WSDOT ECS Standard Report - SR 509/ Clear Creek Stream Restoration

Washington State Department of Transportation

ECS Standard Report

WIN/Title: A50907X	- SR 509/Clear Creek Stream Restoration	**ECS Id:**	A50907X-1

WSDOT Approval

Region Environmental Contact	Phone	Approval

Signed on 6/21/24, signatures on file at project office

Federal Highway Administration	Date	Region Environmental Manager Electronically signed through a secure system.	Date

Part 1 Project Description

PIN(S):

Federal Aid Number:	
Description of Work:	Washington Department of Transportation (WSDOT) proposes to construct the State Route (SR) 509/Clear Creek Restoration Project (Project) that will remove two fish passage barriers and other infrastructure related to an existing commercial fish hatchery and restore natural stream processes at the Project site. The two existing fish passage barriers (dams) prevent anadromous fish from migrating upstream and divert stream flow, preventing sediment transport downstream. The two barriers on Clear Creek are identified by the Washington Department of Fish and Wildlife (WDFW) as WDFW IDs 600317 and 600318. The Project will remove the two fish passage barriers, thereby providing access to 2.4 miles of aquatic habitat upstream of the existing barriers. The Project will also enhance habitat by restoring natural processes in the Clear Creek channel and floodplain. The Project will remove existing infrastructure, regrade the stream channel, install large woody material, create new side-channel habitat, expand the floodplain for rearing habitat, and plant riparian vegetation for improved stream shading and nutrient input. Project work includes grading and demolition above and below the ordinary high-water mark.
Needs & Purpose:	During the planning phases of the SR 509 Completion Project and SR 167 Completion Project, two fish passage barriers (culverts) were identified within the limits of those projects that are subject to correction under the federal injunction: WDFW ID 935070 and WDFW ID 105 R121519a. Due to the limited habitat gain and the significant engineering and constructability constraints related to these barriers, WSDOT, Puyallup Tribe of Indians, and WDFW reached agreement to leave the barriers uncorrected, and instead provide a net gain of habitat functions and values for fish and other aquatic life at the Clear Creek restoration site. Hydraulic Project Approvals issued by WDFW for the SR 509 Completion Project and SR 167 Completion Project

	requires the removal of barriers at Clear Creek.
Statement of purpose:	The purpose of the Project is to complete habitat restoration and enhancement to satisfy commitments made during tribal consultation and permitting for WSDOT's SR 509 Completion Project and SR 167 Completion Project. Restoring Clear Creek to natural stream processes will provide immediate benefits to fish and aquatic life by: - Removing two fish passage barriers (WDFW IDs 600317 and 600318) - Opening approximately 2.6 miles of spawning habitat that is currently inaccessible to anadromous fish including Federally protected Puget Sound Chinook Salmon - Restoring stream processes including floodplain connectivity, sediment continuity, and flood conveyance - Eliminating surface water withdrawals and improving water quality and quantity - Improving spawning and rearing habitat and habitat complexity

Project Location

SR: 509 Begin MP: 0 End MP: 0.010 WSDOT Region: Gateway Projects

County/Counties: Pierce

Right of Way

Will ROW be needed for this project? Yes

Will ☑ People and/or ☑ Businesses be relocated and/or displaced? Yes

Will early acquisition be necessary? Yes

ROW Notes: Relocation is required for the Troutlodge business, and two resident employees of the Troutlodge business (i.e., on-site caretakers). Resident employees will be relocated consistent with the Uniform Relocation Act.
1-125347 (Troutlodge full acquisition)
1-125348, 1-125349, 1-125350 (permanent easements)
WSDOT Headquarters has approved an early acquisition request of these properties.

Section, Township, Range: Section 13, Township 20N, Range 03E

Statewide Transportation Improvement Program (STIP) Confirmation

Are all phases of the project included in Yes

the STIP?

list the STIP/STIP Amendments:	2024	WDNW-2128

Part 2 Project Environmental Documentation

NEPA Classification: FHWA Categorical Exclusion (CE) 23 CFR 771.117

NEPA Subsection: C25: Environmental restoration and pollution abatement (including fish passage projects)

SEPA Classification: Categorical Exemption

SEPA Subsection: 43.21C.0382 RCW Watershed restoration and fish habitat enhancement projects

Federal Agency Concurrence is required: ☑ NEPA Start Date: 10/24/2022

Endangered Species Act

USFWS Consultation:	Programmatic	Determination:	May affect likely to adversely affect	Date:	5/14/2024
NOAA Consultation:	Programmatic	Determination:	May affect likely to adversely affect	Date:	5/21/2024
Essential Fish Habitat:		Determination:	May Adversely Affect	Date:	5/21/2024

National Historic Preservation Act: Section 106

Has a Cultural Resources Specialist review this project? *Yes*

Is the project on tribal lands? *Yes* List Tribe: Puyallup Tribe

Is the project on Forest Service or other Federal land? No

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Are there any National Register-eligible historic bridges within the project limits? No

Is the project exempt from further review under the 2018 Programmatic Agreement with FTA, FHWA and SHPO? No

Will a cultural resources survey be required? Yes

Determination of effect: No Historic Properties Affected

Date of SHPO concurrence with determination: *12/5/2023*

If Adverse Effect, date of execution of Memorandum of Agreement:

Notes: *NEPA: The Project was initially discussed with FHWA on 10/24/22 and again on 07/10/23 at which time FHWA confirmed that C25 was the appropriate NEPA classification and that FHWA would sign the CE due to the business displacement/relocation.*
SEPA: WSDOT as the SEPA Lead Agency has determined that the Project is exempt per RCW 43.21.0382 (1) Watershed Restoration Projects.
National Historical Preservation Act (NHPA): Cultural Resources field work will not be completed until a real estate agreement is in place. The Section 106 desktop-analysis was completed for this project and sent on 1/21/23 to the Puyallup, Nisqually, Snoqualmie, Squaxin Island, Yakama, and Muckleshoot Tribes (Tribes). No comments were received from the Tribes.

Part 3 Permits & Approvals

Federal:

- ☑ US Army Corps of Engineers
  - ☑ Section 404 ☐ Section 10
  - ◉ Nationwide Type: NWP 27
  - ○ Individual
- ☐ US Coast Guard
  - ☐ General Bridge Act
  - Contact Date:
  - ☐ Private Aids to Navigation (non-bridge project)

State:

- ☑ Hydraulic Project Approval (HPA)
  - ☐ General Hydraulic Project
  - Type:
- ☑ Section 401 Water Quality Certification
  - Certifying Entity: Ecology
  - Certification Type: Individual permit
- ☐ Aquatic Use Authorization (WDNR)
- ☑ Coastal Zone Management Certification (CZM)

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Local:

- ☑ Critical Areas Ordinance Compliance (CAO)
  - Issuing Agency: Pierce County
  - List of CAO permits in notes section.
- ☐ Jurisdictional Stormwater Manual
  - Issuing Municipality:
- ☐ Noise Variance (e.g. nighttime construction or maint.)
  - Issuing Agency:
- ☑ Flood Plain Development Permit
  - Issuing Agency: Pierce County
- ☑ Shoreline Management Program
  - Issuing Agency: Pierce County
  - Permit Type: Exemption – List Type

County: Pierce

- ☐ Forest Practice Approval
  - Agency Name:
- ☑ NPDES Construction Stormwater Permit
  - ◉ General
  - ○ Individual
- ☑ Temporary Erosion Sediment Control Plan (TESC)
- ☐ GEO 21-02

Tribal:

Tribe Name: Puyallup Tribe

List of permits and approval in the Notes section below.

Other Plans/Approvals:

- ☐ MBTA Permit Required
- ☑ BE Permit Required or Bird Management Plan Required
- ☐ Incidental Harassment Authorization
- ☐ Other

Notes: The Project requires FEMA Conditional Letter of Map Revision (CLOMR) and finalized Letter of Map Revision (LOMR). US Coast Guard (USCG) confirmed on 10/11/23 that Clear Creek is NOT a "navigable waterway;" therefore a USGS permit and Aquatic Use Authorization will NOT be required. Tribal Lands: The Project is located within the Puyallup Tribe Reservation; however, Washington State Department of Ecology maintains Section 401 jurisdiction at the Project site. The Project is subject to Intergovernmental Agreements between WSDOT and Puyallup Tribe of Indians: Intergovernmental Agreement for the SR 509/24th Ave S 188th St - New Expressway Project, executed 12/27/22, and Intergovernmental Agreement for the SR 167 Completion Project, executed 9/14/23. WSDOT has plenary authority but will substantively comply with Pierce County Critical Areas Ordinance. Bald Eagle and MBTA screening completed, memo to file: no BE permit, but will implement a Bird Management plan consistent with WSDOT guidance.

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Part 4 Environmental Context

4a) Air Quality

1. Is the project located in a maintenance or nonattainment area? *No*
2. Is the project likely to have > 140,000 AADT? *No*

4b) Wetlands/Critical Areas/Resource Lands

1. Will wetlands be impacted by the project? *Yes*

   Is a site review required by a wetland specialist? *Yes* Completion Date: 2/14/2022

   Will a wetland delineation and discipline report be required? *Yes* Completion Date: 7/21/2022

   Estimated temporary wetland impacts (acres): 0 Estimated permanent wetland buffer impacts (acres): 0

   Estimated permanent wetland impacts (acres): 0.04 Will mitigation be required? No
2. Will the project affect fish, wildlife or habitat? *Yes*
3. Are there fish barriers present within the project Area? Yes

   Is the project within the Injunction Case Area Boundary? Yes
4. Is there the potential to impact MBTA? Yes

   Was an MBTA survey conducted? Yes 11/16/2023
5. Is the project located in a Sole Source Aquifer? *Yes*

   Check only those that apply.
   - ☑ Project is exempt from EPA approval.
   - ☐ The project received EPA approval on:
6. Is the project located in a critical aquifer recharge area? *Yes*

   Check only those that apply. The project ☐ is exempt ☐ requires approval from: Pierce
7. Will the project impact a geologically hazardous area? *Yes*

   Explain: According to Pierce County the property includes the following hazard areas: Erosion, Landslide, and Volcanic

8. Will the project require work in water or below the estimated OHWM? *Yes*

   Waterbodies: Clear Creek

   Did staff observe any aquatic invasive species during their field visit?

9. Is the project located in a 100-year Floodway? *Yes*

   Is the project located in a 100-year Floodplain? *Yes*

4c) Hazardous Materials

1. Does the project require excavation below the existing ground surface? *Yes*
   a. Is the project located within 1/2 mile radius of any Ecology listed sites that have the potential of impacting

      the project during construction? *No*
2. Does the project require excavation below the existing roadway prism? No
   a. Will groundwater be encountered in an area of known contamination?
3. Will any properties be acquired as part of this project? *Yes*
   a. Are any of the properties listed on Ecology's databases? *No*
   b. Are any of the properties not listed on Ecology's databases a high risk due to historic land use (i.e. gasoline

      station, auto-body shop, or dry cleaner)? *No*
4. Will the project disturb, renovate, or demolish any existing buildings, bridges,culverts or other structures (IMPORTANT:

   If yes, follow the Asbestos Good Faith Inspection directives in M 31-11, Chapter 447)? Yes
5. Based on the information above and the project specific activities, is there a potential for the project to

   acquire any known or potentially contaminated properties, or encounter contaminated soils, groundwater

   or surface water? *No*

   Therefore, based on the proposed project description and construction activities, WSDOT is unlikely to assume liability for cleanup of contaminated soil or groundwater as part of this project, and it is concluded that no significant, unavoidable adverse impacts that cannot be mitigated for are expected for the following reasons: 1) No known or suspected contaminated properties are being acquired; 2) Soil disturbance is anticipated to be less than 1 foot below ground surface with no known or suspected contamination; 3)

Contaminated groundwater will not be encountered as part of this project. No further investigation is warranted at this time.

4d) Noise

1. Is this project a Type 1 noise project? *No*
2. Do previous noise mitigation commitments exist within or adjacent to the project limits? No
3. Is a noise study required?

4e) Land Use

1. Are there any Section 4(f) resources (parks, recreation areas, wildlife refuges, historic properties)impacted/used within the project limits? No
5. Are there any properties within the project limits that used funds from the Land & Water Conservation Fund Act or any other RCO grant funds? No
6. Is there a Wild and Scenic River (state or federally designated, "study river", or on the National Rivers Inventory) in or near the project area? No
7. (LAO to Complete)Is the project located on a Scenic Byway? No
8. (LAO to Complete)Is the project located on a State Scenic & Recreational Highway? *No*
9. Will farmland be converted for the project? No
10. Will other resource land (i.e. forest lands, mineral resource lands) be impacted? No

4f) Title VI/Environmental Justice

1. Will the project require detailed EJ analysis? *Yes*

Notes: One business, the TroutLodge Hatchery, and two resident employees will be relocated according to the Uniform Relocation Act.
A right-sized Environmental Justice analysis has been prepared according to WSDOT guidance and procedures.
The Project is not anticipated to result in adverse impacts to minority or low-income populations.

4g) Water Quality/Stormwater

1. Will the project increase runoff? *No*
2. Will water quality treatment be required per the HRM or a more stringent manual local stormwater management manual? *No*

3. Does a TMDL waterbody have the potential to receive a discharge? *No*
4. Does a 303d waterbody have the potential to receive a discharge? *No*

4h) Visual Quality/Roadside Policy Manual/Aesthetics

1. (LAO to Complete) Will the project disturb the roadside? (e.g. Cuts, fills, new lighting, clearing & grading, realignment, structures) *No*
2. (LAO to Complete) Will the project disturb Resource Conservation Areas? (See Roadside Poicy Manual M 3110) No

4i) Long-term Environmental Commitments

1. Were previous long-term environmental commitments (environmental commitments that extend beyond the end of the consturction phase such as wetland monitoring, preservation of landscape buffers,stormwater BMP, etc.) made within the project limits? No
2. Will the project create long-term environmental commitments (environmental commitments that extend beyond the end of the construction phase such as wetland monitoring, preservation of landscape buffers, stormwater BMP, etc)? *Yes*

4j) Summary

1. Briefly describe environmental issues likely to affect design and mitigation measures for this project:

The Project will remove dams on Clear Creek and restore aquatic and riparian habitat as compensatory mitigation. Development of the Project design indicated potential effects could occur to streams, aquatic species, floodway, hazardous materials, environmental justice populations, and cultural resources. Analysis concluded that minimal effects would occur as a result of the Project (summarized below and addressed further in the attached reports).

Streams and Aquatic Species: The Project is a stream restoration project and will require demolition of two dams and associated in-water structures. The stream channel will be realigned and re-graded, requiring permits/approval from WDFW, Washington State Department of Ecology, the US Army Corps of Engineers, National Marine Fisheries Service, and U.S. Fish and Wildlife Service. Work will occur below the ordinary high-water mark of Clear Creek and will require temporary impacts to the stream including temporary stream diversion, temporary increase in turbidity, and temporary fish exclusion. The Project would actively enhance 5.8 acres of aquatic habitat with the installation of large woody material, creation of new side-channel habitat, expansion of floodplain for rearing habitat, and addition of riparian vegetation for temperature regulation and nutrient input. The Project provides a significant increase in aquatic resources compared to the impacts of construction; Best Management Practices will be implemented during construction, but no further mitigation measures are proposed.

Floodplain/Floodway: Impacts to the floodway would occur as a result of the Project, because the Project is designed to restore engagement of the stream with its adjacent floodplain in support of

aquatic and riparian habitat. The increase in the base flood elevation will not impact any existing structures, as existing structures are slated for removal as part of the stream restoration design. WSDOT will coordinate FEMA flood-map revisions and Pierce County approvals through the design process, but no mitigation measures are proposed.

Hazardous Materials were reviewed in a desktop analysis and are not likely to affect project design. Additional minimization measures will include a good faith investigation for asbestos-containing materials, consistent with WSDOT policies.

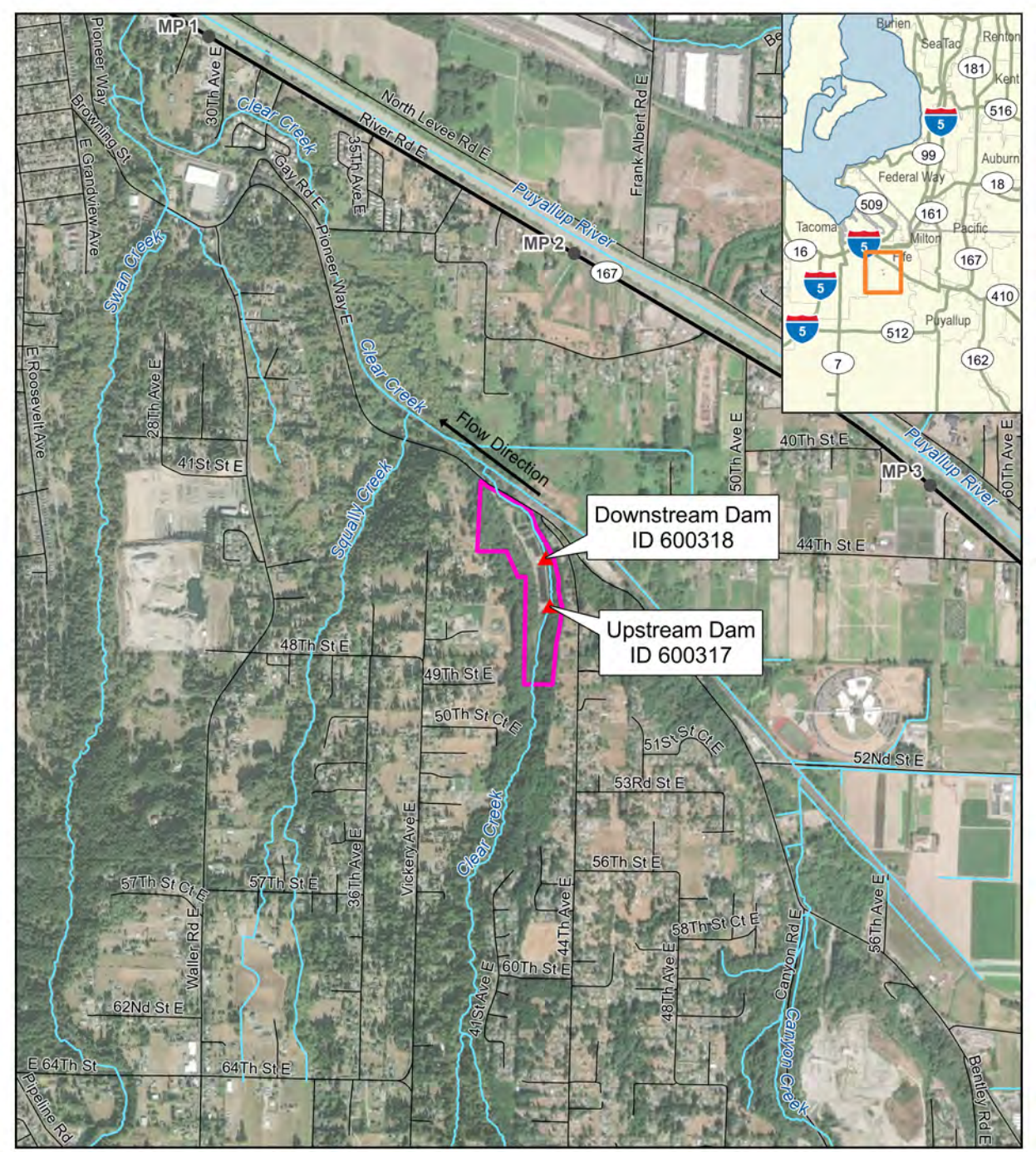
Environmental Justice: Construction of the Project will require relocation of Troutlodge hatchery and two employees that live on site. Relocation of residential employees will follow Uniform Relocation Act requirements and no displacement will occur until a comparable dwelling is offered. No additional mitigation measures are proposed.

Cultural Resources: The desktop analysis concluded that no eligible historic structures would be affected, so no mitigation measures are proposed. Sub-surface soil investigations are not currently possible due to access limitations; however, WSDOT will peform fieldwork when site access is possible and will submit updated invormation to DAHP consistent with Section 106 documentation. An archaeological monitoring and discovery plan will be developed for the Project due to the possible presence of undisturbed buried surfaces. No mitigation measures are proposed at this time, and WSDOT will continue to work closely with Puyallup Tribe of Indians as design progresses and fieldwork is conducted.

Long-term environmental commitments will be established as permits and approvals are obtained and will be followed (e.g. a plant monitoring period of 3 to 5 years).

Attached Files
Attach_13_Visual-Quality-Memo.pdf
Attach_08_Cultural-Res_Sect106.pdf
Attach_09_DAHPConcurrence.pdf
Attach_10-AquaticResources-Report_reduced.pdf
Attach_11_HazMat-Report_reduced.pdf
Attach_12_EJ-Memo.pdf
Attach_04_BA-form_USFWS.pdf
Attach_05-USFWS-ProgrammaticConsultation.pdf
Attach_06-USFWS-Concurrence.pdf
Attach_07-NMFS-Concurrence.pdf
Attach_01_Vicinity-Map.pdf
Attach_02_EarlyAcquisition-Approval.pdf
Attach_03_BA-form_NOAA.pdf

Attachment 1 – Vicinity Map



▲ WDFW Barrier Identification
● Mile Post Marker
— Road
— Highway
River/Stream
Project Footprint

Vicinity Map

SR 509/Clear Creek Restoration Project

WDFW ID 600317
WDFW ID 600318

0 0.1 0.2 0.3 0.4 Miles

WSDOT

Data Sources: Esri, Pierce County, USGS, WSDOT (2024)

Attachment 2 – WSDOT Early Acquisition Approval

Application for Early/Advanced Acquisition

**See Procedures in separate attachment*

Section 1. CONTACT INFORMATION		
Date: 01/03/2024	Region/Program Contact: Ali Amiri	Region/Program: Puget Sound Gateway Pgm. – SR 509 Completion Proj.
	Project Engineer: Dan Holmquist	Environmental Lead: Leah Erickson

Section 2. PROJECT INFORMATION	
Project Title: **SR 509/Clear Creek Stream Restoration Project**	SR:**509**
Parcel(s): **WSDOT Parcel Numbers: 1-25350, 1-25349, 1-25348, 1-25347**	Plan Title, if applicable: **Pierce Co. Sundry Site Plan. SR 509 Completion Clear Creek Stream Restoration Site.**
What is the estimated date property will be incorporated into a project? **2025**	
PROJECT REQUEST AND BUSINESS NEED: *(Why is this property a good candidate for EA/AA?)* **The project is requesting to pursue early acquisition (EA) of the parcels to support completion of the construction of the stream restoration coincident with the dependent highway construction projects. The Clear Creek site is the specific site identified in executed agreements with the Puyallup Tribe of Indians (PTOI) and the Washington Department of Fish and Wildlife (WDFW) for both SR 509 and SR 167 Transportation Projects. The Clear Creek Stream Restoration project is approved by WSDOT and stakeholders as mitigation in lieu of correcting fish barriers on SR 509 and SR 167 Transportation Projects, since removing the dams and restoring Clear Creek at the site will provide a larger ecological uplift than correcting the barriers on SR 509 and SR 167 Transportation Projects. Assistant Attorney General has determined eminent domain applies to Clear Creek site property acquisitions. The acquisition and relocation process for the primary site, Parcel 1-25247, will control when construction of the restoration project can start. The primary site acquisition and relocation are expected to take up to two and half years which is the main reason for this early acquisition request. The Clear Creek Stream Restoration Project will create additional rearing habitat for salmonids and improve habitat diversity and productivity which are currently absent or limited at the site. This project is a good candidate because the state funds are available for use in acquisition and relocation, and there is no federal matching credit or reimbursement. NEPA for the SR 509 and SR 167 Transportation Projects are complete. A separate NEPA Categorical Exclusion will be prepared for the Clear Creek Stream Restoration Project, once the property is acquired and access to complete the cultural resource investigation may be obtained. The SR 509 and SR 167 Transportation projects are funded with construction, and expected to be completed in 2029.**	
FUTURE PROPERTY USE and MANAGEMENT SUMMARY: **Clear Creek Stream Restoration Project is mitigation in lieu of on-site fish barrier corrections for both SR 167 and SR 509. Fish barrier correction is a commitment that was provided in the NEPA documents completed for the SR 509 and SR 167 Transportation Projects. The timeline for possession and use of the parcel is expected to be controlled by the relocation needs of the current trout hatchery operation. Once possession and use are acquired, it is expected the project would immediately go to construction limiting any property management.**	

Section 3. EARLY/ADVANCED ACQUISITION REQUIREMENTS	Yes	No
1. Is the proposed purchase in a highway transportation corridor?	☐	☒

2.	Is the proposed purchase included in the state's 10-year capital improvement and preservation program?	☒	☐
3.	Is there relocation of displaced persons anticipated? If yes, what type: **one non-residential and two residential relocations**. If yes, attach approved relocation plan **(See Attachment 1)**	☒	☐
4.	Is there a high degree of certainty that the parcel will be needed as evidenced *in at least one* of the following: A.) The parcel is necessary in all project options. B.) If there is a preferred option, the parcel is necessary. C.) A major portion or all the property is necessary in any alternative.	☒	☐
5.	Has Environmental (NEPA/SEPA) started? If yes, expected completion date: **Doc. Categorical Excl., March 2024** **The SR 509: Corridor Completion/I-5/South Access Road, NEPA Record of Decision, was approved in March 2003, with subsequent NEPA Re-evaluations completed in January 2018, March 2020, November 2021, and April 2023. The NEPA process has started for the SR 509/Clear Creek Stream Restoration Project and is expected to be approved in March 2024. WSDOT is the SEPA lead for this project, and the project is considered exempt from SEPA.**	☒	☐
6.	Environmental due diligence/review (hazmat) of the parcel(s) is completed. (Must be included in the final parcel file) **(See Attachment 2)**	☒	☐
7.	Is the map that identifies the property attached? For less than total ownership, include sufficient design work and mapping to describe the right of way. (Right of Way plan, Parcel acquisition Plan, Exhibit Map) Comments: **Acquiring the whole parcel (See Attachment 3 - Sundry Site Plan).**	☒	☐
8.	Does the project intend to acquire under the threat of eminent domain? Comments: **Based on the need for the site created by the agreements for both projects with WDFW and PTOI, WSDOT is pursuing acquisition under threat of eminent domain.**	☒	☐
	Section 4. ADDITONAL REQUIREMENTS (compliance with CFR 710.501)	**Yes**	**No**
9.	Acquisition will not influence the outcome of NEPA.	☒	☐
10.	The property will be lawfully obtained by the agency.	☒	☐
11.	Acquisitions and relocations will comply with the Uniform Act.	☒	☐
12.	Is property protected under section 4(f) of the Department of Transportation Act of 1966, codified at 23 USC 138, and the regulations at 23 CFR 774. Comment:	☐	☒
13.	The State will comply with the requirement of Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d-20006-04)	☒	☐

Section 5. TYPE OF EARLY/ADVANCED ACQUISITION (EA/AA)

Refer to the Early acquisition/Advanced acquisition application instructions and chart and CFR 710.501 for details and requirements

CHOOSE ONLY ONE OPTION

Early Acquisition

☒ Option 1 - State Funded, No Matching Credit or Reimbursement

☐ Option 2 - State Funded, w/ Matching Credit
☐ Option 3 - State Funded, w/ Reimbursement
☐ Option 4 - Federally Funded Early Acquisition Stand Alone Project *
*Must be in STIP, cannot use eminent domain, NEPA decision required on stand-alone project, FHWA Approval required

OR

Advanced Acquisition
Requires NEPA approval, typically a CE, for the specific parcel being acquired. Eligible for federal reimbursement/credit.
☐ Protective Buying
☐ Hardship Purchase

Section 6. FUNDING INFORMATION
(Choose 1 of the following funding methods)

☒ State Funded –Attach CPDM/Program Management approval regarding Option 1, 2, or 3 above
☐ Federally Funded – Attach STIP, NEPA decision for early acquisition project, and FHWA Authorization
☐ Advanced R/W Revolving Account – Complete Section 7 to request AROW Funding.

