looking northeast.
**Photograph 10.** South Meade Street, looking east.
**Photograph 11.** South Meade Street, looking south.
**Photograph 12.** Southeast corner, looking south.
**Photograph 13.** Southeast corner, looking west.
**Photograph 14.** Southeast corner, looking east.
**Photograph 15.** Southeast corner, looking north.
**Photograph 16.** Southwest corner, looking east.
**Photograph 17.** Southwest corner, looking northeast.
**Photograph 18.** Southwest corner, looking northwest.
**Photograph 19.** Southwest corner, looking south.
**Photograph 20.** Southwest corner, looking west.
**Photograph 21.** Maintenance shed, looking east.
**Photograph 22.** Maintenance shed, looking south.
**Photograph 23.** Maintenance shed, looking northwest.
**Photograph 24.** TriMet light rail and storage box.
**Photograph 25.** TriMet light rail, looking southwest.
**Photograph 26.** TriMet light rail and storage box, looking southwest.
**Photograph 27.** Stormwater swale, looking east.
**Photograph 28.** Stormwater swale, looking southwest.
**Photograph 29.** Stormwater swale, looking west.
**Photograph 30.** TriMet light rail, looking northwest.

**Photograph 31.** TriMet light rail, looking northwest.

**Photograph 32.** TriMet light rail, looking east.

**Photograph 33.** TriMet light rail, looking north.

**Photograph 34.** Fenced storage area.

**Photograph 1.** Northwest corner, looking east.

**Photograph 2.** Northwest corner, looking west.

**Photograph 3.** Northwest corner, looking south.


**Photograph 4.** Northeast corner, looking east.

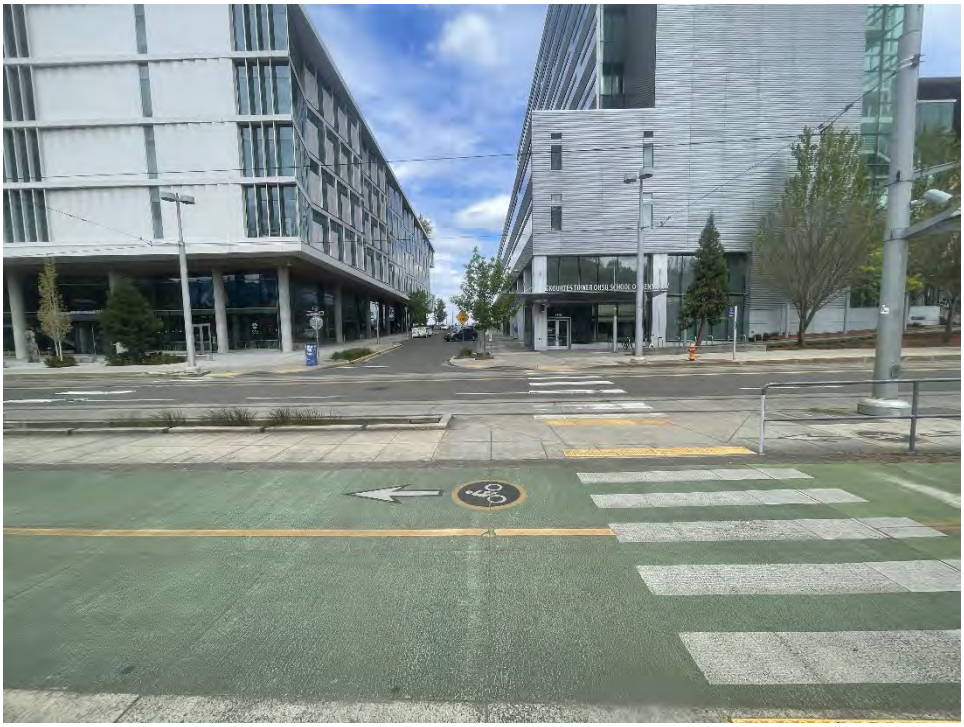

**Photograph 5.** Northeast corner, looking north.

**Photograph 6.** Northeast corner, looking south.

**Photograph 7.** Northeast corner, looking north.

**Photograph 8.** Northeast corner, looking west.

**Photograph 9.** South Meade Street, looking northeast.



**Photograph 10.** South Meade Street, looking east.

**Photograph 11.** South Meade Street, looking south.

**Photograph 12.** Southeast corner, looking south.

**Photograph 13.** Southeast corner, looking west.

**Photograph 14.** Southeast corner, looking east.

**Photograph 15.** Southeast corner, looking north.

**Photograph 16.** Southwest corner, looking east.

**Photograph 17.** Southwest corner, looking northeast.

**Photograph 18.** Southwest corner, looking northwest.

**Photograph 19.** Southwest corner, looking south.

**Photograph 20.** Southwest corner, looking west.

**Photograph 21.** Maintenance shed, looking east.

**Photograph 22.** Maintenance shed, looking south.

**Photograph 23.** Maintenance shed, looking northwest.

**Photograph 24.** TriMet light rail and storage box.

**Photograph 25.** TriMet light rail, looking southwest.

**Photograph 26.** TriMet light rail and storage box, looking southwest.

**Photograph 27.** Stormwater swale, looking east.

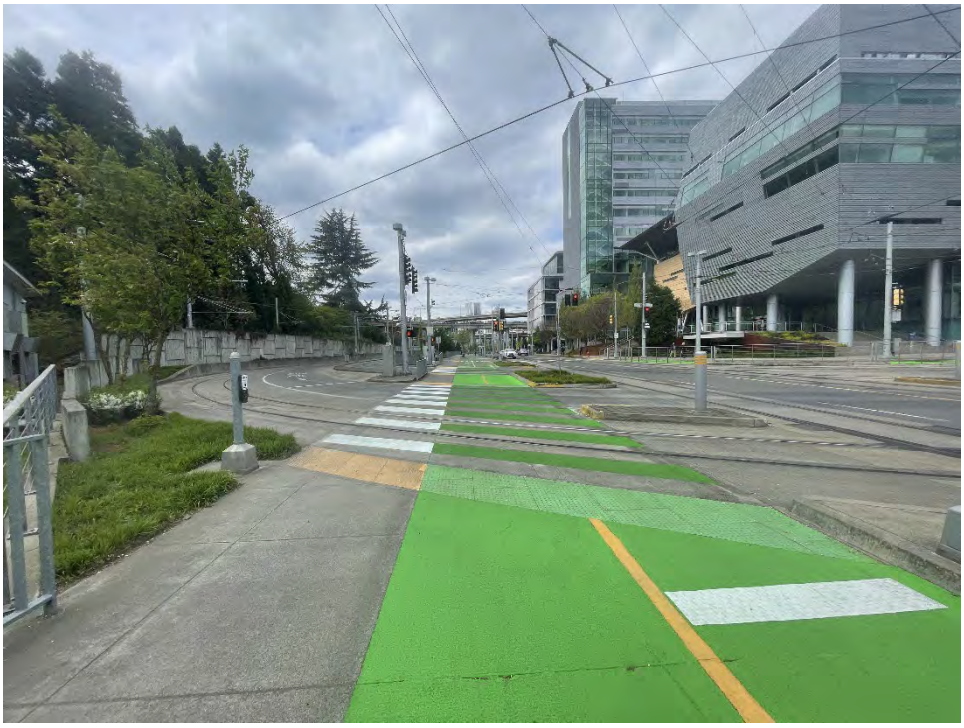
**Photograph 28.** Stormwater swale, looking southwest.

**Photograph 29.** Stormwater swale, looking west.

**Photograph 30.** TriMet light rail, looking northwest.

**Photograph 31.** TriMet light rail, looking south.

**Photograph 32.** TriMet light rail, looking east.



**Photograph 33.** TriMet light rail, looking north.

**Photograph 34.** Fenced storage area.

**ATTACHMENT B**
**ECOLOGICAL RISK SCOPING REPORT**

PRELIMINARY SITE ASSESSMENT
2997 South Moody Avenue
Portland, Oregon

Farallon PN: 2243-005

FARALLON CONSULTING

# T E C H N I C A L  M E M O R A N D U M

**TO:** Rob Hood, Natural Specialist 4
Oregon Department of Environmental Quality

**FROM:** Sam Jackson, Senior Environmental Engineer
Chuck Esler, Principal Environmental Scientist

**DATE:** May 3, 2024

**RE:** **TIER I ECOLOGICAL RISK ASSESSMENT SCOPING REPORT**
**2997 SOUTH MOODY AVENUE**
**PORTLAND, OREGON**
**FARALLON PN: 2243-005**

Farallon Consulting, L.L.C. (Farallon) has prepared a Tier I Ecological Risk Assessment Scoping Report (ERA Report) to support Tri-County Metropolitan Transportation District of Oregon (TriMet) to implement a regulatory closure strategy for the former Moody Light Rail and Storage Property at 2997 South Moody Avenue in Portland, Oregon (herein referred to as the Subject Property). The area of focus for the ERA Report includes the Subject Property and adjacent properties within 0.1 mile of the Subject Property (herein referred to as the Project Area). The Project Area and Subject Property boundaries are shown on Figures 1 and 2.

The purpose of the Report is to assemble basic site information to describe ecological features and species present and evaluate the potential for complete exposure pathways between receptors and site-related contaminants.

In preparing the ERA Report, Farallon used the Oregon Department of Environmental Quality (DEQ) *Conducting Ecological Risk Assessments*[1] and *Site Ecology Scoping Report Outline*[2]. This ERA Report includes a summary review of the Project Area and vicinity to evaluate for the known or suspected presence of hazardous substances, sensitive environments, and threatened/endangered species. In this context, the term "hazardous substance" includes those chemicals listed as hazardous substances in the Code of Federal Regulations (CFR 171.8) and the Oregon Administrative Rules (OAR 837-090-1000), including petroleum products.

[1] DEQ. 2020. *Conducting Ecological Risk Assessments.* September 14.
[2] DEQ. 2020. *Site Ecology Scoping Report* Outline.

The ERA Report follows the Oregon Department of Environmental Quality's *Site Ecology Scoping Report Outline* (DEQ, 2020), which is highlighted, below.

(1) A description of current and historical site use.

(2) Contaminants of interest (COIs) known or suspected to be present.

(3) Current and future land use and zoning.

(4) Surface features and transport pathways, such as pavement, storm water catch basins, outfalls.

(5) Habitat type present on or adjacent to the site.

(1)CURRENT AND HISTORICAL SITE USE

a) Site location

The Subject Property consists of Multnomah County Parcel No. 1S1E10BA-00200, a 2.33-acre, narrow, rectangular-shaped strip of land located within the South Waterfront Neighborhood near the western bank of the Willamette River approximately 1 mile south of downtown Portland, Oregon. Adjacent structures include Marquam Bridge to the north, South Moody Avenue to the east, Ross Island Bridge to the south, and Interstate 5 and associated right-of-way (ROW) to the west. The land is developed with transportation rail lines on the northern portion and vegetated areas, a gravel access road, a stormwater control facility, and fenced storage areas on the southern portion. Adjoining properties include South Sheridan Street to the north; South Moody Avenue to the east; commercial retail property to the south, and the Interstate 5 and the associated ROW to the west. Historically, rail lines were present on the Subject Property and adjacent properties from at least the 1880s to the present.

According to previous environmental studies conducted in the Project Area, discussed below, groundwater is encountered at approximately 25 feet below ground surface (bgs).

b) Site land and/or water use(s)

(i) Historical

From 1889 to 1909, the Project Area consisted mainly of single-family residences with sheds and vacant land. Two single-family residences were constructed on the southernmost portion of the Project Area in that period. By 1969, the single-family residences were replaced by commercial and industrial uses. A presentation of the Site history is provided in this ERA Report.

(ii) Current

The Property Area is developed with transportation rail lines and landscaped areas on the northern portion and vegetated areas, a gravel access road, a stormwater facility (drainage ditch and inlet with an impermeable liner), and a fenced storage area on the southern portion. An active

signals/communications building for the Tilikum bridge train signals network, which consists of a steel-sided shed (~10 feet wide by ~25 feet long) is located in the central portion of the Subject Property. No habitable buildings are present on the Subject Property. Drinking water is supplied by the City of Portland and no water supply wells are on the Subject Property.

(2) COIs KNOWN OR SUSPECTED TO BE PRESENT

A summary of COIs known or suspected to be presented based on documents reviewed and a Site visit performed in March 2024 is presented in this ERA Report.

## 3. CURRENT AND FUTURE LAND USE AND ZONING

The Property Area is developed with transportation rail lines and landscaped areas on the northern portion and vegetated areas, a gravel access road, a stormwater facility (drainage ditch and inlet with an impermeable liner), and a fenced storage area on the southern portion. The Property Area is zoned Central Commercial (CX). The CX zone is defined as *"a high density commercial zone intended for development within Portland's most urban and intense areas. The CX zone allows for intense development with high building coverage and large buildings placed close together. Development is intended to be pedestrian oriented with a strong emphasis on a safe and attractive streetscape*." (City of Portland, Title 33.130.030(F)).

There is no planned change to the land use on the Subject Property.

## 4. SURFACE FEATURES AND TRANSPORT PATHWAYS

Pavement and Transportation Infrastructure

The Property is developed with transportation rail lines on the northern portion and vegetated areas, a gravel access road, a stormwater control facility, and fenced storage areas on the southern portion. Adjoining properties include South Sheridan Street to the north; South Moody Avenue to the east; commercial retail property to the south, and the Interstate 5 and the associated ROW to the west. Adjacent structures include Marquam Bridge to the north, South Moody Avenue to the east, Ross Island Bridge to the south, and Interstate 5 and associated ROW to the west.

Stormwater

Stormwater on the Subject Property either infiltrates directly into the permeable ground surface or is directed into a stormwater swale with an impermeable liner. Water flows through the swale for retention and evaporation, with overflow leaving the outlet on the south end of the swale, which ultimately discharges into the municipal stormwater system.

Structures

An active signals/communications building for the Tilikum bridge train signals network, which consists of a steel-sided shed (~10 feet wide by ~25 feet long) is located in the central portion of the Subject Property. No habitable buildings are present on the Subject Property.

5. HABITAT TYPE PRESENT ON OR ADJACENT TO THE SITE

(c) Ecological features (Part 3, Attachment 1)

The specific evaluation of ecological receptors / habitat checklist is included as Part 3 of Attachment 1. The majority of the site is characterized by constructed rail line area. Less than 20 percent of the area is characterized by ruderal vegetation.

(d) Ecologically important species/habitats (Part 4, Attachment 1)

Ecologically important species/habitats were not observed during the site visit. The specific evaluation of ecologically important species/habitats is included as Part 4 of Attachment 1.

(i) Threatened and/or endangered species

Based on a review of databases provided by Oregon Biodiversity Information Center, US Fish and Wildlife Service, and National Marine Fisheries Service, threatened and/or endangered species are not expected to occur on the Site. The databases indicate that the following threatened species are potentially present on the Subject Property: Northern Spotted Owl (*Strix occidentalis caurina*); Streaked Horned Lark (*Eremophila alpestris strigata*); Yellow-billed Cuckoo (*Coccyzus americanus*); and Nelson's Checker-mallow (*Sidalcea nelsoniana*). However, the Subject Property location does not overlap critical habitat areas for those potentially present threatened and/or endangered species and none were observed during the Site walk.

The character of parcels adjacent and to the north, east, and south of the Subject Property are pavement and urbanized impermeable features. A wooded ROW for Interstate 5 is the adjacent property to the west; as shown on Figure 3, approximately 0.5 acre of the ROW is wooded and defined as low value or not designated by Metro Fish and Wildlife Title 13 Habitat Conservation Area (HCA). The adjacent parcels do not overlap critical habitat for threatened and/or endangered species.

(e) Exposure pathways (Attachment 2)

There are no complete exposure pathways at the Subject Property.

Chemicals of interests in historical soil samples collected from surficial soils (surface to 3 feet bgs), either were not detected or were detected at concentrations less than the DEQ risk-based concentration (RBC) for urban residential direct ingestion pathway. Direct contact with contaminated surface soil and subsequent ingestion is a not a complete exposure pathway. COIs were detected at concentrations above the DEQ RBC for urban residential ingestion in one soil sample collected at 7 feet bgs.

In historical groundwater samples, total petroleum hydrocarbons (TPH) as diesel-range organics and TPH as residual-range oil were detected at concentrations exceeding the DEQ RBC for urban residential ingestion and inhalation and less than the DEQ RBC for urban residential ingestion and

inhalation. These constituents are present at low concentrations and additional groundwater data is not warranted.

(3) RECOMMENDATIONS

As documented herein, there are no potentially complete exposure pathways to ecological receptors on the Subject Property. A risk assessment is not warranted on the Subject Property and no further action is necessary.

## GENERAL LIMITATIONS

The conclusions contained in this Technical Memorandum are based on professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted industry practices applicable to this location. The conclusions contained herein are subject to the following inherent limitations:

- **Accuracy of Information.** Farallon obtained, reviewed, and evaluated certain information used in this report/assessment from sources that were believed to be reliable. Farallon's conclusions, opinions, and recommendations are based in part on such information. Farallon's services did not include verification of its accuracy or authenticity. Should the information upon which Farallon relied prove to be inaccurate or unreliable, Farallon reserves the right to amend or revise its conclusions, opinions, and/or recommendations.

For the foregoing reasons, Farallon cannot and does not warrant or guarantee that the Project Area is free of hazardous or potentially hazardous substances or conditions, or that latent or undiscovered conditions will not become evident in the future. Farallon's observations, findings, and opinions can be considered valid only as of the date of the ERA Report.

This ERA Report has been prepared in accordance with the *Professional Services Contract No. RC190192KN-D2* dated November 5, 2021 between Farallon and TriMet. This assessment is not intended to comply with ASTM International E1527 for a Phase I Environmental Site Assessment. No other warranties, representations, or certifications are made.

Attachments: Figure 1, *Project Vicinity Map*
Figure 2, *Project Plan*
Figure 3, *Project Vicinity*
Figure 4, *Topographic Map*
Figure 5, *Project Plan Surface Features*
Attachment A, Oregon Biodiversity Information Center Data Search
Attachment B, Ecological Screening, Part 3, Attachments 1 and 2

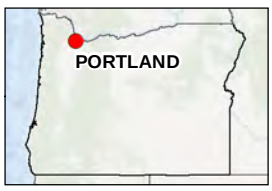
SJ/CE:cm

# FIGURES

TIER I ECOLOGICAL RISK ASSESSMENT SCOPING REPORT
2997 South Moody Avenue
Portland, Oregon

Farallon PN: 2243-005


REFERENCE: 7.5 MINUTE USGS QUADRANGLE PORTLAND, OREGON, DATED 2013

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SCALE IN FEET

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Washington
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Oregon
Portland | Baker City

California
Oakland | Irvine

# FIGURE 1

PROPERTY AREA VICINITY MAP
2997 SOUTH MOODY AVENUE
PORTLAND, OREGON

FARALLON PN: 2243-005

Drawn By:chartman Checked By: BT Date: 8/25/2022 Disc Reference:
\\edgefs02\GIS\Projects\2243 TriMet\005 2997 South Moody Ave\Mapfiles\003\Figure-01_PropertyVicinity.mxd


**LEGEND**

- SUBJECT PROPERTY BOUNDARY
- PROJECT AREA VICINITY BOUNDARY

N

0 400

SCALE IN FEET

NOTES:
1. ALL LOCATIONS ARE APPROXIMATE.
2. FIGURES WERE PRODUCED IN COLOR. GRAYSCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION.

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# FIGURE 2

PROJECT PLAN
2997 SOUTH MOODY AVENUE
PORTLAND, OREGON

FARALLON PN: 2243-005

Drawn By: aguse | Checked By: SJ | Date: 5/3/2024 | Disc Reference:

Path: \\192.168.0.248\gis\Projects\2243 TriMet\005 2997 South Moody Ave\Mapfiles\005\Figure-02_ProjectPlan.mxd

**ATTACHMENT A**
**OREGON BIODIVERSITY INFORMATION CENTER DATA SEARCH**

TIER I ECOLOGICAL RISK ASSESSMENT SCOPING REPORT
2997 South Moody Avenue
Portland, Oregon

Farallon PN: 2243-005

**IPaC** **U.S. Fish & Wildlife Service**

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.



## Location

Multnomah County, Oregon


## Local office

Oregon Fish And Wildlife Office

(503) 231-6179
(503) 231-6195

2600 Southeast 98th Avenue, Suite 100
Portland, OR 97266-1398

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

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

The following species are potentially affected by activities in this location:

# Birds

| NAME | STATUS |
|---|---|
| Northern Spotted Owl Strix occidentalis caurina<br>Wherever found<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>https://ecos.fws.gov/ecp/species/1123 | Threatened |
| Streaked Horned Lark Eremophila alpestris strigata<br>Wherever found<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>https://ecos.fws.gov/ecp/species/7268 | Threatened |
| Yellow-billed Cuckoo Coccyzus americanus<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>https://ecos.fws.gov/ecp/species/3911 | Threatened |

# Insects

| NAME | STATUS |
|---|---|
| Monarch Butterfly Danaus plexippus<br>Wherever found<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/9743 | Candidate |

# Flowering Plants

| NAME | STATUS |
|---|---|
| Nelson's Checker-mallow Sidalcea nelsoniana<br>Wherever found<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/7340 | Threatened |

# Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

# Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

**The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location.** To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

| NAME | BREEDING SEASON |
|---|---|
| **Bald Eagle** *Haliaeetus leucocephalus*<br>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. | Breeds Jan 1 to Sep 30 |
| **Black Swift** *Cypseloides niger*<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/8878 | Breeds Jun 15 to Sep 10 |
| **California Gull** *Larus californicus*<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. | Breeds Mar 1 to Jul 31 |
| **Cassin's Finch** *Carpodacus cassinii*<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/9462 | Breeds May 15 to Jul 15 |
| **Clark's Grebe** *Aechmophorus clarkii*<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. | Breeds Jun 1 to Aug 31 |
| **Evening Grosbeak** *Coccothraustes vespertinus*<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. | Breeds May 15 to Aug 10 |
| **Golden Eagle** *Aquila chrysaetos*<br>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.<br>https://ecos.fws.gov/ecp/species/1680 | Breeds Jan 1 to Aug 31 |

Lesser Yellowlegs Tringa flavipes — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9679

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Rufous Hummingbird selasphorus rufus — Breeds Apr 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Short-billed Dowitcher Limnodromus griseus — Breeds Jun 1 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Western Grebe aechmophorus occidentalis — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6743



# Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

**Probability of Presence** (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

**Breeding Season** (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

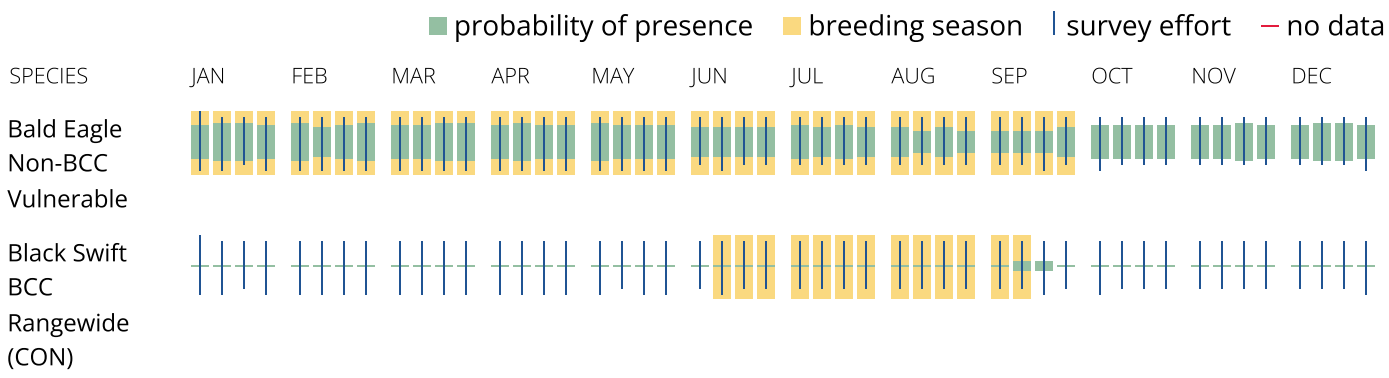
**Survey Effort** (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

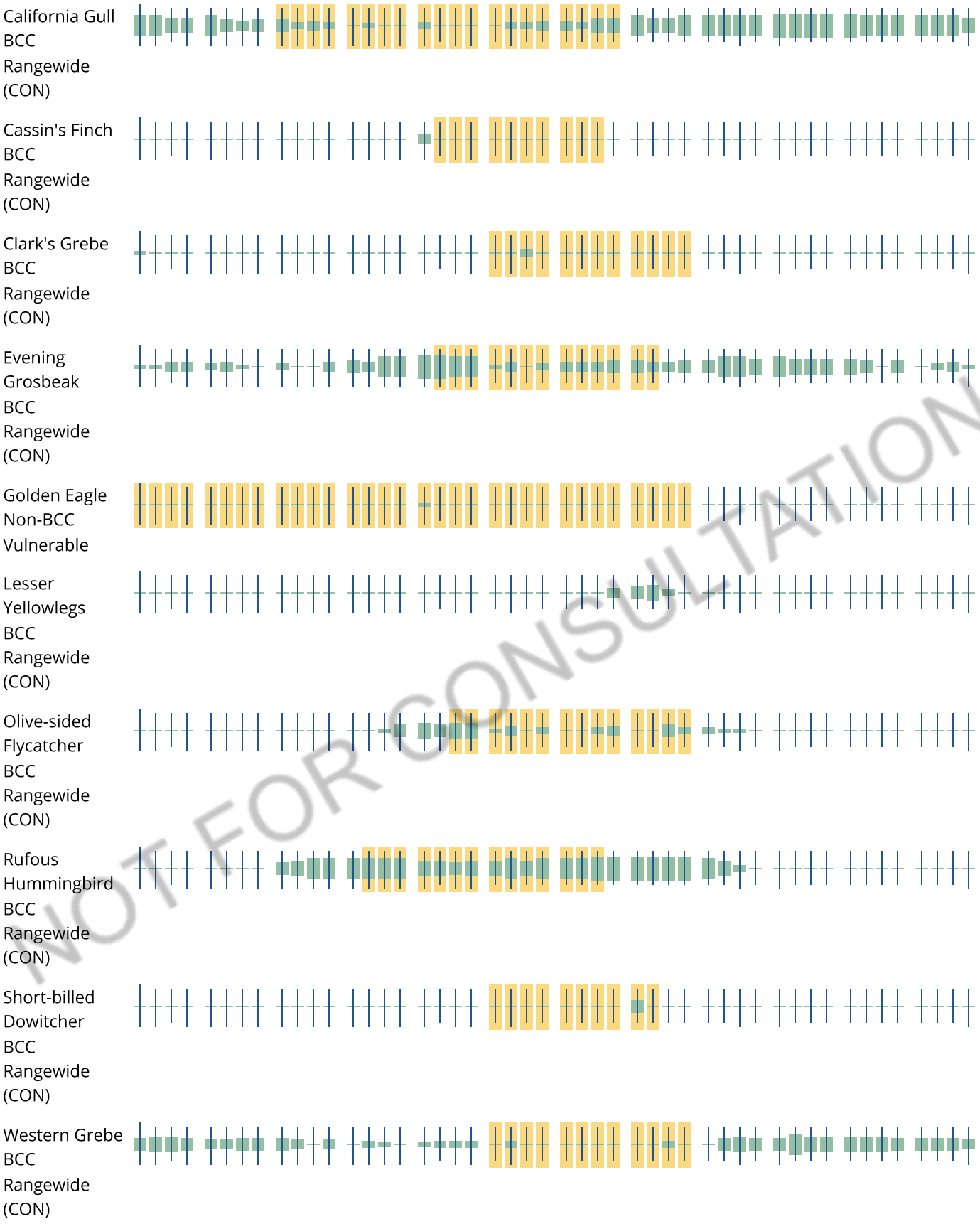
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

**No Data** (–)
A week is marked as having no data if there were no survey events for that week.

**Survey Timeframe**
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.










**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

**How do I know if a bird is breeding, wintering or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

**What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin

Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

**Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

**What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

**Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be

confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

# Coastal Barrier Resources System

Projects within the John H. Chafee Coastal Barrier Resources System (CBRS) may be subject to the restrictions on Federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local Ecological Services Field Office or visit the CBRA Consultations website. The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

## There are no known coastal barriers at this location.

**Data limitations**

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the official CBRS maps. The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation

**Data exclusions**

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact CBRA@fws.gov.



# Facilities

# National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

# Fish hatcheries

There are no fish hatcheries at this location.

# Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

## Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.



### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

**Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

# OREGON BIODIVERSITY INFORMATION CENTER

Institute for Natural Resources
Portland State UNIVERSITY
Mail Stop: INR
Post Office Box 751
Portland, Oregon 97207
503.725.9950
*http://inr.oregonstate.edu/orbic*

December 5, 2022

Sam Jackson
Farallon Consulting, LLC
4380 SW Macadam, Suite 500
Portland, OR 97239

Dear Mr. Jackson:

Thank you for requesting information from the Oregon Biodiversity Information Center (ORBIC). We have conducted a data system search for rare, threatened, and endangered plant, animal, and fungi records for your 2997 S Moody Ave Project in Portland.

Fifteen (15) element occurrence records were noted within a two-mile radius of your project and are included on the enclosed database report.

Please remember that a lack of rare element information from a given area does not necessarily indicate there are no significant elements present, only that there is no information known to us from the site. To ensure there are no significant elements present that may be affected by your project, you should inventory the site during the appropriate season.

This data is confidential and for the specific purposes of your project and is **not to be distributed**. Please also note that as our database is continually updated, the data in this report should be considered current for a maximum of one year from the date it was generated and should not be cited thereafter.

Please forward the included invoice to the appropriate party in your organization for payment.

If you need additional information or have any further questions, please do not hesitate to contact me.

Sincerely,

Lindsey Wise

Lindsey Wise
Biodiversity Data Manager
*lindsey.wise@pdx.edu*
503.725.9951

encl.: **invoice (INR-120522-LKW3)**
**database report and data key**

# OREGON BIODIVERSITY INFORMATION CENTER

Institute for Natural Resources
Portland State UNIVERSITY
Mail Stop: INR
Post Office Box 751
Portland, Oregon 97207
503.725.9950
*http://inr.oregonstate.edu/orbic*

Invoice Number: **INR-120522-LKW3**
Index: OBC104

## INVOICE

TO: Farallon Consulting, LLC
4380 SW Macadam, Suite 500
Portland, OR 97239

ATTN: Accounts Payable

DATE: 12/5/2022

RE: Data system search for rare, threatened, and endangered plants, animals, and fungi in the vicinity of Portland. Requested by Sam Jackson (sjackson@farallonconsulting.com) for the 2997 S Moody Ave Project.

**For services and products:**

| | |
|---|---|
| Computer records (15 @ $0.6/record) | $ 9.00 |
| Computer fee (flat rate) | $ 60.00 |
| Staff time (0.75 hours @ $115/hour) | $ 86.25 |
| **TOTAL DUE (USD):** | **$ 155.25** |

Please make checks payable to: **PSU - Institute for Natural Resources**

Please include invoice number **INR-120522-LKW3** on your check.

Remit to:

Institute for Natural Resources / INR
Portland State University
P.O. Box 751
Portland, OR 97207-0751

Terms: **Net 30**

Scientific Name: ***Acipenser medirostris*** EO NUM: 1
Common Name: **Green sturgeon** EO ID: 19198

Category: Vertebrate Animal Federal Status: SOC G Rank: G2 ORBIC List:
ELCODE: AFCAA01030 State Status: S Rank: S3 Tracked: N

Confirmed: First Obs: 1991-Pre Last Obs: 1991-Pre EO Rank:
Directions: COLUMBIA RIVER AND ESTUARY, UPSTREAM TO BONNEVILLE DAM. WILLAMETTE RIVER BELOW WILLAMETTE FALLS.

| County Name | Ecoregion | Owner Name/Type | Watershed |
|---|---|---|---|
| Clackamas | CR | STATE | 170800010801 - Tanner Creek-Columbia River |
| Clatsop | ME | | 170800010802 - Woodard Creek-Columbia River |
| Columbia | WC | | 170800010803 - Bridal Veil Creek-Columbia River |
| Multnomah | WV | | 170800010804 - Latourell Creek-Columbia River |
| | | | 170800030200 - Hayden Island-Columbia River |
| | | | 170800030900 - Cathlamet Channel-Columbia River |
| | | | 170800060500 - Baker Bay-Columbia River |
| | | | 170900070405 - Tanner Creek-Willamette River |
| | | | 170900120104 - Oswego Creek-Willamette River |
| | | | 170900120202 - Balch Creek-Willamette River |

| Town/Range Sect Meridian TRS Note |
|---|
| 001N001E - 01 - WM - |
| 001N001E - 18 - WM - |
| 001N001E - 19 - WM - |
| 001N001E - 20 - WM - |
| 001N001E - 21 - WM - |
| 001N001E - 27 - WM - |
| 001N001E - 28 - WM - |
| 001N001E - 34 - WM - |
| 001N001W - 02 - WM - |
| 001N001W - 11 - WM - |
| 001N001W - 12 - WM - |
| 001N001W - 13 - WM - |
| 001N002E - 03 - WM - |
| 001N002E - 04 - WM - |
| 001N002E - 05 - WM - |
| 001N002E - 06 - WM - |
| 001N002E - 10 - WM - |
| 001N002E - 11 - WM - |
| 001N002E - 12 - WM - |
| 001N003E - 07 - WM - |
| 001N003E - 13 - WM - |
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| 001N006E - 04 - WM - |
| 001N006E - 07 - WM - |
| 001N006E - 08 - WM - |
| 001S001E - 03 - WM - |
| 001S001E - 10 - WM - |
| 001S001E - 15 - WM - |
| 001S001E - 22 - WM - |
| 001S001E - 26 - WM - |
| 001S001E - 27 - WM - |
| 001S001E - 35 - WM - |
| 002N001E - 19 - WM - |
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| 002N001E - 28 - WM - |
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| 002N001E - 35 - WM - |
| 002N001W - 02 - WM - |
| 002N001W - 11 - WM - |
| 002N001W - 13 - WM - |
| 002N001W - 14 - WM - |
| 002N001W - 22 - WM - |
| 002N001W - 23 - WM - |

| QuadCode | QuadName |
|---|---|
| 45121-E8 | Tanner Butte |
| 45121-F8 | Bonneville Dam |
| 45122-C5 | Oregon City |
| 45122-D5 | Gladstone |
| 45122-D6 | Lake Oswego |
| 45122-E1 | Multnomah Falls |
| 45122-E2 | Bridal Veil |
| 45122-E3 | Washougal |
| 45122-E4 | Camas |
| 45122-E5 | Mount Tabor |
| 45122-E6 | Portland |
| 45122-E7 | Linnton |
| 45122-F6 | Vancouver |
| 45122-F7 | Sauvie Island |
| 45122-G7 | Saint Helens |
| 45122-H7 | Deer Island |
| 46122-A7 | Kalama |
| 46122-A8 | Rainier |
| 46122-B8 | Kelso |
| 46123-B1 | Coal Creek |
| 46123-B2 | Oak Point |
| 46123-B3 | Nassa Point |
| 46123-B4 | Cathlamet |
| 46123-B6 | Cathlamet Bay |
| 46123-B7 | Astoria |
| 46123-B8 | Warrenton |
| 46123-C4 | Skamokawa |
| 46123-C5 | Grays River |
| 46123-C6 | Rosburg |
| 46124-B1 | Clatsop Spit |

| Managed Area Name |
|---|
| Oregon Island Wilderness Area |

002N001W - 24 - WM -
002N001W - 27 - WM -
002N001W - 34 - WM -
002N001W - 35 - WM -
002N006E - 34 - WM -
002N006E - 35 - WM -
002N006E - 36 - WM -
002N007E - 21 - WM -
002N007E - 29 - WM -
002N007E - 30 - WM -
002N007E - 31 - WM -
002S001E - 02 - WM -
002S001E - 11 - WM -
002S001E - 13 - WM -
002S001E - 14 - WM -
002S001E - 24 - WM -
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003N001W - 11 - WM -
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007N002W - 07 - WM -
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009N008W - 22 - WM -
009N008W - 29 - WM -
009N009W - 35 - WM -
009N009W - 36 - WM -
009N010W - 31 - WM -

| Source Feature | Uncertainty Type (Distance) [Use Class] | | Annual Observations |
|---|---|---|---|
| 19198 - Line | Linear (8 m) | Undetermined | |
| 38085 - Line | Linear (8 m) | Undetermined | |

| SFeat ID | Visit Date | Visit Data | Visit Dataset | Dataset Record ID |
|---|---|---|---|---|

Occurence Data

EO Type: YEAR-ROUND - fish Min. Elev.(m):

Population Data: NO COLLECTION INFORMATION AVAILABLE. GREEN STURGEON ADULTS ARE ABUNDANT AND THE NUMBERS ARE STABLE IN THE LOWER COLUMBIA RIVER. THEY ARE RARELY FOUND IN THE COLUMBIA RIVER FROM PUGET ISLAND (RM40) UPSTREAM TO BONNEVILLE DAM AND TO WILLAMETTE FALLS IN THE WILLAMETTE RIVER. (1995 ODFW BIENNIAL REPORT ON THE STATUS OF WILD FISH IN OREGON)

Habitat:

Protection:

Management:

References: NOAA 1991; Oregon Department of Fish and Wildlife 1995; Smith

Specimens:

General: GREEN STURGEON NOT ABUNDANT IN ANY PACIFIC COAST ESTUARY. LITTLE IS KNOWN ABOUT ITS LIFE HISTORY. THIS SPECIES MORE MARINE ORIENTED THAN WHITE STURGEON AND SPENDS LIMITED AMOUNT OF TIME IN FRESHWATER (EXCEPT PERHAPS EARLY JUVENILES AND SPAWNING ADULTS). B91NOA01ORUS.

Scientific Name: ***Batrachoseps wrighti*** EO NUM: 272
Common Name: **Oregon slender salamander** EO ID: 36895

Category: Vertebrate Animal Federal Status: SOC G Rank: G3 ORBIC List: 4
ELCODE: AAAAD02100 State Status: S S Rank: S3 Tracked: W

Confirmed: First Obs: 2007 Last Obs: 2007 EO Rank: E - Verified extant (viability not assessed)
Directions: On the East Side of the River, across from the Ross Island Bridge.

| County Name | Ecoregion | Owner Name/Type | Watershed |
|---|---|---|---|
| Multnomah | WV | | 170900120202 - Balch Creek-Willamette River |

| Town/Range Sect Meridian TRS Note | QuadCode | QuadName | Managed Area Name |
|---|---|---|---|
| 001S001E - 14 - WM - | 45122-D6 | Lake Oswego | |

| Source Feature | Uncertainty Type (Distance) [Use Class] | Annual Observations |
|---|---|---|
| 74754 - Point | Estimated (100 m) Not applicable | |

| SFeat ID | Visit Date | Visit Data | Visit Dataset | Dataset Record ID |
|---|---|---|---|---|
| 74754 | 2007 | 2 salamanders observed during ODFW Oregon Slender Project. | | |

Occurence Data
EO Type: Min. Elev.(m): 61
Population Data: 2007: 2 salamanders observed.
Habitat:
Protection:
Management:
References: Oregon Department of Fish and Wildlife 2014
Specimens:
General:

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Scientific Name: ***Chrysemys picta*** EO NUM: 61
Common Name: **Painted turtle** EO ID: 20014

Category: Vertebrate Animal Federal Status: G Rank: G5 ORBIC List: 2
ELCODE: ARAAD01010 State Status: SC S Rank: S2 Tracked: Y

Confirmed: First Obs: 1965-04-10 Last Obs: 1965-04-10 EO Rank: H - Historical
Directions: HOYT PARK, FAIRVIEW BOULEVARD.

| County Name | Ecoregion | Owner Name/Type | Watershed |
|---|---|---|---|
| Multnomah | CR | CITY | 170900120202 - Balch Creek-Willamette River |

| Town/Range Sect Meridian TRS Note | QuadCode | QuadName | Managed Area Name |
|---|---|---|---|
| 001S001E - 05 - WM - | 45122-E6 | Portland | |

| Source Feature | Uncertainty Type (Distance) [Use Class] | Annual Observations |
|---|---|---|
| 20014 - Point | Estimated (800 m) Not applicable | |

| SFeat ID | Visit Date | Visit Data | Visit Dataset | Dataset Record ID |
|---|---|---|---|---|
| 20014 | 1965-04-10 | 1965: 1 INDIVIDUAL COLLECTED OBSERVER: CAVANAGH, R. PORTLAND STATE UNIVERSITY SPECIMEN #002431. | | |

Occurence Data
EO Type: Min. Elev.(m): 235
Population Data: 1965: 1 INDIVIDUAL COLLECTED
Habitat:
Protection:
Management:
References: Bruce
Specimens:
General: OBSERVER: CAVANAGH, R. PORTLAND STATE UNIVERSITY SPECIMEN #002431.