Section 7. APPLICATION FOR ADVANCED R/W REVOLING ACCOUNT (AROW)
(If applicable)

Proceed to section 8 if not requesting approval to use the R/W revolving fund.

	Yes	No
Is there a high degree of certainty that the right of way will increase in cost as evidenced by one of the following conditions: A.) There is a plan for a private industrial, commercial, or residential development in the area. B.) The property is in an area of rapid development.	☐	☐

CURRENT AND PROJECTED COSTS:

Acquisition:	$0.00	
Relocation:	$0.00	
Demolition:	$0.00	
Other Costs:	$0.00	
Total Amount Requested:	$0.00	

FUTURE AND PROJECTED COSTS:

Acquisition:	$0.00	
Relocation:	$0.00	
Demolition:	$0.00	
Other Costs:	$0.00	
Total Future and Projected Costs:	$0.00	

The estimated savings including relocation and demolition:

Estimated savings:	$0.00	

ESTIMATED DATE FOR REIMBURSEMENT:

Section 8. REGION APPROVAL (Required)		
I certify that the requested purchase meets all eligibility requirements and the information completed is accurate to the best of my knowledge.		
Requested by:	Printed Name:	Title:
	Signature: Signature on file at project office.	Date:
Region Administrator (if requesting Advanced R/W Account Funding)	Printed Name:	Title:
	Signature: Signature on file at project office.	Date:
Section 9: ACQUISITION PROGRAM MANAGER APPROVAL* (Required)		
Approved ☒	Printed Name:	Title:
Declined ☐	Signature: Signature on file at project office.	Date:
Section 10. ADDITIONAL APPROVALS ADVANCED RIGHT OF WAY REVOLVING ACCOUNT APPROVAL (If Applicable)		
Approved ☐	Printed Name:	Title: **RES Program Administrator**
Declined ☐	Signature:	Date:
Approved ☐	Printed Name:	Title: **Director, Capital Program Development and Management**
Declined ☐	Signature:	Date:
Approved ☐	Printed Name:	Title: **Budget Director**
Declined ☐	Signature:	Date:

Note: ***The approval to use the Advance Right of Way Revolving Account expires in eight (8) months.***
Exception: Approval time limits may be extended if the region provides documentation that progress is being made on the acquisition process.

**Early acquisition approval expires 1 year from date of Acquisition Program Manager approval. The offer must be rescinded if not settled within 1 year.*

ClearCreekEA-AAApplication_01032024

Final Audit Report 2024-01-04

Created:	2024-01-04
By:	Lisa Scholl (scholl@wsdot.wa.gov)
Status:	Signed
Transaction ID:	CBJCHBCAABAA2vjsAHIZyhHO48EBuIs0RofIM1XIqZTx

"ClearCreekEA-AAApplication_01032024" History

Document created by Lisa Scholl (scholl@wsdot.wa.gov)
2024-01-04 - 3:52:30 PM GMT

Document emailed to Ali Amiri (amiria@wsdot.wa.gov) for signature
2024-01-04 - 3:59:03 PM GMT

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Adobe Acrobat Sign

Agreement completed.

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Adobe Acrobat Sign

Attachment 3 – Programmatic Biological Assessment - project notification form - National Marine Fisheries Service

WSDOT NOAA Short Project Notification Form

Note: The proper version of this form must be submitted to either the National Marine Fisheries Service or the U.S. Fish and Wildlife Service (or both)for informal or formal projects. No effect projects are not submitted to the Services. See http://wwwi.wsdot.wa.gov/Environment/FishWildlife/

for submittal procedures.

Project Name:
SR 509/Clear Creek Stream Restoration Project

Submittal Date:
March 18, 2024

Work Order:
XL6735

WIN:
50907X

Project Location:

State Route 5, Mile Post 147.57 to 147.57
Geographical Coordinates: 47.36847600 / -122.29356400 to 47.36847600 / -122.29356400

Indicate Township / Range / Section
T 20 N, R 3 E, S 13 and 24

Indicate the federal nexus for the project
FHWA

County:
Pierce

Region:
Olympic

Project Biologist:

Dougherty, Logan, doughlo@consultant.wsdot.wa.gov, 425-456-8581
Washington State Department of Transportation (WSDOT) is required to comply with United States, et al. vs. Washington, et al. No. C70-9213 Subproceeding No. 0101 dated March 29, 2013, a federal permanent injunction requiring the State of Washington to correct fish barriers in Water Resource Inventory Areas (WRIAs) 1 through 23. WSDOT must also comply with Washington Administrative Code (WAC) 220-660-190 relating to the correction of fish passage barriers. WSDOT policy is to correct barriers if they fall within the footprint of a project if they meet certain criteria.

During the planning phases of the State Route (SR) 509 Stage 2 and the SR 167 Stage 2b projects, fish passage barriers were identified within the limits of the two projects that were not previously identified as barriers or on the federal injunction list. WSDOT worked closely with the Puyallup Tribe of Indians (PTOI) and Washington Department Fish and Wildlife (WDFW) on two of these barriers: WDFW ID 935070 and WDFW ID 105 R121519a due to the complexity of correction and limited habitat gain if the barriers were made passable. The PTOI, WDFW and WSDOT reached agreement to restore, enhance, and create habitat at Clear Creek as mitigation for leaving the barriers uncorrected. The SR 509/Clear Creek Stream Restoration Project will satisfy the injunction requirements for the culverts within the footprint of both projects. Therefore, the proposed action at the Clear Creek site will be permitted and constructed independently from the SR 509 Stage 2 and SR 167 Stage 2b projects because it is being undertaken to comply with the federal injunction.

Reviewing Biologist:

Form Completed Date:

WRIA:
10: Puyallup - White

6th Field Hydrologic Unit Code (HUC) Name
Puyallup River

6th Field HUC number
171100140502

Site Visit Date:
November 16, 2023

Explain and summarize Early Coordination activities with the Services:
A pre-BA meeting was held with Federal Highway Administration (FHWA), WSDOT, U.S. Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS) representatives on November 16, 2023, to review project information, proposed footprint, and provisional determinations for listed species. Attendees included: Cindy Callahan (FHWA), George Ritchotte (NMFS and USFWS liaison), Ryan Boyle, Maki Dalzell, Jeff Dreier, Logan Dougherty, Leah Erickson, and Joel Widmer (WSDOT).

Date to Begin Early Coordination:
October 24, 2023

Have there been any design or construction method changes since Early Coordination that could affect your consultation and have not been discussed with liaisons prior to project submittal?
☐ **Yes** ☑ **No**

Date Early Coordination is Complete
December 19, 2023

Does the project meet the conditions of the NMFS programmatic biological assessment?
☑ **Yes** ☐ **No**

Does the project meet the conditions of the USFWS programmatic biological assessment?
☑ **Yes** ☐ **No**

Is this a reference biological assessment for NMFS?
☐ **Yes** ☑ **No**

Is this an Essential Fish Habitat (EFH) only submittal for NMFS?
☐ **Yes** ☑ **No**

Is this an after the fact consultation for NMFS?
☐ **Yes** ☑ **No**

Will this project be submitted Fast Track for the NMFS?
☐ **Yes** ☑ **No**

Will this project be submitted Fast Track for the USFWS?
☐ **Yes** ☑ **No**

NMFS summary of species and critical habitats in the project action area:
Puget Sound Chinook, Puget Sound Steelhead, Puget Sound Chinook Critical Habitat, and Puget Sound Steelhead Critical Habitat

Check all project activities that apply (for both NMFS and USFWS projects)

Upland vegetation removal & management
Riparian and Wetland Vegetation Removal and Management
In-Water Excavation
Work Area Exclusion and Dewatering
Geotechnical Sampling
Heavy equipment operation
Cut and fill operations
Fish Handling
Debris Removal

Project action area:

The terrestrial component of the action area is defined by the geographic extent of visual and noise-related disturbance associated with the SR 509/Clear Creek Stream Restoration Project (Project). Using the rules for decibel addition, the noise level for the proposed construction activity is expected not to exceed 106 dBA (A-weighted decibel). The construction noise is based upon the Project activities and the three loudest pieces of construction equipment expected to be used, which are noted in the equipment list section of this Project Notification Form (vibratory pile driver - 105 dBA, pavement grinder - 97 dBA, and jackhammer - 95 dBA).

Based on the population density of the Waller area of Pierce County, the existing background (ambient) noise level is estimated to be 45 dBA. The speed limit in the Project area on Pioneer Way East is 40 miles per hour (mph). The 2019 WSDOT Annual Traffic Geoportal lists the annual daily traffic (ADT) on Pioneer Way East as 11,770 vehicles per day. Therefore, vehicles per hour can be estimated as 10 percent of 11,770 vehicles per hour based on the WSDOT guidance. A roadway with 1,170 vehicles per hour at 40 mph traffic speed has a traffic noise level of approximately 48.8 dBA.

Soft forest site conditions are assumed to be present in the vicinity of the Project area. Based on the WSDOT guidance, base 10-Log equations are used to calculate noise levels at a specific distance from the source to determine the distance that construction noise will travel before it attenuates to the traffic noise level and the distance at which construction or traffic noise will attenuate to background noise levels. Using the equations, traffic noise is not expected to be distinguishable from the background noise level at approximately 100 feet, and construction noise levels attenuate to the background noise levels at approximately 3,605 feet. As a result, the extent of Project related noise is estimated at approximately 3,605 feet.

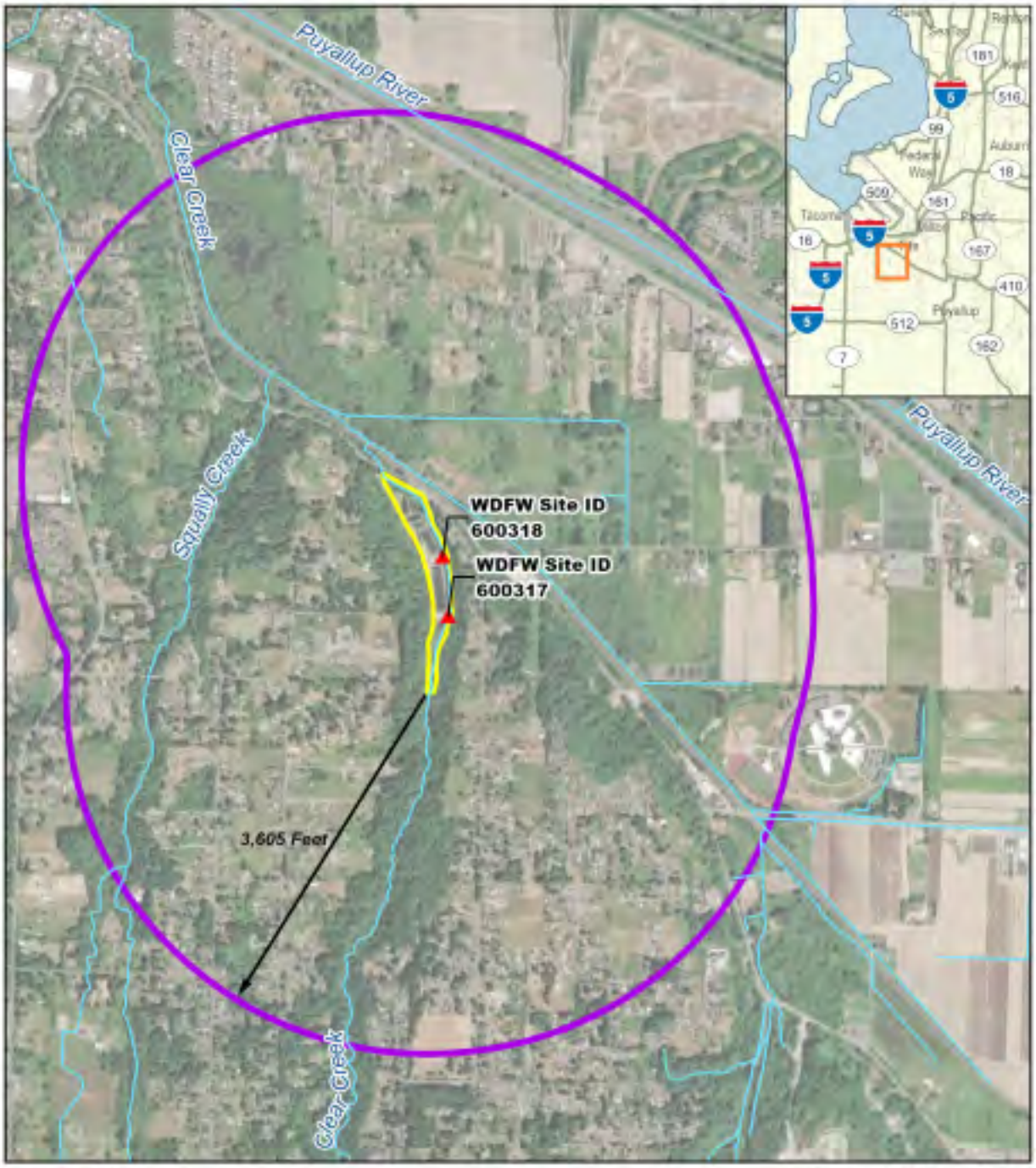
The aquatic portion of the action area is defined by the extent of in-water work, including related turbidity, and upstream habitat gain. Chapter 173-201A-200 (1)(e)(i) of the WAC allows for a sediment mixing zone not to exceed a specified distance downstream of the Project footprint based on the characteristics of the waterbody at the proposed time of construction. In-water activities for the Project would occur during the published in-water work window (July 16 - August 31). Clear Creek has a mean annual flow rate exceeding 10 cubic feet per second (cfs) but less than 100 cubic feet per cfs. WAC states that for waters with a flow between 10 cfs and 100 cfs at the time of construction, the point of compliance is 200 feet downstream from the activity causing the turbidity exceedance. Therefore, the downstream extent of the aquatic component of the action area is 200 feet downstream of the construction activity locations. The upstream extent of the aquatic component of the action area includes at least 13,700 linear feet of upstream habitat gain.

Attach map and photographs:






WDFW Site ID
600318
WDFW Site ID
600317
Clear Creek
WDFW Site ID
600318
WDFW Sites
Stream
Turbidity Limits (200 feet)
Upstream Gain (13,700 feet)
Project Location
WSDOT
Aquatic Project Action Area
SR 509/Clear Creek Stream Restoration Project
0 500 1,000 1,500
Feet
Data Sources: Esri, USGS, WSDOT (2024)


Puyallup River
Clear Creek
Squally Creek
WDFW Site ID
600318
WDFW Site ID
600317
3,605 Feet
Clear Creek
Puyallup River
WDFW Sites
Terrestrial Noise Action Area (3,605 feet)
Project Location
Terrestrial Project Action Area
SR 509/Clear Creek Stream Restoration Project
WSDOT
0 500 1,000 1,500
Feet
Data Sources: Esri, USGS, WSDOT (2024)

Project Description:
WSDOT proposes to construct the SR 509/Clear Creek Stream Restoration Project (Project) that will remove two fish-passage barriers on Clear Creek and restore stream functions at the Project site. The Project site is within the Puyallup-White watershed (WRIA 10), and is located at 4008 Pioneer Way East on privately-owned parcels in the Puyallup Tribe reservation in unincorporated Pierce County, Washington. The Project site is owned and operated by Troutlodge fish hatchery located along Clear Creek, a tributary of the Puyallup River. The two existing fish passage barriers (dams) on site are located at river mile 1.9 (WDFW IDs 600317 and 600318).

All of the fish hatchery infrastructure will be removed, restoring the basin to its historic alluvial condition and opening up at least 13,700 linear feet of high-quality rearing and spawning habitat that has been unreachable for several decades. Aquatic habitat will be enhanced with installation of large woody material (LWM), creation of new side-channel habitat, expanded floodplain for rearing habitat, and riparian vegetation for improved stream shading and nutrient input. The proposed actions will restore natural stream processes, including sediment transport, LWM transport, marine derived nutrient input above the dam locations, floodplain interaction, and channel migration.

The Project includes the following major work elements:
- **Remove all existing in-water concrete structures, including two fish passage barriers**
- **Remove existing fish hatchery structures, including operational building(s), storage shed(s), fish hatchery rearing ponds, and other auxiliary structures**
- **Re-grade the existing Clear Creek stream channel and regrade the floodplain to mimic historic conditions**
- **Construct habitat-enhancement elements, including placement of LWM, creation of habitat berms, and development of beaver-analog ponds**
- **Clear existing invasive vegetation and replant native riparian and upland vegetation**

WSDOT will acquire the privately owned hatchery parcels and will establish permanent easements at the stream edge for three adjacent residential parcels. The Project is scheduled to be constructed between 2026 and 2028.

Project Equipment List
Equipment to be used on the Project would include, and not be limited to: dump trucks, cranes, excavators, skid loaders, dozers, auger drill rigs, drill rig trucks, backhoes, jackhammers, concrete grinders, concrete saws, generators, hand power tools, pumps, and a vibratory pile driver.

Indicate equipment that will be working below the ordinary high water mark (OHWM) in a wetted channel.
The equipment working in the wetted channel would include fish exclusion gear, pumps, hand tools, sandbags, and a chainsaw. Prior to in-water work, fish exclusion gear, pumps, and stream diversion equipment will be used to exclude fish and dewater the work area.

Is this an emergency project?
☐ **Yes** ☑ **No**

Does the project have sensitive habitats (within 200 feet of wetlands or surface waters) where staging, refueling, or other activities should be restricted?
☑ **Yes** ☐ **No**

Indicate mileposts within project area where restrictions apply.
Not applicable. Project is not located along a transportation corridor.

Will the project have construction equipment operating within the wetted channel of any waterbody?
☑ **Yes** ☐ **No**

Will detours be used?
☐ **Yes** ☑ **No**

Will the project include work at night?
☐ **Yes** ☑ **No**

Will artificial lights be used over or adjacent to an aquatic area?
☐ **Yes** ☑ **No**

Will blasting occur?
☐ **Yes** ☑ **No**

Will impact pile driving occur?
☐ **Yes** ☑ **No**

Will piles be removed on the project?
☐ **Yes** ☑ **No**

Is the project for slide abatement and repair?
☐ **Yes** ☑ **No**

Will cutting or filling occur?
☑ **Yes** ☐ **No**

Indicate cut area (excavated area) above the ordinary high water mark (OHWM).
Area: 3.6 acres (156,820 square feet)

Indicate cut area (excavated area) below the ordinary high water mark.
Area: .92 acres (40,080 square feet)

Indicate fill area above the ordinary high water mark (OHWM)
Area: .81 acres (35,290 square feet)

Indicate fill area below the ordinary high water mark (OHWM)
Area: .56 acres (24,400 square feet)

Will cutting or filling occur within 300 ft of a water body that has listed aquatic species or their habitat?

☑ **Yes** ☐ **No**

Will any soils be exposed?
☑ **Yes** ☐ **No**

What is the erosion potential?
Medium

Will bare soils be revegetated or hydroseeded after construction?
☑ **Yes** ☐ **No**

Describe the proposed methods.
The Project will have a Temporary Erosion Sediment Control plan with site specific best management practices (BMPs). Erosion control BMPs may include stabilized construction entrances, straw ground cover, straw wattles, silt fence, compost socks, or erosion control blankets to stabilize soils in the project area. After the project, disturbed areas will be re-vegetated with appropriate native vegetation.

Project Timing

Construction Start Date
January 1, 2026

Construction End Date
December 31, 2028

Total Working Days
1,003

Will the project need a Hydraulic Project Approval (HPA) or have an aquatic zone of impact requiring in-water work?
☑ **Yes** ☐ **No**

Will the project use a WDFW published in-water work window?
☑ **Yes** ☐ **No**

Begin of in-water work window
July 16, 2026

End of in-water work window
August 31, 2028

Project Aquatic Habitat Impacts

Elevated pollutant delivery (non-sediment)?
☐ **Yes** ☑ **No**

Will there be elevated sediment/turbidity?
☑ **Yes** ☐ **No**

Estimate the lineal extent of stream or shoreline that will be exposed to elevated turbidity (ft).
2,810

Explain
The lineal extent of stream exposed to elevated turbidity includes the entire channel grading and channel improvements lengths and downstream impacts. There will be temporary increase in turbidity from the installation and removal of block nets for fish exclusion and the stream diversion. The length of the regraded channel is 1,800 feet. An additional 780 feet of stream channel will be dewatered to allow for the installation of stream improvements downstream of the regraded segment, as well as approximately 30 feet for fish exclusion and stream diversion installation. The downstream distance of elevated turbidity includes 200 feet downstream from the end of the stream diversion location, to account for elevated sediment and turbidity levels during construction.

Will riparian habitat functions be altered?
☑ **Yes** ☐ **No**

Explain
The Project would temporarily affect approximately 1.2 acres of riparian vegetation to allow for the removal of the existing dams, regrade of the stream channel, and construction of new side channels and new spring flow channel. Disturbed areas will be replanted with native woody species. Approximately 0.09 acres of riparian vegetation will be permanently removed. This vegetation will be replaced by new stream channel segments.

Will there be elevated surface water temperature?
☑ **Yes** ☐ **No**

Explain
The Project would temporarily affect existing woody vegetation within the project footprint. The Project may temporarily increase surface water temperatures in the Clear Creek until the planted woody vegetation matures. Conversely, the Project may create decreased surface water temperature, as stream water will no longer be diverted from Clear Creek and made to flow through the fish hatchery rearing pond raceways before being returned to the stream.

Will there be substrate disturbance?
☑ **Yes** ☐ **No**

Indicate disturbed area if known
Area: 2.096 acres (91,290 square feet)

Explain.
Due to the Project's removal of two water surface drop barriers, the Project will regrade 1,800 linear feet of stream channel to restore the natural, continuous grade that will allow fish passage.

Will substrate disturbance mobilize contaminants?
☐ **Yes** ☑ **No**

Will there be loss of benthic invertebrate habitat and potential food web effects?
☑ **Yes** ☐ **No**

Indicate area of benthic invertebrate habitat disturbance
Area: 2.096 acres (91,290 square feet)

Explain.
Benthic invertebrates in the existing channel would be temporarily impacted due to in-water work. However, impacts to benthic invertebrates are considered minor and temporary as benthic organisms are known to be resilient to habitat disturbance and are likely to recolonize quickly into the new channel location. Benthic invertebrates would be expected to make a full recovery to existing conditions shortly after the construction is complete.

Will there be elevated in-water noise from pile driving?
☐ **Yes** ☑ **No**

Fish harm or harassment from in-water work or handling?
☑ **Yes** ☐ **No**

Explain.
The work area within OHWM will be isolated prior to the fish barrier correction work. WSDOT biologists will follow the current WSDOT Fish Exclusion Protocols and Standards for safe capture and removal of fish from the isolated work area.

Will there be effects on fish migration?
☑ **Yes** ☐ **No**

Will project actions reduce the channel width, or block a shoreline migration use area, and if so, how much of channel/shoreline area (%) is available for fish movement?
The Project actions will dewater the stream channel during the temporary stream diversion. There will be no channel width available for fish movement while the temporary stream diversion is in place.

Explain.
During construction, approximately 1,000 feet of existing fish habitat will be dewatered. This is the distance from the downstream extent of dewatered channel to the first fish passage barrier. By removing the fish passage barriers, the Project will create access to at least 13,700 linear feet of upstream habitat gain.

Will there be impacts to wetlands that have fish habitat?
☐ **Yes** ☑ **No**

Will there be permanent or temporary fish habitat displacement?
☑ **Yes** ☐ **No**

Explain.
Fish habitat would be temporarily displaced by the stream diversion required to allow construction to take place within the channel. Habitat access will be restored when correction of the fish barriers is complete, and the new channel is constructed. The displacement of habitat in the existing channel would be replaced by the construction of the new channel.

Will there be altered water quality delivery, such as a change to a stormwater conveyance structure?
☐ **Yes** ☑ **No**

Will there be streambank/shoreline habitat loss/modification or reduced habitat connectivity?
☐ **Yes** ☑ **No**

Will natural stream processes and/or floodplains be altered?
☑ **Yes** ☐ **No**

Explain.
Within the Project area, Clear Creek has been constrained by riprap, eco-blocks, and concrete walls, which has isolated the stream from its floodplain. The Project will remove these constraints and allow the stream to re-engage with its floodplain.

Will the stream channel be realigned, meanders added, or will other project actions change the length of the stream channel?
☑ **Yes** ☐ **No**

What is the current stream length (to the nearest whole foot)?
1,797

What is the post-project stream length (to the nearest whole foot)?
3,438

Will the project have beneficial effects?
☑ **Yes** ☐ **No**

Explain.
Regrading activity will restore the natural channel slope/gradient and will create fish access to at least 13,700 linear feet of upstream habitat gain. New side channels will be created upstream of the dam for additional habitat and to increase channel diversity. WSDOT also plans to remove existing weirs and revetments in this area and install LWM and native vegetation along the channel. Along the main channel and the side channel, native vegetation will be planted to provide shading and nutrient input, and to create ecological diversity along the banks. In addition, WSDOT plans to create rearing habitat in the downstream channel south of Pioneer Way East by creating additional floodplain storage, placing LWM along the channel, and planting native vegetation.

Stream connectivity will be restored through channel grading work and riparian planting along the channel. The proposed activities at the site would improve habitat conditions along the channel, allow sediment transport, and provide direct connection for fish or other organisms at the downstream restoration sites to the upstream habitat.

If project removes a fish barrier, indicate length of fish habitat gain on the stream (feet)
13,700

Fish Habitat Improvement

As part of the project, check all that apply:

Water quality improvements will occur to waters with listed species.
Fish barriers will be eliminated.
Revegetation of streambanks or riparian areas will occur.
Large woody debris or habitat structures will be placed in streams.
Fish habitat will be created.

Please describe:
WSDOT plans to remove two existing dams, regrade upstream and downstream of the dams, and install habitat features along the channel to restore stream processes. Regrading activity will restore the natural channel slope/gradient. New side channels will be created upstream of the dam for additional habitat and to increase channel diversity. WSDOT also plans to remove existing weirs and revetments in this area and install LWM and native vegetation along the channel. Along the main channel and the side channel, native vegetation will be planted to provide shading and nutrient input, and to create ecological diversity along the banks. In addition, WSDOT plans to create rearing habitat in the downstream channel south of Pioneer Way East by creating additional floodplain storage, placing LWM along the channel, and planting native vegetation.

Stream connectivity will be restored through channel grading work and riparian planting along the channel. The proposed activities at the site would improve habitat conditions along the channel, allow sediment transport, and provide direct connection for fish or other organisms at the downstream restoration sites to the upstream habitat.

Will large woody material (LWM) be removed from the site?
☐ **Yes** ☑ **No**

Environmental Setting

Baseline Conditions. Document general baseline conditions in the action area as they relate to the proposed action and effects. Discuss surrounding land use if appropriate.
The Project site is currently privately-owned and operated as a fish hatchery. The project area contains gravel roadways, several buildings, concrete fish rearing ponds, and sediment settling ponds. Minimal native vegetation is present in areas proposed for restoration. Land use in the action area surrounding the Project area includes forested hillslope, riparian, rural residential, and some agricultural use.

Clear Creek has a drainage area of approximately 1,990 acres. The watershed contains two forks, East Fork Clear Creek and West Fork Clear Creek, which come to a confluence approximately 1 mile upstream of the Project area. A wide variety of different land cover is observed within Clear Creek's watershed including Low Intensity and Open Space Developed Land, Pastures, and Forest.

Downstream of the Project area, Clear Creek passes underneath the Pioneer Way East culvert (WDFW Site ID 105 R031616a) and a Burlington Northern Santa Fe Railway railroad crossing (WDFW Site ID 105 R031616a1). From there, Clear Creek flows northwest into the historical Puyallup River floodplain. Squally Creek and Swan Creek both converge with Clear Creek in this stretch. At the confluence with the Puyallup River, there is a tidal gate operated by the Port of Tacoma (WDFW Site ID 990083), which prevents the Puyallup River from backing up into the Clear Creek channel.

Describe the vegetation in the project action area:
The east side of Clear Creek is bordered by a densely forested hillslope with an overstory of western redcedar (Thuja plicata), Douglas-fir (Psuedotsuga menziesii), and red alder (Alnus rubra) rooted near the streambed. The understory is dominated by osoberry (Oemleria cerasiformis), salmonberry (Rubus spectabilis), vine maple (Acer circinatum), and western swordfern (Polystichum munitum).
Upstream of the fish hatchery infrastructure, the west bank is bordered by a similar forested hillslope. Adjacent to the fish hatchery infrastructure, the west bank is bordered by a thin stretch of vegetation dominated by Himalayan blackberry (Rubus armeniacus). Apart from this blackberry, the fish hatchery is maintained clear of vegetation.

Habitat in the project action area
30% Riparian, 10% Coniferous Forest, 10% Mixed Forest, 10% Wetlands, and 40% Developed

Do streams, rivers, or other waterbodies occur in the project action area?
☑ **Yes** ☐ **No**

Provide names of major streams/creeks in action area and describe spawning gravels, embeddedness, riparian cover, refuge area riffles, etc. Focus on areas where impacts may occur. If the stream is a tributary of a larger stream or river, indicate distance to nearest confluence.
Clear Creek is the primary stream in the action area, and flows into the Puyallup River approximately 2 miles downstream of the Project.

Within the stream length that will be impacted, there are five distinct sub-reaches of channel. Upstream of the dams are the sediment weir and sediment basin sub-reaches. Between the dams is the armored conveyance sub-reach. Downstream of the dams are the armored bank and low gradient sub-reaches. These sub-reaches are described below.

Sediment weir: This sub-reach is located at the upstream extent of the Project area. Within this reach, sediment is detained; cobbles and gravels are trapped within the sediment weirs. The channel is a semi-stable, braided channel. Clear Creek has been artificially widened, by pulling the hillslopes back by retaining walls. There is a lack of LWM and slash through the reach. The riparian forest provides good stream shade.

Sediment basin: This sub-reach spans downstream of the sediment weirs, where Clear Creek widens, to the upper dam. At the upstream, the stream transitions from a ravine-like setting to a wide opening on the valley floor. In this wider section of Clear Creek, a portion of sands and fines begin to settle out of the water due to decreased velocities from the upper dam. These fines settle immediately upstream of the dam and in the sedimentation pond. Through this reach, there are no features to increase stream complexity. Existing conditions challenge fish life in this sub-reach, even ignoring the fish passage barrier of the upper dam. LWM is absent and the stream is straight and widened with limited sinuosity, and this area is only partially shaded.

Armored conveyance: Between the upstream and lower dams, Clear Creek becomes channelized by a retaining wall along the left bank of the channel. A segment of the stream is lined with asphalt while other segments have riprap in them. Through this reach, the stream has little channel complexity due to the lack of LWM and meanders. This segment is well-shaded by mature trees on the east bank of Clear Creek.

Armored bank: This reach is located immediately downstream of the lower dam. Significant levels of bed armoring are present in this reach. Within this sub-reach, Clear Creek is confined with erosion-resistant bed material due to the armoring. Excess amounts of stream power results in armoring to occur in the stream bed by eroding fines, preventing fines from depositing, and leaving cobbles and gravels in the stream. Additionally, there is riprap added to the banks, preventing any erosion from occurring.
There is a lack of LWM or slash within the stream. Reed canarygrass (Phalaris arundinacea) is located on the overbanks on each side of the stream.
The existing conditions challenge fish life. The reach does offer patches of spawning gravels, on the coarser end of the preferred range. The absence of large or smaller woody material and the armoring of the banks deprives the reach of any areas of moderate flows or sheltering habitats for rearing juveniles.

Low gradient: This sub-reach is immediately upstream of the Pioneer Way East crossing. The slope within this sub-reach flattens out and the stream power is limited. Large amounts of sands and fines deposit into this section of Clear Creek. Reed canarygrass confines and hardens the channel banks.
LWM is present within the stream and slash is wracked on the LWM. Reed canarygrass lines the banks and traps fine sands and silts there. The terraces support riparian shrubs and trees, providing thorough shade in this segment. The reach lacks spawning gravels due to the abundance of fines in the channel substrate. The presence of large and smaller woody material offers shelter to rearing juveniles and a source of macroinvertebrate foods.

Squally Creek, a tributary to Clear Creek, also falls within the action area. Squally Creek flows into Clear Creek approximately 0.3 mile downstream of the Project area. No impacts to Squally Creek are proposed.

Indicate rivermile if appropriate
The dams are located at rivermile 1.9.

Project Impacts to Streambank, Streambed, and Shoreline

Will there be riprap placement in the project area along streambanks or shorelines ?
☐ **Yes** ☑ **No**

Will work on streambanks or shorelines improve fish habitat?
☑ **Yes** ☐ **No**

Describe the proposed work:
The Project will remove two dams, bank armoring, and other in-water concrete structures from Clear Creek. This will create access to at least 13,700 linear feet of fish habitat. The Project will regrade 1,800 linear feet of streambed within the Project area, which will restore the natural channel slope/gradient. New side channels will be created upstream of the dam for additional habitat and to increase channel diversity. Along the main channel and the side channel, native vegetation will be planted to provide shading and nutrient input and to create ecological diversity along the banks. In addition, WSDOT plans to create rearing habitat in the downstream channel south of Pioneer Way East by creating additional floodplain storage, placing LWM along the channel, and planting native vegetation.

Will the stream bed, lake bed or marine bed be disturbed?
☑ **Yes** ☐ **No**

What is the area of disturbance?
Area: 2.096 acres (91,290 square feet)

Will all materials, such as riprap or gravel, placed within the water be free of rock fines, silt, soil, or other extraneous material? An exception to the presence of fines is permitted if they are required as part of channel bed reconstruction.
☐ **Yes** ☑ **No**

Explain why materials with fines will be allowed into state waters.
Channel bed reconstruction will take place. Material used for stream reconstruction will be derived from on-site material and may therefore include rock fines, silt, soil, or other extraneous material. The streambed material will be watered in before stream flow is allowed to be diverted into the new channel segments.

Project Impacts to Marine Mammals

The NMFS programmatic only covers informal effects to marine mammals
Will the project affect marine mammal migration?
☐ **Yes** ☑ **No**

Will there be effects to marine mammal prey species or food webs?
☑ **Yes** ☐ **No**

Explain
Marine mammal prey species, including Puget Sound Chinook salmon, are present in the Project action area. These fish may require fish handling if they are present during the fish exclusion work. The Project will overall benefit this species by allowing access to at least 13,700 linear feet of upstream habitat gain.

Will the project alter shorelines or other natural processes?
☐ **Yes** ☑ **No**

Pollution Generating Impervious Surface

Will the project create new PGIS?
☐ **Yes** ☑ **No**

Fish Handling

Will the project have fish handling?
☑ **Yes** ☐ **No**

Indicate all that apply

Seining
Herding
Electrofishing

Will an HPA be needed?
☑ **Yes** ☐ **No**

Number of days with in-water work
141

Project Terrestrial Impacts

Total permanent vegetation impact area (all vegetation types including riparian)
Area: 4,000 square feet (.092 acres)

Total temporary vegetation impact area (all vegetation types)
Area: 1.223 acres (53,260 square feet)

Total vegetation impact area (all vegetation types)
Area: 1.315 acres (57,260 square feet)

Will the project have riparian vegetation impacts?
☑ **Yes** ☐ **No**

Temporary riparian impact area
Area: 1.223 acres (53,260 square feet)

Permanent riparian impact area
Area: 4,000 square feet (.092 acres)

Total riparian impact area.
Area: 1.315 acres (57,260 square feet)

If you are removing mature trees in the riparian zone, describe the species and approximate tree size and number removed
Approximately 30-40 mature trees in the riparian zone will require removal to allow for the dam removal and channel bed reconstruction to take place. The trees will remain on-site and be used for LWM. The trees requiring removal will mainly consist of Western redcedar (Thuja plicata), Douglas fir (Pseudotsuga menziesii), and red alder (Alnus rubra). The trees range in size from approximately 8 to 24 inch diameter at breast height (DBH).

Area of on-site riparian restoration
Area: 1.223 acres (53,260 square feet)

NMFS and USFWS Pre-Approved Enhancement Projects (Fast Track)

These are projects that benefit listed species and habitat.

All Fast Track projects must be submitted for final review to WSDOT Headquarters. Check the box if your project meets the stated conditions and fill in the required information. There are 6 project types.

Fast Track Project Types

Fast Track is an accelerated review for projects that have benefits for listed species. Fast Track is offered for both the NMFS and USFWS programmatics, but some Fast Track project types only apply to one agency, some to both. Check all that apply.

1. Will the project have new pollution generating impervious surface (PGIS), treat stormwater from all new and existing PGIS, and does not have other activities that would result in adverse effects? Fish handling is allowed as part of this activity.

☐ **Yes** ☑ **No**

2. Will the project have new PGIS and existing PGIS, and stormwater from all PGIS is infiltrated, and there are no other activities that would result in adverse effects? Fish handling is allowed as part of this activity.

☐ **Yes** ☑ **No**

3. Will the project have no new PGIS but will treat stormwater from all existing PGIS, and have no other activities that would result in adverse effects? Fish handling is allowed as part of this activity.

☐ **Yes** ☑ **No**

5. Will the project replace a culvert for fish passage, and there are no other activities that would result in adverse effects? Fish handling is allowed as part of this activity. USFWS coverage is allowed if there is a low risk for channel incision when listed species could be affected and if there are no adverse effects other than fish handling..

☐ **Yes** ☑ **No**

6. Will the project remove derelict fish nets in association with floating bridge cable replacement, and there are no other activities that may have adverse effects in addition to replacing the cables/removing the nets?

☐ **Yes** ☑ **No**

Essential Fish Habitat

The analysis of Essential Fish Habitat is usually conducted for all projects submitted to the National Marine Fisheries Service in conjunction with the Endangered Species Act analysis. However, an EFH analysis can be done as a stand-alone submittal.

Pacific salmon EFH is based on habitat for Chinook, coho, and pink salmon.

Is there Coastal Pelagic Essential Fish Habitat present in the project action area?

☐ **Yes** ☑ **No**

Is there Groundfish Essential Fish Habitat present in the project action area?

☐ **Yes** ☑ **No**

Is there Pacific Salmon Essential Fish Habitat present in the project action area?

☑ **Yes** ☐ **No**

Indicate which salmon species are present

Chinook salmon
Coho salmon
Pink Salmon

Would the EFH present be affected by one or more of these impacts (check all that are applicable)

Removal of riparian vegetation
Elevated suspended sediment

If you selected one or more of the above impacts, you will adversely affect EFH. Indicate the correct determination below

The project will adversely affect Pacific Salmon EFH

Project Minimization Measures

Stormwater Quality and Quantity Minimization Measures

MM-1. All projects (except exempt activities as listed in section 3-2.2 of the Highway Runoff Manual (2014), are subject to minimum stormwater management requirements as outlined in Section 3-3 of the Highway Runoff Manual. Non-exempt projects must address erosion control if >= 7,000 ft2 of soil will be disturbed or if there is >= 2000 ft2 of new, replaced, or new + replaced impervious surface. Erosion control requirements include: 1) a Temporary Erosion and Sediment Control (TESC) Plan (see TESC Manual), and a project specific Spill Prevention, Control and Countermeasures (SPCC) Plan as required in Standard Specification 1.07-15(1).

☑ **Yes** ☐ **No**

MM-2. WSDOT will ensure that projects within 200 feet of surface water will install and maintain Best Management Practices (BMPs) as stated in the Contract to ensure that no foreign material, such as pavement slurry from asphalt grinding equipment, is sidecast, and to control and prevent sediments from entering aquatic systems.

☑ **Yes** ☐ **No**

MM-3. The Contractor shall comply with Washington Department of Ecology's State Water Quality Standards (WAC 173-201) or permit modifications. Permit modifications are limited to an extended temporary area of mixing granted by Ecology in a 401 Water Quality Certification.

☑ **Yes** ☐ **No**

MM-4. Projects that drain to waters that may be used by listed fish species and create more than 500 ft2 of new pollution generating impervious surface in any TDA will use the most current WSDOT stormwater effects analysis guidance to evaluate the potential effects of each proposed project. The PBA Determination Form and/or supplemented documents must include the following information at a minimum: 1) Sufficient information to assess pre-project and post-project stormwater pollutant loadings and end of pipe concentrations. 2) Identify the receiving waterbodies for the stormwater runoff associated with the new pollution generating impervious surface. 3) Identify any proposed new (or modified) stormwater outfalls/structures.

☐ **Yes** ☑ **No**

MM-4 cont'd. 4) A qualitative or quantitative description of pre-and post-project mixing zones or dilution analysis, consistent with WSDOT stormwater effects analysis guidance. If exposure to listed fish species in the dilution zone cannot be discounted, a quantitative description is recommended. 5) Describe potential effects to hydrology (i.e., peak flows, base flows, flow durations, etc.) and in-stream conditions (i.e., bed and bank scour or erosion, channel stability, etc.) due to the proposed project.

☐ **Yes** ☑ **No**

MM-5. The project will not cause or contribute to bed or bank scour or erosion (channel instability), and will not measurably affect base, peak, or flow durations in any Threshold Discharge Area (TDA) or receiving waterbody.

☑ **Yes** ☐ **No**

MM-6. Stormwater will be infiltrated and/or dispersed when possible.

☑ **Yes** ☐ **No**

Aquatic Area Buffers Minimization Measures

MM-7. No contractor staging areas will be allowed within 200 feet of potentially suitable wetland, stream, estuarine, river or marine drainage as identified by the project biologist, unless site specific review completed by the project biologist indicates that no impacts to the sensitive resource areas will occur due to topography or other factors.

☑ **Yes** ☐ **No**

MM-8. Temporary material storage piles consisting of erosive materials will be placed outside the 100-year floodplain during the rainy season (October 1 through June 1) except for emergency projects, or unless site specific review completed by the project biologist indicates that topography or other factors preclude runoff from entering waterbodies containing listed fish species or their prey. Such temporary storage piles will be stabilized with plastic sheeting, straw bales, or other BMPs, to prevent sediment delivery to these waterbodies. Material to be used within 12 hours of deposition will not be considered a temporary material storage pile.

☑ **Yes** ☐ **No**

MM-9. All excavated materials will be removed to an upland location where they cannot enter the water body.

☑ **Yes** ☐ **No**

Vegetation Removal Minimization Measures

MM-10. To facilitate compliance with the Northwest Forest Plan Standards and Guidelines, WSDOT will coordinate with the appropriate Forest Service ranger district if tree removal, including dying, dead, or downed wood is proposed on lands identified in the plan

☐ **Yes** ☑ **No**

MM-11. WSDOT Designers will minimize removal of riparian vegetation and contractors shall replant riparian vegetation. Replanting may not be possible in permanent impact areas, the roadway clear zone, or adjacent to or under bridges. However, potential replanting of riparian vegetation near the site should be evaluated. The PBA Determination Form will provide the justification for the removal of riparian vegetation and will include the proposed planting plans, if applicable.

☑ **Yes** ☐ **No**

MM-12. Vegetation will only be grubbed from areas undergoing permanent alteration. No grubbing will occur in areas slated for temporary impacts. Exceptions to grubbing temporary impact areas can be made if the temporary area is currently covered by non-native or invasive species and will be replanted with native species.

☑ **Yes** ☐ **No**

MM-13. Disturbance to riparian vegetation from the operation of heavy equipment will be minimized as practicable by straddling it with heavy equipment or by pruning it without damaging the roots. Existing riparian vegetation outside of the work area will not be removed or disturbed.

☑ **Yes** ☐ **No**

In-Water Work Minimization Measures

MM-14. Seasonal restrictions applied to work conducted within or below the OHWM or MHHW, will follow requirements within the HPA issued by the Washington Department of Fish and Wildlife, and Water Quality Standards for Surface Waters of the State of Washington (Chapter 173-201A WAC). In-water work duration will be minimized as practicable.

☑ **Yes** ☐ **No**

MM-15. No temporary floating work platform will place its anchors or allow grounding in fish spawning areas in freshwater or in eelgrass, kelp, macro algae, or intertidal wetlands. Anchoring above beds or eelgrass, kelp, or macro algae will be kept to a minimum.

☐ **Yes** ☑ **No**

MM-16. Construction equipment will not enter any water body without authorization from the Washington Department of Fish and Wildlife, USFWS, and the NMFS. Equipment will be operated as far from the water's edge as possible.

☑ **Yes** ☐ **No**

MM-17. Anthropogenic debris from bridge demolition will be directed toward storage areas on land or barges. Bridge demolition will include sectioning the structure to the extent possible to provide for safer disposal and to minimize debris falling into surface waters.

☐ **Yes** ☑ **No**

Revegetation and Slope Stability Minimization Measures

MM-18. Erodible earth not being worked, whether at final grade or not, shall be covered within the specified time periods below, using an approved soil covering practice: Western Washington (west of the Cascade Mountain Crest) 1) from October 1 through April 30 erodible earth may be exposed without cover for a 2 day maximum, 2) from May 1 to September 30 for 7 days maximum. Eastern Washington (east of the Cascade Mountain Crest) 1) from October 1 through June 30 erodible earth may be exposed without cover for a 5 day maximum, 2) from July 1 to September 30 for 10 days maximum.

☑ **Yes** ☐ **No**

MM-19. Temporarily disturbed areas will be restored to pre-work conditions to the extent possible, including protecting existing root systems and allowing re-sprouting of herbaceous and woody plants. Native trees and shrubs will be used that are endemic to the project vicinity or region of the State where the activity is occurring.

☑ **Yes** ☐ **No**

MM-20. All exposed areas will be mulched and seeded with an approved native or noninvasive herbaceous seed mix following construction and/or planted with native woody vegetation and trees (if appropriate) during the first available planting season.

☑ **Yes** ☐ **No**

General Construction Minimization Measures

MM-21. Construction impacts will be confined to the minimum area necessary to complete the project.

☑ **Yes** ☐ **No**

MM-22. WSDOT Construction will clearly flag the boundaries of clearing limits to prevent disturbance outside of the limits. The contractor shall install high visibility fencing in accordance with WSDOT Standard Specifications.

☑ **Yes** ☐ **No**

Pollutant Protection Minimization Measures

MM-23. The contractor will use BMPs, as stated in their Spill Prevention Control and Countermeasures Plan, to ensure that no foreign material such as oil or fuel from construction equipment will enter any wetlands, flowing or standing water.

☑ **Yes** ☐ **No**

MM-24. All equipment will be fueled and maintained more than 200 feet from the nearest wetland, ditches, flowing or standing water, unless site specific review completed by the project biologist indicates that no impacts to the resource areas will result due to topography or other factors. Exceptions to this requirement are allowed for large cranes, pile drivers, and drill rigs if they cannot be easily moved.

☑ **Yes** ☐ **No**

MM-25. Equipment will be checked daily for leaks and will be well maintained to prevent lubricants and any other deleterious materials from entering waters of the State. Prior to entering the water or below the OHWM, all equipment will be free of any external petroleum products, hydraulic fluid, coolants, and other deleterious materials. Wash water will not be discharged to any water body without pre-treatment.

☑ **Yes** ☐ **No**

MM-26. All equipment entering waters that may be used by listed fish species and/or if the waters are critical habitat, will use vegetable oil or other biodegradable acceptable hydraulic fluid substitute, unless the project is an emergency action.

☑ **Yes** ☐ **No**

Concrete Work Minimization Measures

MM-27. For projects involving concrete, concrete truck chute cleanout areas will be established to properly contain wet concrete and wash water and prevent it from entering wetlands and other waterbodies.

☐ **Yes** ☑ **No**

MM-28. The contractor will protect all inlets and catchments from stormwater runoff from fresh concrete, tackifier, paving, or paint striping if inclement weather unexpectedly occurs.

☐ **Yes** ☑ **No**

MM-29. All concrete will be poured in the dry, or within confined waters not being dewatered to surface waters, and will be allowed to cure a minimum of 7 days before contact with surface water.

☐ **Yes** ☑ **No**

Access Roads and Bridges Minimization Measures

MM-30. The establishment and use of temporary access roads will meet the following conditions: 1) Existing roadways or travel paths will be used whenever they provide the needed access. 2) Where stream crossings are essential, the crossing design will accommodate reasonably foreseeable risks (such as flooding and associated bedload and debris) to prevent diversion of stream flow out of the channel and down the road in the event of a crossing failure. 3) Vehicles and machinery must cross riparian areas and streams perpendicular to the main channel unless site specific conditions require an alternate approach. 4) Vehicles and machinery will not cross within a wetted stream, unless necessary as part of an emergency action. The PBA Determination Form must state why avoidance of crossing a wetted stream is not possible if proposed as part of an emergency action.

☑ **Yes** ☐ **No**

MM-30 cont'd. 5) Temporary roads within 300 feet of streams will avoid, minimize, and mitigate soil disturbance and compaction by clearing vegetation to ground level, and placing clean gravel over geotextile fabric. 6) Vehicles and machinery operating below the OHWM (except if operating in the dry or during emergency actions) will use biodegradable hydraulic fluids and lubricants to reduce the potential impacts associated a potential oil spill or leak. 7) The number of stream crossings will be minimized.

☑ **Yes** ☐ **No**

MM-31. New stream crossing structures, including channel-spanning bridges, will not reduce the existing stream width.

☐ **Yes** ☑ **No**

Restrictions in Rainy Weather Minimization Measures

MM-32. No paving, chip sealing, or stripe painting will be initiated in rainy weather.

☐ **Yes** ☑ **No**

Bridge Work Minimization Measures

MM-17. Anthropogenic debris from bridge demolition will be directed toward storage areas on land or barges. Bridge demolition will include sectioning the structure to the extent possible to provide for safer disposal and to minimize debris falling into surface waters.

☐ **Yes** ☑ **No**

MM-33. Bridge construction will take place from the adjacent streambanks, existing bridges, barges, or temporary work bridges. Some work may be allowed within a dewatered channel or on a dry gravel bar with WDFW, NMFS and USFWS approval, but no equipment or vehicle staging will be allowed in these areas.

☐ **Yes** ☑ **No**

MM-34. Concentrated accumulations of bird feces, road grit, sand, and loose paint chips will be removed from bridges before dismantling unless such activities would result in a higher risk of materials entering the water. This material will be scraped, swept or vacuumed from the bridge structure and collected and disposed of at permitted and approved upland location. A 5.25 percent sodium hypochlorite solution may be used directly on residual accumulations of guano or fungus after prior dry cleaning and washing. Wash water from the sodium hypochlorite solution shall be full contained and not allowed to enter state waters.

☐ **Yes** ☑ **No**

Bridge Painting Minimization Measures

MM-35. For brush and/or roller paint applications, painters will work from pails containing a maximum of 2 gallons of paint to minimize the impact of accidental spillage, except for sealed containers that are part of a spray system.

☐ **Yes** ☑ **No**

MM-36. Cleaning of paint materials and maintenance equipment will not be done in or over waters of the State nor will resultant cleaning runoff be allowed to enter State waters.

☐ **Yes** ☑ **No**

MM-37. Drip pans or other protective devices will be required for all paint mixing and solvent transfer operations.

☐ **Yes** ☑ **No**

MM-38. Drip tarps will be suspended below paint platforms to prevent spilled paint, buckets, brushes, etc. from entering State waters.

☐ **Yes** ☑ **No**

MM-39. Residual grease will be removed by hand from bridges and roadways with a degreaser on absorbent-material to prevent cleaning agents and grease from entering waters of the State.

☐ **Yes** ☑ **No**

MM-40. Bridges will first be cleaned using dry methods and equipment. Debris accumulations on the bridge, road surface, and within the bridge drains will be collected or swept up and properly disposed of prior to fresh water flushing. Debris disposal will occur in approved locations above the limits of flood water or extreme high tide. Debris will not be placed in road drainages, wetlands, riparian areas, or on adjacent land where it may be transported into state waters. Flushing will involve the use of clean water only, to prevent detergents or other cleaning agents from entering waters of the State.

☐ **Yes** ☑ **No**

MM-41. Preparatory painting pressure washing of structures will be done using appropriate filter fabric to control and contain paint particles generated by the activity. Wash water will be fully contained when it would otherwise discharge to waters with listed fish species.

☐ **Yes** ☑ **No**

MM-42. During abrasive blasting of a steel bridge prior to painting, a containment system appropriate for the type and location of the bridge will be in place and maintained to prevent spent blast media from reaching State Waters. Spent blast media will be collected, sampled, designated for its hazardous waste content, and disposed of as appropriate for its waste designation at an approved and permitted site.

☐ **Yes** ☑ **No**

Sub-surface Sampling Minimization Measures

MM-44. Oil absorbent pads will be placed under the drill rig to catch and control spills during subsurface sampling when within 200 feet of waters containing listed fish species.

☑ **Yes** ☐ **No**

MM-46. For subsurface sampling all existing large woody debris will be left on or adjacent to the site if feasible.

☐ **Yes** ☑ **No**

MM-47. For subsurface sampling, no geared mechanisms (e.g., tires, tracks) will enter the wetted perimeter of a waterbody. Truck mounted and tracked drilling equipment will work from a location outside of the wetted perimeter unless working off of a temporary floating work platform or barge. The temporary floating work platforms will not ground on the bed of State waters.

☑ **Yes** ☐ **No**

Emergency Minimization Measures

MM-48. Report emergency actions to the NMFS/USFWS within one workday where listed fish species or other federally listed species are potentially present. Emergency activities should be limited to only those actions that are necessary to address the immediate emergency.

☑ **Yes** ☐ **No**

Bank Protection Minimization Measures

MM-49. If site-specific conditions allow, improve fish habitat by incorporating LWD into bank protection projects.

☑ **Yes** ☐ **No**

MM-50. Installation of riprap and other materials will occur from the banks or outside the wetted perimeter as much as possible.

☐ **Yes** ☑ **No**

MM-51. Project areas with existing riprap will be allowed to increase the lineal distance of the riprapped area below the OHWM by an additional 5 percent. If the project footprint needs to be increased beyond this, riprap placement will demonstrate consistency with the Integrated Streambank Protection techniques that are defined for WSDOT projects (see Working Document)

☐ **Yes** ☑ **No**

Work Area Isolation and Fish Handling Minimization Measures

MM-53. Listed fish species, including their forage fish, will be removed from the work area prior to any in-water work activities, unless removal would affect the individuals more than leaving them on-site. Fish exclusion activities will follow the most recent WSDOT protocol that has been approved by the NMFS and USFWS.

☑ **Yes** ☐ **No**

MM-54. Water pumped out of the isolated project area will be discharged to a temporary storage and treatment site or to upland areas and filtered through vegetation prior to reentering the stream channel.

☐ **Yes** ☑ **No**

MM-55. All intake pumps within fish bearing streams will have a fish screen installed, operated and maintained. Screening techniques must utilize the specifications in the HPA and be in compliance with RCW 77.55.010, RCW 77.57.040 and RCW 77.57.070 or the specifications in the NMFS Anadromous Salmonid Passage Facility Design manual (2008) and NMFS Fish Screening Criteria for Anadromous Salmonids (1997), whichever is more restrictive.

☑ **Yes** ☐ **No**

MM-56. Temporary diversion structures will be non-erosive (e.g., sand bags filled with clean gravel and covered with plastic sheeting, portable bladder dam).