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Scientific Name: ***Cimicifuga elata var. elata*** EO NUM: 51
Common Name: **Tall bugbane** EO ID: 14823

Category: Vascular Plant Federal Status: G Rank: G4T3? ORBIC List: 3
ELCODE: PDRAN0T012 State Status: C S Rank: S3? Tracked: Y

Confirmed: First Obs: 1990 Last Obs: 1990-07-11 EO Rank: D - Poor estimated viability
Directions: SENTINEL HILL, PORTLAND, JUST EAST OF POWERLINE BELOW INTERSECTION OF FAIRMOUNT BLVD. AND MARQUAM HILL RD.

| County Name | Ecoregion | Owner Name/Type | Watershed |
|---|---|---|---|
| Multnomah | CR | PRIVATE | 170900120202 - Balch Creek-Willamette River |

| Town/Range Sect Meridian TRS Note | QuadCode | QuadName | Managed Area Name |
|---|---|---|---|
| 001S001E - 09 - WM - | 45122-D6 | Lake Oswego | |

| Source Feature | Uncertainty Type (Distance) [Use Class] | Annual Observations |
|---|---|---|
| 14823 - Point | Estimated (50 m) | • 1990 - 1 PLANT |

| SFeat ID | Visit Date | Visit Data | Visit Dataset | Dataset Record ID |
|---|---|---|---|---|

Occurence Data
EO Type: Min. Elev.(m): 244
Population Data: 1 PLANT, IN FLOWER.
Habitat: NORTH FACING SLOPE 2 METERS ABOVE SMALL INTERMITTENT STREAM: ACMA OVERSTORY, WITH ACCI, COCO, SYAL, POMU. THICK CARPET OF IVY COVERING THE GROUND.
Protection: THREATS: DEVELOPMENT, IVY ENCROACHMENT.
Management:
References: Alverson
Specimens:
General:

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Scientific Name: ***Corynorhinus townsendii*** EO NUM: 94
Common Name: **Townsend's big-eared bat** EO ID: 6409

Category: Vertebrate Animal Federal Status: No status G Rank: G4 ORBIC List: 2
ELCODE: AMACC08010 State Status: SC S Rank: S2 Tracked: Y

Confirmed: First Obs: 1914 Last Obs: 1928-09-05 EO Rank: H - Historical
Directions: Sensitive Data - contact ORBIC for more information

| County Name | Ecoregion | Owner Name/Type | Watershed |
|---|---|---|---|
| Multnomah | WV | PRIVATE | 170800030104 - Lake River-Frontal Columbia River<br>170800030200 - Hayden Island-Columbia River<br>170900100401 - Beaverton Creek<br>170900100502 - Fanno Creek<br>170900120103 - Lower Johnson Creek<br>170900120201 - Columbia Slough<br>170900120202 - Balch Creek-Willamette River |

| Town/Range Sect Meridian TRS Note | Managed Area Name |
|---|---|
| 001N001E - 25 - WM - | |

| Source Feature | Uncertainty Type (Distance) [Use Class] | Annual Observations |
|---|---|---|
| 6409 - Point | Estimated (8050 m) Undetermined | |

| SFeat ID | Visit Date | Visit Data | Visit Dataset | Dataset Record ID |
|---|---|---|---|---|

Occurence Data
EO Type: Min. Elev.(m): 46
Population Data: Sensitive Data - contact ORBIC for more information
Habitat:
Protection:
Management:
References: Bailey 1936; Maser 1981

Specimens:

General:

Scientific Name: ***Entosphenus tridentatus*** EO NUM: 56

Common Name: **Pacific lamprey** EO ID: 38458

Category: Vertebrate Animal Federal Status: SOC G Rank: G4 ORBIC List: 2

ELCODE: AFBAA02100 State Status: S S Rank: S1S2 Tracked: Y

Confirmed: First Obs: 2011 Last Obs: 2012 EO Rank: E - Verified extant (viability not assessed)

Directions: Lower Columbia to Willamette

| County Name | Ecoregion | Owner Name/Type | Watershed |
|---|---|---|---|
| Clackamas | CR | | 170800010804 - Latourell Creek-Columbia River |
| Columbia | WV | | 170800030200 - Hayden Island-Columbia River |
| Multnomah | | | 170800030900 - Cathlamet Channel-Columbia River |
| | | | 170900070405 - Tanner Creek-Willamette River |
| | | | 170900120101 - Upper Johnson Creek |
| | | | 170900120102 - Kellogg Creek |
| | | | 170900120103 - Lower Johnson Creek |
| | | | 170900120104 - Oswego Creek-Willamette River |
| | | | 170900120202 - Balch Creek-Willamette River |
| | | | 170900120301 - South Scappoose Creek |
| | | | 170900120302 - North Scappoose Creek |
| | | | 170900120303 - Milton Creek |
| | | | 170900120304 - Scappoose Creek |
| | | | 170900120305 - Multnomah Channel |

| Town/Range | Sect | Meridian | TRS Note |
|---|---|---|---|
| 001N001E | 18 | WM | |
| 001N001E | 19 | WM | |
| 001N001E | 20 | WM | |
| 001N001E | 21 | WM | |
| 001N001E | 27 | WM | |
| 001N001E | 28 | WM | |
| 001N001E | 34 | WM | |
| 001N001W | 02 | WM | |
| 001N001W | 11 | WM | |
| 001N001W | 12 | WM | |
| 001N001W | 13 | WM | |
| 001N002E | 03 | WM | |
| 001N002E | 04 | WM | |
| 001N002E | 05 | WM | |
| 001N002E | 06 | WM | |
| 001N002E | 11 | WM | |
| 001N002E | 12 | WM | |
| 001N003E | 07 | WM | |
| 001N003E | 13 | WM | |
| 001N003E | 14 | WM | |
| 001N003E | 15 | WM | |
| 001N003E | 16 | WM | |
| 001N003E | 17 | WM | |
| 001S001E | 03 | WM | |
| 001S001E | 10 | WM | |
| 001S001E | 15 | WM | |
| 001S001E | 22 | WM | |
| 001S001E | 23 | WM | |
| 001S001E | 24 | WM | |
| 001S001E | 26 | WM | |
| 001S001E | 27 | WM | |
| 001S001E | 35 | WM | |
| 001S001E | 36 | WM | |
| 001S002E | 13 | WM | |
| 001S002E | 15 | WM | |
| 001S002E | 19 | WM | |
| 001S002E | 20 | WM | |
| 001S002E | 21 | WM | |
| 001S002E | 22 | WM | |
| 001S002E | 23 | WM | |
| 001S002E | 24 | WM | |
| 001S002E | 25 | WM | |
| 001S002E | 26 | WM | |
| 001S002E | 29 | WM | |
| 001S002E | 30 | WM | |
| 001S002E | 34 | WM | |
| 001S002E | 35 | WM | |
| 001S003E | 16 | WM | |
| 001S003E | 17 | WM | |
| 001S003E | 18 | WM | |
| 002N001E | 19 | WM | |
| 002N001E | 20 | WM | |
| 002N001E | 28 | WM | |
| 002N001E | 29 | WM | |
| 002N001E | 34 | WM | |
| 002N001E | 35 | WM | |
| 002N001W | 02 | WM | |
| 002N001W | 11 | WM | |
| 002N001W | 13 | WM | |
| 002N001W | 14 | WM | |

| QuadCode | QuadName |
|---|---|
| 45122-C5 | Oregon City |
| 45122-D4 | Damascus |
| 45122-D5 | Gladstone |
| 45122-D6 | Lake Oswego |
| 45122-E4 | Camas |
| 45122-E5 | Mount Tabor |
| 45122-E6 | Portland |
| 45122-E7 | Linnton |
| 45122-F6 | Vancouver |
| 45122-F7 | Sauvie Island |
| 45122-F8 | Dixie Mountain |
| 45122-G7 | Saint Helens |
| 45122-G8 | Chapman |
| 45122-H8 | Trenholm |

Managed Area Name

002N001W - 22 - WM -
002N001W - 23 - WM -
002N001W - 24 - WM -
002N001W - 27 - WM -
002N001W - 34 - WM -
002N001W - 35 - WM -
002S001E - 01 - WM -
002S001E - 02 - WM -
002S001E - 11 - WM -
002S001E - 13 - WM -
002S001E - 14 - WM -
002S001E - 24 - WM -
002S002E - 03 - WM -
002S002E - 04 - WM -
002S002E - 05 - WM -
002S002E - 06 - WM -
002S002E - 19 - WM -
002S002E - 30 - WM -
003N001W - 02 - WM -
003N001W - 23 - WM -
003N001W - 26 - WM -
003N001W - 35 - WM -
003N002W - 01 - WM -
003N002W - 02 - WM -
003N002W - 12 - WM -
003N002W - 13 - WM -
003N002W - 14 - WM -
003N002W - 15 - WM -
003N002W - 22 - WM -
004N001W - 03 - WM -
004N001W - 04 - WM -
004N001W - 05 - WM -
004N001W - 06 - WM -
004N001W - 09 - WM -
004N001W - 10 - WM -
004N001W - 15 - WM -
004N001W - 16 - WM -
004N001W - 17 - WM -
004N001W - 20 - WM -
004N001W - 22 - WM -
004N001W - 27 - WM -
004N001W - 29 - WM -
004N001W - 30 - WM -
004N001W - 31 - WM -
004N001W - 35 - WM -
004N002W - 01 - WM -
004N002W - 02 - WM -
004N002W - 27 - WM -
004N002W - 34 - WM -
004N002W - 35 - WM -
004N002W - 36 - WM -
005N001W - 31 - WM -
005N001W - 32 - WM -
005N002W - 16 - WM -
005N002W - 17 - WM -
005N002W - 21 - WM -
005N002W - 22 - WM -
005N002W - 26 - WM -
005N002W - 27 - WM -
005N002W - 35 - WM -

| Source Feature | Uncertainty Type (Distance) | [Use Class] | Annual Observations |
|---|---|---|---|
| 76686 - Line | Negligible (8 m) | Freshwater | |
| 76684 - Line | Negligible (8 m) | Freshwater | |
| 63524 - Line | Negligible (8 m) | Undetermined | |
| 63315 - Line | Negligible (8 m) | Undetermined | |
| 62956 - Line | Negligible (8 m) | Undetermined | |
| 63625 - Line | Negligible (8 m) | Undetermined | |
| 63420 - Line | Negligible (8 m) | Undetermined | |
| 63081 - Line | Negligible (8 m) | Undetermined | |
| 63084 - Line | Negligible (8 m) | Undetermined | |
| 63684 - Line | Negligible (8 m) | Undetermined | |
| 63393 - Line | Negligible (8 m) | Undetermined | |
| 63936 - Line | Negligible (8 m) | Freshwater | |
| 63373 - Line | Negligible (8 m) | Undetermined | |
| 63920 - Line | Negligible (8 m) | Freshwater | |
| 63853 - Line | Negligible (8 m) | Freshwater | |
| 63854 - Line | Negligible (8 m) | Freshwater | |
| 63852 - Line | Negligible (8 m) | Freshwater | |

| SFeat ID | Visit Date | Visit Data | Visit Dataset | Dataset Record ID |
|---|---|---|---|---|
| 63684 | 2012 | Use type: Unknown. Downstream documented fish observation. Agency data steward: Erik Suring. | | |
| 63625 | 2012 | Use type: Unknown. Downstream documented fish observation. Agency data steward: Erik Suring. | | |
| 62956 | 2011 | Use type: Unknown. Documented fish observation. Agency data steward: . | | |
| 63420 | 2011 | Use type: Unknown. Downstream documented fish observation. Agency data steward: Eric Brown. | | |
| 63081 | 2011 | Use type: Unknown. Documented fish observation. Agency data steward: Erik Suring. | | |
| 63084 | 2011 | Use type: Unknown. Downstream documented fish observation. Agency data steward: Erik Suring. | | |
| 63393 | 2011 | Use type: Spawning. Documented fish observation. Agency data steward: Eric Brown. | | |
| 63936 | 2011 | Use type: Spawning. Documented fish observation. Agency data steward: Eric Brown. | | |
| 63373 | 2011 | Use type: Spawning. Documented fish observation. Agency data steward: Eric Brown. | | |
| 63920 | 2011 | Use type: Spawning. Documented fish observation. Agency data steward: Eric Brown. | | |
| 63853 | 2011 | Use type: Spawning. Documented fish observation. Agency data steward: Eric Brown. | | |
| 63854 | 2011 | Use type: Spawning. Documented fish observation. Agency data steward: Eric Brown. | | |
| 63852 | 2011 | Use type: Spawning. Documented fish observation. Agency data steward: Eric Brown. | | |
| 63524 | 2011 | Use type: Spawning. Documented fish observation. Agency data steward: Eric Brown. | | |
| 63315 | 2011 | Use type: Spawning. Documented fish observation. Agency data steward: Eric Brown. | | |

Occurence Data

EO Type: Min. Elev.(m):

Population Data: 2011: Use type: Unknown. Documented fish observation. Agency data steward: .

Habitat:

Protection:

Management:

References: ODFW 2012

Specimens:

General: From the 2012 edition of the ODFW Oregon Fish Habitat Distribution - Pacific Lamprey geodatabase; these data are based on sampling and describe areas of suitable habitat currently and historically used by Pacific lamprey populations.

Scientific Name: ***Fluminicola fuscus*** EO NUM: 20
Common Name: **Columbia pebblesnail** EO ID: 41137

Category: Invertebrate Animal Federal Status: SOC G Rank: G2 ORBIC List: 2
ELCODE: IMGASG3500 State Status: S Rank: S1 Tracked: Y

Confirmed: First Obs: 1999 Last Obs: 1999 EO Rank: E - Verified extant (viability not assessed)
Directions: North of the Morrison Bridge, Downtown Portland

| County Name | Ecoregion | Owner Name/Type | Watershed |
|---|---|---|---|
| Multnomah | WV | City of Portland | 170900120202 - Balch Creek-Willamette River |

| Town/Range Sect Meridian TRS Note | QuadCode | QuadName | Managed Area Name |
|---|---|---|---|
| 001N001E - 34 - WM - | 45122-E6 | Portland | |

| Source Feature | Uncertainty Type (Distance) [Use Class] | |
|---|---|---|
| 82529 - Point | Estimated (50 m) | Not applicable |

Annual Observations
- 1999 - 2 snails

| SFeat ID | Visit Date | Visit Data | Visit Dataset | Dataset Record ID |
|---|---|---|---|---|
| 82529 | 1999 | Catalog Number:473990; Specimen Count: 2; Accessed: 2012; Conditions: Dry | | |

Occurence Data
EO Type: Min. Elev.(m): 15
Population Data: 1999: 2 specimen observed
Habitat:
Protection:
Management:
References: Smithsonian National Museum of Natural History 2012; Xerces 2017
Specimens:
General: Data was retrieved from the Xerces Society rare invertebrate database of 2017

Scientific Name: ***Fluminicola virens*** EO NUM: 1
Common Name: **Olympia pebblesnail** EO ID: 32254

Category: Invertebrate Animal Federal Status: G Rank: G2 ORBIC List: 2
ELCODE: IMGASG3600 State Status: S Rank: S2 Tracked: Y

Confirmed: First Obs: 1996-pre Last Obs: 1996-pre EO Rank: H - Historical
Directions: Willamette River, from Corvallis to its mouth, and the lower Columbia River below Portland.

| County Name | Ecoregion | Owner Name/Type | Watershed |
|---|---|---|---|
| Benton | WV | | 170800030200 - Hayden Island-Columbia River |
| Clackamas | | | 170900030609 - Frazier Creek-Willamette River |
| Linn | | | 170900030610 - Truax Creek-Willamette River |
| Marion | | | 170900030611 - McCarthy Slough-Willamette River |
| Multnomah | | | 170900070101 - Bashaw Creek-Willamette River |
| Polk | | | 170900070107 - Wilkerson Creek-Willamette River |
| Yamhill | | | 170900070301 - Croisan Creek-Willamette River |
| | | | 170900070303 - Glenn Creek-Willamette River |
| | | | 170900070304 - Lambert Slough-Willamette River |
| | | | 170900070307 - Hess Creek-Willamette River |
| | | | 170900070401 - Corral Creek-Willamette River |
| | | | 170900070402 - Coffee Lake Creek-Willamette River |
| | | | 170900070405 - Tanner Creek-Willamette River |
| | | | 170900120104 - Oswego Creek-Willamette River |
| | | | 170900120202 - Balch Creek-Willamette River |

| Town/Range Sect Meridian TRS Note |
|---|
| 001N001E - 18 - WM - |
| 001N001E - 19 - WM - |
| 001N001E - 20 - WM - |
| 001N001E - 21 - WM - |
| 001N001E - 27 - WM - |
| 001N001E - 28 - WM - |
| 001N001E - 34 - WM - |
| 001N001W - 02 - WM - |
| 001N001W - 11 - WM - |
| 001N001W - 12 - WM - |
| 001N001W - 13 - WM - |
| 001S001E - 03 - WM - |
| 001S001E - 10 - WM - |
| 001S001E - 15 - WM - |
| 001S001E - 22 - WM - |
| 001S001E - 26 - WM - |
| 001S001E - 27 - WM - |
| 001S001E - 35 - WM - |
| 002N001W - 13 - WM - |
| 002N001W - 14 - WM - |
| 002N001W - 22 - WM - |
| 002N001W - 23 - WM - |
| 002N001W - 27 - WM - |
| 002N001W - 34 - WM - |
| 002N001W - 35 - WM - |
| 002S001E - 02 - WM - |
| 002S001E - 11 - WM - |
| 002S001E - 13 - WM - |
| 002S001E - 14 - WM - |
| 002S001E - 24 - WM - |
| 002S001E - 36 - WM - |
| 002S002E - 19 - WM - |
| 002S002E - 30 - WM - |
| 002S002E - 31 - WM - |
| 003S001E - 01 - WM - |
| 003S001E - 02 - WM - |
| 003S001E - 10 - WM - |
| 003S001E - 11 - WM - |
| 003S001E - 15 - WM - |
| 003S001E - 19 - WM - |
| 003S001E - 20 - WM - |
| 003S001E - 21 - WM - |
| 003S001E - 22 - WM - |
| 003S001E - 23 - WM - |
| 003S001E - 27 - WM - |
| 003S001W - 22 - WM - |
| 003S001W - 23 - WM - |
| 003S001W - 24 - WM - |
| 003S001W - 27 - WM - |
| 003S001W - 28 - WM - |
| 003S001W - 29 - WM - |
| 003S001W - 31 - WM - |
| 003S001W - 32 - WM - |
| 003S002W - 29 - WM - |
| 003S002W - 30 - WM - |
| 003S002W - 31 - WM - |
| 003S002W - 32 - WM - |
| 003S002W - 33 - WM - |
| 003S002W - 34 - WM - |
| 003S002W - 35 - WM - |

| QuadCode | QuadName |
|---|---|
| 44123-E2 | Riverside |
| 44123-E3 | Corvallis |
| 44123-F1 | Albany |
| 44123-F2 | Lewisburg |
| 44123-G1 | Sidney |
| 44123-G2 | Monmouth |
| 44123-H1 | Salem West |
| 44123-H2 | Rickreall |
| 45122-A8 | Gervais |
| 45122-B8 | Saint Paul |
| 45122-C5 | Oregon City |
| 45122-C6 | Canby |
| 45122-C7 | Sherwood |
| 45122-C8 | Newberg |
| 45122-D5 | Gladstone |
| 45122-D6 | Lake Oswego |
| 45122-E6 | Portland |
| 45122-E7 | Linnton |
| 45122-F7 | Sauvie Island |
| 45123-A1 | Mission Bottom |
| 45123-B1 | Dayton |
| 45123-C1 | Dundee |

| Managed Area Name |
|---|

003S003W - 36 - WM -
004S001W - 06 - WM -
004S002W - 01 - WM -
004S002W - 02 - WM -
004S003W - 01 - WM -
004S003W - 12 - WM -
004S003W - 13 - WM -
004S003W - 14 - WM -
004S003W - 15 - WM -
004S003W - 22 - WM -
004S003W - 23 - WM -
004S003W - 26 - WM -
004S003W - 27 - WM -
004S003W - 35 - WM -
004S003W - 36 - WM -
005S003W - 01 - WM -
005S003W - 02 - WM -
005S003W - 10 - WM -
005S003W - 11 - WM -
005S003W - 13 - WM -
005S003W - 14 - WM -
005S003W - 24 - WM -
005S003W - 25 - WM -
005S003W - 26 - WM -
005S003W - 34 - WM -
005S003W - 35 - WM -
006S003W - 04 - WM -
006S003W - 09 - WM -
006S003W - 16 - WM -
006S003W - 20 - WM -
006S003W - 21 - WM -
006S003W - 29 - WM -
006S003W - 32 - WM -
006S003W - 33 - WM -
007S003W - 03 - WM -
007S003W - 04 - WM -
007S003W - 10 - WM -
007S003W - 15 - WM -
007S003W - 21 - WM -
007S003W - 22 - WM -
007S003W - 28 - WM -
007S003W - 29 - WM -
007S003W - 30 - WM -
007S003W - 31 - WM -
007S004W - 25 - WM -
007S004W - 36 - WM -
008S004W - 01 - WM -
008S004W - 11 - WM -
008S004W - 12 - WM -
008S004W - 14 - WM -
008S004W - 21 - WM -
008S004W - 22 - WM -
008S004W - 23 - WM -
008S004W - 28 - WM -
008S004W - 33 - WM -
008S004W - 34 - WM -
008S004W - 35 - WM -
008S004W - 36 - WM -
009S003W - 05 - WM -
009S003W - 06 - WM -
009S003W - 07 - WM -

009S003W - 08 - WM -
009S003W - 18 - WM -
009S004W - 01 - WM -
009S004W - 13 - WM -
009S004W - 23 - WM -
009S004W - 24 - WM -
009S004W - 26 - WM -
009S004W - 35 - WM -
009S004W - 36 - WM -
010S003W - 29 - WM -
010S003W - 30 - WM -
010S003W - 32 - WM -
010S004W - 02 - WM -
010S004W - 11 - WM -
010S004W - 13 - WM -
010S004W - 14 - WM -
010S004W - 24 - WM -
010S004W - 25 - WM -
011S003W - 05 - WM -
011S003W - 06 - WM -
011S004W - 01 - WM -
011S004W - 02 - WM -
011S004W - 03 - WM -
011S004W - 09 - WM -
011S004W - 10 - WM -
011S004W - 16 - WM -
011S004W - 20 - WM -
011S004W - 21 - WM -
011S004W - 28 - WM -
011S004W - 29 - WM -
011S004W - 30 - WM -
011S005W - 25 - WM -
011S005W - 35 - WM -
011S005W - 36 - WM -
012S005W - 02 - WM -

| Source Feature | Uncertainty Type (Distance) [Use Class] | | Annual Observations |
|---|---|---|---|
| 55506 - Point | Linear (8 m) | Not applicable | |
| 55507 - Point | Linear (8 m) | Not applicable | |
| 55505 - Point | Linear (8 m) | Not applicable | |
| 55508 - Point | Linear (8 m) | Not applicable | |

| SFeat ID | Visit Date | Visit Data | Visit Dataset | Dataset Record ID |
|---|---|---|---|---|

Occurence Data

EO Type: Min. Elev.(m):

Population Data: Five occurences along the Willamette River (from Portland to Corvallis), as described by Hershler and Frest, 1996. Precise locations and collection dates not reported.

Habitat:

Protection:

Management:

References: Hershler and Frest 1996

Specimens:

General: 5 snails collected along Willamette, as described by Hershler and Frest, 1996.

Scientific Name: ***Haliaeetus leucocephalus*** EO NUM: 586

Common Name: **Bald eagle** EO ID: 22425

Category: Vertebrate Animal Federal Status: DL G Rank: G5 ORBIC List: 4

ELCODE: ABNKC10010 State Status: S Rank: S4B,S4N Tracked: W

Confirmed: First Obs: 1996 Last Obs: 2007 EO Rank: E - Verified extant (viability not assessed)
Directions: Ross Island, in the Willamette River, Portland.

| County Name | Ecoregion | Owner Name/Type | Watershed |
|---|---|---|---|
| Multnomah | WV | | 170900120202 - Balch Creek-Willamette River |

| Town/Range | Sect | Meridian | TRS Note | QuadCode | QuadName | Managed Area Name |
|---|---|---|---|---|---|---|
| 001S001E | 15 | WM | - | 45122-D6 | Lake Oswego | |

| Source Feature | Uncertainty Type (Distance) | [Use Class] |
|---|---|---|
| 22425 - Point | Estimated (25 m) | Breeding |

Annual Observations
- 2007 - 1 fledged
- 2006 - 2 fledged
- 2005 - 2 fledged
- 2004 - active, outcome unknown
- 2003 - 1 fledged
- 2002 - 2 fledged
- 2001 - 2 fledged
- 2000 - BREEDING FAILURE
- 1999 - NESTING FAILURE
- 1998 - 3 FLEDGED
- 1997 - 1 FLEDGED
- 1996 - 1 FLEDGED
- 1995 - STATUS UNKNOWN

| SFeat ID | Visit Date | Visit Data | Visit Dataset | Dataset Record ID |
|---|---|---|---|---|

Occurence Data
EO Type: BREEDING SITE Min. Elev.(m): 6
Population Data: See annual observations.
Habitat:
Protection:
Management:
References: Issaccs, F.B. and R.G. Anthony 2003; Isaacs 2008; Isaacs & Anthony 2006; Isaacs 2000
Specimens:
General: Isaacs and Anthony nests 697, 932, 1209. 2003: nest 697 no longer exists. 2006: Nest 932 down.

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Scientific Name: ***Oncorhynchus kisutch pop. 1*** EO NUM: 37
Common Name: **Coho salmon (Lower Columbia River ESU)** EO ID: 3164

| Category: | Vertebrate Animal | Federal Status: T | G Rank: G5T2Q | ORBIC List: 1 |
|---|---|---|---|---|
| ELCODE: | AFCHA02031 | State Status: LE | S Rank: S2 | Tracked: Y |

Confirmed: First Obs: 2001-pre Last Obs: 2009 EO Rank: E - Verified extant (viability not assessed)
Directions: SCAPPOOSE BAY, MULTNOMAH CHANNEL, WILLAMETTE RIVER

| County Name | Ecoregion | Owner Name/Type | Watershed |
|---|---|---|---|
| Clackamas | WV | | 170800030200 - Hayden Island-Columbia River |
| Columbia | | | 170800030900 - Cathlamet Channel-Columbia River |
| Multnomah | | | 170900070405 - Tanner Creek-Willamette River |
| | | | 170900120102 - Kellogg Creek |
| | | | 170900120103 - Lower Johnson Creek |
| | | | 170900120104 - Oswego Creek-Willamette River |
| | | | 170900120201 - Columbia Slough |
| | | | 170900120202 - Balch Creek-Willamette River |
| | | | 170900120301 - South Scappoose Creek |
| | | | 170900120302 - North Scappoose Creek |
| | | | 170900120303 - Milton Creek |
| | | | 170900120304 - Scappoose Creek |
| | | | 170900120305 - Multnomah Channel |

| Town/Range Sect Meridian TRS Note |
|---|
| 001N001E - 05 - WM - |
| 001N001E - 06 - WM - |
| 001N001E - 17 - WM - |
| 001N001E - 18 - WM - |
| 001N001E - 19 - WM - |
| 001N001E - 20 - WM - |
| 001N001E - 21 - WM - |
| 001N001E - 27 - WM - |
| 001N001E - 28 - WM - |
| 001N001E - 34 - WM - |
| 001N001W - 02 - WM - |
| 001N001W - 11 - WM - |
| 001N001W - 12 - WM - |
| 001N001W - 13 - WM - |
| 001S001E - 03 - WM - |
| 001S001E - 10 - WM - |
| 001S001E - 15 - WM - |
| 001S001E - 22 - WM - |
| 001S001E - 26 - WM - |
| 001S001E - 27 - WM - |
| 001S001E - 35 - WM - |
| 001S001E - 36 - WM - |
| 002N001E - 30 - WM - |
| 002N001E - 31 - WM - |
| 002N001E - 32 - WM - |
| 002N001W - 03 - WM - |
| 002N001W - 04 - WM - |
| 002N001W - 06 - WM - |
| 002N001W - 07 - WM - |
| 002N001W - 13 - WM - |
| 002N001W - 14 - WM - |
| 002N001W - 17 - WM - |
| 002N001W - 18 - WM - |
| 002N001W - 20 - WM - |
| 002N001W - 21 - WM - |
| 002N001W - 22 - WM - |
| 002N001W - 23 - WM - |
| 002N001W - 24 - WM - |
| 002N001W - 25 - WM - |
| 002N001W - 27 - WM - |
| 002N001W - 28 - WM - |
| 002N001W - 34 - WM - |
| 002N001W - 35 - WM - |
| 002N001W - 36 - WM - |
| 002N002W - 01 - WM - |
| 002N002W - 12 - WM - |
| 002S001E - 02 - WM - |
| 002S001E - 03 - WM - |
| 002S001E - 10 - WM - |
| 002S001E - 11 - WM - |
| 002S001E - 13 - WM - |
| 002S001E - 14 - WM - |
| 002S001E - 24 - WM - |
| 002S002E - 19 - WM - |
| 002S002E - 30 - WM - |
| 003N001W - 03 - WM - |
| 003N001W - 04 - WM - |
| 003N001W - 09 - WM - |
| 003N001W - 10 - WM - |
| 003N001W - 15 - WM - |

| QuadCode | QuadName |
|---|---|
| 45122-C5 | Oregon City |
| 45122-D5 | Gladstone |
| 45122-D6 | Lake Oswego |
| 45122-E6 | Portland |
| 45122-E7 | Linnton |
| 45122-F6 | Vancouver |
| 45122-F7 | Sauvie Island |
| 45122-F8 | Dixie Mountain |
| 45122-G7 | Saint Helens |
| 45122-G8 | Chapman |
| 45122-H7 | Deer Island |

| Managed Area Name |
|---|
| Scappoose Bay State Natural Area |

003N001W - 16 - WM -
003N001W - 17 - WM -
003N001W - 19 - WM -
003N001W - 20 - WM -
003N001W - 21 - WM -
003N001W - 22 - WM -
003N001W - 23 - WM -
003N001W - 27 - WM -
003N001W - 28 - WM -
003N001W - 29 - WM -
003N001W - 30 - WM -
003N001W - 31 - WM -
003N001W - 33 - WM -
003N001W - 34 - WM -
003N001W - 35 - WM -
003N002W - 01 - WM -
003N002W - 02 - WM -
003N002W - 12 - WM -
003N002W - 13 - WM -
003N002W - 14 - WM -
003N002W - 25 - WM -
003N002W - 36 - WM -
004N001W - 03 - WM -
004N001W - 08 - WM -
004N001W - 09 - WM -
004N001W - 10 - WM -
004N001W - 16 - WM -
004N001W - 17 - WM -
004N001W - 20 - WM -
004N001W - 21 - WM -
004N001W - 27 - WM -
004N001W - 28 - WM -
004N001W - 29 - WM -
004N001W - 30 - WM -
004N001W - 31 - WM -
004N001W - 33 - WM -
004N001W - 34 - WM -
004N002W - 36 - WM -
005N001W - 34 - WM -

Source Feature | Uncertainty Type (Distance) [Use Class] | Annual Observations

Data currently not available.

SFeat ID | Visit Date | Visit Data | Visit Dataset | Dataset Record ID

Occurence Data

EO Type: REARING & MIGRATION - fish Min. Elev.(m):

Population Data: 2009: Classified as rearing by ODFW. Undocumented fish observations. 2001: ODFW DISTRIBUTION MAPS USED TO CREATE THE 1:24,000 COVERAGE.

Habitat: Rearing & migration use.

Protection:

Management:

References: ODFW 2009; ODFW 2000; Bennett ; Massey ; ODFW ; ODFW 2004

Specimens:

General: Distribution information used in this EOR was derived from ODFW geographic resources data produced and distributed in 1999. Unless specific data exists in the data field, the information presented in this EOR represents the "best professional judgement" by ODFW's district fisheries biologist; the presence of coho in described areas should be considered undocumented but as having a potential of being present. EOR was updated using ODFW geographic resources data produced and distributed in 2004. Updated with 2009 ODFW data.

Scientific Name: ***Oncorhynchus mykiss pop. 27*** EO NUM: 1
Common Name: **Steelhead (Lower Columbia River ESU, winter run)** EO ID: 851

Category: Vertebrate Animal Federal Status: LT G Rank: G5T2Q ORBIC List: 1
ELCODE: AFCHA02132 State Status: SC S Rank: S2 Tracked: Y

Confirmed: First Obs: 1999-PRE Last Obs: 2009 EO Rank: E - Verified extant (viability not assessed)
Directions: SCAPPOOSE BAY, MULTNOMAH CHANNEL, WILLAMETTE RIVER

| County Name | Ecoregion | Owner Name/Type | Watershed |
|---|---|---|---|
| Clackamas | WV | | 170900070405 - Tanner Creek-Willamette River |
| Columbia | | | 170900120102 - Kellogg Creek |
| Multnomah | | | 170900120103 - Lower Johnson Creek |
| | | | 170900120104 - Oswego Creek-Willamette River |
| | | | 170900120201 - Columbia Slough |
| | | | 170900120202 - Balch Creek-Willamette River |
| | | | 170900120303 - Milton Creek |
| | | | 170900120304 - Scappoose Creek |
| | | | 170900120305 - Multnomah Channel |

| Town/Range | Sect | Meridian | TRS Note |
|---|---|---|---|
| 001N001E | 05 | WM | |
| 001N001E | 06 | WM | |
| 001N001E | 17 | WM | |
| 001N001E | 18 | WM | |
| 001N001E | 19 | WM | |
| 001N001E | 20 | WM | |
| 001N001E | 21 | WM | |
| 001N001E | 27 | WM | |
| 001N001E | 28 | WM | |
| 001N001E | 34 | WM | |
| 001N001W | 02 | WM | |
| 001N001W | 11 | WM | |
| 001N001W | 12 | WM | |
| 001N001W | 13 | WM | |
| 001S001E | 03 | WM | |
| 001S001E | 10 | WM | |
| 001S001E | 15 | WM | |
| 001S001E | 22 | WM | |
| 001S001E | 26 | WM | |
| 001S001E | 27 | WM | |
| 001S001E | 35 | WM | |
| 001S001E | 36 | WM | |
| 002N001E | 30 | WM | |
| 002N001E | 31 | WM | |
| 002N001E | 32 | WM | |
| 002N001W | 06 | WM | |
| 002N001W | 07 | WM | |
| 002N001W | 14 | WM | |
| 002N001W | 17 | WM | |
| 002N001W | 18 | WM | |
| 002N001W | 20 | WM | |
| 002N001W | 21 | WM | |
| 002N001W | 22 | WM | |
| 002N001W | 23 | WM | |
| 002N001W | 24 | WM | |
| 002N001W | 25 | WM | |
| 002N001W | 27 | WM | |
| 002N001W | 28 | WM | |
| 002N001W | 34 | WM | |
| 002N001W | 35 | WM | |
| 002N001W | 36 | WM | |
| 002N002W | 01 | WM | |
| 002N002W | 12 | WM | |
| 002S001E | 02 | WM | |
| 002S001E | 10 | WM | |
| 002S001E | 11 | WM | |
| 002S001E | 13 | WM | |
| 002S001E | 14 | WM | |
| 002S001E | 24 | WM | |
| 002S002E | 19 | WM | |
| 002S002E | 30 | WM | |
| 003N001W | 03 | WM | |
| 003N001W | 04 | WM | |
| 003N001W | 09 | WM | |
| 003N001W | 10 | WM | |
| 003N001W | 15 | WM | |
| 003N001W | 16 | WM | |
| 003N001W | 17 | WM | |
| 003N001W | 19 | WM | |
| 003N001W | 20 | WM | |

| QuadCode | QuadName |
|---|---|
| 45122-C5 | Oregon City |
| 45122-D5 | Gladstone |
| 45122-D6 | Lake Oswego |
| 45122-E6 | Portland |
| 45122-E7 | Linnton |
| 45122-F6 | Vancouver |
| 45122-F7 | Sauvie Island |
| 45122-G7 | Saint Helens |
| 45122-G8 | Chapman |

| Managed Area Name |
|---|
| Scappoose Bay State Natural Area |

003N001W - 21 - WM -
003N001W - 22 - WM -
003N001W - 23 - WM -
003N001W - 27 - WM -
003N001W - 28 - WM -
003N001W - 30 - WM -
003N001W - 31 - WM -
003N001W - 33 - WM -
003N001W - 34 - WM -
003N001W - 35 - WM -
003N002W - 25 - WM -
003N002W - 36 - WM -
004N001W - 04 - WM -
004N001W - 05 - WM -
004N001W - 08 - WM -
004N001W - 09 - WM -
004N001W - 10 - WM -
004N001W - 16 - WM -
004N001W - 17 - WM -
004N001W - 19 - WM -
004N001W - 20 - WM -
004N001W - 21 - WM -
004N001W - 27 - WM -
004N001W - 28 - WM -
004N001W - 30 - WM -
004N001W - 31 - WM -
004N001W - 33 - WM -
004N001W - 34 - WM -
004N002W - 25 - WM -
004N002W - 36 - WM -
005N001W - 32 - WM -

Source Feature | Uncertainty Type (Distance) [Use Class] | Annual Observations

Data currently not available.

SFeat ID | Visit Date | Visit Data | Visit Dataset | Dataset Record ID

Occurence Data

EO Type: REARING & MIGRATION - fish Min. Elev.(m):

Population Data: 2009: Classified as rearing by ODFW. Undocumented fish observation.
WINTER RUN: ODFW DISTRIBUTIION MAPS USED TO CREATE THE 1:24,000 COVERAGE

Habitat:

Protection:

Management:

References: ODFW 2000; Bennett ; Massey ; ODFW

Specimens:

General: DISTRIBUTION INFORMATION USED IN THIS EOR WAS DERIVED FROM ODFW GEOGRAPHIC RESOURCES DATA PRODUCED AND DISTRIBUTED IN 1999. UNLESS SPECIFIC DATA EXISTS IN THE DATA FIELD, THE INFORMATION PRESENTED IN THIS EOR REPRESENTS THE "BEST PROFESSIONAL JUDGMENT" BY ODFW'S DISTRICT FISHERIES BIOLOGIST; THE PRESENCE OF STEELHEAD IN DESCRIBED AREAS SHOULD BE CONSIDERED UNDOCUMENTED BUT AS HAVING A POTENTIAL OF BEING PRESENT.

Scientific Name: ***Oncorhynchus tshawytscha pop. 21*** EO NUM: 6

Common Name: **Chinook salmon (Lower Columbia River ESU, spring run)** EO ID: 3132

Category: Vertebrate Animal Federal Status: LT G Rank: G5T2Q ORBIC List: 1

ELCODE: AFCHA0205W State Status: SC S Rank: S2 Tracked: Y

Confirmed: First Obs: 1999-PRE Last Obs: 2009 EO Rank: E - Verified extant (viability not assessed)

Directions: SCAPPOOSE BAY, MULTNOMAH CHANNEL, WILLAMETTE RIVER

| County Name | Ecoregion | Owner Name/Type | Watershed |
|---|---|---|---|
| Clackamas | WV | | 170900070405 - Tanner Creek-Willamette River |
| Columbia | | | 170900120104 - Oswego Creek-Willamette River |
| Multnomah | | | 170900120202 - Balch Creek-Willamette River |
| | | | 170900120303 - Milton Creek |
| | | | 170900120304 - Scappoose Creek |
| | | | 170900120305 - Multnomah Channel |

| Town/Range Sect Meridian TRS Note |
|---|
| 001N001E - 18 - WM - |
| 001N001E - 19 - WM - |
| 001N001E - 20 - WM - |
| 001N001E - 21 - WM - |
| 001N001E - 27 - WM - |
| 001N001E - 28 - WM - |
| 001N001E - 34 - WM - |
| 001N001W - 02 - WM - |
| 001N001W - 11 - WM - |
| 001N001W - 12 - WM - |
| 001N001W - 13 - WM - |
| 001S001E - 03 - WM - |
| 001S001E - 10 - WM - |
| 001S001E - 15 - WM - |
| 001S001E - 22 - WM - |
| 001S001E - 26 - WM - |
| 001S001E - 27 - WM - |
| 001S001E - 35 - WM - |
| 002N001W - 06 - WM - |
| 002N001W - 07 - WM - |
| 002N001W - 14 - WM - |
| 002N001W - 17 - WM - |
| 002N001W - 18 - WM - |
| 002N001W - 20 - WM - |
| 002N001W - 21 - WM - |
| 002N001W - 22 - WM - |
| 002N001W - 23 - WM - |
| 002N001W - 27 - WM - |
| 002N001W - 28 - WM - |
| 002N001W - 34 - WM - |
| 002N001W - 35 - WM - |
| 002N002W - 01 - WM - |
| 002N002W - 12 - WM - |
| 002S001E - 02 - WM - |
| 002S001E - 11 - WM - |
| 002S001E - 13 - WM - |
| 002S001E - 14 - WM - |
| 002S001E - 24 - WM - |
| 002S002E - 19 - WM - |
| 002S002E - 30 - WM - |
| 003N001W - 04 - WM - |
| 003N001W - 09 - WM - |
| 003N001W - 16 - WM - |
| 003N001W - 17 - WM - |
| 003N001W - 19 - WM - |
| 003N001W - 20 - WM - |
| 003N001W - 30 - WM - |
| 003N001W - 31 - WM - |
| 003N002W - 25 - WM - |
| 003N002W - 36 - WM - |
| 004N001W - 09 - WM - |
| 004N001W - 10 - WM - |
| 004N001W - 16 - WM - |
| 004N001W - 17 - WM - |
| 004N001W - 20 - WM - |
| 004N001W - 21 - WM - |
| 004N001W - 27 - WM - |
| 004N001W - 28 - WM - |
| 004N001W - 33 - WM - |
| 004N001W - 34 - WM - |

| QuadCode | QuadName |
|---|---|
| 45122-C5 | Oregon City |
| 45122-D5 | Gladstone |
| 45122-D6 | Lake Oswego |
| 45122-E6 | Portland |
| 45122-E7 | Linnton |
| 45122-F7 | Sauvie Island |
| 45122-G7 | Saint Helens |

| Managed Area Name |
|---|
| Scappoose Bay State Natural Area |

Source Feature | Uncertainty Type (Distance) [Use Class] | Annual Observations

Data currently not available.