☑ **Yes** ☐ **No**

MM-57. Temporary bypass systems will utilize non-erosive techniques, such as pipe or a plastic-lined channel that will accommodate the predicted peak flow rate during construction.

☑ **Yes** ☐ **No**

MM-58. Temporary bypass structures will have energy dissipaters at the outflow to prevent erosion.

☑ **Yes** ☐ **No**

MM-59. WSDOT Biologists will follow the WSDOT Fish Exclusion Protocols and Standards to conduct work area isolation, fish capture and removal, and dewatering/rewatering. Implementing these factors depends to some degree on local conditions and the professional judgment of the biologist. If block nets are in use, they will be checked 3 times daily. Flows shall be gradually reintroduced to the isolated work area, to prevent channel bed or bank instability, excessive scour, or turbidity and sedimentation. The directing biologist shall inspect the work area downstream reach to ensure no fish are stranded or in distress during reintroduction of flows.

☑ **Yes** ☐ **No**

MM-60. Upon completion of all in-water work, all stream diversion devices, equipment, pipe, and conduits will be removed and disturbed soil will be restored after diversions are removed. Streambank plantings may occur at a later date during the planting season.

☑ **Yes** ☐ **No**

MM-61. Projects will not inhibit passage of any listed fish species life stage following completion. When feasible, a bypass system will be installed during construction to permit both upstream and downstream passage of listed fish and their prey.

☑ **Yes** ☐ **No**

Cutting and Filling Minimization Measures

MM-66. Fill material will only be placed in specified and permitted locations. Fill placement may be permanent or temporary and will be located in a way that minimizes impacts to sensitive areas.
☑ **Yes** ☐ **No**

MM-67. Temporary fills must be entirely removed and the site restored to pre-existing contours.
☑ **Yes** ☐ **No**

Pile Installation/Removal Minimization Measures

MM-68. Installation of steel piles with an impact hammer in-water requires the use of a bubble curtain or other approved sound attenuation method(s) to minimize impacts within waterbodies that may be used by listed species, including marine mammals.
☐ **Yes** ☑ **No**

MM-69. No creosote-treated wood will be used below the OHWM.
☐ **Yes** ☑ **No**

MM-70. Any removed piling or other materials, including their waste water, will be fully contained and disposed of at a location with regulatory approval.
☐ **Yes** ☑ **No**

MM-71. For pile removal, direct pulling, vibratory removal, or cutting the piles below ground level will be prioritized to minimize localized turbidity. If using a clamshell bucket or other removal method is necessary due to pile breakage and the action will generate turbidity, the contractor shall employ a turbidity control BMP that is appropriate for that site.
☐ **Yes** ☑ **No**

MM-72. In tidally influenced areas, piles will be driven during slack tides whenever practicable.
☐ **Yes** ☑ **No**

MM-73. All treated wood will be contained during and after removal to preclude sediments and any contaminated materials from re-entering the aquatic environment. All contaminated materials will be disposed of at an approved and permitted disposal facility. No reuse of treated wood will occur.
☐ **Yes** ☑ **No**

MM-74. Sound pressure will be monitored per the approved WSDOT Hydroacoustic Monitoring Protocol for in-water pile driving to determine ambient conditions and the sound pressure generated during in-water impact pile driving of steel piles, including H-piles, and sheet piles. Sound pressure monitoring will occur for in-water work where listed fish species may be present. Monitoring results will be provided to the Service within 90 days following completion of pile driving.
☐ **Yes** ☑ **No**

Herbicide Use Minimization Measures

MM-75. Herbicides will not be used within 200 ft of listed fish species spawning and rearing streams unless site specific review completed by the project biologist and landscape architect indicates that topography or other factors preclude herbicides from reaching spawning and rearing stream occupied by listed fish species.

☑ **Yes** ☐ **No**

Geotechnical Investigations Minimization Measures

MM-47. For Geotechnical Drilling: No geared mechanisms (e.g., tires, tracks) will enter the wetted perimeter of a waterbody. Truck mounted and tracked drilling equipment will work from a location outside of the wetted perimeter unless working off a temporary floating work platform or barge. The temporary work platform will not ground on the bed of State waters.

☑ **Yes** ☐ **No**

Coordination with Other Federal Agencies Minimization Measures

MM-108. To facilitate compliance with the Northwest Forest Plan Standards and Guidelines, WSDOT will coordinate with the appropriate Forest Service ranger district if tree removal, including dying, dead, or downed wood is proposed on lands identified in the plan. Coordination will be documented within the PBA notification form.

☐ **Yes** ☑ **No**

MM-109. On National Forests and Parks that do not have a current agreement with WSDOT to use this PBA, the project biologist will contact appropriate Forest/Park staff and receive written approval to use the PBA. The Forest/Park may have additional conditions that will be followed.

☐ **Yes** ☑ **No**

Minimization Measures Documentation

Will the project use all applicable minimization measures?

☑ **Yes** ☐ **No**

Attachment 4 – Programmatic Biological Assessment - project notification form - U.S. Fish and Wildlife Service

WSDOT USFW Project Notification Form

Note: The proper version of this form must be submitted to either the National Marine Fisheries Service or the U.S. Fish and Wildlife Service (or both)for informal or formal projects. No effect projects are not submitted to the Services. See http://wwwi.wsdot.wa.gov/Environment/FishWildlife/

for submittal procedures.

Project Name:
SR 509/Clear Creek Stream Restoration Project

Submittal Date:
March 18, 2024

Work Order:
XL6735

WIN:
50907X

Project Location:

State Route 5, Mile Post 147.57 to 147.57
Geographical Coordinates: 47.36847600 / -122.29356400 to 47.36847600 / -122.29356400

Indicate Township / Range / Section
T 20 N, R 3 E, S 13 and 24

Indicate the federal nexus for the project
FHWA

County:
Pierce

Region:
Olympic

Project Biologist:

Dougherty, Logan, doughlo@consultant.wsdot.wa.gov, 425-456-8581
Washington State Department of Transportation (WSDOT) is required to comply with United States, et al. vs. Washington, et al. No. C70-9213 Subproceeding No. 0101 dated March 29, 2013, a federal permanent injunction requiring the State of Washington to correct fish barriers in Water Resource Inventory Areas (WRIAs) 1 through 23. WSDOT must also comply with Washington Administrative Code (WAC) 220-660-190 relating to the correction of fish passage barriers. WSDOT policy is to correct barriers if they fall within the footprint of a project if they meet certain criteria.

During the planning phases of the State Route (SR) 509 Stage 2 and the SR 167 Stage 2b projects, fish passage barriers were identified within the limits of the two projects that were not previously identified as barriers or on the federal injunction list. WSDOT worked closely with the Puyallup Tribe of Indians (PTOI) and Washington Department Fish and Wildlife (WDFW) on two of these barriers: WDFW ID 935070 and WDFW ID 105 R121519a due to the complexity of correction and limited habitat gain if the barriers were made passable. The PTOI, WDFW and WSDOT reached agreement to restore, enhance, and create habitat at Clear Creek as mitigation for leaving the barriers uncorrected. The SR 509/Clear Creek Stream Restoration Project will satisfy the injunction requirements for the culverts within the footprint of both projects. Therefore, the proposed action at the Clear Creek site will be permitted and constructed independently from the SR 509 Stage 2 and SR 167 Stage 2b projects because it is being undertaken to comply with the federal injunction.

Species Notes:

- The North American wolverine was listed as threatened on November 30, 2023, and shows up on the IPaC species list for the Project. The U.S. Fish and Wildlife Service's (USFWS) Statewide Programmatic Biological Opinion adopted the September 2023 wolverine conference opinion as the species concurrence for the Programmatic Agreement. Consistent with the conference concurrence, the Project will have a No Effect determination on North American wolverine because the Project is located outside of the Cascade Range.

- The Northwestern Pond Turtle is proposed for listing as threatened. The Project will not jeopardize the continued existence of Northwestern Pond Turtle. If the turtle is listed prior to construction, the project will have a provisional no effect determination.

Reviewing Biologist:

Form Completed Date:

WRIA:
10: Puyallup - White

6th Field Hydrologic Unit Code (HUC) Name
Puyallup River

6th Field HUC number
171100140502

Site Visit Date:
November 16, 2023

Explain and summarize Early Coordination activities with the Services:
A pre-BA meeting was held with Federal Highway Administration (FHWA), WSDOT, U.S. Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS) representatives on November 16, 2023, to review project information, proposed footprint, and provisional determinations for listed species. Attendees included: Cindy Callahan (FHWA), George Ritchotte (NMFS and USFWS liaison), Ryan Boyle, Maki Dalzell, Jeff Dreier, Logan Dougherty, Leah Erickson, and Joel Widmer (WSDOT).

Date to Begin Early Coordination:
October 24, 2023

Have there been any design or construction method changes since Early Coordination that could affect your consultation and have not been discussed with liaisons prior to project submittal?
☐ **Yes** ☑ **No**

Date Early Coordination is Complete
December 19, 2023

For USFWS jurisdiction species and critical habitats, this is a:
Formal Consultation

Does the project meet the conditions of the NMFS programmatic biological assessment?
☑ **Yes** ☐ **No**

Does the project meet the conditions of the USFWS programmatic biological assessment?
☑ **Yes** ☐ **No**

Is this a reference biological assessment for USFWS?
☐ **Yes** ☑ **No**

Is this an after the fact consultation for the USFWS?
☐ **Yes** ☑ **No**

Will this project be submitted Fast Track for the NMFS?
☐ **Yes** ☑ **No**

Will this project be submitted Fast Track for the USFWS?
☐ **Yes** ☑ **No**

Effect determinations for USFWS species and critical habitats that can occur in the project action area:

No Effect:
Marbled Murrelet
Streaked Horned Lark
Taylor's Checkerspot Butterfly
Western Yellow-billed Cuckoo

Adversely Affect:
Bull Trout

USFWS IPaC number for project
2024-0039813

Check all project activities that apply (for both NMFS and USFWS projects)

Upland vegetation removal & management
Riparian and Wetland Vegetation Removal and Management
In-Water Excavation
Work Area Exclusion and Dewatering
Geotechnical Sampling
Heavy equipment operation
Cut and fill operations
Fish Handling
Debris Removal

Check all project activities that apply (USFWS projects only)

Fish Passage
Environmental Retrofit and Enhancement

Project action area:

The terrestrial component of the action area is defined by the geographic extent of visual and noise-related disturbance associated with the SR 509/Clear Creek Stream Restoration Project (Project). Using the rules for decibel addition, the noise level for the proposed construction activity is expected not to exceed 106 dBA (A-weighted decibel). The construction noise is based upon the Project activities and the three loudest pieces of construction equipment expected to be used, which are noted in the equipment list section of this Project Notification Form (vibratory pile driver - 105 dBA, pavement grinder - 97 dBA, and jackhammer - 95 dBA).

Based on the population density of the Waller area of Pierce County, the existing background (ambient) noise level is estimated to be 45 dBA. The speed limit in the Project area on Pioneer Way East is 40 miles per hour (mph). The 2019 WSDOT Annual Traffic Geoportal lists the annual daily traffic (ADT) on Pioneer Way East as 11,770 vehicles per day. Therefore, vehicles per hour can be estimated as 10 percent of 11,770 vehicles per hour based on the WSDOT guidance. A roadway with 1,170 vehicles per hour at 40 mph traffic speed has a traffic noise level of approximately 48.8 dBA.

Soft forest site conditions are assumed to be present in the vicinity of the Project area. Based on the WSDOT guidance, base 10-Log equations are used to calculate noise levels at a specific distance from the source to determine the distance that construction noise will travel before it attenuates to the traffic noise level and the distance at which construction or traffic noise will attenuate to background noise levels. Using the equations, traffic noise is not expected to be distinguishable from the background noise level at approximately 100 feet, and construction noise levels attenuate to the background noise levels at approximately 3,605 feet. As a result, the extent of Project related noise is estimated at approximately 3,605 feet.

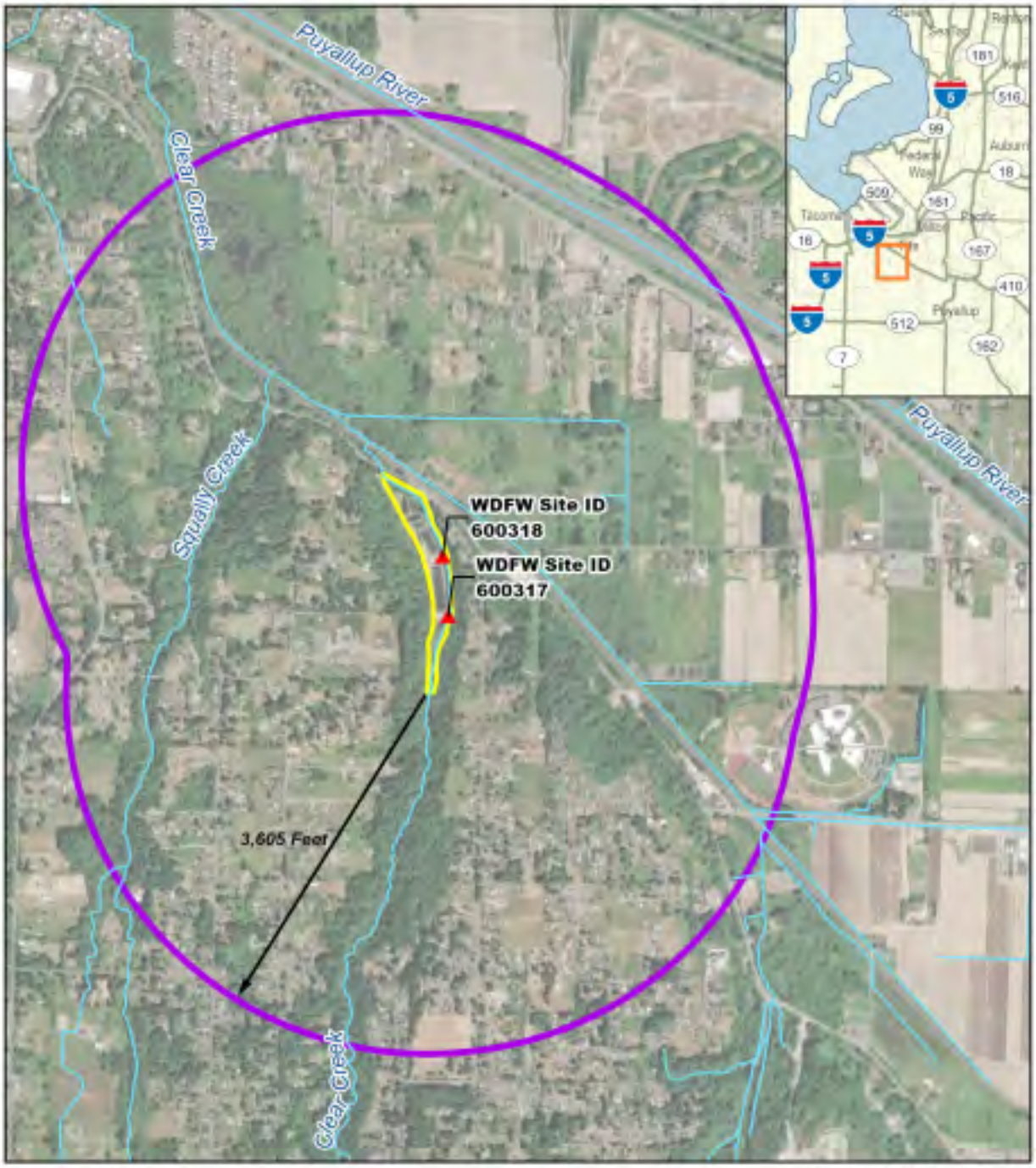
The aquatic portion of the action area is defined by the extent of in-water work, including related turbidity, and upstream habitat gain. Chapter 173-201A-200 (1)(e)(i) of the WAC allows for a sediment mixing zone not to exceed a specified distance downstream of the Project footprint based on the characteristics of the waterbody at the proposed time of construction. In-water activities for the Project would occur during the published in-water work window (July 16 - August 31). Clear Creek has a mean annual flow rate exceeding 10 cubic feet per second (cfs) but less than 100 cubic feet per cfs. WAC states that for waters with a flow between 10 cfs and 100 cfs at the time of construction, the point of compliance is 200 feet downstream from the activity causing the turbidity exceedance. Therefore, the downstream extent of the aquatic component of the action area is 200 feet downstream of the construction activity locations. The upstream extent of the aquatic component of the action area includes at least 13,700 linear feet of upstream habitat gain.

Attach map and photographs:






WDFW Site ID
600318
WDFW Site ID
600317
Clear Creek
WDFW Site ID
600318
WDFW Sites
Stream
Turbidity Limits (200 feet)
Upstream Gain (13,700 feet)
Project Location
WSDOT
Aquatic Project Action Area
SR 509/Clear Creek Stream Restoration Project
0 500 1,000 1,500
Feet
Data Sources: Esri, USGS, WSDOT (2024)


Puyallup River
Clear Creek
Squally Creek
WDFW Site ID
600318
WDFW Site ID
600317
3,605 Feet
Clear Creek
Puyallup River
WDFW Sites
Terrestrial Noise Action Area (3,605 feet)
Project Location
Terrestrial Project Action Area
SR 509/Clear Creek Stream Restoration Project
WSDOT
0 500 1,000 1,500
Feet
Data Sources: Esri, USGS, WSDOT (2024)

Project Description:
WSDOT proposes to construct the SR 509/Clear Creek Stream Restoration Project (Project) that will remove two fish-passage barriers on Clear Creek and restore stream functions at the Project site. The Project site is within the Puyallup-White watershed (WRIA 10), and is located at 4008 Pioneer Way East on privately-owned parcels in the Puyallup Tribe reservation in unincorporated Pierce County, Washington. The Project site is owned and operated by Troutlodge fish hatchery located along Clear Creek, a tributary of the Puyallup River. The two existing fish passage barriers (dams) on site are located at river mile 1.9 (WDFW IDs 600317 and 600318).

All of the fish hatchery infrastructure will be removed, restoring the basin to its historic alluvial condition and opening up at least 13,700 linear feet of high-quality rearing and spawning habitat that has been unreachable for several decades. Aquatic habitat will be enhanced with installation of large woody material (LWM), creation of new side-channel habitat, expanded floodplain for rearing habitat, and riparian vegetation for improved stream shading and nutrient input. The proposed actions will restore natural stream processes, including sediment transport, LWM transport, marine derived nutrient input above the dam locations, floodplain interaction, and channel migration.

The Project includes the following major work elements:
- **Remove all existing in-water concrete structures, including two fish passage barriers**
- **Remove existing fish hatchery structures, including operational building(s), storage shed(s), fish hatchery rearing ponds, and other auxiliary structures**
- **Re-grade the existing Clear Creek stream channel and regrade the floodplain to mimic historic conditions**
- **Construct habitat-enhancement elements, including placement of LWM, creation of habitat berms, and development of beaver-analog ponds**
- **Clear existing invasive vegetation and replant native riparian and upland vegetation**

WSDOT will acquire the privately owned hatchery parcels and will establish permanent easements at the stream edge for three adjacent residential parcels. The Project is scheduled to be constructed between 2026 and 2028.

Project Equipment List
Equipment to be used on the Project would include, and not be limited to: dump trucks, cranes, excavators, skid loaders, dozers, auger drill rigs, drill rig trucks, backhoes, jackhammers, concrete grinders, concrete saws, generators, hand power tools, pumps, and a vibratory pile driver.

Indicate equipment that will be working below the ordinary high water mark (OHWM) in a wetted channel.
The equipment working in the wetted channel would include fish exclusion gear, pumps, hand tools, sandbags, and a chainsaw. Prior to in-water work, fish exclusion gear, pumps, and stream diversion equipment will be used to exclude fish and dewater the work area.

Is this an emergency project?
☐ **Yes** ☑ **No**

Does the project have any USFWS listed species or critical habitats on the county list? If no, then no effect for USFWS.
☑ **Yes** ☐ **No**

Does the project have any USFWS listed species or critical habitats in the mapped project area on IPaC (you can use an unofficial list if you think you have a no effect project)? If no, then no effect. Fill in the remaining required fields and the minimization measures and print the USFWS no effect form. If yes, continue with the rest of the form.
☑ **Yes** ☐ **No**

Does the project have sensitive habitats (within 200 feet of wetlands or surface waters) where staging, refueling, or other activities should be restricted?
☑ **Yes** ☐ **No**

Indicate mileposts within project area where restrictions apply.
Not applicable. Project is not located along a transportation corridor.

Will the project have construction equipment operating within the wetted channel of any waterbody?
☑ **Yes** ☐ **No**

Will detours be used?
☐ **Yes** ☑ **No**

Will the project include work at night?
☐ **Yes** ☑ **No**

Will artificial lights be used over or adjacent to an aquatic area?
☐ **Yes** ☑ **No**

Will blasting occur?
☐ **Yes** ☑ **No**

Will impact pile driving occur?
☐ **Yes** ☑ **No**

Will piles be removed on the project?
☐ **Yes** ☑ **No**

Is the project for slide abatement and repair?
☐ **Yes** ☑ **No**

Will cutting or filling occur?
☑ **Yes** ☐ **No**

Indicate cut area (excavated area) above the ordinary high water mark (OHWM).
Area: 3.6 acres (156,820 square feet)

Indicate cut area (excavated area) below the ordinary high water mark.
Area: .92 acres (40,080 square feet)

Indicate fill area above the ordinary high water mark (OHWM)
Area: .81 acres (35,290 square feet)

Indicate fill area below the ordinary high water mark (OHWM)
Area: .56 acres (24,400 square feet)

Will cutting or filling occur within 300 ft of a water body that has listed aquatic species or their habitat?

☑ **Yes** ☐ **No**

Will any soils be exposed?
☑ **Yes** ☐ **No**

What is the erosion potential?
Medium

Will bare soils be revegetated or hydroseeded after construction?
☑ **Yes** ☐ **No**

Describe the proposed methods.
The Project will have a Temporary Erosion Sediment Control plan with site specific best management practices (BMPs). Erosion control BMPs may include stabilized construction entrances, straw ground cover, straw wattles, silt fence, compost socks, or erosion control blankets to stabilize soils in the project area. After the project, disturbed areas will be re-vegetated with appropriate native vegetation.

Project Timing

Construction Start Date
January 1, 2026

Construction End Date
December 31, 2028

Total Working Days
1,003

Will the project need a Hydraulic Project Approval (HPA) or have an aquatic zone of impact requiring in-water work?
☑ **Yes** ☐ **No**

Will the project use a WDFW published in-water work window?
☑ **Yes** ☐ **No**

Begin of in-water work window
July 16, 2026

End of in-water work window
August 31, 2028

Project Aquatic Habitat Impacts

Elevated pollutant delivery (non-sediment)?
☐ **Yes** ☑ **No**

Will there be elevated sediment/turbidity?
☑ **Yes** ☐ **No**

Estimate the lineal extent of stream or shoreline that will be exposed to elevated turbidity (ft).
2,810

Explain
The lineal extent of stream exposed to elevated turbidity includes the entire channel grading and channel improvements lengths and downstream impacts. There will be temporary increase in turbidity from the installation and removal of block nets for fish exclusion and the stream diversion. The length of the regraded channel is 1,800 feet. An additional 780 feet of stream channel will be dewatered to allow for the installation of stream improvements downstream of the regraded segment, as well as approximately 30 feet for fish exclusion and stream diversion installation. The downstream distance of elevated turbidity includes 200 feet downstream from the end of the stream diversion location, to account for elevated sediment and turbidity levels during construction.

Will riparian habitat functions be altered?
☑ **Yes** ☐ **No**

Explain
The Project would temporarily affect approximately 1.2 acres of riparian vegetation to allow for the removal of the existing dams, regrade of the stream channel, and construction of new side channels and new spring flow channel. Disturbed areas will be replanted with native woody species. Approximately 0.09 acres of riparian vegetation will be permanently removed. This vegetation will be replaced by new stream channel segments.

Will there be elevated surface water temperature?
☑ **Yes** ☐ **No**

Explain
The Project would temporarily affect existing woody vegetation within the project footprint. The Project may temporarily increase surface water temperatures in the Clear Creek until the planted woody vegetation matures. Conversely, the Project may create decreased surface water temperature, as stream water will no longer be diverted from Clear Creek and made to flow through the fish hatchery rearing pond raceways before being returned to the stream.

Will there be substrate disturbance?
☑ **Yes** ☐ **No**

Indicate disturbed area if known
Area: 2.096 acres (91,290 square feet)

Explain.
Due to the Project's removal of two water surface drop barriers, the Project will regrade 1,800 linear feet of stream channel to restore the natural, continuous grade that will allow fish passage.

Will substrate disturbance mobilize contaminants?
☐ **Yes** ☑ **No**

Will there be loss of benthic invertebrate habitat and potential food web effects?
☑ **Yes** ☐ **No**

Indicate area of benthic invertebrate habitat disturbance
Area: 2.096 acres (91,290 square feet)

Explain.
Benthic invertebrates in the existing channel would be temporarily impacted due to in-water work. However, impacts to benthic invertebrates are considered minor and temporary as benthic organisms are known to be resilient to habitat disturbance and are likely to recolonize quickly into the new channel location. Benthic invertebrates would be expected to make a full recovery to existing conditions shortly after the construction is complete.

Will there be elevated in-water noise from pile driving?
☐ **Yes** ☑ **No**

Fish harm or harassment from in-water work or handling?
☑ **Yes** ☐ **No**

Explain.
The work area within OHWM will be isolated prior to the fish barrier correction work. WSDOT biologists will follow the current WSDOT Fish Exclusion Protocols and Standards for safe capture and removal of fish from the isolated work area.

Will there be effects on fish migration?
☑ **Yes** ☐ **No**

Will project actions reduce the channel width, or block a shoreline migration use area, and if so, how much of channel/shoreline area (%) is available for fish movement?
The Project actions will dewater the stream channel during the temporary stream diversion. There will be no channel width available for fish movement while the temporary stream diversion is in place.

Explain.
During construction, approximately 1,000 feet of existing fish habitat will be dewatered. This is the distance from the downstream extent of dewatered channel to the first fish passage barrier. By removing the fish passage barriers, the Project will create access to at least 13,700 linear feet of upstream habitat gain.

Will there be impacts to wetlands that have fish habitat?
☐ **Yes** ☑ **No**

Will there be permanent or temporary fish habitat displacement?
☑ **Yes** ☐ **No**

Explain.
Fish habitat would be temporarily displaced by the stream diversion required to allow construction to take place within the channel. Habitat access will be restored when correction of the fish barriers is complete, and the new channel is constructed. The displacement of habitat in the existing channel would be replaced by the construction of the new channel.

Will there be altered water quality delivery, such as a change to a stormwater conveyance structure?
☐ **Yes** ☑ **No**

Will there be streambank/shoreline habitat loss/modification or reduced habitat connectivity?
☐ **Yes** ☑ **No**

Will natural stream processes and/or floodplains be altered?
☑ **Yes** ☐ **No**

Explain.
Within the Project area, Clear Creek has been constrained by riprap, eco-blocks, and concrete walls, which has isolated the stream from its floodplain. The Project will remove these constraints and allow the stream to re-engage with its floodplain.

Will the project have beneficial effects?
☑ **Yes** ☐ **No**

Explain.
Regrading activity will restore the natural channel slope/gradient and will create fish access to at least 13,700 linear feet of upstream habitat gain. New side channels will be created upstream of the dam for additional habitat and to increase channel diversity. WSDOT also plans to remove existing weirs and revetments in this area and install LWM and native vegetation along the channel. Along the main channel and the side channel, native vegetation will be planted to provide shading and nutrient input, and to create ecological diversity along the banks. In addition, WSDOT plans to create rearing habitat in the downstream channel south of Pioneer Way East by creating additional floodplain storage, placing LWM along the channel, and planting native vegetation.