SFeat ID | Visit Date | Visit Data | Visit Dataset | Dataset Record ID

Occurence Data

EO Type: REARING & MIGRATION - fish Min. Elev.(m):

Population Data: SPRING RUN; ODFW DISTRIBUTION MAPS USED TO CREATE THE 1:24,000 COVERAGE

Habitat:

Protection:

Management:

References: ODFW 2000; Bennett ; Massey ; ODFW

Specimens:

General: DISTRIBUTION INFORMATION USED IN THIS EOR WAS DERIVED FROM ODFW GEOGRAPHIC RESOURCES DATA PRODUCED AND DISTRIBUTED IN 1999. UNLESS SPECIFIC DATA EXISTS IN THE DATA FIELD, THE INFORMATION PRESENTED IN THIS EOR REPRESENTS THE "BEST PROFESSIONAL JUDGMENT" BY ODFW'S DISTRICT FISHERIES BIOLOGIST; THE PRESENCE OF CHINOOK IN DESCRIBED AREAS SHOULD BE CONSIDERED UNDOCUMENTED BUT AS HAVING A POTENTIAL OF BEING PRESENT.

Scientific Name: ***Oncorhynchus tshawytscha pop. 22*** EO NUM: 6

Common Name: **Chinook salmon (Lower Columbia River ESU, fall run)** EO ID: 778

Category: Vertebrate Animal Federal Status: LT G Rank: G5T2Q ORBIC List: 1

ELCODE: AFCHA0205Y State Status: SC S Rank: S2 Tracked: Y

Confirmed: First Obs: 1999-PRE Last Obs: 2009 EO Rank: E - Verified extant (viability not assessed)

Directions: SCAPPOOSE BAY & TRIBUTARIES, WILLAMETTE RIVER & TRIBUTARIES

| County Name | Ecoregion | Owner Name/Type | Watershed |
|---|---|---|---|
| Clackamas | WV | | 170900070405 - Tanner Creek-Willamette River |
| Columbia | | | 170900120102 - Kellogg Creek |
| Multnomah | | | 170900120103 - Lower Johnson Creek |
| | | | 170900120104 - Oswego Creek-Willamette River |
| | | | 170900120201 - Columbia Slough |
| | | | 170900120202 - Balch Creek-Willamette River |
| | | | 170900120301 - South Scappoose Creek |
| | | | 170900120303 - Milton Creek |
| | | | 170900120304 - Scappoose Creek |
| | | | 170900120305 - Multnomah Channel |

| Town/Range Sect Meridian TRS Note |
|---|
| 001N001E - 05 - WM - |
| 001N001E - 06 - WM - |
| 001N001E - 18 - WM - |
| 001N001E - 19 - WM - |
| 001N001E - 20 - WM - |
| 001N001E - 21 - WM - |
| 001N001E - 27 - WM - |
| 001N001E - 28 - WM - |
| 001N001E - 34 - WM - |
| 001N001W - 02 - WM - |
| 001N001W - 11 - WM - |
| 001N001W - 12 - WM - |
| 001N001W - 13 - WM - |
| 001S001E - 03 - WM - |
| 001S001E - 10 - WM - |
| 001S001E - 15 - WM - |
| 001S001E - 22 - WM - |
| 001S001E - 26 - WM - |
| 001S001E - 27 - WM - |
| 001S001E - 35 - WM - |
| 001S001E - 36 - WM - |
| 002N001E - 31 - WM - |
| 002N001W - 03 - WM - |
| 002N001W - 04 - WM - |
| 002N001W - 06 - WM - |
| 002N001W - 07 - WM - |
| 002N001W - 14 - WM - |
| 002N001W - 17 - WM - |
| 002N001W - 18 - WM - |
| 002N001W - 20 - WM - |
| 002N001W - 21 - WM - |
| 002N001W - 22 - WM - |
| 002N001W - 23 - WM - |
| 002N001W - 24 - WM - |
| 002N001W - 25 - WM - |
| 002N001W - 27 - WM - |
| 002N001W - 28 - WM - |
| 002N001W - 34 - WM - |
| 002N001W - 35 - WM - |
| 002N001W - 36 - WM - |
| 002N002W - 01 - WM - |
| 002N002W - 12 - WM - |
| 002S001E - 02 - WM - |
| 002S001E - 11 - WM - |
| 002S001E - 13 - WM - |
| 002S001E - 14 - WM - |
| 002S001E - 24 - WM - |
| 002S002E - 19 - WM - |
| 002S002E - 30 - WM - |
| 002S002E - 31 - WM - |
| 003N001W - 03 - WM - |
| 003N001W - 04 - WM - |
| 003N001W - 09 - WM - |
| 003N001W - 10 - WM - |
| 003N001W - 15 - WM - |
| 003N001W - 16 - WM - |
| 003N001W - 17 - WM - |
| 003N001W - 19 - WM - |
| 003N001W - 20 - WM - |
| 003N001W - 21 - WM - |

| QuadCode | QuadName |
|---|---|
| 45122-C5 | Oregon City |
| 45122-D5 | Gladstone |
| 45122-D6 | Lake Oswego |
| 45122-E6 | Portland |
| 45122-E7 | Linnton |
| 45122-F7 | Sauvie Island |
| 45122-G7 | Saint Helens |

| Managed Area Name |
|---|
| Scappoose Bay State Natural Area |

003N001W - 22 - WM -
003N001W - 23 - WM -
003N001W - 27 - WM -
003N001W - 28 - WM -
003N001W - 29 - WM -
003N001W - 30 - WM -
003N001W - 31 - WM -
003N001W - 33 - WM -
003N001W - 34 - WM -
003N001W - 35 - WM -
003N002W - 01 - WM -
003N002W - 25 - WM -
003N002W - 36 - WM -
004N001W - 09 - WM -
004N001W - 10 - WM -
004N001W - 15 - WM -
004N001W - 16 - WM -
004N001W - 17 - WM -
004N001W - 20 - WM -
004N001W - 21 - WM -
004N001W - 27 - WM -
004N001W - 28 - WM -
004N001W - 29 - WM -
004N001W - 30 - WM -
004N001W - 31 - WM -
004N001W - 33 - WM -
004N001W - 34 - WM -
004N002W - 36 - WM -

Source Feature | Uncertainty Type (Distance) [Use Class] | Annual Observations

Data currently not available.

SFeat ID | Visit Date | Visit Data | Visit Dataset | Dataset Record ID

Occurence Data

EO Type: REARING & MIGRATION - fish Min. Elev.(m):

Population Data: 2009: Classified as rearing by ODFW. Undocumented fish observation. FALL RUN; ODFW DISTRIBUTION MAPS USED TO CREATE THE 1:24,000 COVERAGE

Habitat:

Protection:

Management:

References: Caldwell 1999; ODFW 2000; Bennett ; Massey ; ODFW

Specimens:

General: DISTRIBUTION INFORMATION USED IN THIS EOR WAS DERIVED FROM ODFW GEOGRAPHIC RESOURCES DATA PRODUCED AND DISTRIBUTED IN 1999. UNLESS SPECIFIC DATA EXISTS IN THE DATA FIELD, THE INFORMATION PRESENTED IN THIS EOR REPRESENTS THE "BEST PROFESSIONAL JUDGMENT" BY ODFW'S DISTRICT FISHERIES BIOLOGIST: THE PRESENCE OF CHINOOK IN DESCRIBED AREAS SHOULD BE CONSIDERED UNDOCUMENTED BUT AS HAVING A POTENTIAL OF BEING PRESENT. Updated with 2009 ODFW 1:24,000 coverage.

Scientific Name: ***Oncorhynchus tshawytscha pop. 23*** EO NUM: 91

Common Name: **Chinook salmon (Upper Willamette River ESU, spring run)** EO ID: 31243

Category: Vertebrate Animal Federal Status: LT G Rank: G5T2Q ORBIC List: 1

ELCODE: AFCHA02052 State Status: SC S Rank: S2 Tracked: Y

Confirmed: First Obs: 2009-pre Last Obs: 2009 EO Rank: E - Verified extant (viability not assessed)

Directions: From the mouth of the Willamette River to confluence with the Clackamas River.

| County Name | Ecoregion | Owner Name/Type | Watershed |
|---|---|---|---|
| Clackamas | WV | | 170800030200 - Hayden Island-Columbia River |
| Multnomah | | | 170900070405 - Tanner Creek-Willamette River |
| | | | 170900120104 - Oswego Creek-Willamette River |
| | | | 170900120202 - Balch Creek-Willamette River |

| Town/Range Sect Meridian TRS Note | QuadCode | QuadName | Managed Area Name |
|---|---|---|---|
| 001N001E - 18 - WM - | 45122-C5 | Oregon City | |
| 001N001E - 19 - WM - | 45122-D5 | Gladstone | |
| 001N001E - 20 - WM - | 45122-D6 | Lake Oswego | |
| 001N001E - 21 - WM - | 45122-E6 | Portland | |
| 001N001E - 27 - WM - | 45122-E7 | Linnton | |
| 001N001E - 28 - WM - | 45122-F7 | Sauvie Island | |
| 001N001E - 34 - WM - | | | |
| 001N001W - 02 - WM - | | | |
| 001N001W - 11 - WM - | | | |
| 001N001W - 12 - WM - | | | |
| 001N001W - 13 - WM - | | | |
| 001S001E - 03 - WM - | | | |
| 001S001E - 10 - WM - | | | |
| 001S001E - 15 - WM - | | | |
| 001S001E - 22 - WM - | | | |
| 001S001E - 26 - WM - | | | |
| 001S001E - 27 - WM - | | | |
| 001S001E - 35 - WM - | | | |
| 002N001W - 13 - WM - | | | |
| 002N001W - 14 - WM - | | | |
| 002N001W - 22 - WM - | | | |
| 002N001W - 23 - WM - | | | |
| 002N001W - 27 - WM - | | | |
| 002N001W - 34 - WM - | | | |
| 002N001W - 35 - WM - | | | |
| 002S001E - 02 - WM - | | | |
| 002S001E - 11 - WM - | | | |
| 002S001E - 13 - WM - | | | |
| 002S001E - 14 - WM - | | | |
| 002S001E - 24 - WM - | | | |
| 002S002E - 19 - WM - | | | |
| 002S002E - 30 - WM - | | | |

| Source Feature | Uncertainty Type (Distance) [Use Class] | Annual Observations |
|---|---|---|
| Data currently not available. | | |

| SFeat ID | Visit Date | Visit Data | Visit Dataset | Dataset Record ID |
|---|---|---|---|---|

Occurence Data

EO Type: Min. Elev.(m):

Population Data: 2009: Classified as rearing by ODFW.

Habitat:

Protection:

Management:

References: ODFW

Specimens:

General: Distribution information used in this EOR was derived from ODFW 1:24,000 scale geographic resources data produced and distributed in 2009. Use type was determined by ODFW and other natural resources agency field staff based on survey data, supporting documentation, and the best professional judgement of the field biologists. Unless otherwise noted, the presence of chinook in described areas should be considered undocumented but as having a potential of being present.

Scientific Name: ***Progne subis*** EO NUM: 121
Common Name: **Purple martin** EO ID: 6359

Category: Vertebrate Animal Federal Status: G Rank: G5 ORBIC List: 2
ELCODE: ABPAU01010 State Status: SC S Rank: S2B Tracked: Y

Confirmed: First Obs: 1998-07-18 Last Obs: 1998-07-18 EO Rank: H - Historical

Directions: THIS COLONY IS IN WILLAMETTE PARK-OFF MCADAM IN DOWNTOWN PORTLAND. THE GOURD RACK IS JUST N OF THE BOAT RAMP, BESIDE THE PATH. THE HOUSEBOATS ACROSS THE RIVER FROM THE PARK HAVE NESTBOXES ON PILINGS.

| County Name | Ecoregion | Owner Name/Type | Watershed |
|---|---|---|---|
| Multnomah | WV | CITY | 170900120202 - Balch Creek-Willamette River |

| Town/Range | Sect | Meridian | TRS Note | QuadCode | QuadName | Managed Area Name |
|---|---|---|---|---|---|---|
| 001S001E | 15 | WM | | 45122-D6 | Lake Oswego | |

| Source Feature | Uncertainty Type (Distance) [Use Class] | Annual Observations |
|---|---|---|
| 6359 - Point | Estimated (50 m) Undetermined | |

| SFeat ID | Visit Date | Visit Data | Visit Dataset | Dataset Record ID |
|---|---|---|---|---|
| 6359 | 1998-07-18 | 1998: 2 PAIRS. | | |

Occurence Data

EO Type:
Min. Elev.(m): 9
Population Data: 1998: 2 PAIRS.
Habitat:
Protection:
Management:
References: Horvath 1999
Specimens:
General:

15 records total

**Key to Oregon Biodiversity Information Center Data Reports**

| Field Name | Description |
|---|---|
| Scientific Name | The scientific name of the species. |
| Common Name | The common name of the species. |
| EO NUM | The number of the Element Occurrence (EO) for this species. An element occurrence is an area of land or water where the species is or was known to occur and has conservation value. EOs are the main tracking unit for Heritage Programs. |
| EO ID | Unique identifier for the Element Occurrence (EO). Unique for each occurrence in the database. |
| Category | Value that indicates the broad biological category for each species. |
| ELCODE | Unique NatureServe code for identifying this element. 1st and 2nd byte (PD=Plant dicot, PM=Plant monocot, PG=Plant gymnosperm, PP=Plant pteridophyte, AA=amphibian, AB=bird, AF=fish, AM=mammal, AR=reptile, I=invertebrate. 3rd-5th byte (family abbreviation). 6th-7th (genus code). 8th-9th (species). 10th (tie breaker). |
| Federal Status | US Fish and Wildlife Service or NOAA Fisheries status. **E**=endangered, **T**=threatened, **PE** or **PT**=proposed endangered or threatened, **C**=candidate for listing with enough information available for listing, **SOC** or **SC**=species of concern, **PS:***xx*=partial status for species, **XE**=experimental population, essential. **XN**=experimental population, non-essential.<br>**PDL**=Proposed for delisting. **DL**=Delisted. **UR**=Under Review. |
| State Status | For animals, Oregon Department of Fish and Wildlife status: **LE**=listed endangered, **PE**=proposed endangered, **LT**=listed threatened, **PT**=proposed threatened, **SC** or **C**=sensitive-critical, **S**=sensitive. For plants, Oregon Department of Agriculture status: **LE**=listed endangered, **LT**=listed threatened, **C**=candidate. |
| G Rank / S Rank | ORBIC participates in an international system for ranking rare, threatened and endangered species throughout the world. The system was developed by The Nature Conservancy and is now maintained by NatureServe in cooperation with Heritage Programs or Conservation Data Centers (CDCs) in all 50 states, in 4 Canadian provinces, and in 13 Latin American countries. The ranking is a 1-5 scale, primarily based on the number of known occurrences, but also including threats, sensitivity, area occupied, and other biological factors. In this book, the ranks occupy two lines. The top line is the Global Rank and begins with a "G". If the taxon has a trinomial (a subspecies, variety or recognized race), this is followed by a "T" rank indicator. A "Q" at the end of this line indicates the taxon has taxonomic questions. The second line is the State Rank and begins with the letter "S". The ranks are summarized as follows:<br>**1** = Critically imperiled because of extreme rarity or because it is somehow especially vulnerable to extinction or extirpation, typically with 5 or fewer occurrences;<br>**2** = Imperiled because of rarity or because other factors demonstrably make it very vulnerable to extinction (extirpation), typically with 6-20 occurrences;<br>**3** = Rare, uncommon or threatened, but not immediately imperiled, typically with 21-100 occurrences;<br>**4** = Not rare and apparently secure, but with cause for long-term concern, usually with more than 100 occurrences;<br>**5** = Demonstrably widespread, abundant, and secure;<br>**H**= Historical Occurrence, formerly part of the native biota with the implied expectation that it may be rediscovered;<br>**X** = Presumed extirpated or extinct;<br>**U** = Unrankable due to conflicting information;<br>**?** = assigned rank is uncertain;<br>**NR** = not yet ranked. |
| ORBIC List | All rare species in Oregon are assigned a list number of 1, 2, 3 or 4, where<br>**1**=threatened or endangered throughout range,<br>**2**=threatened or endangered in Oregon but more common elsewhere,<br>**3**=Review List (more information is needed),<br>**4**=Watch List (currently stable, but could become threatened). A null value indicates the species is not currently on our rare species list. |

**Key to Oregon Biodiversity Information Center Data Reports**

| Field Name | Description |
|---|---|
| Tracked | We currently obtain and computerize locational information for only those elements marked with **Y**(es). Those species marked with **N**(o) or **W**(atch) have incomplete data as we do not actively track them at this time. |
| Confirmed | Indication of whether taxonomic identification of the Element represented by this occurrence has been confirmed by a reliable individual. Blank=unknown, assumed to be correctly identified.<br>Y=Yes, confident identification. ?=identification questions. |
| First Obs | First reported sighting date for this occurrence in the form YYYY-MM-DD. Fuzzy dates are possible (e.g., 2001-08 meaning sometime in August 2001; 1990-Pre meaning before 1990). |
| Last Obs | Last reported sighting date, usually in the form YYYY-MM-DD. Fuzzy dates are possible (e.g., 2001-08 meaning sometime in August 2001; 1990-Pre meaning before 1990). |
| EO Rank | ORBIC's determination of the viability of the occurrence. **A-D** ranks from highest to lowest quality/stability. **E**=extant, viability not assessed. **F**=failed to find. **H**=historical (species could still be present but has not been recently observed). **X**=extirpated; population no longer exists. |
| Directions | Site name and/or directions to site. |
| County | County name(s) in which EO is mapped. |
| Ecoregion | Physiographic Province in which EO is mapped: **CR**=Coast Range, **WV**=Willamette Valley, **KM**=Klamath Mountains, **WC**=West slope and crest of the Cascades, **EC**=East slope of the Cascades, **BM**=Ochoco, Blue and Wallowa Mts., **BR**=Basin and Range, **CB**=Columbia Basin, **SP**=Snake River Plains. **ME**=Marine and Estuarine. |
| Owner Name/Type | Federal, State, Private, etc. |
| Watershed | Watershed(s), identified according to the U.S. Geological Survey (USGS) Hydrologic Unit Map 10-digit code, within which the Element Occurrence is located. |
| Town-Range, Sec, and TRS Note | United States rectangular land survey (also known as the Public Land Survey System) legal township, range, and section descriptions in which the EO is mapped. Township first (4 bytes), range second (4 bytes). For example: 004S029E = Township 4S, Range 29E. All locations are with reference to the Willamette Meridian. Fractional ranges or townships are indicated in the Note field. |
| Quadcode | USGS code for the USGS topographic quadrangle map(s) where the record is mapped. |
| Quadname | Name of the USGS topographic quadrangle map(s) where the record is mapped. |
| Managed Area Name | Name of managed area, if applicable, e.g., BLM District, USFS Forest, Private Preserve |
| Source Feature | A Source Feature is the initial translation of a discrete unit of observation data as a spatial feature.<br>Creation of a Source Feature requires an interpretive process. The likely location and extent of an observation is determined through consideration of the amount and direction of any variability between the recorded and actual locations of the observation data. In most cases, the Source Feature is delineated to encompass locational uncertainty.<br>A Source Feature can be a point, line, or polygon. The type of Source Feature developed depends on both the preceding conceptual feature type and the locational uncertainty associated with the feature. |
| Uncertainty Type (Distance) | The recorded location of an observation of an Element may vary from its true location due to many factors, including the level of expertise of the data collector, differences in survey techniques and equipment used, and the amount and type of information obtained. This inaccuracy is characterized as locational uncertainty, and is assessed for Source Feature(s) based on the uncertainty associated with the underlying information on the location of the observation. |

**Key to Oregon Biodiversity Information Center Data Reports**

| Field Name | Description |
|---|---|
| | Four categories of locational uncertainty have been identified, as follows:<br>Negligible uncertainty is less than or equal to 6.25 meters in any dimension. Source Features with negligible uncertainty are based on a comprehensive field survey with high quality mapping and a high degree of certainty.<br>Linear uncertainty is greater than 6.25 meters, and varies along an axis (e.g., a path, stream, ridgeline). The true location of an observation with linear uncertainty may be visualized as effectively sliding along a line that delineates the uncertainty.<br>Areal delimited uncertainty is greater than 6.25 meters, and varies in more than one dimension. The true location of an observation can be visualized as floating within an area with a boundary that can be specifically delimited. Boundaries can be defined using roads, bodies of water, etc.<br>Areal estimated uncertainty is greater than 6.25 meters, and varies in more than one dimension. A boundary cannot be specifically delimited based on the observation information, i.e., the actual extent is unknown. The true location of the observation can be visualized as floating within an area for which boundaries cannot be specifically delimited. Source Features with areal estimated uncertainty require that the user specify an estimated uncertainty distance to be used for buffering the feature to incorporate the locational uncertainty. |
| Use Class | How the source feature is used by migratory species (e.g., breeding, maternity colony, hibernaculum). |
| Annual Observations | Summary of yearly observations from most recent to oldest. |
| SFeat ID | Unique identifier for source feature. |
| Visit Date | Date of the visit to this source feature. Fuzzy dates are possible (e.g., 2001-08 meaning sometime in August 2001; 1990-Pre meaning before 1990). |
| Visit Data | Information about individual visits to each source feature, when available. |
| Visit Dataset | Name of dataset that was the source of the visit data, if applicable. |
| Dataset Record ID | Unique ID of the record that was the source of the visit data, if applicable |
| EO Type | For animals, type of occurrence, e.g., roost, nest, spawning, migration. |
| Minimum Elevation | Minimum elevation of the area covered by the range of the taxon, in meters. Negative numbers or blank=not determined. |
| Population Data | Summary of species and population biology for the EO – may include number observed, number of sites, reproduction data, assessment of viability, etc. |
| Habitat | Habitat information, e.g., aspect, slope, soils, associated species, community type. |
| Protection | Comments on site protection and threats. |
| Management | Comments on how the site is managed. |
| References | Abbreviated list of references for the site (author/surveyor and date if known/applicable). |
| Specimens | Details on specimens that have been collected at this occurrence site. Order of information is: Collector (Collector's number). Year collected. Acquisition number. Collection code. |
| General | Miscellaneous comments, usually pertaining to references and data sources. |

**ATTACHMENT B**
**ECOLOGICAL SCREENING, PART 3, ATTACHMENTS 1 AND 2**

TIER I ECOLOGICAL RISK ASSESSMENT SCOPING REPORT
2997 South Moody Avenue
Portland, Oregon

Farallon PN: 2243-005

| General Site Information | |
|---|---|
| **ECSI File No. or LUST File No.:** | DEQ ECSI File No. 6295 |
| **Site Name:** | 2997 S Moody Ave |
| **Site Location (address, city, and/or county):** | 2997 S Moody Ave, Portland |
| **Latitude/Longitude or other location documentation for site:** | Multnomah County Parcel No. 1S1E10BA-00200 |
| **Current and Historical Site Use (gas station, dry cleaner, jet hangar, etc.) [1]:** Rail lines were present on the Property Area and adjacent properties since at least the 1880s to the present. | |
| **Zoning:** | General Commercial |
| **Site[2] Features:** | The Site totals 2.33 acres of land developed with transportation rail lines on the northern portion and vegetated areas, a gravel access road, fenced storage areas, stormwater infiltration areas, and a vegetated swale. |
| **Chemicals of Interest[3]:** | Arsenic, lead, TPH, PAHs |

[1] Include contaminant management, treatment, storage or disposal and areas where a release may have occurred. Historical sources should be identified using sources of information which help in identifying current or past uses or occupants of a site including aerial photographs, fire insurance maps, property tax files, recorded land title records, United States Geological Survey (USGS) 7.5 minute topographic maps, local street directories, building department records, zoning or land use records. Any previous site assessments, environmental assessments or studies should be summarized

[2] Facility or Site (OAR 340-122-0115(26)) means any building, structure, installation, equipment, pipe or pipeline including any pipe into a sewer or publicly owned treatment works, well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, above ground tank, underground storage tank, motor vehicle, rolling stock, aircraft, or any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located and where a release has occurred or where there is a threat of a release, but does not include any consumer product in consumer use or any vessel.

[3] A COI list should include chemicals that are detected or are suspected to be present based on historical and current operations. For Stage 1, the site-specific history of hazardous substance uses and releases is usually the source of potential chemical information. Identify hazardous substances that have the potential to bioaccumulate in Section C2 of Attachment 1.

**Site Conditions – Provide Approximate Areas (acres)**

These habitats may occur in a range of natural and protected areas, including parks and green space found within urban areas. More information and habitat classification can be found at: https://oregonexplorer.info/content/classification-wildlife-habitats

Site; Adjacent to Site

**0.2; 0.5 Terrestrial Open Habitat / Grasslands**: Dominated by short to medium-tall grasses, low to medium shrubs, or bare soil.

**0.1; 0.5 Forest or Woodland Habitats:** Woodlands (maple, alder, aspen), conifer forest (Douglas fir, hemlock, cedar, spruce), mixed-woodland, juniper, pine (ponderosa, lodgepole).

**0.0; 0.5 Wetland[4]:** May be either tidal or non-tidal wetlands with emergent herbaceous plants.

**0.0; 0.5 Riparian Zone:** Patches or linear strips of land adjacent to waterbodies (rivers, streams, waterbodies), or on nearby floodplains and terraces. May be impacted by periodic riverine flooding or perennial flowing water**.** May or may not also contain wetlands.

**0.0; 0.0 Aquatic Open Water:** Ponds, lakes, reservoirs, rivers, creeks, streams, bays estuaries, and nearshore marine and intertidal.

**2.0; 40.0 Impermeable Surface:** Pavement, structures.

**Documentation**

- Aerial Site Vicinity Map(s) identifying zoning and Site features. Include topographic map.
- Summarize known or potential contaminated soil, groundwater, migration pathways.
- Figure illustrating source/release areas, sample locations, estimated areas of contamination, and surface features such as pavement, stormwater catch basins/drainage system including outfalls, dry wells or stormwater swales.
- Aerial Map showing habitat types described above both within and adjacent to the Site by at least 1/4 mile from Site boundary. Definitions and tools[5] for identifying wetlands include:

[4] Covered Under Oregon Statewide Wetlands Inventory (ORS 196.674) https://www.oregon.gov/dsl/WW/Pages/SWI.aspx

[5] Information shown on the Local Wetland Inventory maps is for planning purposes only, as wetland information is subject to change. There may be unmapped wetland and waters subject to regulation and all wetlands and waters boundary mapping is approximate. In all cases, actual field conditions determine the presence, absence and boundaries of wetlands and waters.

| | | |
|---|---|---|
| | https://www.oregon.gov/dsl/WW/Pages/Inventories.aspx<br>http://tools.oregonexplorer.info/oe_map_viewer_2_0/viewer.html?Viewer=orwap<br>National Wetlands Inventory: https://www.fws.gov/wetlands/Data/Mapper.html | |
| Checklist Completed By:<br>(name and title/expertise) | Sam Jackson, PE | Date: 12/12/2022 |

**ATTACHMENT 1**
**Ecological Scoping Checklist**

| | |
|---|---|
| Site Name | 2997 S Moody |
| Date of Site Visit | 9/12/2022 |
| Site Location | 2997 S Moody, Portland |
| Site Visit Conducted by | Sam Jackson, PE |

Part ❶

| **CONTAMINANTS OF INTEREST IN LOCALITY OF FACILITY† Types, Classes, Or Specific Hazardous Substances ‡ Known Or Suspected** | **Upland** | **Aquatic** |
|---|---|---|
| Lead, arsenic, PAHs, TPH | yes | No |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

‡ As defined by OAR 340-122-115(30) † As defined by OAR 340-122-115(34)

Part ❷

| **OBSERVED IMPACTS OBSERVED IN THE LOCALITY OF THE FACILITY** | **Finding** |
|---|---|
| Onsite vegetation (**N**one, **L**imited, **E**xtensive) | L |
| Vegetation in the locality of the site (**N**one, **L**imited, **E**xtensive) | L |
| Onsite wildlife such as macroinvertebrates, reptiles, amphibians, birds, mammals, other (**N**one, **L**imited, **E**xtensive) | L |
| Wildlife such as macroinvertebrates, reptiles, amphibians, birds, mammals, other in the locality of the site (**N**one, **L**imited, **E**xtensive) | L |
| Other readily observable impacts (**N**one, **D**iscuss below) | D |
| Discussion:<br>Railroad ties and trash associated with homeless encampments. See attached report for additional information. | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

**ATTACHMENT 1**
**Ecological Scoping Checklist (cont'd)**

Part ❸

| SPECIFIC EVALUATION OF ECOLOGICAL RECEPTORS / HABITAT | Finding |
|---|---|
| ***Terrestrial - Wooded*** | |
| Percentage of site that is wooded | 10 |
| Dominant vegetation type (**E**vergreen, **D**eciduous, **M**ixed) | M **P *** |
| Prominent tree size at breast height, i.e., four feet (<6", 6" to 12", >12") | 6-12 |
| Evidence / observation of wildlife (**M**acroinvertebrates, **R**eptiles, **A**mphibians, **B**irds, **M**ammals, **O**ther) | B |
| ***Terrestrial - Scrub/Shrub/Grasses*** | |
| Percentage of site that is scrub/shrub | 10 |
| Dominant vegetation type (**Sc**rub, **Sh**rub, **G**rasses, **O**ther) | Sh **P** |
| Prominent height of vegetation (<2', 2' to 5', >5') | >5 ft |
| Density of vegetation (**D**ense, **P**atchy, **S**parse) | P **P** |
| Evidence / observation of wildlife (**M**acroinvertebrates, **R**eptiles, **A**mphibians, **B**irds, **M**ammals, **O**ther) | |
| ***Terrestrial - Ruderal*** | |
| Percentage of site that is ruderal | 10 |
| Dominant vegetation type (**L**andscaped, **A**griculture, **B**are ground) | L **P** |
| Prominent height of vegetation (0', >0' to <2', 2' to 5', >5') | 0-2 |
| Density of vegetation (**D**ense, **P**atchy, **S**parse) | P **P** |
| Evidence / observation of wildlife (**M**acroinvertebrates, **R**eptiles, **A**mphibians, **B**irds, **M**ammals, **O**ther) | B |
| ***Aquatic - Non-flowing (lentic)*** | |
| Percentage of site that is covered by lakes or ponds | 0 |
| Type of water bodies (**L**akes, **P**onds, **V**ernal pools, **I**mpoundments, **Lag**oon, **R**eservoir, **C**anal) | |
| Size (acres), average depth (feet), trophic status of water bodies | |
| Source water (**R**iver, **St**ream, **G**roundwater, **I**ndustrial discharge, **Su**rface water runoff) | |
| Water discharge point (**N**one, **R**iver, **St**ream, **G**roundwater, **W**etlands impoundment) | |
| Nature of bottom (**M**uddy, **R**ocky, **S**and, **C**oncrete, **O**ther) | **P** |
| Vegetation present (**S**ubmerged, **E**mergent, **F**loating) | **P** |
| Obvious wetlands present (**Y**es / **N**o) | |
| Evidence / observation of wildlife (**M**acroinvertebrates, **R**eptiles, **A**mphibians, **B**irds, **M**ammals, **O**ther) | |
| ***Aquatic - Flowing (lotic)*** | |
| Percentage of site that is covered by rivers, streams (brooks, creeks), intermittent streams, dry wash, arroyo, ditches, or channel waterway | 2 |
| Type of water bodies (**R**ivers, **S**treams, **I**ntermittent Streams, **D**ry wash, **A**rroyo, **D**itches, **C**hannel waterway) | D |
| Size (acres), average depth (feet), approximate flow rate (cfs) of water bodies | <0.1ac, 5ft, 0 cfs **P** |
| Bank environment (cover: **V**egetated, **B**are / slope: **S**teep, **G**radual / height (in feet)) | V, S |

| SPECIFIC EVALUATION OF ECOLOGICAL RECEPTORS / HABITAT | Finding |
|---|---|
| Source water (**R**iver, **St**ream, **G**roundwater, **I**ndustrial discharge, **Su**rface water runoff) | S |
| Tidal influence (**Y**es / **N**o) | N |
| Water discharge point (**N**one, **R**iver, **St**ream, **G**roundwater, **W**etlands impoundment) | N |
| Nature of bottom (**M**uddy, **R**ocky, **S**and, **C**oncrete, **O**ther) | O |
| Vegetation present (**S**ubmerged, **E**mergent, **F**loating) | E |
| Obvious wetlands present (**Y**es / **N**o) | N |
| Evidence / observation of wildlife (**M**acroinvertebrates, **R**eptiles, **A**mphibians, **B**irds, **M**ammals, **O**ther) | B |
| ***Aquatic - Wetlands*** | |
| Obvious or designated wetlands present (**Y**es / **N**o) | N |
| Wetlands suspected as site is/has (**A**djacent to water body, in **F**loodplain, **S**tanding water, **D**ark wet soils, **M**ud cracks, **D**ebris line, **W**ater marks) | |
| Vegetation present (**S**ubmerged, **E**mergent, **S**crub/shrub, **W**ooded) | |
| Size (acres) and depth (feet) of suspected wetlands | |
| Source water (**R**iver, **St**ream, **G**roundwater, **I**ndustrial discharge, **Su**rface water runoff) | |
| Water discharge point (**N**one, **R**iver, **St**ream, **G**roundwater, **I**mpoundment) | |
| Tidal influence (**Y**es / **N**o) | |
| Evidence / observation of wildlife (**M**acroinvertebrates, **R**eptiles, **A**mphibians, **B**irds, **M**ammals, **O**ther) | |

: Photographic documentation of these features is highly recommended.

Part ❹

| HABITATS AND SPECIES OBSERVED OR DOCUMENTED IN LOF |
|---|
| Trees, 6-12 inch diameter |
| Shrubs, 5-12 ft tall |
| Ruderal species |
| Stormwater conveyance ditch |
| |
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| |

**ATTACHMENT 2**
**Evaluation of Receptor-Pathway Interactions**

| EVALUATION OF RECEPTOR-PATHWAY INTERACTIONS | Y | N | U |
|---|---|---|---|
| **Are hazardous substances present or potentially present in surface waters? This includes tidal or seasonally inundated areas and wetlands.**<br>**AND**<br>**Could hazardous substances reach these receptors via surface water?** | | N | |
| When answering the above questions, consider the following:<br>• Known or suspected presence of hazardous substances in surface waters.<br>• Ability of hazardous substances to migrate to surface waters. Consider migration pathways such as erosion of soils adjacent to aquatic environments (e.g., banks or riparian areas), subsurface preferential pathways (e.g., pipes), outfalls, groundwater discharges, and surface migration (e.g., ditches).<br>• Terrestrial organisms may be dermally exposed to water-borne contaminants as a result of wading or swimming in contaminated waters. Aquatic receptors may be exposed through osmotic exchange, respiration or ventilation of surface waters.<br>• Contaminants may be taken-up by terrestrial plants whose roots are in contact with surface waters.<br>• Terrestrial receptors may ingest water-borne contaminants if contaminated surface waters are used as a drinking water source. | | | |
| **Are hazardous substances present or potentially present in groundwater?**<br>**AND**<br>**Could hazardous substances reach these receptors via groundwater?** | | N | |
| When answering the above questions, consider the following:<br>• Known or suspected presence of hazardous substances in groundwater.<br>• Ability of hazardous substances to migrate to groundwater.<br>• Potential for hazardous substances to migrate via groundwater and discharge into habitats and/or surface waters.<br>• Contaminants may be taken-up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone (~1m depth).<br>• Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface. | | | |

**"Y" = yes; "N" = No, "U" = Unknown (counts as a "Y")**

**ATTACHMENT 2**
**Evaluation of Receptor-Pathway Interactions (cont'd)**

| EVALUATION OF RECEPTOR-PATHWAY INTERACTIONS | Y | N | U |
|---|---|---|---|
| **Are hazardous substances present or potentially present in sediments? This includes tidal or seasonally inundated areas and wetlands.**<br>**AND**<br>**Could hazardous substances reach receptors via contact with sediments?** | | N | |
| When answering the above questions, consider the following:<br>• Known or suspected presence of hazardous substances in sediment.<br>• Ability of hazardous substances to leach or erode from surface soils and be carried into sediment via surface runoff.<br>• Potential for contaminated groundwater to upwell through, and deposit contaminants in, sediments.<br>• If sediments are present in an area that is only periodically inundated with water, both aquatic and terrestrial species may exposed. Aquatic receptors may be directly exposed to sediments or may be exposed through osmotic exchange, respiration or ventilation of sediment pore waters.<br>• Terrestrial species may be exposed to sediment in an area that is only periodically inundated with water.<br>• If sediments are present in an area that is only periodically inundated with water, terrestrial species may have direct access to sediments for the purposes of incidental ingestion. Aquatic receptors may regularly or incidentally ingest sediment while foraging. | | | |
| **Are hazardous substances present or potentially present in prey or food items of ecologically important receptors?**<br>**AND**<br>**Could hazardous substances reach these receptors via consumption of food items?** | | N | |
| When answering the above questions, consider the following:<br>• Higher trophic level terrestrial and aquatic consumers and predators may be exposed through consumption of contaminated food sources.<br>• In general, organic contaminants with log $K_{ow}$ > 3.5 may accumulate in terrestrial mammals and those with a log $K_{ow}$ > 5 may accumulate in aquatic vertebrates. | | | |

**"Y" = yes; "N" = No, "U" = Unknown (counts as a "Y")**

**ATTACHMENT 2**
**Evaluation of Receptor-Pathway Interactions (cont'd)**

| EVALUATION OF RECEPTOR-PATHWAY INTERACTIONS | Y | N | U |
|---|---|---|---|
| **Are hazardous substances present or potentially present in surficial soils?**<br>**AND**<br>**Could hazardous substances reach these receptors via incidental ingestion of or dermal contact with surficial soils?** | Y | | |
| When answering the above questions, consider the following:<br>• Known or suspected presence of hazardous substances in surficial (~1m depth) soils.<br>• Ability of hazardous substances to migrate to surficial soils.<br>• Significant exposure via dermal contact would generally be limited to organic contaminants which are lipophilic and can cross epidermal barriers.<br>• Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces by rain striking contaminated soils (i.e., rain splash).<br>• Contaminants in bulk soil may partition into soil solution, making them available to roots.<br>• Incidental ingestion of contaminated soil could occur while animals grub for food resident in the soil, feed on plant matter covered with contaminated soil or while grooming themselves clean of soil. | | | |
| **Are hazardous substances present or potentially present in soils?**<br>**AND**<br>**Could hazardous substances reach these receptors via vapors or fugitive dust carried in surface air or confined in burrows?** | | N | |
| When answering the above questions, consider the following:<br>• Volatility of the hazardous substance (volatile chemicals generally have Henry's Law constant > $10^{-5}$ atm-$m^3$/mol and molecular weight < 200 g/mol).<br>• Exposure via inhalation is most important to organisms that burrow in contaminated soils, given the limited amounts of air present to dilute vapors and an absence of air movement to disperse gases.<br>• Exposure via inhalation of fugitive dust is particularly applicable to ground-dwelling species that could be exposed to dust disturbed by their foraging or burrowing activities or by wind movement.<br>• Foliar uptake of organic vapors would be limited to those contaminants with relatively high vapor pressures.<br>• Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces. | | | |

**"Y" = yes; "N" = No, "U" = Unknown (counts as a "Y")**

**ATTACHMENT C**
**LUST SUMMARY REPORTS**

PRELIMINARY SITE ASSESSMENT
2997 South Moody Avenue
Portland, Oregon

Farallon PN: 2243-005

# Leaking Underground Storage Tanks ( LUST ) Site Information



(Use "Back" button on browser to return to previous search results)

## Leaking Underground Storage Tank (LUST) Site Information

Log Nbr: **26-93-0128**
Site Name: WESTWOOD CORP.
Address: 3030 SW MOODY AVE
City: PORTLAND
Site Type: Groundwater
Heating Oil Tank (HOT):

### Basic Incident Information

Zip Code: 97201
File Status: No Further Action
Regulated Tank: YES

Status: **CLOSED**
Received Date: 8/3/1993
UST Facility Id: 7351
County: MULTNOMAH

### Assessment Information

26-93-0128

Cause: UNKNOWN
Source: Not Reported
Discovery: SITE ASSESSMENT

| Media Effected | Contaminants Released |
|---|---|
| >Soil >GroundWater | >Deisel >OtherPetro |

Free Product Removed:
Delineate Groundwater:
Delineate Soil:

Free Vapor Removed:
Groundwater Delineated:
Soil Delineated:
Compliance Monitoring:

CAP Requested:
CAP Submitted:
CAP Approved:

### Management Information

26-93-0128

Release Stopped Date: 8/24/1994
Cleanup Start Date: 8/24/1994
Cleanup End Date: 8/19/1996

### Work Reported Information

26-93-0128

| Work Reported | Reported By | Reported Date |
|---|---|---|
| Initial Response | Data Conversion 2006 | 1/1/1901 |

**This information may not reflect current status of site.**
**For further detail, refer to the DEQ Regional Office file.**

**ATTACHMENT D**
**SANBORN MAPS**

PRELIMINARY SITE ASSESSMENT
2997 South Moody Avenue
Portland, Oregon

Farallon PN: 2243-005

2997 South Moody Avenue

2997 South Moody Avenue

Portland, OR 97201

Inquiry Number: 7094621.1

August 23, 2022

# Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# Certified Sanborn® Map Report

08/23/22

**Site Name:**

2997 South Moody Avenue
2997 South Moody Avenue
Portland, OR 97201
EDR Inquiry # 7094621.1

**Client Name:**

Farallon Consulting, LLC
4380 South Macadam Avenue, Suite 500
Portland, OR 97239
Contact: Brittany Train