Stream connectivity will be restored through channel grading work and riparian planting along the channel. The proposed activities at the site would improve habitat conditions along the channel, allow sediment transport, and provide direct connection for fish or other organisms at the downstream restoration sites to the upstream habitat.

If project removes a fish barrier, indicate length of fish habitat gain on the stream (feet)
13,700

Fish Habitat Improvement

As part of the project, check all that apply:

Water quality improvements will occur to waters with listed species.
Fish barriers will be eliminated.
Revegetation of streambanks or riparian areas will occur.
Large woody debris or habitat structures will be placed in streams.
Fish habitat will be created.

Please describe:
WSDOT plans to remove two existing dams, regrade upstream and downstream of the dams, and install habitat features along the channel to restore stream processes. Regrading activity will restore the natural channel slope/gradient. New side channels will be created upstream of the dam for additional habitat and to increase channel diversity. WSDOT also plans to remove existing weirs and revetments in this area and install LWM and native vegetation along the channel. Along the main channel and the side channel, native vegetation will be planted to provide shading and nutrient input, and to create ecological diversity along the banks. In addition, WSDOT plans to create rearing habitat in the downstream channel south of Pioneer Way East by creating additional floodplain storage, placing LWM along the channel, and planting native vegetation.

Stream connectivity will be restored through channel grading work and riparian planting along the channel. The proposed activities at the site would improve habitat conditions along the channel, allow sediment transport, and provide direct connection for fish or other organisms at the downstream restoration sites to the upstream habitat.

Will large woody material (LWM) be removed from the site?
☐ **Yes** ☑ **No**

Environmental Setting

Baseline Conditions. Document general baseline conditions in the action area as they relate to the proposed action and effects. Discuss surrounding land use if appropriate.
The Project site is currently privately-owned and operated as a fish hatchery. The project area contains gravel roadways, several buildings, concrete fish rearing ponds, and sediment settling ponds. Minimal native vegetation is present in areas proposed for restoration. Land use in the action area surrounding the Project area includes forested hillslope, riparian, rural residential, and some agricultural use.

Clear Creek has a drainage area of approximately 1,990 acres. The watershed contains two forks, East Fork Clear Creek and West Fork Clear Creek, which come to a confluence approximately 1 mile upstream of the Project area. A wide variety of different land cover is observed within Clear Creek's watershed including Low Intensity and Open Space Developed Land, Pastures, and Forest.

Downstream of the Project area, Clear Creek passes underneath the Pioneer Way East culvert (WDFW Site ID 105 R031616a) and a Burlington Northern Santa Fe Railway railroad crossing (WDFW Site ID 105 R031616a1). From there, Clear Creek flows northwest into the historical Puyallup River floodplain. Squally Creek and Swan Creek both converge with Clear Creek in this stretch. At the confluence with the Puyallup River, there is a tidal gate operated by the Port of Tacoma (WDFW Site ID 990083), which prevents the Puyallup River from backing up into the Clear Creek channel.

Describe the vegetation in the project action area:
The east side of Clear Creek is bordered by a densely forested hillslope with an overstory of western redcedar (Thuja plicata), Douglas-fir (Psuedotsuga menziesii), and red alder (Alnus rubra) rooted near the streambed. The understory is dominated by osoberry (Oemleria cerasiformis), salmonberry (Rubus spectabilis), vine maple (Acer circinatum), and western swordfern (Polystichum munitum).
Upstream of the fish hatchery infrastructure, the west bank is bordered by a similar forested hillslope. Adjacent to the fish hatchery infrastructure, the west bank is bordered by a thin stretch of vegetation dominated by Himalayan blackberry (Rubus armeniacus). Apart from this blackberry, the fish hatchery is maintained clear of vegetation.

Habitat in the project action area
30% Riparian, 10% Coniferous Forest, 10% Mixed Forest, 10% Wetlands, and 40% Developed

Do streams, rivers, or other waterbodies occur in the project action area?
☑ **Yes** ☐ **No**

Provide names of major streams/creeks in action area and describe spawning gravels, embeddedness, riparian cover, refuge area riffles, etc. Focus on areas where impacts may occur. If the stream is a tributary of a larger stream or river, indicate distance to nearest confluence.
Clear Creek is the primary stream in the action area, and flows into the Puyallup River approximately 2 miles downstream of the Project.

Within the stream length that will be impacted, there are five distinct sub-reaches of channel. Upstream of the dams are the sediment weir and sediment basin sub-reaches. Between the dams is the armored conveyance sub-reach. Downstream of the dams are the armored bank and low gradient sub-reaches. These sub-reaches are described below.

Sediment weir: This sub-reach is located at the upstream extent of the Project area. Within this reach, sediment is detained; cobbles and gravels are trapped within the sediment weirs. The channel is a semi-stable, braided channel. Clear Creek has been artificially widened, by pulling the hillslopes back by retaining walls. There is a lack of LWM and slash through the reach. The riparian forest provides good stream shade.

Sediment basin: This sub-reach spans downstream of the sediment weirs, where Clear Creek widens, to the upper dam. At the upstream, the stream transitions from a ravine-like setting to a wide opening on the valley floor. In this wider section of Clear Creek, a portion of sands and fines begin to settle out of the water due to decreased velocities from the upper dam. These fines settle immediately upstream of the dam and in the sedimentation pond. Through this reach, there are no features to increase stream complexity. Existing conditions challenge fish life in this sub-reach, even ignoring the fish passage barrier of the upper dam. LWM is absent and the stream is straight and widened with limited sinuosity, and this area is only partially shaded.

Armored conveyance: Between the upstream and lower dams, Clear Creek becomes channelized by a retaining wall along the left bank of the channel. A segment of the stream is lined with asphalt while other segments have riprap in them. Through this reach, the stream has little channel complexity due to the lack of LWM and meanders. This segment is well-shaded by mature trees on the east bank of Clear Creek.

Armored bank: This reach is located immediately downstream of the lower dam. Significant levels of bed armoring are present in this reach. Within this sub-reach, Clear Creek is confined with erosion-resistant bed material due to the armoring. Excess amounts of stream power results in armoring to occur in the stream bed by eroding fines, preventing fines from depositing, and leaving cobbles and gravels in the stream. Additionally, there is riprap added to the banks, preventing any erosion from occurring.
There is a lack of LWM or slash within the stream. Reed canarygrass (Phalaris arundinacea) is located on the overbanks on each side of the stream.
The existing conditions challenge fish life. The reach does offer patches of spawning gravels, on the coarser end of the preferred range. The absence of large or smaller woody material and the armoring of the banks deprives the reach of any areas of moderate flows or sheltering habitats for rearing juveniles.

Low gradient: This sub-reach is immediately upstream of the Pioneer Way East crossing. The slope within this sub-reach flattens out and the stream power is limited. Large amounts of sands and fines deposit into this section of Clear Creek. Reed canarygrass confines and hardens the channel banks.
LWM is present within the stream and slash is wracked on the LWM. Reed canarygrass lines the banks and traps fine sands and silts there. The terraces support riparian shrubs and trees, providing thorough shade in this segment. The reach lacks spawning gravels due to the abundance of fines in the channel substrate. The presence of large and smaller woody material offers shelter to rearing juveniles and a source of macroinvertebrate foods.

Squally Creek, a tributary to Clear Creek, also falls within the action area. Squally Creek flows into Clear Creek approximately 0.3 mile downstream of the Project area. No impacts to Squally Creek are proposed.

Indicate rivermile if appropriate
The dams are located at rivermile 1.9.

Project Impacts to Streambank, Streambed, and Shoreline

Will there be riprap placement in the project area along streambanks or shorelines ?
☐ **Yes** ☑ **No**

Will work on streambanks or shorelines improve fish habitat?
☑ **Yes** ☐ **No**

Describe the proposed work:
The Project will remove two dams, bank armoring, and other in-water concrete structures from Clear Creek. This will create access to at least 13,700 linear feet of fish habitat. The Project will regrade 1,800 linear feet of streambed within the Project area, which will restore the natural channel slope/gradient. New side channels will be created upstream of the dam for additional habitat and to increase channel diversity. Along the main channel and the side channel, native vegetation will be planted to provide shading and nutrient input and to create ecological diversity along the banks. In addition, WSDOT plans to create rearing habitat in the downstream channel south of Pioneer Way East by creating additional floodplain storage, placing LWM along the channel, and planting native vegetation.

Will the stream bed, lake bed or marine bed be disturbed?
☑ **Yes** ☐ **No**

What is the area of disturbance?
Area: 2.096 acres (91,290 square feet)

Will all materials, such as riprap or gravel, placed within the water be free of rock fines, silt, soil, or other extraneous material? An exception to the presence of fines is permitted if they are required as part of channel bed reconstruction.
☐ **Yes** ☑ **No**

Explain why materials with fines will be allowed into state waters.
Channel bed reconstruction will take place. Material used for stream reconstruction will be derived from on-site material and may therefore include rock fines, silt, soil, or other extraneous material. The streambed material will be watered in before stream flow is allowed to be diverted into the new channel segments.

For fish passage projects with USFWS listed species, does the stream have an incised channel profile (longitudinal profile downstream from culvert is offset below upstream profile by 1 foot or more)

☑ **Yes** ☐ **No**

For fish passage projects with USFWS listed species, are there incision issues other than a localized scour hole at the outlet of an existing undersized culvert?
☑ **Yes** ☐ **No**

Pollution Generating Impervious Surface

Will the project create new PGIS?
☐ **Yes** ☑ **No**

Fish Handling

Will the project have fish handling?
☑ **Yes** ☐ **No**

Indicate all that apply

Seining
Herding
Electrofishing

Will an HPA be needed?
☑ **Yes** ☐ **No**

Number of days with in-water work
141

Project Terrestrial Impacts

Total permanent vegetation impact area (all vegetation types including riparian)
Area: 4,000 square feet (.092 acres)

Total temporary vegetation impact area (all vegetation types)
Area: 1.223 acres (53,260 square feet)

Total vegetation impact area (all vegetation types)
Area: 1.315 acres (57,260 square feet)

Will the project have riparian vegetation impacts?
☑ **Yes** ☐ **No**

Temporary riparian impact area
Area: 1.223 acres (53,260 square feet)

Permanent riparian impact area
Area: 4,000 square feet (.092 acres)

Total riparian impact area.
Area: 1.315 acres (57,260 square feet)

If you are removing mature trees in the riparian zone, describe the species and approximate tree size and number removed
Approximately 30-40 mature trees in the riparian zone will require removal to allow for the dam removal and channel bed reconstruction to take place. The trees will remain on-site and be used for LWM. The trees requiring removal will mainly consist of Western redcedar (Thuja plicata), Douglas fir (Pseudotsuga menziesii), and red alder (Alnus rubra). The trees range in size from approximately 8 to 24 inch diameter at breast height (DBH).

Area of on-site riparian restoration
Area: 1.223 acres (53,260 square feet)

USFWS Listed Species/Critical Habitat Impacts & Effect Determinations

Only fill out the USFWS species that are on your IPaC list. Leave the others blank.

Marbled Murrelet

The programmatic will provide formal coverage for marbled murrelet

After mapping your project in IPaC, was marbled murrelet on the species list returned by IPaC?

☑ **Yes** ☐ **No**

Is the project located within 70 miles of marine waters?

☑ **Yes** ☐ **No**

Will the project have night work or a combination of night work and daytime work in marbled murrelet suitable habitat during sensitive nesting periods?

☐ **Yes** ☑ **No**

Is the project located within a covered mapped city boundary? If the project has multiple areas, all must be within municipal city boundaries to answer yes. Projects within Port Angeles are analyzed like any other project within the 55 mile zone from marine waters.

☐ **Yes** ☑ **No**

Does the project have suitable murrelet habitat either within the action area, or within 0.25 mile of disturbance activities, or 1 mile for blasting?

☐ **Yes** ☑ **No**

Will the project include removal of suitable marbled murrelet habitat outside of critical habitat, and create a canopy gap, either within or outside of the nesting season?

☐ **Yes** ☑ **No**

Effect Determination:
No Effect

Rationale
The Project will have No Effect on marbled murrelet because there is no suitable habitat present in the Project Action Area.

Marbled Murrelet Critical Habitat

The programmatic will provide formal coverage for marbled murrelet critical habitat.

Is critical habitat located within the project action area? If not, is it within 0.5 mile of suitable habitat that is also within a critical habitat unit?

☑ **No** ☐ **Yes**

Northern Spotted Owl

The programmatic will provide formal coverage for n. spotted owl

After mapping your project in IPaC, was n. spotted owl on the species list returned by IPaC?

☑ **No** ☐ **Yes**

Northern Spotted Owl Critical Habitat

The programmatic will provide formal coverage for n. spotted owl critical habitat.

Is critical habitat located within the project action area or is critical habitat adjacent to the action area?

☑ **No** ☐ **Yes**

Bull Trout

The programmatic will provide formal coverage for bull trout

Is the project located in a county where bull trout is on the USFWS species list?

☐ **No** ☑ **Yes**

After mapping your project in IPaC, was bull trout on the species list returned by IPaC?

☑ **Yes** ☐ **No**

Is the project within 500 feet of mapped bull trout spawning/rearing or FMO habitat? If yes, and there are quantified amounts below (take), the project is likely to have adverse effects to bull trout. If no, and the project site is accessible to bull trout, then the project is not likely to adversely affect bull trout.

☐ **Yes** ☑ **No**

Comments

Bull trout spawning/rearing habitat is not mapped within 500 feet of the Project area, however, bull trout can access the Project site.

Effect Determination:

Adversely Affect

Rationale

The work area within OHWM will be isolated prior to the fish barrier correction work. WSDOT biologists will follow the current WSDOT Fish Exclusion Protocols and Standards for safe capture and removal of fish from the isolated work area, which may include fish handling of bull trout.

Bull Trout Critical Habitat

The programmatic will provide formal coverage for bull trout critical habitat.

Is the project located within designated critical habitat?

☑ **No** ☐ **Yes**

Columbian White-Tailed Deer

The programmatic will provide informal coverage for Columbian white-tailed deer. Projects with adverse effects must do individual consultations on CWT deer.

Is the project located in a county where Columbia white-tailed deer is on the USFWS species list? CWTD are generally located in Wahkiakum, Clark or Cowlitz Counties.

☑ **No** ☐ **Yes**

Woodland Caribou

The programmatic will provide informal coverage for Woodland Caribou

Is the project located in Pend Oreille or Stevens Counties?

☑ **No** ☐ **Yes**

Pygmy Rabbit

The programmatic will provide informal coverage for Pygmy Rabbit

Is the project within the historic range of the pygmy rabbit (portions of Douglas, Grant, Lincoln, Adams, Franklin, or Benton Counties) or the current range (Douglas and Grant Counties)?

☑ **No** ☐ **Yes**

Canada Lynx

The programmatic will provide informal coverage for Canada Lynx

Is the project located in a county where Canada lynx is on the USFWS species list? These areas are located within the montane areas of the Okanogan highlands or the Cascade Mountains.

☑ **No** ☐ **Yes**

Gray Wolf

The programmatic will provide informal coverage for gray wolf

Is the project located in a county where gray wolf is on the USFWS species list?

☑ **No** ☐ **Yes**

Grizzly Bear

The programmatic will provide informal coverage for Grizzly Bear

Is the project located in a county where grizzly bear is on the USFWS species list?

☑ **No** ☐ **Yes**

Western Snowy Plover

The programmatic will provide informal coverage for W. Snowy Plover

Is the project located in Pacific or Grays Harbor counties?

☑ **No** ☐ **Yes**

Western Snowy Plover Critical Habitat

The programmatic will provide informal coverage for W. Snowy Plover Critical Habitat.

Does the project action area overlap with designated critical habitat in Grays Harbor or Pacific Counties?

☑ **No** ☐ **Yes**

Streaked Horned Lark

The programmatic will provide informal coverage for Streaked Horned Lark

Is streaked horned lark on the county list, or does the activity occur in Pierce, Thurston, Mason, Grays Harbor, Pacific, Wahkiakum, or Cowlitz Counties?

☐ **No** ☑ **Yes**

After mapping your project in IPaC, was streaked horned lark on the species list returned by IPaC?

☑ **Yes** ☐ **No**

Will there be ground disturbing activities (either permanent or temporary) to potential suitable nesting habitat during the breeding or non-breeding season as identified by the project biologist?

☐ **Yes** ☑ **No**

Will the project have visual or noise disturbance in streaked horned lark potential nesting habitat from April 15 to August 31?

☑ **No** ☐ **Yes**

Effect Determination:
No Effect

Rationale:
The Project will have No Effect on streaked horned lark because there is no suitable habitat present in the Project Action Area.

Streaked Horned Lark Critical Habitat

The programmatic will provide informal coverage for Streaked Horned Lark critical habitat.

Is streaked horned lark critical habitat on the county list, or does the activity occur in Pierce, Thurston, Mason, Grays Harbor, Pacific, Wahkiakum, or Cowlitz Counties?

☑ **No** ☐ **Yes**

Taylor's Checkerspot Butterfly

The programmatic will provide informal coverage for Taylor's Checkerspot Butterfly

Is the Taylor’s checkerspot butterfly on the county list, or does the activity occur in Island, San Juan, Clallam, Pierce, Lewis, Mason, or Thurston counties?

☐ **No** ☑ **Yes**

After mapping your project in IPaC, was Taylor's checkerspot butterfly on the species list returned by IPaC?

☑ **Yes** ☐ **No**

Did a site evaluation conclude there is potential habitat within the project action area?
☑ **No** ☐ **Yes**

Effect Determination:
No Effect

Rationale
The Project will have No Effect on Taylor's checkerspot butterfly because there is no suitable habitat present in the Project Action Area.

Taylor's Checkerspot Butterfly Critical Habitat

The programmatic will provide informal coverage for Taylor's Checkerspot Butterfly critical habitat.

Is Taylor's Checkerspot Butterfly critical habitat on the county list, or is the project in Thurston, Pierce, Skagit, Island or Clallam Counties?
☑ **No** ☐ **Yes**

Western Yellow-billed Cuckoo

The programmatic will provide informal coverage for Yellow-billed Cuckoo. This bird is listed in all of Washington State. There is no proposed or designated critical habitat in Washington State.
Is yellow-billed cuckoo on the IPaC county or project-specific list?
☑ **Yes** ☐ **No**

Does the project action area contain mature, wooded, non-coniferous riparian areas that are equal or greater than 50 acres in size?
☐ **Yes** ☑ **No**

Will the project occur during October-April?
☑ **Yes** ☐ **No**

Will the project have effects to potential riparian habitat, in hardwood stands that are a minimum of 50 acres in size?
☐ **Yes** ☑ **No**

Effect Determination:
No Effect

Rationale
The Project will have No Effect on Western yellow-billed cuckoo because there is no suitable habitat present in the Project Action Area.

Oregon Spotted Frog

The programmatic will provide informal coverage for Oregon Spotted Frog.

Is the project in Whatcom, Skagit, Snohomish, Grays Harbor, Lewis, King, Pierce, Thurston, Clark, Skamania, Yakima, or Klickitat Counties?

☑ **No** ☐ **Yes**

Oregon Spotted Frog Critical Habitat

The programmatic will provide informal consultation for Oregon Spotted Frog critical habitat.

Is the project in Whatcom, Skagit, Thurston, Skamania, or Klickitat Counties?

☑ **No** ☐ **Yes**

Bradshaw's Lomatium (Bradshaw's desert parsley)

The programmatic will provide informal coverage for Bradshaw's Lomatium (Bradshaw's desert parsley)

Is the project located in Clark County?

☐ **Yes** ☑ **No**

Golden Paintbrush

The programmatic will provide informal coverage for golden paintbrush

Is the project within Thurston, Pierce, Island, King, or San Juan Counties within suitable prairie habitat, or is it on the IPaC list?

☐ **Yes** ☑ **No**

Ute Ladies'-Tresses

The programmatic will provide informal coverage for Ute Ladies'-Tresses

Is the project within Chelan County within suitable wet meadow or riparian habitat?

☐ **Yes** ☑ **No**

Water Howellia

The programmatic will provide informal coverage for Water Howellia

Is the project within Spokane, Pierce, Thurston, or Clark Counties within suitable pothole ponds or old river oxbow habitat, where the surface water feature has a firm, consolidated substrate and may be permanent or ephemeral?

☐ **Yes** ☑ **No**

Spalding’s Catchfly (Spalding’s Silene)

The programmatic will provide informal coverage for Spalding’s Catchfly

Is the project within Adams, Asotin, Garfield, Lincoln, Spokane, or Whitman Counties within suitable bunchgrass grasslands, sagebrush-steppe, and to a lesser extent, open-canopy pine stands?

☐ **Yes** ☑ **No**

Nelson's Checkermallow

The programmatic will provide informal coverage for Nelson's Checkermallow

Is the project within Cowlitz or Lewis Counties and within Oregon ash swales, moist open meadows with depressions, or along streams?

☐ **Yes** ☑ **No**

Kincaid's Lupine

The programmatic will provide informal coverage for Kincaid's Lupine

Is the project within Lewis County and within native upland prairie and open oak woodlands?

☐ **Yes** ☑ **No**

Showy Stickseed

The programmatic will provide informal coverage for Showy Stickseed

Is the project within Chelan County and within granite or talus derived substrate, in cliff ledges, or within Tumwater Canyon?

☐ **Yes** ☑ **No**

Fast Track Project Types

Fast Track is an accelerated review for projects that have benefits for listed species. Fast Track is offered for both the NMFS and USFWS programmatics, but some Fast Track project types only apply to one agency, some to both. Check all that apply.

3. Will the project have no new PGIS but will treat stormwater from all existing PGIS, and have no other activities that would result in adverse effects? Fish handling is allowed as part of this activity.

☐ **Yes** ☑ **No**

4. Will the project retrofit existing pollution generating impervious surface (PGIS) without adding new PGIS?

☐ **Yes** ☑ **No**

5. Will the project replace a culvert for fish passage, and there are no other activities that would result in adverse effects? Fish handling is allowed as part of this activity. USFWS coverage is allowed if there is a low risk for channel incision when listed species could be affected and if there are no adverse effects other than fish handling..

☐ **Yes** ☑ **No**

Project Minimization Measures

Stormwater Quality and Quantity Minimization Measures

MM-1. All projects (except exempt activities as listed in section 3-2.2 of the Highway Runoff Manual (2014), are subject to minimum stormwater management requirements as outlined in Section 3-3 of the Highway Runoff Manual. Non-exempt projects must address erosion control if >= 7,000 ft2 of soil will be disturbed or if there is >= 2000 ft2 of new, replaced, or new + replaced impervious surface. Erosion control requirements include: 1) a Temporary Erosion and Sediment Control (TESC) Plan (see TESC Manual), and a project specific Spill Prevention, Control and Countermeasures (SPCC) Plan as required in Standard Specification 1.07-15(1).

☑ **Yes** ☐ **No**

MM-2. WSDOT will ensure that projects within 200 feet of surface water will install and maintain Best Management Practices (BMPs) as stated in the Contract to ensure that no foreign material, such as pavement slurry from asphalt grinding equipment, is sidecast, and to control and prevent sediments from entering aquatic systems.

☑ **Yes** ☐ **No**

MM-3. The Contractor shall comply with Washington Department of Ecology's State Water Quality Standards (WAC 173-201) or permit modifications. Permit modifications are limited to an extended temporary area of mixing granted by Ecology in a 401 Water Quality Certification.

☑ **Yes** ☐ **No**

MM-4. Projects that drain to waters that may be used by listed fish species and create more than 500 ft2 of new pollution generating impervious surface in any TDA will use the most current WSDOT stormwater effects analysis guidance to evaluate the potential effects of each proposed project. The PBA Determination Form and/or supplemented documents must include the following information at a minimum: 1) Sufficient information to assess pre-project and post-project stormwater pollutant loadings and end of pipe concentrations. 2) Identify the receiving waterbodies for the stormwater runoff associated with the new pollution generating impervious surface. 3) Identify any proposed new (or modified) stormwater outfalls/structures.

☐ **Yes** ☑ **No**

MM-4 cont'd. 4) A qualitative or quantitative description of pre-and post-project mixing zones or dilution analysis, consistent with WSDOT stormwater effects analysis guidance. If exposure to listed fish species in the dilution zone cannot be discounted, a quantitative description is recommended. 5) Describe potential effects to hydrology (i.e., peak flows, base flows, flow durations, etc.) and in-stream conditions (i.e., bed and bank scour or erosion, channel stability, etc.) due to the proposed project.

☐ **Yes** ☑ **No**

MM-5. The project will not cause or contribute to bed or bank scour or erosion (channel instability), and will not measurably affect base, peak, or flow durations in any Threshold Discharge Area (TDA) or receiving waterbody.

☑ **Yes** ☐ **No**

MM-6. Stormwater will be infiltrated and/or dispersed when possible.

☑ **Yes** ☐ **No**

Aquatic Area Buffers Minimization Measures

MM-7. No contractor staging areas will be allowed within 200 feet of potentially suitable wetland, stream, estuarine, river or marine drainage as identified by the project biologist, unless site specific review completed by the project biologist indicates that no impacts to the sensitive resource areas will occur due to topography or other factors.

☑ **Yes** ☐ **No**

MM-8. Temporary material storage piles consisting of erosive materials will be placed outside the 100-year floodplain during the rainy season (October 1 through June 1) except for emergency projects, or unless site specific review completed by the project biologist indicates that topography or other factors preclude runoff from entering waterbodies containing listed fish species or their prey. Such temporary storage piles will be stabilized with plastic sheeting, straw bales, or other BMPs, to prevent sediment delivery to these waterbodies. Material to be used within 12 hours of deposition will not be considered a temporary material storage pile.

☑ **Yes** ☐ **No**

MM-9. All excavated materials will be removed to an upland location where they cannot enter the water body.

☑ **Yes** ☐ **No**

Vegetation Removal Minimization Measures

MM-10. To facilitate compliance with the Northwest Forest Plan Standards and Guidelines, WSDOT will coordinate with the appropriate Forest Service ranger district if tree removal, including dying, dead, or downed wood is proposed on lands identified in the plan

☐ **Yes** ☑ **No**

MM-11. WSDOT Designers will minimize removal of riparian vegetation and contractors shall replant riparian vegetation. Replanting may not be possible in permanent impact areas, the roadway clear zone, or adjacent to or under bridges. However, potential replanting of riparian vegetation near the site should be evaluated. The PBA Determination Form will provide the justification for the removal of riparian vegetation and will include the proposed planting plans, if applicable.

☑ **Yes** ☐ **No**

MM-12. Vegetation will only be grubbed from areas undergoing permanent alteration. No grubbing will occur in areas slated for temporary impacts. Exceptions to grubbing temporary impact areas can be made if the temporary area is currently covered by non-native or invasive species and will be replanted with native species.

☑ **Yes** ☐ **No**

MM-13. Disturbance to riparian vegetation from the operation of heavy equipment will be minimized as practicable by straddling it with heavy equipment or by pruning it without damaging the roots. Existing riparian vegetation outside of the work area will not be removed or disturbed.

☑ **Yes** ☐ **No**

In-Water Work Minimization Measures

MM-14. Seasonal restrictions applied to work conducted within or below the OHWM or MHHW, will follow requirements within the HPA issued by the Washington Department of Fish and Wildlife, and Water Quality Standards for Surface Waters of the State of Washington (Chapter 173-201A WAC). In-water work duration will be minimized as practicable.

☑ **Yes** ☐ **No**

MM-15. No temporary floating work platform will place its anchors or allow grounding in fish spawning areas in freshwater or in eelgrass, kelp, macro algae, or intertidal wetlands. Anchoring above beds or eelgrass, kelp, or macro algae will be kept to a minimum.

☐ **Yes** ☑ **No**

MM-16. Construction equipment will not enter any water body without authorization from the Washington Department of Fish and Wildlife, USFWS, and the NMFS. Equipment will be operated as far from the water's edge as possible.

☑ **Yes** ☐ **No**

MM-17. Anthropogenic debris from bridge demolition will be directed toward storage areas on land or barges. Bridge demolition will include sectioning the structure to the extent possible to provide for safer disposal and to minimize debris falling into surface waters.

☐ **Yes** ☑ **No**

Revegetation and Slope Stability Minimization Measures

MM-18. Erodible earth not being worked, whether at final grade or not, shall be covered within the specified time periods below, using an approved soil covering practice: Western Washington (west of the Cascade Mountain Crest) 1) from October 1 through April 30 erodible earth may be exposed without cover for a 2 day maximum, 2) from May 1 to September 30 for 7 days maximum. Eastern Washington (east of the Cascade Mountain Crest) 1) from October 1 through June 30 erodible earth may be exposed without cover for a 5 day maximum, 2) from July 1 to September 30 for 10 days maximum.

☑ **Yes** ☐ **No**

MM-19. Temporarily disturbed areas will be restored to pre-work conditions to the extent possible, including protecting existing root systems and allowing re-sprouting of herbaceous and woody plants. Native trees and shrubs will be used that are endemic to the project vicinity or region of the State where the activity is occurring.

☑ **Yes** ☐ **No**

MM-20. All exposed areas will be mulched and seeded with an approved native or noninvasive herbaceous seed mix following construction and/or planted with native woody vegetation and trees (if appropriate) during the first available planting season.

☑ **Yes** ☐ **No**

General Construction Minimization Measures

MM-21. Construction impacts will be confined to the minimum area necessary to complete the project.

☑ **Yes** ☐ **No**

MM-22. WSDOT Construction will clearly flag the boundaries of clearing limits to prevent disturbance outside of the limits. The contractor shall install high visibility fencing in accordance with WSDOT Standard Specifications.

☑ **Yes** ☐ **No**

Pollutant Protection Minimization Measures

MM-23. The contractor will use BMPs, as stated in their Spill Prevention Control and Countermeasures Plan, to ensure that no foreign material such as oil or fuel from construction equipment will enter any wetlands, flowing or standing water.

☑ **Yes** ☐ **No**

MM-24. All equipment will be fueled and maintained more than 200 feet from the nearest wetland, ditches, flowing or standing water, unless site specific review completed by the project biologist indicates that no impacts to the resource areas will result due to topography or other factors. Exceptions to this requirement are allowed for large cranes, pile drivers, and drill rigs if they cannot be easily moved.

☑ **Yes** ☐ **No**

MM-25. Equipment will be checked daily for leaks and will be well maintained to prevent lubricants and any other deleterious materials from entering waters of the State. Prior to entering the water or below the OHWM, all equipment will be free of any external petroleum products, hydraulic fluid, coolants, and other deleterious materials. Wash water will not be discharged to any water body without pre-treatment.

☑ **Yes** ☐ **No**

MM-26. All equipment entering waters that may be used by listed fish species and/or if the waters are critical habitat, will use vegetable oil or other biodegradable acceptable hydraulic fluid substitute, unless the project is an emergency action.

☑ **Yes** ☐ **No**

Concrete Work Minimization Measures

MM-27. For projects involving concrete, concrete truck chute cleanout areas will be established to properly contain wet concrete and wash water and prevent it from entering wetlands and other waterbodies.

☐ **Yes** ☑ **No**

MM-28. The contractor will protect all inlets and catchments from stormwater runoff from fresh concrete, tackifier, paving, or paint striping if inclement weather unexpectedly occurs.

☐ **Yes** ☑ **No**

MM-29. All concrete will be poured in the dry, or within confined waters not being dewatered to surface waters, and will be allowed to cure a minimum of 7 days before contact with surface water.

☐ **Yes** ☑ **No**

Access Roads and Bridges Minimization Measures

MM-30. The establishment and use of temporary access roads will meet the following conditions: 1) Existing roadways or travel paths will be used whenever they provide the needed access. 2) Where stream crossings are essential, the crossing design will accommodate reasonably foreseeable risks (such as flooding and associated bedload and debris) to prevent diversion of stream flow out of the channel and down the road in the event of a crossing failure. 3) Vehicles and machinery must cross riparian areas and streams perpendicular to the main channel unless site specific conditions require an alternate approach. 4) Vehicles and machinery will not cross within a wetted stream, unless necessary as part of an emergency action. The PBA Determination Form must state why avoidance of crossing a wetted stream is not possible if proposed as part of an emergency action.

☑ **Yes** ☐ **No**

MM-30 cont'd. 5) Temporary roads within 300 feet of streams will avoid, minimize, and mitigate soil disturbance and compaction by clearing vegetation to ground level, and placing clean gravel over geotextile fabric. 6) Vehicles and machinery operating below the OHWM (except if operating in the dry or during emergency actions) will use biodegradable hydraulic fluids and lubricants to reduce the potential impacts associated a potential oil spill or leak. 7) The number of stream crossings will be minimized.

☑ **Yes** ☐ **No**

MM-31. New stream crossing structures, including channel-spanning bridges, will not reduce the existing stream width.

☐ **Yes** ☑ **No**

Restrictions in Rainy Weather Minimization Measures

MM-32. No paving, chip sealing, or stripe painting will be initiated in rainy weather.

☐ **Yes** ☑ **No**

Bridge Work Minimization Measures

MM-17. Anthropogenic debris from bridge demolition will be directed toward storage areas on land or barges. Bridge demolition will include sectioning the structure to the extent possible to provide for safer disposal and to minimize debris falling into surface waters.

☐ **Yes** ☑ **No**

MM-33. Bridge construction will take place from the adjacent streambanks, existing bridges, barges, or temporary work bridges. Some work may be allowed within a dewatered channel or on a dry gravel bar with WDFW, NMFS and USFWS approval, but no equipment or vehicle staging will be allowed in these areas.

☐ **Yes** ☑ **No**

MM-34. Concentrated accumulations of bird feces, road grit, sand, and loose paint chips will be removed from bridges before dismantling unless such activities would result in a higher risk of materials entering the water. This material will be scraped, swept or vacuumed from the bridge structure and collected and disposed of at permitted and approved upland location. A 5.25 percent sodium hypochlorite solution may be used directly on residual accumulations of guano or fungus after prior dry cleaning and washing. Wash water from the sodium hypochlorite solution shall be full contained and not allowed to enter state waters.

☐ **Yes** ☑ **No**

Bridge Painting Minimization Measures

MM-35. For brush and/or roller paint applications, painters will work from pails containing a maximum of 2 gallons of paint to minimize the impact of accidental spillage, except for sealed containers that are part of a spray system.

☐ **Yes** ☑ **No**

MM-36. Cleaning of paint materials and maintenance equipment will not be done in or over waters of the State nor will resultant cleaning runoff be allowed to enter State waters.

☐ **Yes** ☑ **No**

MM-37. Drip pans or other protective devices will be required for all paint mixing and solvent transfer operations.

☐ **Yes** ☑ **No**

MM-38. Drip tarps will be suspended below paint platforms to prevent spilled paint, buckets, brushes, etc. from entering State waters.

☐ **Yes** ☑ **No**

MM-39. Residual grease will be removed by hand from bridges and roadways with a degreaser on absorbent-material to prevent cleaning agents and grease from entering waters of the State.

☐ **Yes** ☑ **No**

MM-40. Bridges will first be cleaned using dry methods and equipment. Debris accumulations on the bridge, road surface, and within the bridge drains will be collected or swept up and properly disposed of prior to fresh water flushing. Debris disposal will occur in approved locations above the limits of flood water or extreme high tide. Debris will not be placed in road drainages, wetlands, riparian areas, or on adjacent land where it may be transported into state waters. Flushing will involve the use of clean water only, to prevent detergents or other cleaning agents from entering waters of the State.

☐ **Yes** ☑ **No**

MM-41. Preparatory painting pressure washing of structures will be done using appropriate filter fabric to control and contain paint particles generated by the activity. Wash water will be fully contained when it would otherwise discharge to waters with listed fish species.

☐ **Yes** ☑ **No**

MM-42. During abrasive blasting of a steel bridge prior to painting, a containment system appropriate for the type and location of the bridge will be in place and maintained to prevent spent blast media from reaching State Waters. Spent blast media will be collected, sampled, designated for its hazardous waste content, and disposed of as appropriate for its waste designation at an approved and permitted site.

☐ **Yes** ☑ **No**

Sub-surface Sampling Minimization Measures

MM-44. Oil absorbent pads will be placed under the drill rig to catch and control spills during subsurface sampling when within 200 feet of waters containing listed fish species.

☑ **Yes** ☐ **No**

MM-46. For subsurface sampling all existing large woody debris will be left on or adjacent to the site if feasible.

☐ **Yes** ☑ **No**

MM-47. For subsurface sampling, no geared mechanisms (e.g., tires, tracks) will enter the wetted perimeter of a waterbody. Truck mounted and tracked drilling equipment will work from a location outside of the wetted perimeter unless working off of a temporary floating work platform or barge. The temporary floating work platforms will not ground on the bed of State waters.

☑ **Yes** ☐ **No**

Emergency Minimization Measures

MM-48. Report emergency actions to the NMFS/USFWS within one workday where listed fish species or other federally listed species are potentially present. Emergency activities should be limited to only those actions that are necessary to address the immediate emergency.

☑ **Yes** ☐ **No**

Bank Protection Minimization Measures

MM-49. If site-specific conditions allow, improve fish habitat by incorporating LWD into bank protection projects.

☑ **Yes** ☐ **No**

MM-50. Installation of riprap and other materials will occur from the banks or outside the wetted perimeter as much as possible.

☐ **Yes** ☑ **No**

MM-51. Project areas with existing riprap will be allowed to increase the lineal distance of the riprapped area below the OHWM by an additional 5 percent. If the project footprint needs to be increased beyond this, riprap placement will demonstrate consistency with the Integrated Streambank Protection techniques that are defined for WSDOT projects (see Working Document)

☐ **Yes** ☑ **No**

Work Area Isolation and Fish Handling Minimization Measures

MM-53. Listed fish species, including their forage fish, will be removed from the work area prior to any in-water work activities, unless removal would affect the individuals more than leaving them on-site. Fish exclusion activities will follow the most recent WSDOT protocol that has been approved by the NMFS and USFWS.

☑ **Yes** ☐ **No**

MM-54. Water pumped out of the isolated project area will be discharged to a temporary storage and treatment site or to upland areas and filtered through vegetation prior to reentering the stream channel.

☐ **Yes** ☑ **No**

MM-55. All intake pumps within fish bearing streams will have a fish screen installed, operated and maintained. Screening techniques must utilize the specifications in the HPA and be in compliance with RCW 77.55.010, RCW 77.57.040 and RCW 77.57.070 or the specifications in the NMFS Anadromous Salmonid Passage Facility Design manual (2008) and NMFS Fish Screening Criteria for Anadromous Salmonids (1997), whichever is more restrictive.

☑ **Yes** ☐ **No**

MM-56. Temporary diversion structures will be non-erosive (e.g., sand bags filled with clean gravel and covered with plastic sheeting, portable bladder dam).

☑ **Yes** ☐ **No**

MM-57. Temporary bypass systems will utilize non-erosive techniques, such as pipe or a plastic-lined channel that will accommodate the predicted peak flow rate during construction.

☑ **Yes** ☐ **No**

MM-58. Temporary bypass structures will have energy dissipaters at the outflow to prevent erosion.

☑ **Yes** ☐ **No**

MM-59. WSDOT Biologists will follow the WSDOT Fish Exclusion Protocols and Standards to conduct work area isolation, fish capture and removal, and dewatering/rewatering. Implementing these factors depends to some degree on local conditions and the professional judgment of the biologist. If block nets are in use, they will be checked 3 times daily. Flows shall be gradually reintroduced to the isolated work area, to prevent channel bed or bank instability, excessive scour, or turbidity and sedimentation. The directing biologist shall inspect the work area downstream reach to ensure no fish are stranded or in distress during reintroduction of flows.

☑ **Yes** ☐ **No**

MM-60. Upon completion of all in-water work, all stream diversion devices, equipment, pipe, and conduits will be removed and disturbed soil will be restored after diversions are removed. Streambank plantings may occur at a later date during the planting season.

☑ **Yes** ☐ **No**

MM-61. Projects will not inhibit passage of any listed fish species life stage following completion. When feasible, a bypass system will be installed during construction to permit both upstream and downstream passage of listed fish and their prey.

☑ **Yes** ☐ **No**

Cutting and Filling Minimization Measures

MM-66. Fill material will only be placed in specified and permitted locations. Fill placement may be permanent or temporary and will be located in a way that minimizes impacts to sensitive areas.
☑ **Yes** ☐ **No**

MM-67. Temporary fills must be entirely removed and the site restored to pre-existing contours.
☑ **Yes** ☐ **No**

Pile Installation/Removal Minimization Measures

MM-68. Installation of steel piles with an impact hammer in-water requires the use of a bubble curtain or other approved sound attenuation method(s) to minimize impacts within waterbodies that may be used by listed species, including marine mammals.
☐ **Yes** ☑ **No**

MM-69. No creosote-treated wood will be used below the OHWM.
☐ **Yes** ☑ **No**

MM-70. Any removed piling or other materials, including their waste water, will be fully contained and disposed of at a location with regulatory approval.
☐ **Yes** ☑ **No**

MM-71. For pile removal, direct pulling, vibratory removal, or cutting the piles below ground level will be prioritized to minimize localized turbidity. If using a clamshell bucket or other removal method is necessary due to pile breakage and the action will generate turbidity, the contractor shall employ a turbidity control BMP that is appropriate for that site.
☐ **Yes** ☑ **No**

MM-72. In tidally influenced areas, piles will be driven during slack tides whenever practicable.
☐ **Yes** ☑ **No**

MM-73. All treated wood will be contained during and after removal to preclude sediments and any contaminated materials from re-entering the aquatic environment. All contaminated materials will be disposed of at an approved and permitted disposal facility. No reuse of treated wood will occur.
☐ **Yes** ☑ **No**

MM-74. Sound pressure will be monitored per the approved WSDOT Hydroacoustic Monitoring Protocol for in-water pile driving to determine ambient conditions and the sound pressure generated during in-water impact pile driving of steel piles, including H-piles, and sheet piles. Sound pressure monitoring will occur for in-water work where listed fish species may be present. Monitoring results will be provided to the Service within 90 days following completion of pile driving.
☐ **Yes** ☑ **No**

Herbicide Use Minimization Measures

MM-75. Herbicides will not be used within 200 ft of listed fish species spawning and rearing streams unless site specific review completed by the project biologist and landscape architect indicates that topography or other factors preclude herbicides from reaching spawning and rearing stream occupied by listed fish species.

☑ **Yes** ☐ **No**

Geotechnical Investigations Minimization Measures

MM-47. For Geotechnical Drilling: No geared mechanisms (e.g., tires, tracks) will enter the wetted perimeter of a waterbody. Truck mounted and tracked drilling equipment will work from a location outside of the wetted perimeter unless working off a temporary floating work platform or barge. The temporary work platform will not ground on the bed of State waters.

☑ **Yes** ☐ **No**

Prairie Species Minimization Measures

MM-79. When permanent lighting is needed on a road segment adjacent to prairie species habitat, individual “cobra head” or similar lamps will be used when possible, rather than area lights that illuminate larger areas. Lights will be directed away from prairie species habitat to the extent possible.

☐ **Yes** ☑ **No**

MM-80. Activities located within 200 feet of native upland prairies and open oak woodlands potentially suitable to listed prairie species as identified by the project biologist, will install and maintain all appropriate BMPs to ensure that no foreign material, such as pavement slurry, is sidecast, and that sediments are minimized unless site specific review completed by the project biologist indicates that topography or other factors preclude impacts to this habitat.

☐ **Yes** ☑ **No**

MM-81. No contractor staging areas will be allowed within 200 feet of native upland prairies and open oak woodlands potentially suitable to listed prairie species as identified by the project biologist, unless site specific review completed by the project biologist indicates that no impacts to the sensitive resource areas will occur due to topography or other factors.

☐ **Yes** ☑ **No**

Marbled Murrelet and N. Spotted Owl Minimization Measures

MM-82. For projects with spotted owl or murrelet that have night work only, work will be conducted during the period from 2 hours after sunset to 2 hours before sunrise.

☐ **Yes** ☑ **No**

MM-83. For projects with spotted owl or murrelet that have night work only, work will be conducted during the period from 1 hour after sunset to 1 hour before sunrise

☐ **Yes** ☑ **No**

MM-84. For projects with spotted owl or murrelet that have night work only, work will begin at such time as WSDOT determines is necessary based upon daytime traffic volumes and cease work 2 hours before sunrise

☐ **Yes** ☑ **No**

MM-85. For projects with spotted owl or murrelet that have night and day time work (24/7), no work will occur from 1 hour before sunrise to 2 hours after sunrise and no work from 2 hours before sunset to 1 hour after sunset

☐ **Yes** ☑ **No**

MM-86. For projects with spotted owl or murrelet that have night and day time work (24/7), no work will be conducted from 1 hour before sunrise to 2 hours after sunrise (avoiding the am crepuscular period only).

☐ **Yes** ☑ **No**

MM-87. Activities located within one mile of a murrelet detection section or designated critical habitat will develop and implement a trash handling plan to insure that food wastes and other items attractive to crows, jays, and other Corvidae will be disposed of in a manner that makes it unavailable to these species at any time.

☐ **Yes** ☑ **No**

MM-88. Trees that are removed in potential murrelet nesting habitat will be dropped into the road ROW or areas that will be cleared of vegetation to avoid impacts to adjacent potential habitat. Downed trees will be retained onsite unless prohibited by the land owner. In those circumstances, LWD will be removed and used for future environmental restoration efforts where possible. The PBA Project Notification Form will provide justification for not retaining downed trees on-site or if they are not used for restoration efforts.

☐ **Yes** ☑ **No**

MM-89. Currently or previously-known occupied murrelet or northern spotted owl nest trees will not be removed.

☐ **Yes** ☑ **No**

MM-90. The number of large confers (20 inches dbh or larger) removed will be minimized.

☐ **Yes** ☑ **No**

MM-91. If an active murrelet or northern spotted owl nest is discovered, the activity will cease immediately. A WSDOT and USFWS biologist will be notified immediately and all activities within the disturbance threshold distances (within 0.25 mile of an active nest tree for all activities except blasting, which is 1 mile) will be postponed until after the nesting season.

☐ **Yes** ☑ **No**

MM-92. When working within the early northern spotted owl or murrelet nesting season is unavoidable (i.e., due to adverse weather conditions and snow at high elevations [including blasting], low temperature or coastal fog, or emergency actions addressed in this PBA), work will be phased to the extent possible so activities within disturbance threshold distances are conducted as late as possible in the nesting period.

☐ **Yes** ☑ **No**

MM-93. All activities that may result in visual or noise disturbance based on accepted thresholds, and have daytime work within suitable murrelet nesting habitat, will restrict activities to between two hours after sunrise and two hours before sunset during the murrelet nesting season (crepuscular LOP, April 1 to September 23).

☐ **Yes** ☑ **No**

MM-94. If blasting is to occur in or adjacent to murrelet or northern spotted owl suitable habitat during the nesting season, no blasting will occur that may physically impact potential nest trees, the trees buffering the nest tree, the individual murrelets, northern spotted owls, and/or their eggs.

☐ **Yes** ☑ **No**

MM-95. Activities will not downgrade a forested stand of suitable murrelet nesting habitat to unsuitable murrelet nesting habitat.

☐ **Yes** ☑ **No**

MM-96. Activities will not downgrade suitable northern spotted owl nesting habitat to roosting and foraging habitat; roosting and foraging habitat to dispersal habitat, and/or dispersal habitat to non-dispersal habitat.

☐ **Yes** ☑ **No**

MM-97. Suitable nest trees and suitable habitat cannot be removed during the nesting season.

☐ **Yes** ☑ **No**

Western Snowy Plover Minimization Measures

MM-98. Activities located within one mile of suitable western snowy plover critical habitat, as identified by the project biologist, will develop and implement a trash handling plan to insure that food wastes and other items attractive to crows, jays, and other Corvidae will be disposed of in a manner that makes it unavailable to these species at any time.

☐ **Yes** ☑ **No**

Grizzly Bear Minimization Measures

MM-99. Projects involving bridge replacements within the range of the grizzly bear will design the new structure to accommodate the passage of wildlife when practicable.

☐ **Yes** ☑ **No**

Oregon Spotted Frog Minimization Measures

MM-100. An Environmentally Sensitive Area fence (for example, high visibility exclusion fencing) will be installed as necessary along project boundaries to protect offsite habitat including potential breeding sites for Oregon spotted frog. A separate fencing plan should include a map showing the preliminary location of the fence for the project. Construction personnel will not enter the Environmentally Sensitive Areas.

☐ **Yes** ☑ **No**

MM-101. For Oregon spotted frog projects (except exempt activities as listed in section 3-2.2 of the Highway Runoff Manual (HRM, WSDOT 2014), are subject to minimum stormwater management requirements as outlined in Section 3-3 of the HRM. Non-exempt projects must address erosion control if > 7,000 ft2 of soil will be disturbed or if there is > 2000 ft2 of new, replaced, or new + replaced impervious surface. Erosion control requirements include: 1) a Temporary Erosion and Sediment Control (TESC) plan (see TESC Manual), and a project Specific Spill Prevention, Control and Countermeasures (SPCC) Plan as required in Standard Specification 1.07-15(1).

☐ **Yes** ☑ **No**

MM-102. Stormwater will not be discharged to habitat potentially suitable for Oregon Spotted Frog. Detention ponds will be designed to not attract or promote bullfrogs.

☐ **Yes** ☑ **No**

MM-103. Projects within 200 ft of surface water or areas inundated for four or more months per year will install and maintain BMPs as stated in the Contract to ensure that no foreign material, such as pavement slurry from asphalt grinding equipment, is sidecast, and to control and prevent sediments from entering aquatic systems.

☐ **Yes** ☑ **No**

MM-104. WSDOT Designers will minimize the removal of riparian vegetation and the contractor will replant riparian vegetation. Replanting may not be possible in permanent impact areas, the roadway clear zone, or adjacent to or under bridges. However, potential replanting of riparian vegetation near the site should be evaluated. In areas containing suitable Oregon Spotted Frog habitat, ensure revegetation does not change vegetation from a low vegetation type (grasses and forbs) to a high vegetation type (shrubs and trees).

☐ **Yes** ☑ **No**

MM-105. Upon completion of all in-water work, all stream diversion devices, equipment, pipe, and conduits will be removed and disturbed soil will be restored after diversions are removed. Streambank plantings may occur at a later date during the planting season. In areas with suitable Oregon Spotted Frog breeding habitat, do not plant trees, especially conifers, along the shoreline to avoid shading of potential breeding sites.

☐ **Yes** ☑ **No**

MM-106. Herbicides will not be used within 200 ft of waterbodies unless site specific review completed by the project biologist and landscape architect indicates that topography or other factors preclude herbicides from reaching habitats used by Oregon Spotted Frog. Herbicides applied during the dry season on lands that flood during the winter/spring must break down in the environment before the next inundation

☐ **Yes** ☑ **No**

MM-107. For waters that may be used by Oregon Spotted Frog, culvert cleaning will occur either by hand or from the top of the bank when flow is in the channel, when the stream is either dry, or a flow bypass is installed.

☐ **Yes** ☑ **No**

Coordination with Other Federal Agencies Minimization Measures

MM-108. To facilitate compliance with the Northwest Forest Plan Standards and Guidelines, WSDOT will coordinate with the appropriate Forest Service ranger district if tree removal, including dying, dead, or downed wood is proposed on lands identified in the plan. Coordination will be documented within the PBA notification form.

☐ **Yes** ☑ **No**

MM-109. On National Forests and Parks that do not have a current agreement with WSDOT to use this PBA, the project biologist will contact appropriate Forest/Park staff and receive written approval to use the PBA. The Forest/Park may have additional conditions that will be followed.

☐ **Yes** ☑ **No**

Minimization Measures Documentation

Will the project use all applicable minimization measures?

☑ **Yes** ☐ **No**

Attachment 5 – United States Fish and Wildlife Service Programmatic Consultation

United States Fish and Wildlife Service
Electronic Consistency Review (05/14/2024)
Statewide Programmatic Consultation for
Washington State Department of Transportation
(Ref # 2022-0011119)

Clear Creek Stream Restoration Project - SR 167 MP 2.05-2.15
(Pierce County) (WSDOT-XL6735)
(USFWS Ref # 2024-0060993)

On March 20, 2024, the U.S. Fish and Wildlife Service (Service) received your request for consistency review for the above project under the Statewide Programmatic Consultation for Washington State Department of Transportation (WSDOT) Biological Opinion (Opinion). The Service received the Programmatic Notification Form (PNF) for this project dated March 20, 2024, as part of the request.

As mitigation for leaving fish barriers uncorrected within the SR509 and SR167 project footprints, WSDOT is proposing to remove fish hatchery infrastructure along Clear Creek, a tributary of the Puyallup River, to restore the basin to its historic alluvial condition, correct two fish passage barriers at concrete dams (WDFW IDs 600317 and 600318), and create aquatic and riparian habitat. The project site is on privately-owned parcels operated by Troutlodge fish hatchery on the Puyallup Tribe reservation in unincorporated Pierce County, Washington.

The project includes the following major work elements:

- Remove all existing in-water concrete structures, including two fish passage barriers
- Remove existing fish hatchery structures, including operational buildings, storage sheds, fish hatchery rearing ponds, and other auxiliary structures
- Regrade the existing Clear Creek stream channel and regrade the floodplain to mimic historic conditions
- Construct habitat enhancement elements, including placement of large woody material (LWM), creation of habitat berms, and development of beaver analog ponds
- Clear existing invasive vegetation and replant native riparian and upland vegetation

The proposed project will create side-channel habitat, expand floodplain for rearing habitat, and replant riparian vegetation within temporarily impacted areas. Post-construction natural stream processes will be improved, including sediment transport, LWM transport, marine derived nutrient input above the dam locations, floodplain interaction, and channel migration. The project is scheduled to be constructed between during three in-water work windows (July 16 to August 31) between 2026 and 2028.

Approximately 1,800 feet of channel will be regraded and an additional 810 feet of stream channel will be dewatered to allow for the installation of stream improvements downstream of the regraded section, as well as fish exclusion BMPs and the stream diversion, totaling 2.096 acres. Construction of the project will result in up to 2,810 linear feet of stream exposed to

elevated turbidity. Approximately 1.223 acres of riparian vegetation will be temporarily removed, and 0.092 acres of permanently removed. The project will not result in the creation of new access roads or any pollutant-generating impervious surface.

The FHWA and WSDOT have provided information in support of a "may affect, likely to adversely affect" determination for the bull trout (*Salvelinus confluentus*). The FHWA and WSDOT have concluded the project will have "no effect" on several listed species known to occur in Pierce County. There is no requirement for the Service to concur on "no effect" determinations. Your determination that the project will have no effect on these species rests with the action agency.

Consistency Finding

After consideration of this information, we confirm that the WSDOT project, as proposed, is consistent with all conditions for the species and activities covered under the Opinion.

Bull Trout

There is no bull trout spawning, rearing, foraging, migratory, or overwintering habitat documented in Clear Creek. The project is gradient accessible to bull trout for foraging and supports prey species, primarily juvenile salmonids. Project work will exclude fish from the work area by use of herding, netting, seining, and electroshocking methods. To minimize incidental take of the bull trout, WSDOT will conduct in-waterwork during the in-water work window when bull trout are least likely to occur and follow WSDOT fish exclusion protocols.