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Farallon Consulting, LLC were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

## *Certified Sanborn Results:*

**Certification #** 8035-449B-8B5E

**PO #** NA

**Project** 2243-005-003

**Maps Provided:**

1969
1950
1909
1901
1889

Sanborn® Library search results

Certification #: 8035-449B-8B5E

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

*The Sanborn Library LLC Since 1866™*

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## *Sanborn Sheet Key*

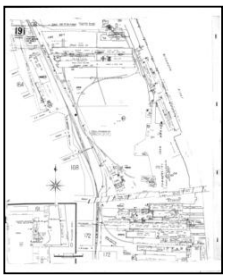
This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

### 1969 Source Sheets

Volume 2, Sheet 191
1969

### 1950 Source Sheets

Volume 2, Sheet 168
1950



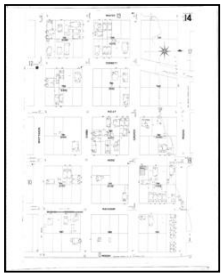
Volume 2, Sheet 191
1950

### 1909 Source Sheets

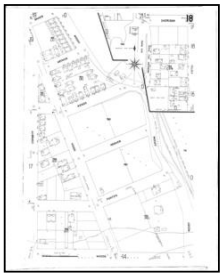
Volume 2, Sheet 164
1909

Volume 2, Sheet 168
1909

### 1901 Source Sheets



Volume 1, Sheet 14
1901



Volume 1, Sheet 18
1901

## *Sanborn Sheet Key*

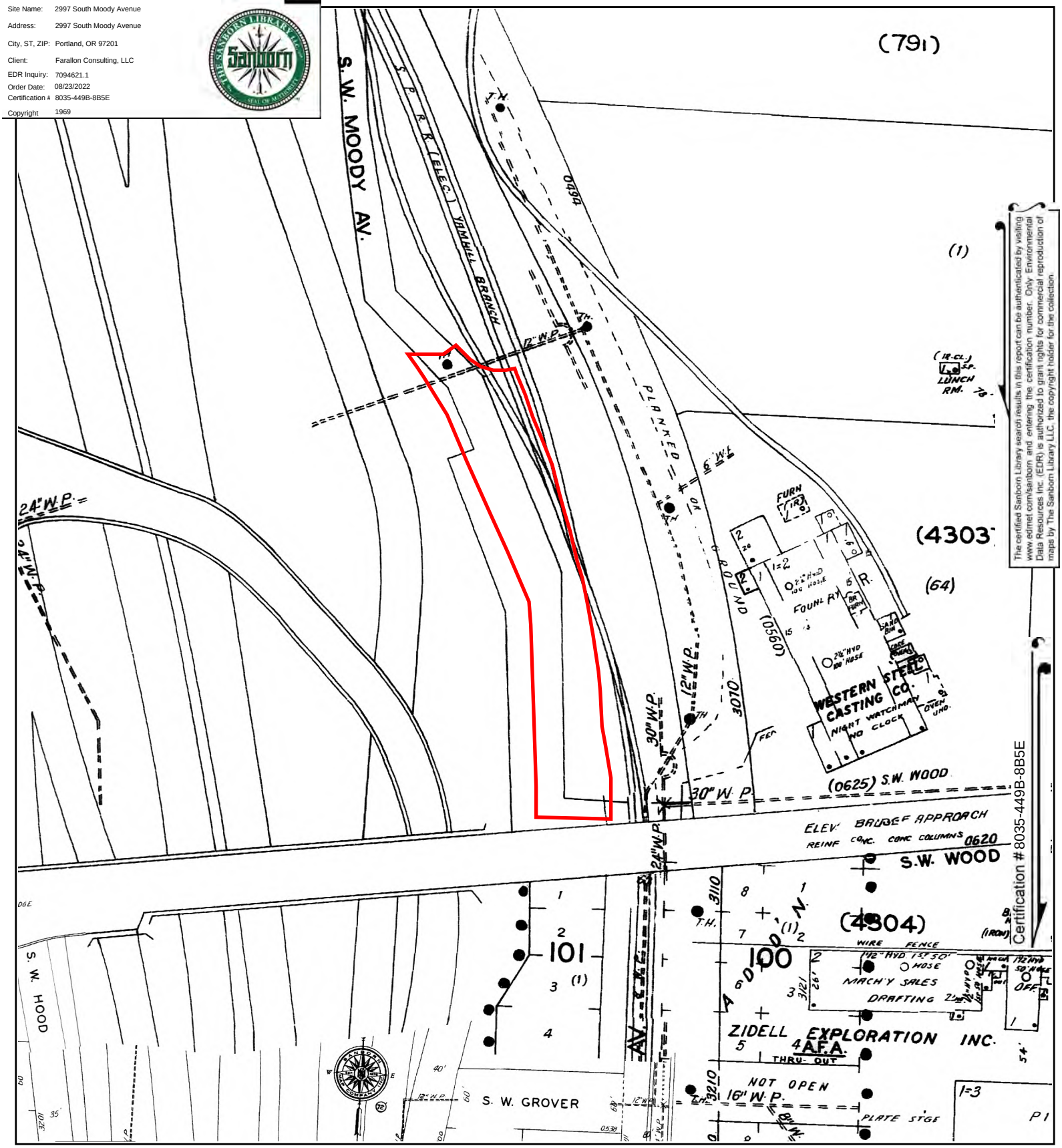
This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

### 1889 Source Sheets

Volume 1, Sheet 9
1889

Volume 1, Sheet 9
1889

Site Name: 2997 South Moody Avenue
Address: 2997 South Moody Avenue
City, ST, ZIP: Portland, OR 97201
Client: Farallon Consulting, LLC
EDR Inquiry: 7094621.1
Order Date: 08/23/2022
Certification #: 8035-449B-8B5E
Copyright 1969

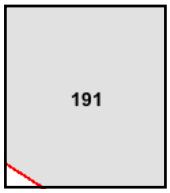





This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600

Volume 2, Sheet 191

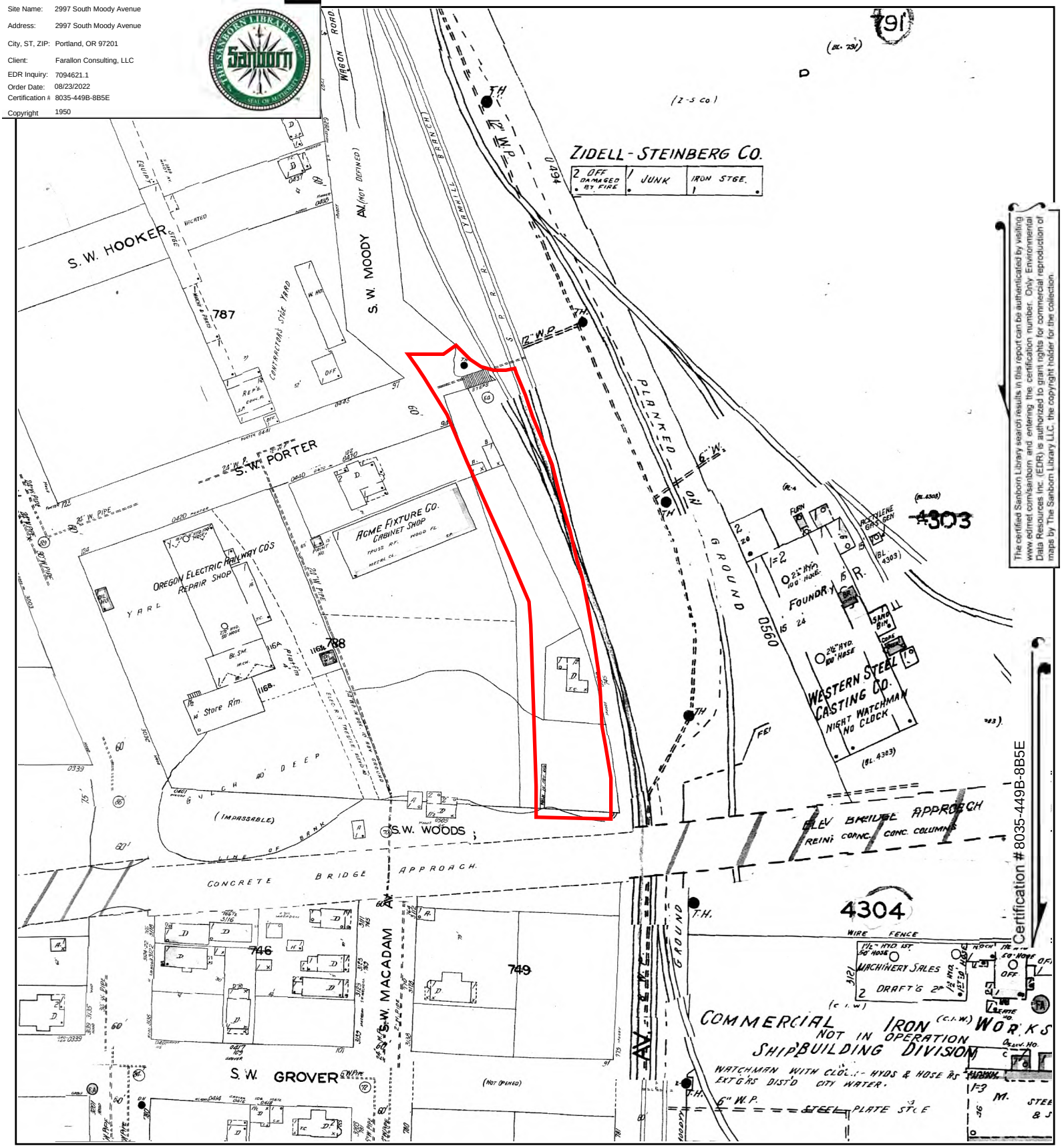



N

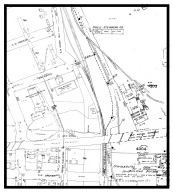
# Certified Sanborn® Map

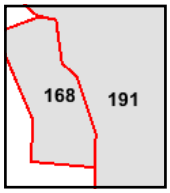
1950

| | |
|---|---|
| Site Name: | 2997 South Moody Avenue |
| Address: | 2997 South Moody Avenue |
| City, ST, ZIP: | Portland, OR 97201 |
| Client: | Farallon Consulting, LLC |
| EDR Inquiry: | 7094621.1 |
| Order Date: | 08/23/2022 |
| Certification #: | 8035-449B-8B5E |
| Copyright | 1950 |




This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.






Volume 2, Sheet 191
Volume 2, Sheet 168

0 Feet 150 300 600

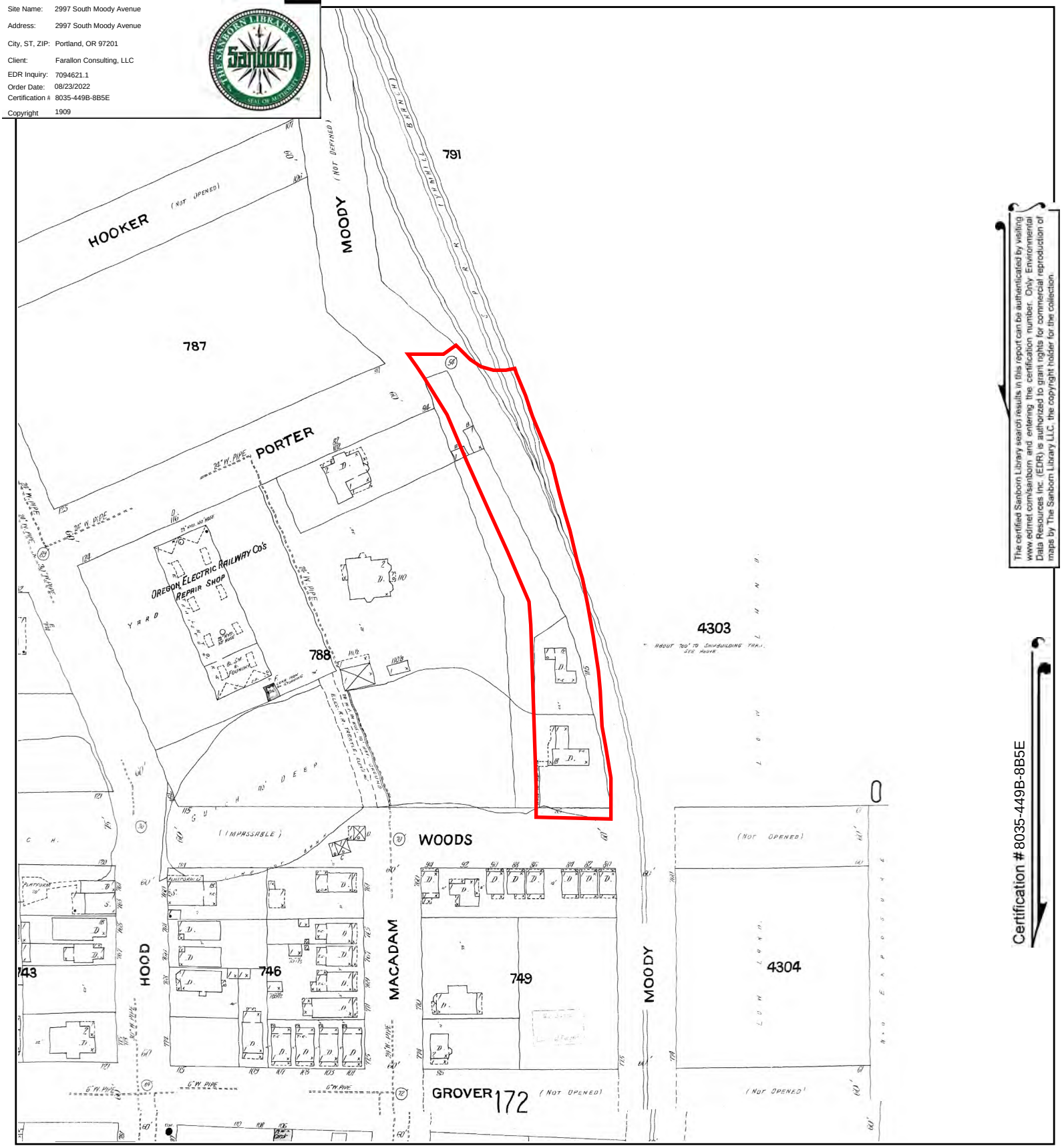
N

7094621 - 1 page 6

# Certified Sanborn® Map

1909

Site Name: 2997 South Moody Avenue
Address: 2997 South Moody Avenue
City, ST, ZIP: Portland, OR 97201
Client: Farallon Consulting, LLC
EDR Inquiry: 7094621.1
Order Date: 08/23/2022
Certification #: 8035-449B-8B5E
Copyright 1909






Certification #8035-449B-8B5E

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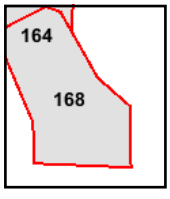
Outlined areas indicate map sheets within the collection.




Volume 2, Sheet 168
Volume 2, Sheet 164

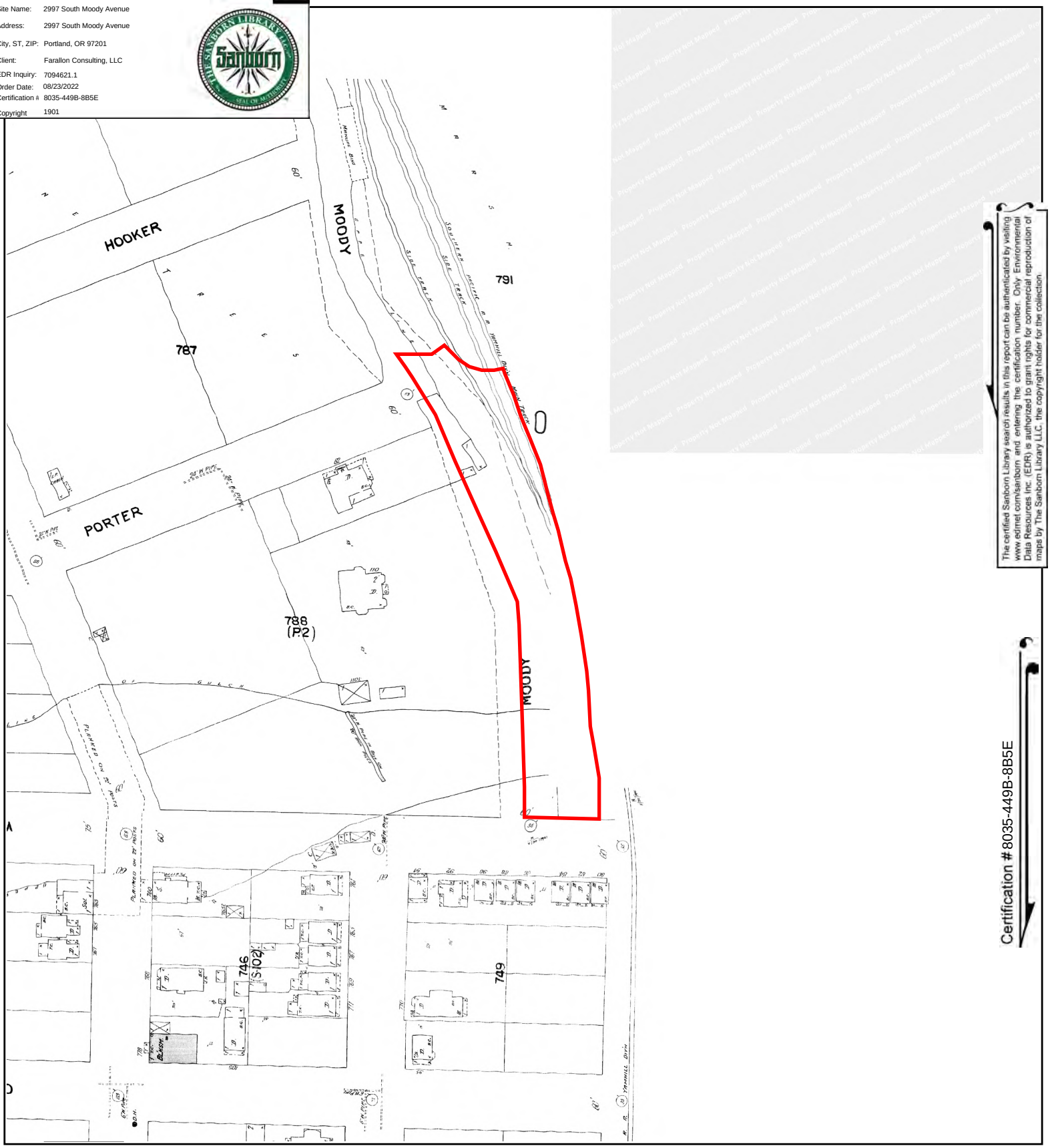
0 Feet 150 300 600

N

# Certified Sanborn® Map

1901

Site Name: 2997 South Moody Avenue
Address: 2997 South Moody Avenue
City, ST, ZIP: Portland, OR 97201
Client: Farallon Consulting, LLC
EDR Inquiry: 7094621.1
Order Date: 08/23/2022
Certification #: 8035-449B-8B5E
Copyright 1901

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Certification #8035-449B-8B5E

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

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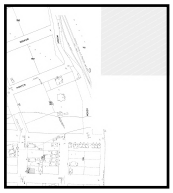
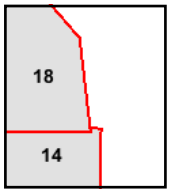