We anticipate incidental take of bull trout in the form of harm and harassment resulting from capture and handling that may occur during fish exclusion and salvage. The Opinion anticipates take in the form of harm and harassment from the handling of 15 individual bull trout per year of which 1 will be injured or killed. The Service will conclude incidental take due to fish handling at project completion.

Reasonable and Prudent Measures pursuant to the Statewide Programmatic Consultation for WSDOT, (Ref # 2022-0011119) that apply to the current project includes:

- Monitor incidental take from fish capture and handling.

In order to be exempt from the prohibitions of section 9 of the ESA, the FHWA and WSDOT must comply with all terms and conditions specified in the Opinion, which implement the reasonable and prudent measures. These terms and conditions are nondiscretionary.

With implementation of the proposed project as described here, the FHWA and WSDOT have met their obligations under Section 7 of the Endangered Species Act. No further consultation on this action is required. The project should be reanalyzed if new information reveals effects to listed species or critical habitat in a manner, or to an extent, not considered in this consultation. The project should also be reanalyzed if the action is subsequently modified in a manner that causes an effect to a listed species or critical habitat that was not considered in this consultation, and/or a new species is listed, or critical habitat is designated that may be affected by the project.

If, during the course of the action, this level of incidental take is exceeded, such incidental take represents new information requiring reinitiation of consultation. The FHWA and WSDOT must provide an explanation of the causes of the taking and review with the Service the need for possible modification of the incidental take authorized for this action.

If you have any further questions or if we can be of further assistance, please contact George Ritchotte (george_ritchotte@fws.gov) or Ryan McReynolds (ryan_mcreynolds@fws.gov).

Thank you.

cc: Ryan McReynolds, USFWS-WFWO
Lindsey Handel, FHWA
Cindy Callahan, FHWA
Ali Amiri, WSDOT
Joel Widmer, WSDOT
Erika Reppun WSDOT
Ryan Boyle, WSDOT
Jeff Dreier, WSDOT HQ/ESO

Attachment 6 – United States Fish and Wildlife Service Concurrence

Erickson, Leah (Consultant)

From: Boyle, Ryan
Sent: Tuesday, June 11, 2024 3:47 PM
To: Erickson, Leah (Consultant)
Cc: Dalzell, Maki (Consultant)
Subject: FW: [EXTERNAL] Clear Creek Fish Passage Project

Follow Up Flag: Follow up
Flag Status: Flagged

FYI

From: Ritchotte, George L <george_ritchotte@fws.gov>
Sent: Tuesday, June 11, 2024 3:44 PM
To: Handel, Lindsey (FHWA) [redacted]; Callahan, Cindy (FHWA) [redacted]; Widmer, Joel [redacted]; Reppun, Erika [redacted]; Dreier, Jeff [redacted]; Ziegenfus, Andreea R [redacted]; Flowers, Cori [redacted]; Amiri, Ali [redacted]; Holmquist, Dan (Consultant) [redacted]; Dalzell, Maki (Consultant) [redacted]; Dougherty, Logan (Consultant) [redacted]; Boyle, Ryan [redacted]
Cc: McReynolds, Ryan [redacted]
Subject: RE: [EXTERNAL] Clear Creek Fish Passage Project

Resending this to include Ryan Boyle.

George Ritchotte
cell: 206-356-0511

From: Ritchotte, George L
Sent: Friday, June 7, 2024 12:17 PM
To: McReynolds, Ryan [redacted]; Handel, Lindsey (FHWA [redacted]; Callahan, Cindy (FHWA [redacted]; Widmer, Joel [redacted]; Reppun, Erika [redacted]; Dreier, Jeff [redacted]; Ziegenfus, Andreea R <andreea_ziegenfus@fws.gov>; Flowers, Cori [redacted]; Amiri, Ali [redacted]; Holmquist, Dan (Consultant [redacted]; Dalzell, Maki (Consultant [redacted]; Dougherty, Logan (Consultant [redacted]
Subject: FW: [EXTERNAL] Clear Creek Fish Passage Project

Mr. Boyle – Apologies for the typos in my previous email. I have corrected the errors below.

George Ritchotte
(he/him/his)
WSDOT Liaison - ESA Biologist
cell: 206-356-0511
US Fish and Wildlife Service
Washington Fish and Wildlife Office
https://www.fws.gov/office/washington-fish-and-wildlife

From: Ritchotte, George L [redacted]
Sent: Tuesday, May 14, 2024 12:42 PM
To: Boyle, Ryan [redacted]
Cc: McReynolds, Ryan [redacted]; Handel, Lindsey (FHWA) [redacted]; Callahan, Cindy (FHWA) [redacted]; Widmer, Joel [redacted]; Reppun, Erika [redacted]; Dreier, Jeff [redacted]; Ziegenfus, Andreea R <andreea_ziegenfus@fws.gov>; Flowers, Cori [redacted]; Amiri, Ali [redacted]; Holmquist, Dan (Consultant) [redacted]; Dalzell, Maki (Consultant) [redacted]; Dougherty, Logan (Consultant) [redacted]
Subject: [EXTERNAL] Clear Creek Fish Passage Project

WARNING: This email originated from outside of WSDOT. Please use caution with links and attachments.

Hello Ryan -

On March 20, 2024, the U.S. Fish and Wildlife Service (Service) received your request for consistency review for the above project under the Statewide Programmatic Consultation for Washington State Department of Transportation (WSDOT) Biological Opinion (Opinion, Ref # 2022-0011119). The Opinion was issued by the Service on July 2, 2015, at the request of the Federal Highway Administration (FHWA) and the U.S. Army Corps of Engineers. The Service reference number for this project is 2024-0060993. This consultation was conducted in accordance with section 7(a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.).

The FHWA and WSDOT provided a complete Programmatic Notification Form ~~with a request for review~~ dated March 20, 2024. WSDOT, on behalf of FHWA, will restore fish passage at the Troutlodge fish hatchery along Clear Creek in Pierce County, Washington. The information included an effect determination of "may affect, likely to adversely affect" for the Bull trout (*Salvelinus confluentus*). After consideration of this information, we confirm that the WSDOT project as proposed is consistent with the programmatic Opinion with an effect determination of "may affect, likely to adversely affect" for potential effects to the bull trout.

The FHWA and WSDOT have concluded the project will have "no effect" on additional listed species and designated critical habitat known to occur in ~~Skagit~~ Pierce County. There is no requirement for the Service to concur with "no effect" determinations. Your determination that the project will have no effect on these species and habitats rests with the action agency.

As set forth by the programmatic consultation, we are responding in electronic format (attached) to confirm our consistency finding under the programmatic, and to describe the exempted incidental take. If you have any further questions or if we can be of further assistance, please contact George Ritchotte [redacted] or Ryan McReynolds [redacted]

Thank you,

George Ritchotte
(he/him/his)
WSDOT Liaison - ESA Biologist
cell: 206-356-0511
US Fish and Wildlife Service
Washington Fish and Wildlife Office

https://www.fws.gov/office/washington-fish-and-wildlife

Attachment 7 – National Marine Fisheries Service Concurrence

Erickson, Leah (Consultant)

From: Dalzell, Maki (Consultant)
Sent: Tuesday, May 28, 2024 4:10 PM
To: Erickson, Leah (Consultant)
Subject: FW: [EXTERNAL] Fwd: Clear Creek Restoration Project (WCRO-2016-00011-7070)

Maki Dalzell
Senior Scientist
(425) 623-5144

From: George Ritchotte - NOAA Affiliate <george.ritchotte@noaa.gov>
Sent: Tuesday, May 21, 2024 11:22 AM
To: Boyle, Ryan [redacted]
Cc: Transportation-WA WCR - NOAA Service Account [redacted]; Ritchotte, George [redacted]; Ritchotte, George L [redacted]; Dreier, Jeff [redacted]; Washington FHWA [redacted]; Callahan, Cindy (FHWA) [redacted]; Handel, Lindsey (FHWA) [redacted]; Amiri, Ali [redacted]; Widmer, Joel [redacted]; Reppun, Erika [redacted]; Dalzell, Maki (Consultant) [redacted]; Dougherty, Logan (Consultant) [redacted]; Holmquist, Dan (Consultant) [redacted]; Bonnie Shorin - NOAA Federal [redacted]
Subject: [EXTERNAL] Fwd: Clear Creek Restoration Project (WCRO-2016-00011-7070)

WARNING: This email originated from outside of WSDOT. Please use caution with links and attachments.

Good morning Ryan:

We reviewed the notification email and project package you submitted to verify the Clear Creek Stream Restoration Project (WCRO-2016-00011-7070) is consistent with the criteria of the US Army Corps of Engineers/Federal Highway Administration Transportation Programmatic Biological Opinion (Opinion; WCRO-2016-00011) issued on October 28, 2016. The proposed project is a fish passage and stream restoration project to remove concrete dams in Clear Creek near SR 167 MP 2.05 - 2.15 and restore floodplain, side channel, and riparian habitat. Our review indicates all proposed design elements and best management practices are consistent with the Opinion.

Based on the materials and documentation submitted by the Washington State Department of Transportation, the proposed project's adverse effects are consistent with those evaluated in the Opinion. They include:

- Temporary removal of 1.223 acres of riparian vegetation, and permanent removal of 0.092 acre
- Exposure of 2,810 linear feet of Clear Creek to elevated suspended sediment
- The handling of ESA listed fish species

Therefore, NMFS has verified this action remains consistent with conditions of the Opinion.

George Ritchotte
WSDOT Liaison - ESA Biologist
cell: 206-356-0511

---------- Forwarded message ---------
From: **Jeff Vanderpham - NOAA Federal** [redacted]
Date: Tue, May 21, 2024 at 10:00 AM
Subject: Re: Clear Creek Restoration Project (WCRO-2016-00011-7070)
To: George Ritchotte - NOAA Affiliate [redacted]

Good morning,

I have reviewed and confirmed that the project fits the programmatic. Please send this verification on my behalf.

Thank you,
Jeff

On Tue, May 21, 2024 at 9:11 AM George Ritchotte - NOAA Affiliate [redacted] wrote:

> Good morning Jeff - Can you please verify this project?
> ---
> We reviewed the notification email and project package you submitted to verify the Clear Creek Stream Restoration Project (WCRO-2016-00011-7070) is consistent with the criteria of the US Army Corps of Engineers/Federal Highway Administration Transportation Programmatic Biological Opinion (Opinion; WCRO-2016-00011) issued on October 28, 2016. The proposed project is a fish passage and stream restoration project to remove concrete dams in Clear Creek near SR 167 MP 2.05 - 2.15 and restore floodplain, side channel, and riparian habitat. Our review indicates all proposed design elements and best management practices are consistent with the Opinion.
>
> Based on the materials and documentation submitted by the Washington State Department of Transportation, the proposed project's adverse effects are consistent with those evaluated in the Opinion. They include:
>
> - Temporary removal of 1.223 acres of riparian vegetation, and permanent removal of 0.092 acre
> - Exposure of 2,810 linear feet of Clear Creek to elevated suspended sediment
> - The handling of ESA listed fish species
>
> Therefore, NMFS has verified this action remains consistent with conditions of the Opinion.
>
> **George Ritchotte**
> **(he/him/his)**
> ***WSDOT Liaison - ESA Biologist***
> **cell: 206-356-0511**
> **National Marine Fisheries Service**
> **West Coast Region**
> **https://www.fisheries.noaa.gov/region/west-coast**

--
Jeff Vanderpham, Ph.D., Biologist
NOAA Fisheries, Central Puget Sound Branch
West Coast Region
(562) 619-5700

Attachment 8 – Section 106 Historical Resources Report

CULTURAL RESOURCES REPORT COVER SHEET

Author(s): Bard, James C., Donald L. Craig, Megan Luce and Leslie Schwab

Title of Report: Cultural Resources Assessment for the SR 509/Clear Creek Restoration Project, Pierce County, Washington

Date of Report: November 2023

County: Pierce Township: 20N Range: 3E Section: 13 and 24
Quad: Puyallup

Acres: 54

PDF of report submitted (REQUIRED) ☒ Yes

Historic Property Inventory Form(s) to be Approved Online? ☒ Yes ☐ No

Archaeological Site(s)/Isolate(s) Found or Amended? ☐ Yes ☒ No

TCP(s) found? ☐ Yes ☒ No

Replace a draft? ☐ Yes ☒ No

Satisfy a DAHP Archaeological Excavation Permit requirement? ☐ Yes ☒ No

Were Human Remains Found? ☐ Yes DAHP Case # ☒ No

DAHP Archaeological Site #:

_____
_____
_____
_____
_____
_____
_____
_____

- Submission of PDFs is required.
- Please be sure that any PDF submitted to DAHP has its cover sheet, figures, graphics, appendices, attachments, correspondence, etc., compiled into one single PDF file.
- Please check that the PDF displays correctly when opened.

Cultural Resources Assessment
SR 509/Clear Creek Restoration Project
Pierce County, Washington



Prepared for:
Washington State Department of Transportation
Gateway Megaprogram
999 3rd Avenue
Suite 2200
Seattle, WA 98104

Prepared by:
SR 509 Team
Donald L. Craig, Principal Investigator
Leslie Schwab, Architectural Historian
Megan Luce, Archaeologist
James C. Bard, Archaeologist

November 28, 2023

Executive Summary

The following cultural resources investigation was conducted in support of the Washington State Department of Transportation's (WSDOT) SR 509/Clear Creek Restoration Project (Project) in Pierce County, Washington. The investigation is a survey of the limits of construction/Project Area of Potential Effects (APE. The Project would be constructed near the intersection of Pioneer Way East and 44th Avenue East outside of Tacoma, within the limits of the Puyallup Tribe of Indian reservation. The e Project is within Township 20 North, Range 3 East, Sections 13 and 24. Proposed activities include the removal of existing dams and other existing fisheries infrastructure within Clear Creek and restoration work to improve fish habitat, including realignment of the stream channel.

The Project's APE captures areas with the potential for direct and indirect effects as follows:

1. All areas where ground disturbance is planned in high probability areas for unknown archaeological resources, these areas have the potential for direct effects, which are caused by the action and occur at the same time and place. Effects could be caused by clearing and grubbing, grading, and ecology embankments, creation, or enhancement of mitigation sites, and staging and stockpiling areas; and

2. Historic properties located either one tax lot on each side of the affected rights-of-way or 200 feet from their margins, whichever is less, in areas where Project activities have the potential for indirect effects. Indirect effects are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable.

Eight historic built environment resources composed of historic-age, single-family residences were identified within the indirect Project APE. None of the historic-age resources are eligible for listing in the National Register of Historic Places (NRHP), either individually or as contributing resources to an historic district. Research did not indicate the presence of historic districts associated with the Project APE. The Washington State Department of Archaeology and Historic Preservation (DAHP) Washington Information System for Architectural and Archaeological Records Data (WISAARD) database also shows two eligible historic properties within 0.5 mile of the APE, including the Northern Pacific Railroad (Property ID 678145) and the 1930 Eagle Acres Barn (3604 40th Avenue East). Neither property is within the proposed APE and, therefore, neither would be affected by Project activities. In addition, no commemorative features or objects were observed within the Project APE associated with the Troutlodge Fish Hatchery (historically, Clear Creek Trout Farm), which has been impacted over time by expansion of its operations and changes in ownership. There are 17 previously recorded built environment resources within a 0.5-mile radius of the APE. None were determined eligible for listing in the NRHP.

Based upon a review of the DAHP WISAARD database, the area of the Project APE has not been previously surveyed. One previously recorded archaeological site, PI1383 (pre-contact isolate), is located within 0.5 mile of the APE. The site is not currently evaluated for the NRHP; however, its location outside of the Project APE means the site would not be affected by the proposed activities.

Background information regarding resources located nearby, as well as the topography within the APE and the proximity to a permanent water resource, give the Project area a moderate to high potential for archaeological resources. The Project site is privately owned, and access is limited by current business operations. Therefore, sub-surface field explorations have not yet occurred. Sub-surface explorations will occur as soon as site access can be obtained, estimated to occur in February or March 2024. A revised report will be prepared to incorporate the results of field investigations. Archaeological monitoring of the Clear Creek restoration area is recommended due to the sensitive Project setting and presence of buried surfaces. A Monitoring and Discovery Plan should be developed once Project plans and the APE have been finalized.

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List of Acronyms and Abbreviations

APE	Area of Potential Effects
BP	Before Present
CFR	Code of Federal Regulations
DAHP	(Washington State) Department of Archaeology and Historic Preservation
FHWA	Federal Highway Administration
GLO	General Land Office
HPIF	Historic Property Inventory Form
NRHP	National Register of Historic Places
PTOI	Puyallup Tribe of Indians
RCW	Revised Code of Washington
SHPO	(Washington) State Historic Preservation Office
SR	State Route
TCP	Traditional Cultural Property
USACE	U.S. Army Corps of Engineers
WISAARD	Washington Information System for Architectural and Archaeological Records Data
WSDOT	Washington State Department of Transportation

1.0 Project Description

1.1 Undertaking/Area of Potential Effects

Washington State Department of Transportation (WSDOT) is planning for construction of the SR 509 Completion and the SR 167 SR 167/I-5 to SR 161-New Expressway projects. WSDOT policy is to correct fish passage barriers if they fall within the footprint of a project if they meet certain criteria in order to comply with United States, et al. vs. Washington, et al. No. C70-9213 Subproceeding No. 0101 dated March 29, 2013, a federal permanent injunction requiring the State of Washington to correct fish barriers in Water Resource Inventory Areas 1 through 23. During the planning phases of the two projects, fish passage barriers were identified within the project limits that are subject to correction under the federal injunction.

WSDOT worked closely with the Puyallup Tribe of Indians (PTOI) and Washington Department Fish and Wildlife (WDFW) on two of these barriers: WDFW ID 935070 and WDFW ID 105 R121519a due to the complexity of correction and limited habitat gain if the barriers were made passable. The PTOI, WDFW and WSDOT reached agreement to restore, enhance, and create habitat at Clear Creek as mitigation for leaving the barriers uncorrected. The Clear Creek site will satisfy the injunction requirements for the culverts within the footprint of both projects. Therefore, the proposed action at the Clear Creek site is considered a separate undertaking from the SR 509 and SR 167 projects because it is being completed to comply with the federal injunction.

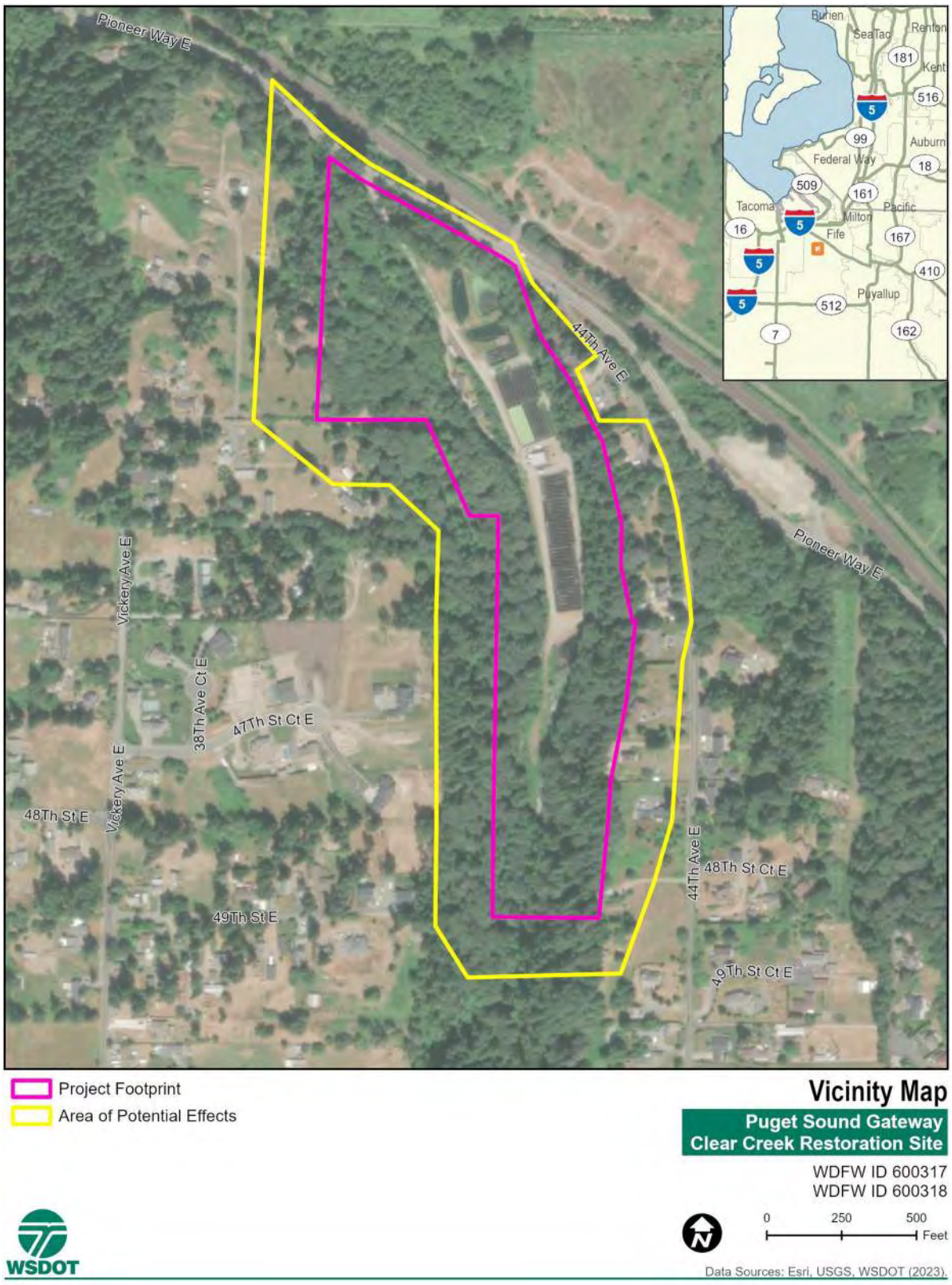
As such, WSDOT has established the Project APE to include the tax parcels that could be included in the Clear Creek mitigation. WSDOT proposes to construct the Clear Creek Restoration Project at 4008 Pioneer Way East, on privately-owned parcels in the Puyallup Tribe reservation in unincorporated Pierce County. This Project is within Township 20 North, Range 3 East, Sections 13 and 24. The Clear Creek Restoration Project includes the following major work elements:

- Remove all existing in-water concrete structures, including two fish passage barriers
- Remove existing fish hatchery structures, including operational building(s), storage shed(s), fish hatchery rearing ponds, and other auxiliary structures
- Re-grade the existing Clear Creek stream channel and regrade the floodplain to mimic historic conditions
- Construct habitat-enhancement elements, including placement of LWM, creation of habitat berms, and development of beaver-analog ponds
- Clear existing invasive vegetation and replant native riparian and upland vegetation

The Project's APE captures area with the potential for direct and indirect effects as described below (and shown in Figure 1 and Note: Data layers derived from Esri 2022; USGS 2022, and WSDOT 2022 Figure 2):

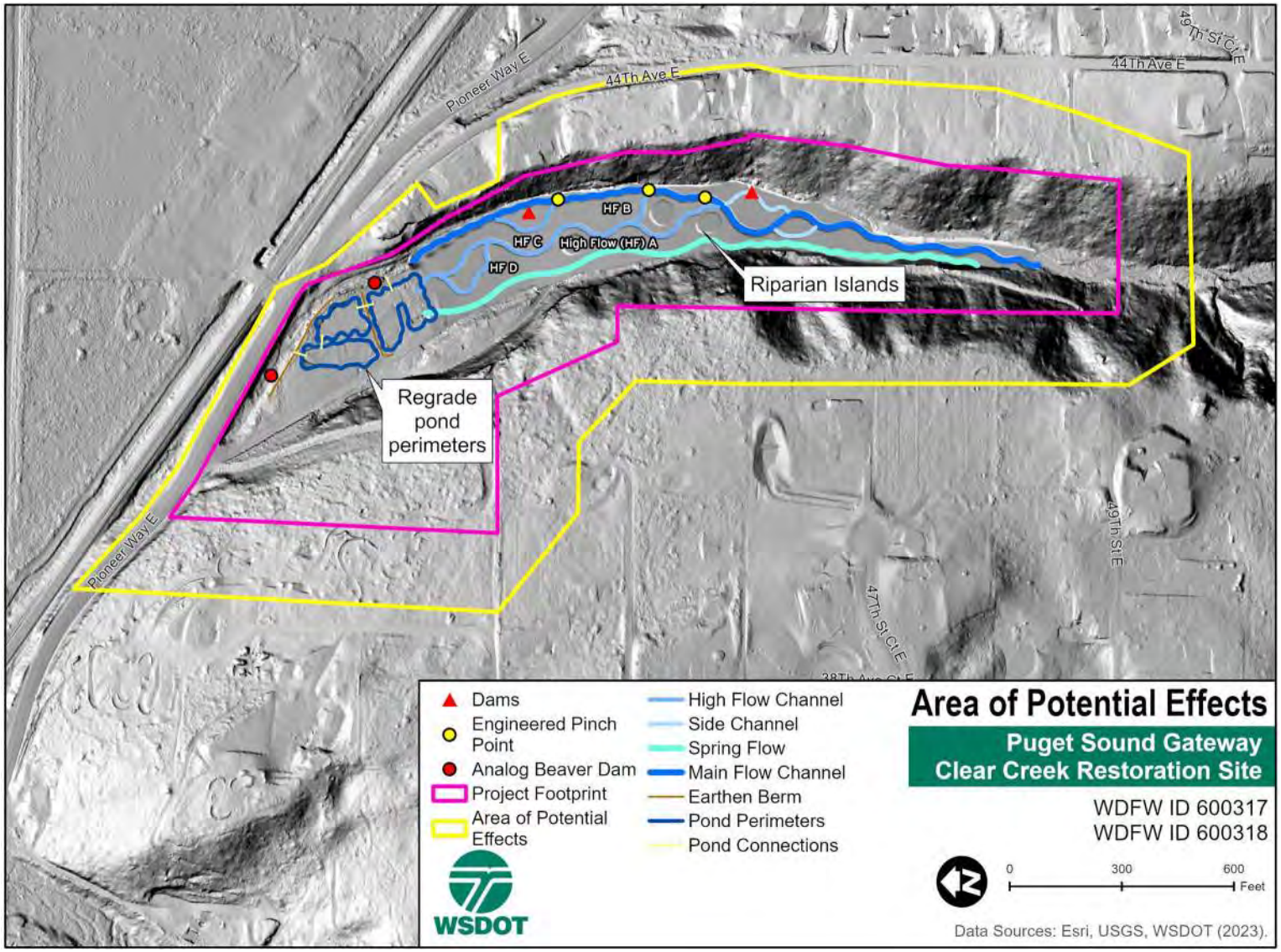
1. All areas where ground disturbance is planned in high probability areas for unknown archaeological resources, these areas have the potential for direct effects, which are caused by the action and occur at the same time and place. Effects could be caused by clearing and grubbing, grading, and ecology embankments, creation, or enhancement of mitigation sites, and staging and stockpiling areas; and

2. Historic properties located either one tax lot on each side of the affected rights-of-way or 200 feet from their margins, whichever is less, in areas where Project activities have the potential for indirect effects. Indirect effects are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable.