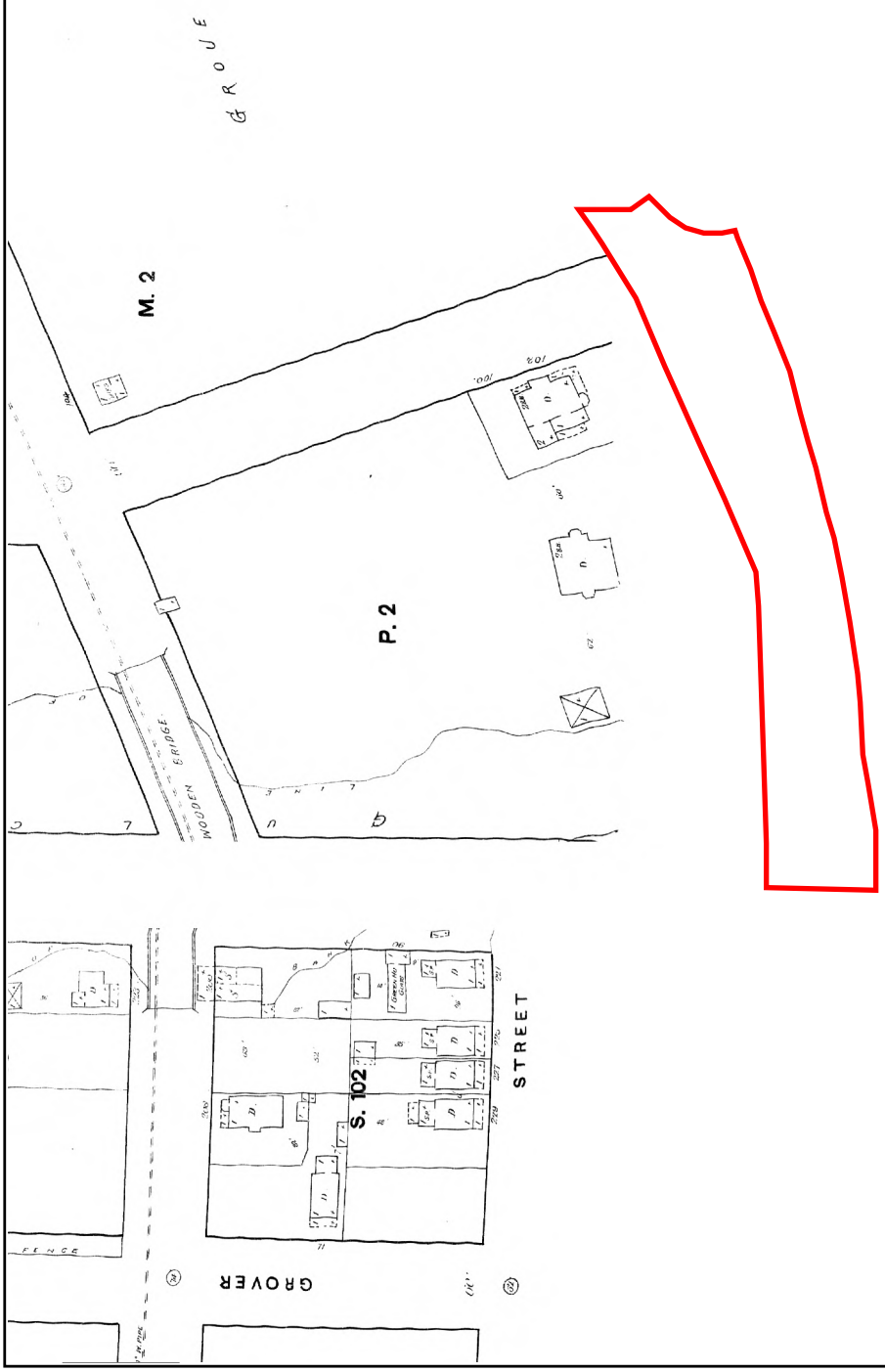

Volume 1, Sheet 18
Volume 1, Sheet 14

N

# Certified Sanborn® Map

1889

Site Name: 2997 South Moody Avenue
Address: 2997 South Moody Avenue
City, ST, ZIP: Portland, OR 97201
Client: Farallon Consulting, LLC
EDR Inquiry: 7094621.1
Order Date: 08/23/2022
Certification #: 8035-449B-8B5E
Copyright: 1889






Certification #8035-449B-8B5E

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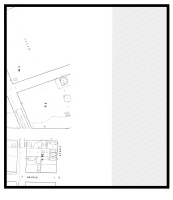

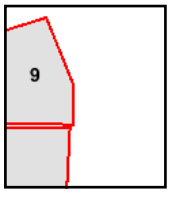


Volume 1, Sheet 9
Volume 1, Sheet 9

0 Feet 150 300 600

N

**ATTACHMENT E**
**AERIAL PHOTOGRAPHS**

PRELIMINARY SITE ASSESSMENT
2997 South Moody Avenue
Portland, Oregon

Farallon PN: 2243-005

**2997 South Moody Avenue**

2997 South Moody Avenue

Portland, OR 97201

Inquiry Number: 7094621.3

August 23, 2022

# The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# EDR Aerial Photo Decade Package

08/23/22

**Site Name:**

2997 South Moody Avenue
2997 South Moody Avenue
Portland, OR 97201
EDR Inquiry # 7094621.3

**Client Name:**

Farallon Consulting, LLC
4380 South Macadam Avenue, Suite 50(
Portland, OR 97239
Contact: Brittany Train

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

***Search Results:***

| Year | Scale | Details | Source |
|---|---|---|---|
| 2016 | 1"=500' | Flight Year: 2016 | USDA/NAIP |
| 2012 | 1"=500' | Flight Year: 2012 | USDA/NAIP |
| 2009 | 1"=500' | Flight Year: 2009 | USDA/NAIP |
| 2005 | 1"=500' | Flight Year: 2005 | USDA/NAIP |
| 2000 | 1"=500' | Acquisition Date: January 01, 2000 | USGS/DOQQ |
| 1994 | 1"=500' | Acquisition Date: June 20, 1994 | USGS/DOQQ |
| 1990 | 1"=500' | Acquisition Date: January 01, 1990 | USGS/DOQQ |
| 1981 | 1"=500' | Flight Date: July 26, 1981 | USDA |
| 1975 | 1"=500' | Flight Date: September 13, 1975 | USGS |
| 1970 | 1"=500' | Flight Date: July 05, 1970 | USGS |
| 1963 | 1"=500' | Flight Date: November 04, 1963 | USDA |
| 1960 | 1"=500' | Flight Date: July 17, 1960 | USGS |
| 1955 | 1"=500' | Flight Date: August 06, 1955 | USDA |
| 1951 | 1"=500' | Flight Date: July 27, 1951 | USGS |
| 1948 | 1"=500' | Flight Date: July 24, 1948 | USDA |

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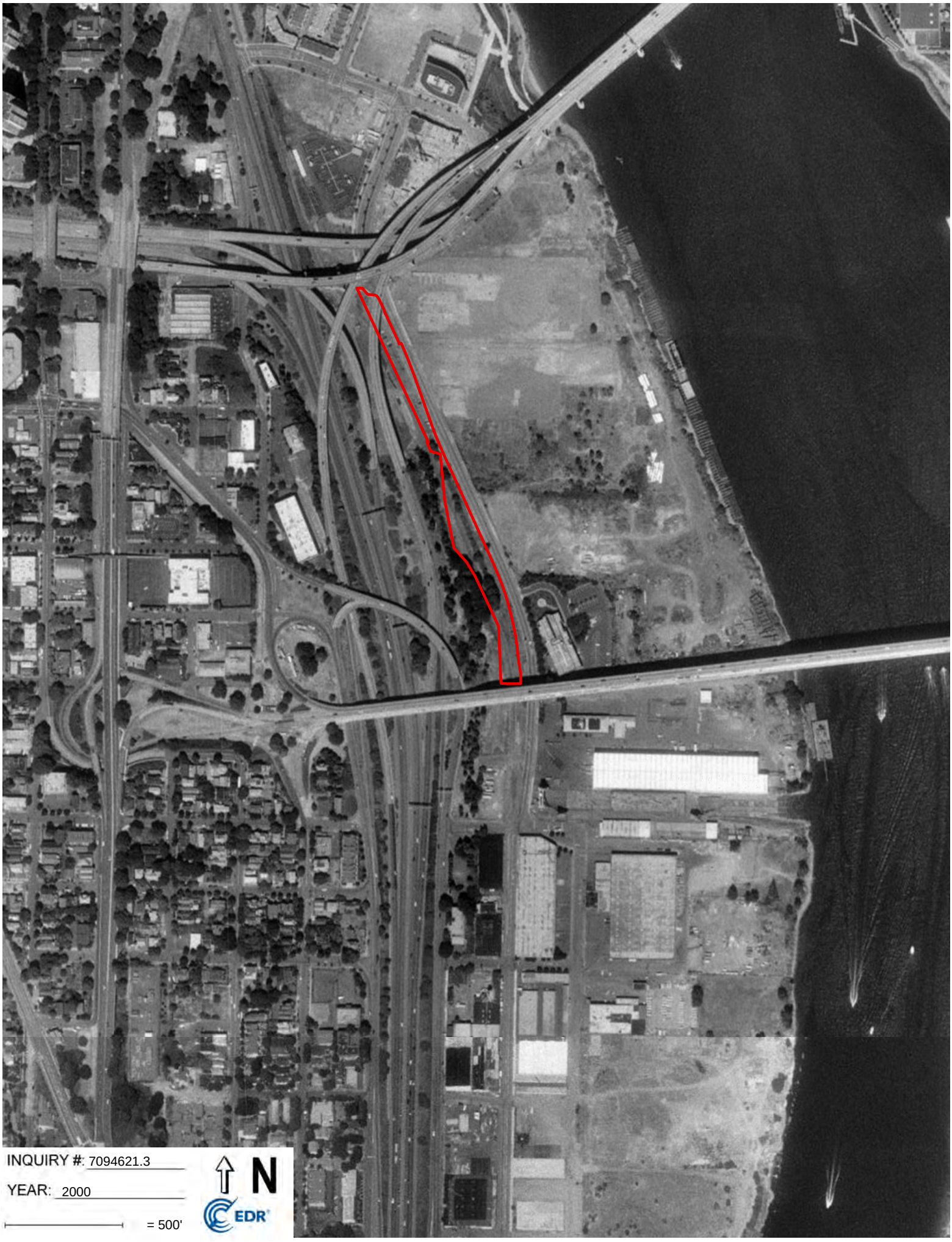
INQUIRY #: 7094621.3
YEAR: 2016
= 500'
N
EDR


INQUIRY #: 7094621.3
YEAR: 2012
= 500'
N
EDR


INQUIRY #: 7094621.3
YEAR: 2009
= 500'
N
EDR


INQUIRY #: 7094621.3
YEAR: 2005
= 500'
N
EDR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EDR

UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED

INQUIRY #: 7094621.3

YEAR: 1990

= 500'

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EDR

UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED


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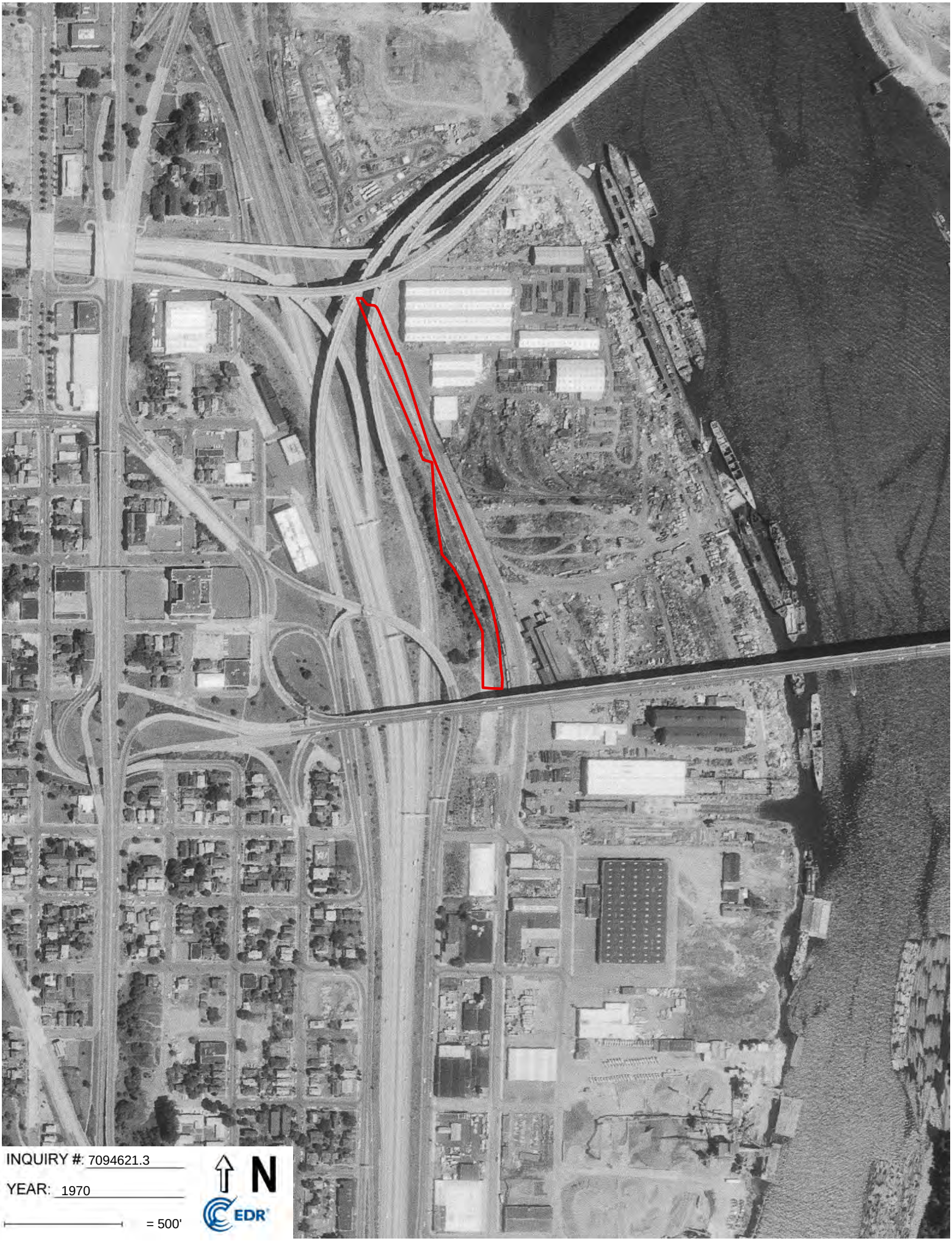
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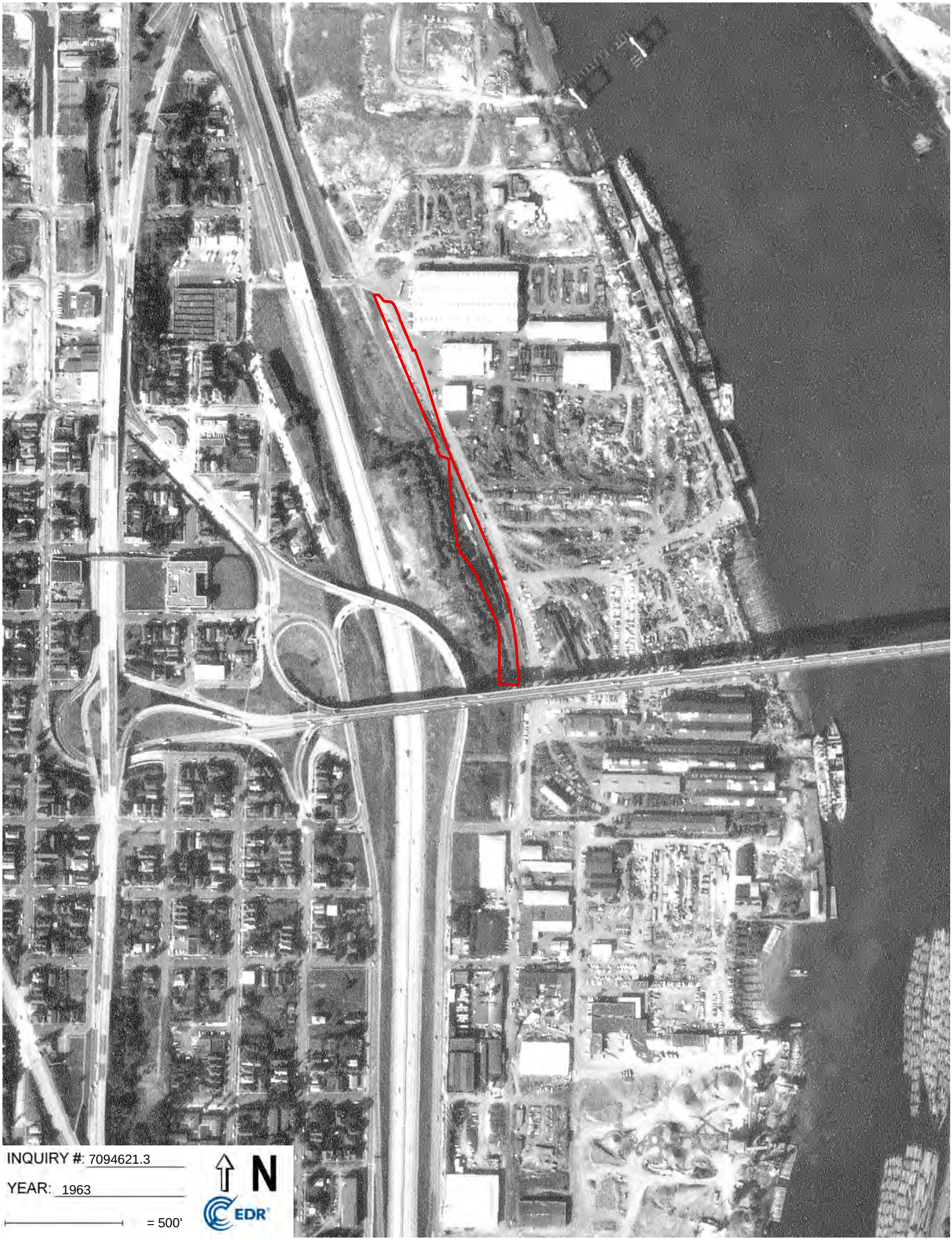
EDR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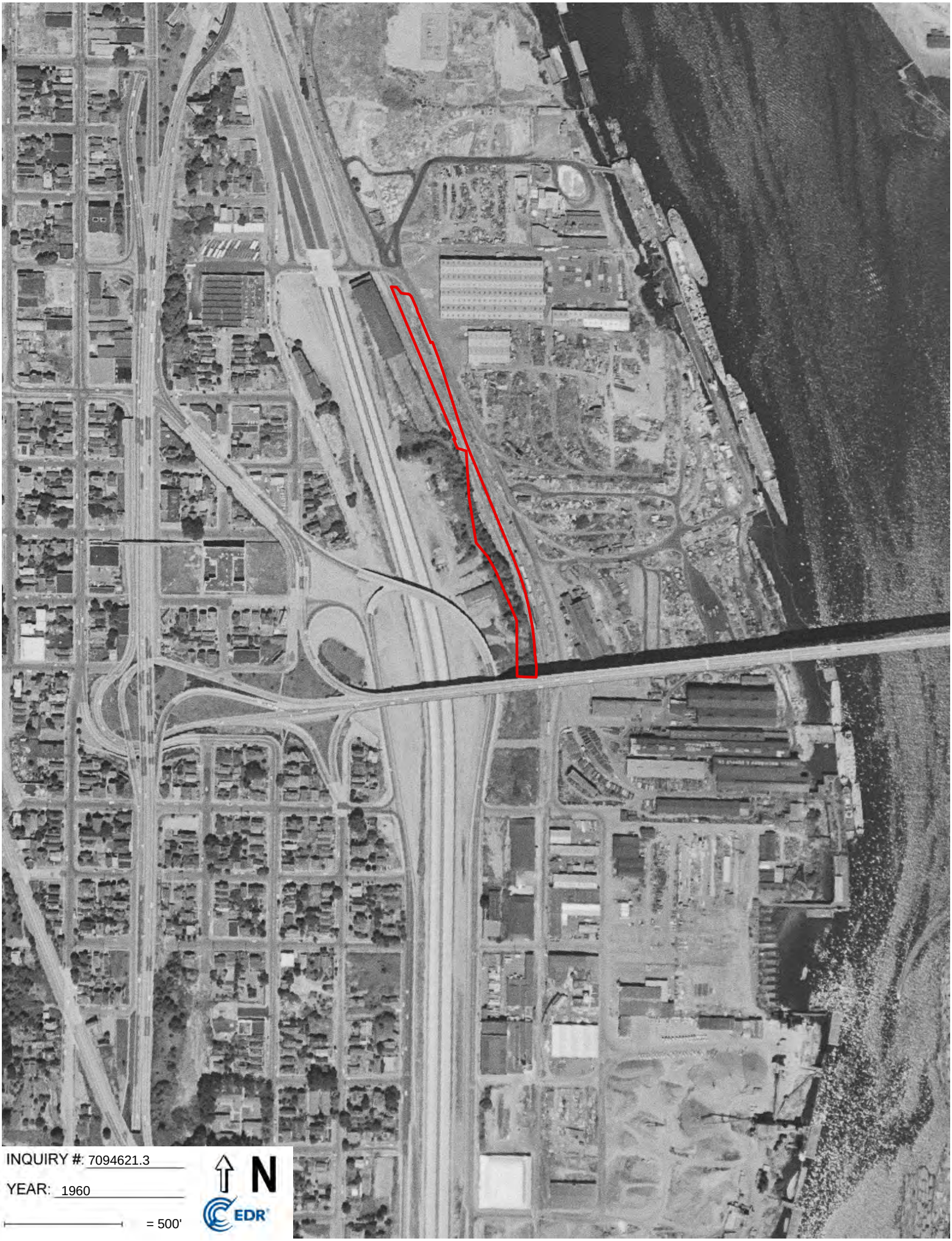
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YEAR: 1960
= 500'
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EDR


INQUIRY #: 7094621.3
YEAR: 1955
= 500'
N
EDR


INQUIRY #: 7094621.3

YEAR: 1951

= 500'

N

EDR


INQUIRY #: 7094621.3

YEAR: 1948

= 500'

N

EDR