Notes: Vicinity map and data layers derived from Esri 2022 and WDFW 2022

Figure 1: Vicinity Map, Clear Creek Restoration Site



Note: Data layers derived from Esri 2022; USGS 2022, and WSDOT 2022

Figure 2. Area of Potential Effects, Clear Creek Restoration Site

1.2. Clear Creek Fish Hatchery Operations and Infrastructure

The Clear Creek trout farm was originally established during the 1940s and has been privately operated as a fish hatchery since it was purchased in the 1970s by Troutlodge, Inc. (Troutlodge). Weirs and dams were constructed on this reach of Clear Creek to facilitate fish hatchery operations (Pierce County 2006). The Troutlodge hatchery draws surface water from Clear Creek, between 3.5 and 3.7 million gallons per day. Until 2017, fish hatchery routine maintenance included dredging streambed materials upstream of the dams to ensure ongoing surface water flow. The dredged stream bed material, mainly consisting of gravel, sand and silt, was dumped upstream of the upstream dam, behind retaining walls to the west of Clear Creek.
As shown on Note: Data layers derived from Esri 2022; WDFW 2022, and USGS 2022

Figure 3, the fish hatchery operation includes a series of large, gravity-fed ponds. The three rectangular ponds each have several raceways where fish are kept and raised. The pour ponds on the north end were used for fishing derbies and are currently used as abatement ponds to remove sediment and nutrient-rich byproducts prior to the water being discharged to Clear Creek. The two dams on Clear Creek have two purposes: they act as barriers to prevent any anadromous fish from making it up stream, which could potentially introduce pathogens that could infect the hatchery fish, and they help divert surface water for hatchery operations. The downstream (lower) dam, constructed when the operation began in 1945, had a simple weir (which is no longer in use). The upstream (upper) dam, built later, includes sediment-deposition weirs, a settling basin, and a permanent flow diversion structure to divert creek flow to the hatchery.

The development and operation of the fish hatchery has disrupted the natural channel processes of what once was an intact, forested, alluvial fan and the diverse habitat it likely supported. Construction of the upper dam (Washington Department of Fish and Wildlife [WDFW] ID 600318) and associated sediment detention basins trapped mostly coarse sediment that likely would have been transported downstream and deposited within the forested alluvial fan. In response, the Clear Creek channel has incised downstream of the lower dam, which has degraded the available habitat and created the fish barrier at the lower dam (WDFW ID 600317) that exists today.



Note: Data layers derived from Esri 2022; WDFW 2022, and USGS 2022

Figure 3: Current Infrastructure at Troutlodge Property

1.3 Cultural Resource Tasks

SR 509 Team staff conducted the following tasks: (1) a comprehensive literature review and file search of records held at DAHP through the Washington Information System for Architectural and Archaeological Records Data (WISAARD) database; (2) documentation of historic built environment resources potentially impacted by the Project; and (3) preparation of this technical report of findings.

1.4 Regulatory Compliance

This cultural resources assessment assists FHWA, WSDOT, and the U.S. Army Corps of Engineers (USACE) in meeting their regulatory responsibilities under Section 106 of the National Historic Preservation Act (Section 106), which requires proponents of federally-assisted undertakings to identify historic properties in the Project's APE and to assess the proposed Project's effects/impacts on resources found to be historically significant and located within the APE. The lead federal agency ensures that, in addition to identifying historically significant archaeological and historic resources, the Advisory Council on Historic Preservation, and tribes have an opportunity to comment on the Project's impacts.

The initial step in the Section 106 process is to identify historic properties. National Register of Historic Places (NRHP) significance criteria were applied to evaluate the cultural resources are defined in Title 36 Code of Federal Regulations Part 60.4 (36 CFR § 60.4), which states:

> *The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess the integrity of the location, design, setting, materials, workmanship, feel, and association; and the aforementioned also possess the following traits:*
>
> *A. Are associated with events that have made a significant contribution to the broad patterns of our history,*
>
> *B. Are associated with the lives of persons significant in our past,*
>
> *C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction, or*
>
> *D. Have yielded, or may be likely to yield, information important in prehistory or history.*

In general, to be considered eligible for listing on the NRHP under one or more of the four criteria listed above, a resource must be 50 years old or older and have the necessary elements of integrity to convey its historical associations and significance. Aspects of integrity include location, design, setting, materials, workmanship, feeling, and association. They are the elements

that can convey the "why, where, and when" a property was—or is—significant. Each property type, whether it is a structure, object, site, building, or landscape, must retain some, if not all, of these aspects of integrity for that property to be considered eligible for listing in the NRHP.

In addition to the federal regulations, the State of Washington requires compliance with the cultural resources management laws and regulations under the Revised Code of Washington (RCW) 27.53 Archaeological Sites and Resources, RCW 27.44 Indian Graves and Records, and RCW 68.50.645 Skeletal Human Remains—Duty to Notify. The latter regulation provides a strict process for notification of law enforcement and other interested parties in the event of the discovery of any human remains, regardless of inferred cultural affiliation.

1.5 Project Personnel

Desktop surveys of the Project APE were conducted by SR 509 Team staff who meet the Secretary of the Interior's Professional Qualifications Standards for archaeologist and architectural historian. They included Donald Craig, MA, RPA; James Bard, Ph.D., RPA; Megan Luce, MA, RPA; and Leslie Schwab, BS Architecture.

1.6 Consultation

WSDOT initiated Section 106 consultation regarding the Project design and APE with the PTOI, Confederated Tribes and Bands of the Yakama Nation, Muckleshoot Indian Tribe, Duwamish Tribe, and Snoqualmie Indian Tribe and Squaxin Island Tribe. To date, consultation includes a request for comment on the revised APE and a meeting held on February 2022 with the PTOI to discuss future survey work that will be needed for the Project. In addition to consulting on cultural resources, WSDOT has coordinated extensively with the PTOI to identify the mitigation site itself and to discuss the proposed Project design. Coordination efforts have continued through biweekly meetings with the PTOI Fisheries Department.

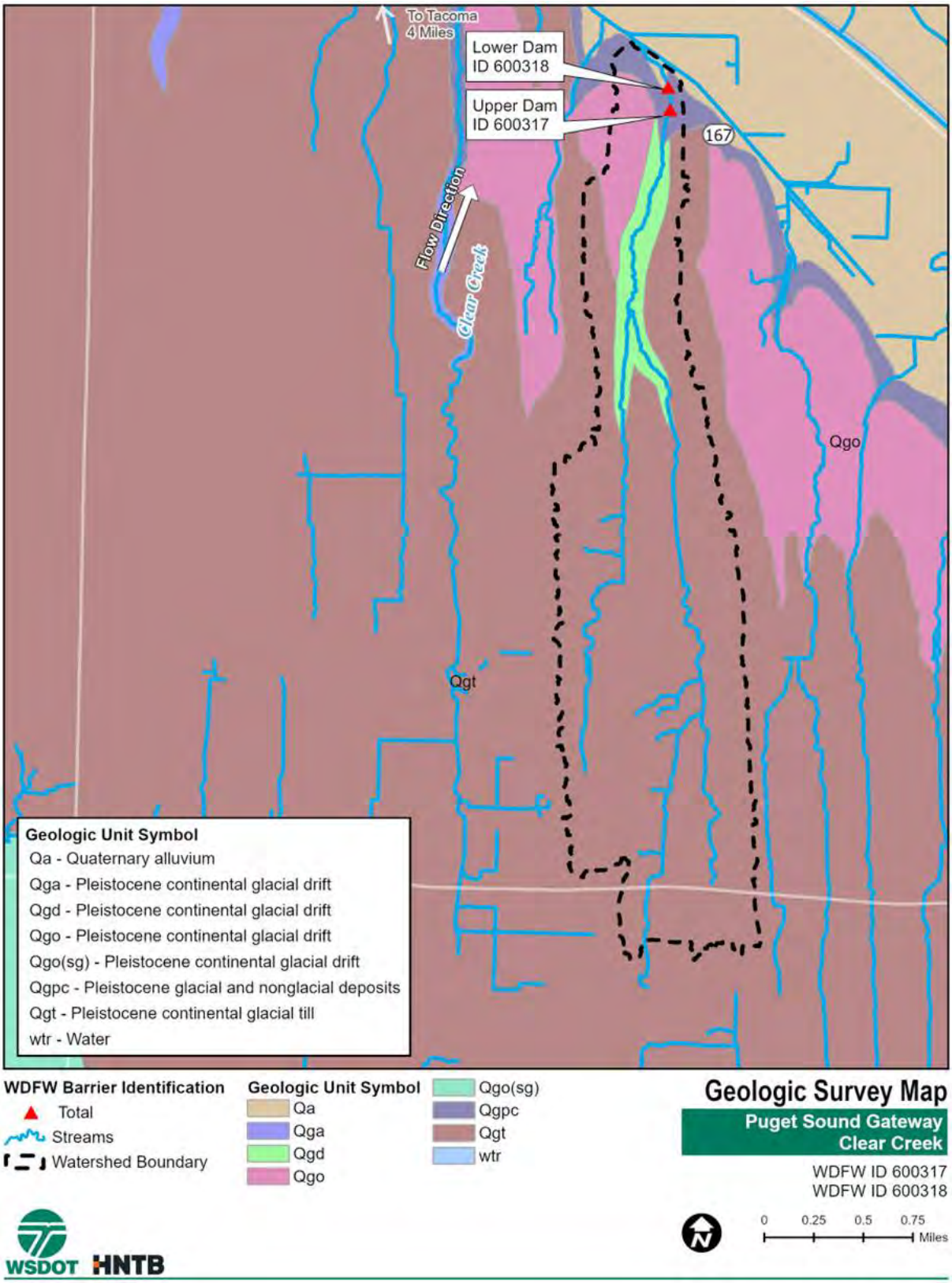
2.0 Environmental Setting

2.1 Geology

The Project is located on Clear Creek, a tributary of the Puyallup River, approximately 4 miles upstream of Commencement Bay in Puget Sound. The area lies in the Puget Trough physiographic province, a valley system that runs from Puget Sound south through the Willamette River valley (Fenneman 1931, Franklin and Dyrness 1988). The Puget Trough physiographic province incorporates all of Puget Sound, separating the Cascade Range from the coastal hills and Olympic Mountains (Thorson 1980). The landscape consists of low, gently rolling hills cut by numerous streams. In the Puget Sound watershed, rivers and streams drain into small coves and inlets of tidewater, as well as into larger bays such as Commencement Bay (Shufelt 2009). The Puyallup River Valley was cut by glacial advance outwash deposits circa 14,000 years Before Present (BP) and was subsequently filled by marine, deltaic, and alluvial deposits before it was inundated by the Osceola Mudflow circa 5,700 years BP (Dragovich et al. 1994:3; Kent 2004:4). Similarly, the South Tacoma Channel, extending from Commencement Bay to Steilacoom, was formed as a glacial outwash before draining over time to form a lowland (Forsman et al. 1998; Thorson 1980; Shufelt 2009).

Previous investigations within the Project APE (HNTB 2023) have provided a good overview of the geology of the area. The watershed uplands surficial geology in the APE largely consists of Pleistocene-age glacial deposits. These include the Vashon glacial till (Qgt), Vashon glacial drift (Qgd), and Vashon advanced glacial outwash (Qgo) (Figure 4). Vashon glacial till and Vashon glacial drift are glacial deposits from the Fraser glaciation. Vashon glacial till consists of clay, silt, sand, and gravel that are highly compact and unstratified. Vashon glacial drift consists of sand, silt, clay, gravel, and diamicton that were deposited during glacial advance and retreat. Vashon advanced glacial outwash consists of interbedded sand and gravel with minor silt interbeds. The Clear Creek ravine cuts through these units and exposes older sediment, comprising glacial and non-glacial pre-Fraser deposits (Qgpc) below approximately 60 feet of elevation within the ravine walls, as well as along the edge of the Puyallup River floodplain (Schuster 2016).

The ravine floor is composed of a thick layer of alluvium. Light detection and ranging (LiDAR) analysis and field observations confirm there is a small alluvial terrace (20 feet higher than the ravine floor) on the west side of Clear Creek, where housing for hatchery employees is located. Field observations confirmed the alluvium is derived from the erosion of the Clear Creek ravine, not from Lahar or volcanic-rich sediments from the Puyallup River. The terrace formed during a period of time when sea level/base level was higher.



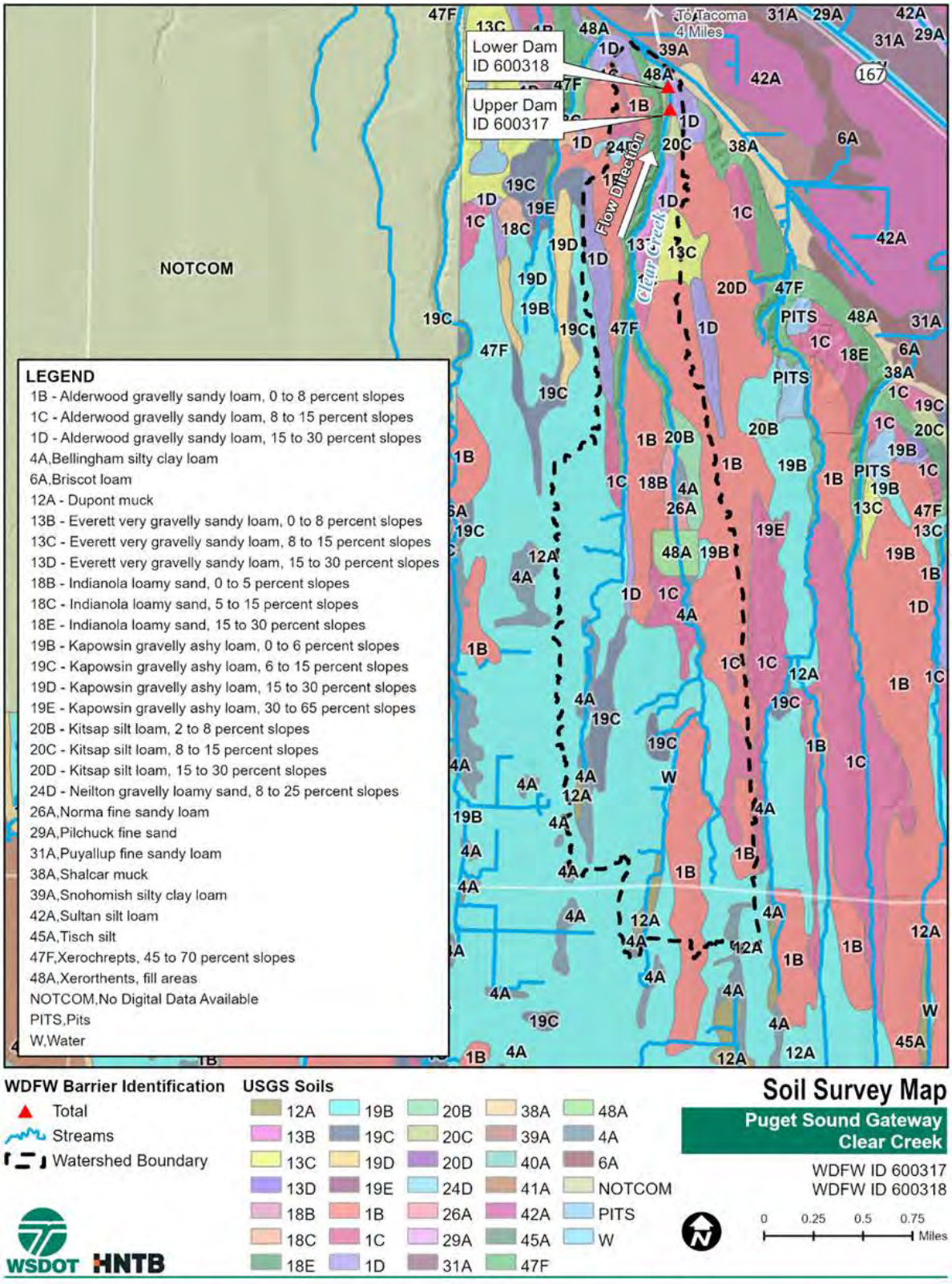
Note: Map derived from WDFW 2022, DNR 2020, NRCS 2022, Esri 2022, and USGS 2022

Figure 4: Geologic Survey Map

The Vashon Stade of the Fraser glaciation (the most recent glaciation of the Puget Sound) began retreating approximately 15.500 million years ago (Haugerud 2021). Lake Puyallup formed in a glacial outwash channel near the southern terminus of the ice sheet as an ice-bound lake (Palmer 1997). Around 14,300 years ago, rapid glacial retreat allowed a connection between the southern Puget Sound and the Pacific Ocean (Haugerud 2021). The water levels dropped to +30 feet when the Puget Sound Basin connected to the Pacific Ocean via the Strait of Juan de Fuca (Thorson 1980). This likely caused the rapid erosion within Clear Creek and the other tributary streams (Swan Creek and Squally Creek). At this time, the Puyallup River valley was a deep tidal basin, and each tributary would have formed deltas along the valley wall (Palmer 1997). Between 5.6 and 14.5 million years ago, the net effect of isostatic rebound and sea level lowering caused a further 40-foot drop in the sea level to -10 feet (Booth et al. 2003). Tributary streams along the Puyallup River, such as Clear Creek, were incised during this time, creating terraces when the base level was higher. At least three significant Holocene lahar flows originating from Mount Rainier inundated the Puyallup River valley between 5,600 and 500 years BP. The oldest, occurring approximately 5,600 years BP, is the Osceola mudflow (Palmer 1997). Before the Osceola mudflow, Palmer estimated the Puyallup River created a marine delta south of Sumner. The Osceola mudflow caused the Puyallup River delta to prograde from Sumner to Fife (approximately 5 miles) within a few years. As a result, Clear Creek began to build an alluvial fan onto the new Puyallup River floodplain.

Two subsequent lahar flows in the Puyallup River valley occurred 2,300 years BP and between 500 and 800 years BP. The Puyallup River delta prograded (extended out farther out into Puget Sound) at a rate of 1.5 mile per 1,000 years due to these repeated lahar flows. During this time, the length of Clear Creek also increased by approximately 2 miles. The lengthening of Clear Creek while sea levels slowly rose has caused the alluvial fan to fill in a portion of the ravine that was deepened.

Soils in the Clear Creek drainage basin were assessed using Natural Resources Conservation Service (NRCS) Web Soil Survey database (NRCS 2022; Figure 5). The predominant soil types in the southern half of the drainage area are Alderwood gravelly sandy loam and Everett very gravelly sandy loam. The predominant soil types in the northern half of the watershed are Alderwood gravelly sandy loam, Kapowsin gravelly ashy loam, and Bellingham silty clay loam. As East Fork Clear Creek and West Fork Clear Creek begin to cut down and enter the ravine-like setting, Xerochrepts is found in the hill slopes and in the valley. Xerochrepts continues through the confluence of the two creek forks and the Project area, extending down to Pioneer Avenue East. Given the amount of sediment found just upstream of the upper dam, Clear Creek has a large sediment supply.



Note: Map derived from WDFW 2022, DNR 2020, Esri 2022, NRCS 2022, and USGS 2022

Figure 5: Clear Creek Watershed Soil Survey Map

2.2 Geomorphology

The first diversion of the Puyallup River occurred in 1918 (Ruby and Brown 1992; Flenniken and Trautman 2013:3). Development of the Puyallup River delta to create usable land included channelizing and/or rerouting of the Puyallup River and creeks throughout the delta. Puyallup River projects created by the USACE Flood Control Act of 1936 included the straightening of the Puyallup River between 1945 and 1950 from the mouth to river mile 3.0. A levee system was constructed on both sides of the river (Kent 2004; Flenniken and Trautman 2013:3).

The Project APE, with its proximity to the Puyallup River and the shores of Commencement Bay, has also been affected by the historic-period filling of both the bay head and the Puyallup River tributaries, which were widened and dredged as early as 1890. The dredge spoils were used as fill to build up the surrounding landscape (Kent 2004). Clear Creek was also channelized in historic times, moving the confluence of Clear Creek and the Puyallup River closer to the northwest of the Project's APE. Prior to Clear Creek's channelization, there appears to have been a higher elevation landform on the northeastern side of the previous creek channel, as described and documented by Rinck et al. (2012) and Shong and Rinck (2015). This landform could potentially have been the result of previous filling or dredging, the latter of which can be difficult to distinguish from natural deposition (Shong and Rinck 2015:6).

2.3 Flora and Fauna

Native vegetation in the Puget Lowland re-established not long after the retreat of glacial ice. Species of pine took root on outwash plains and then gave way to scattered oak, grasses, and Douglas-fir (*Pseudotsuga menziesii*). The general Project area is located within the *Tsuga heterophylla*, or western hemlock, vegetation zone (Franklin and Dyrness 1988). The steep hillslopes extending to the east and west of the valley floor are forested, with a canopy dominated by bigleaf maple (*Acer macrophyllum*), Douglas-fir, and western red cedar (*Thuja plicata*). The understory is composed of osoberry (*Oemleria cerasiformis*), salmonberry (*Rubus spectabilis*), and western swordfern (*Polystichum munitum*). Areas near the toe of slope, adjacent to Clear Creek and the fish hatchery, are dominated by invasive species, including Himalayan blackberry (*Rubus armeniacus*) and reed canarygrass (*Phalaris arundinacea*) (HNTB 2022).

On alluvial bottomlands, vegetation type and density vary according to substrate and elevation above the river, but the native species such as Douglas-fir, red alder (*Alnus rubra*), western red cedar, salal (*Gaultheria shallon*), blackberry (*Rubus* spp.), salmonberry (*Rubus spectabilis*), thimbleberry (*Rubus parviflorus*), Oregon grape (*Mahonia aquifolium*), western swordfern and vine maple (*Acer circinatum*), traditionally predominate (Shufelt 2009:10). Historically, willow (*Salix* spp.), red alder, cattail (*Typha latifolia*), reeds (various), cranberries (*Vaccinium* spp.)), skunk cabbage (*Lysichiton americanus*), and wapato (*Sagittaria latifolia*) all would have provided food or useful resources for humans as well as providing food and cover for game they hunted (Rinck et al. 2012:7). Settlers in the vicinity of Commencement Bay altered the natural environment as they cleared the forests of their dense timber to build homesteads and develop

lands for agricultural use, with subsequent logging practices, industrialization, and increasing urbanization furthering the transformation of the landscape (Rinck et al. 2012:7; Shufelt 2009).

Native Americans in the Pacific Northwest relied predominately on fish and shellfish. Migrating salmon and trout were available in Commencement Bay and the streams that flowed into it. Freshwater fish, including suckers and chubs, were found in nearby lakes and streams. The tidal zone provided a variety of shellfish, with clams, mussels, limpets, and barnacles found in the intertidal zone and scallops and crustaceans in the subtidal area (Kozloff 1983; Rinck et al. 2012:7).

The surrounding forested uplands and meadows in the Puyallup River watershed provided important habitat to larger animals, including elk, black-tailed deer, bear, and mountain lion, as well as smaller animals such as rabbit, raccoon, red fox, porcupine, squirrel, coyote, weasel, and river otter. Marshes and wetlands provided habitat for beaver and muskrats and a migration corridor for ducks, geese, and other waterfowl. Harbor seal, sea lions, porpoises, and other marine mammals were found on the coast (Rinck et al. 2012:7).

3.0 Cultural Setting

Archaeological and historical evidence indicates that Native Americans moved into the Pacific Northwest as the last ice age came to an end, occupying western Washington for at least the last 12,000 years. More evidence is available for occupation after about 5,000 years ago and especially for the last 2,500 years, when populations apparently increased and large, permanent villages were inhabited. The human history of the area is a response to the availability of natural resources of a variety of environments, including marine shorelines, freshwater rivers and streams, marshes and wetlands, prairies, and upland forests and meadows. After the turn of the 19th century, Euroamerican inhabitants and travelers were drawn by timber and mineral resources, as well as homesteading opportunities, settling lands where maritime traffic could be established for transporting timber products and agricultural goods. Even at the time of contact between Native Americans and the earliest Euroamerican explorers, however, demographic and cultural changes were already altering the native way of life (Rinck et al. 2012:7).

3.1 Ethnographic and Ethnohistoric Period

Land within and broadly adjacent to the overall Project APE was the traditional territory of the Puyallup people, known in the native language as “S’Puyalupubsh” or spuyaləpabš, meaning “generous and welcoming behavior to all people (friends and strangers) who enter our lands” (Castile 1985; Smith 1940; Spier 1936; Suttles and Lane 1990). The Puyallup people are Twulshootseed speakers, descendants of Southern Lushootseed speaking (Puget Salish) people (Suttles and Lane 1990). Historically, the Puyallup people lived in the territory extending from Mount Rainier and the top of the Cascades, west to Key Peninsula and many islands throughout the Puget Sound, south to the Nisqually River, and north to the Three Tree Point, including the Puyallup and White River watersheds (Smith 1940; Waterman 1920; Wright 2002; Haeberlin and Gunther (1930:9).

Permanent villages were typically used in the winter, and temporary camps made of reed mats were utilized in the warmer months while people were traveling for seasonal food sources, such as salmon, shellfish, waterfowl, deer, roots, bulbs, and berries. Winter villages were typically positioned above the tide flats “at the juncture of two streams or at the mouth of the stream where it entered the Sound” (Smith 1940:4, 9) and consisted of one to three houses, each approximately 30 feet wide and up to 100 feet long with a pitched roof (Shufelt 2009). The houses generally faced the water, with the length paralleling the river or stream (Hartwich 1972). The winter homes were occupied by single or multiple family groups who gathered and preserved foods in preparation for winter season. At the time of Euroamerican contact, large, well-made canoes were the primary means of transportation between upriver and saltwater villages because pedestrian movement through thick vegetation and steep embankments was difficult (Shufelt 2009).

For subsistence, the most important fish resource was salmon, which were caught at the mouths and along the banks of rivers as the salmon migrated from Puget Sound to native spawning

streams. Salmon were smoked or dried for the winter and provided the bulk of food consumed and exchanged in that season (Suttles and Lane 1990; Shufelt 2009). River fishing strategies involved the use of complex traps and weirs in addition to netting and spearing, while coastal fishing strategies included line and hook, trolling from a canoe with hook, dip netting, and spearing (De Danaan 2002:23). As documented by Ballard (1957: 38-40), elaborate fish weirs were constructed on land and placed in the river during salmon season. The weirs were built with poles of Douglas-fir and alder and screens were made from hazel, ironwood, and cedar branches. Fish weirs and other permanent constructions are often associated with large occupation sites. Common artifact assemblages consist of a range of hunting, fishing, and food-processing tools; bone and shell implements; and midden deposits (Phillips 2011). The Puyallup and other lower Puget Sound tribes acquired and used the horse by around 1800, possibly from the Klickitat and Yakama tribes (Carpenter 1986; Boxberger 1984). As the number of horses they owned increased, the Puyallup people were able to rely more heavily on prairie habitats for pasture and enjoyed greater interaction with peoples east of the Cascade mountains (Shufelt 2009).

Smith (1940) lists 13 Puyallup villages in the present-day Tacoma area, and other ethnographers report other villages, camps, fishing, and gathering places in the vicinity (Spier 1936; Waterman 1920). The tribe's name is derived from one of these villages, Puyallupahmish [S'Puyalupubsh], located in what is now downtown Tacoma (Gibbs 1877; Shong and Rinck 2015). Waterman documented five place names near the mouth of Clear Creek, which met the Puyallup River prior to straightening of the river:

1. Ca'sqwEd ("clear"), a creek that entered the Puyallup River from the south, believed to refer to Clear Creek (although possibly Swan Creek)

2. Ca'sqwo'tsid, referring to the mouth of Ca'sqwEd and also to the village found at that location

3. "QolEq!, an "old village site above Clear Creek on the riverbank"

4. Saoxe'xele'ux, a place where they practice combat and train for war, a place on the "flat below the mouth of [Clear] creek" (Hilbert et al. 2001; also referred to by Smith 1940:9)

5. Xe'l xale, "place where there was a battle," was located on the left bank of the Puyallup River near a marsh, northwest of the confluence of Clear Creek and the Puyallup River (Waterman 1920; Kent 2004; Hilbert et al. 2001:247-250; Phillips 2011).

Several of these places are thought to have been located in 1998 during cultural resource review for the Puyallup Burlington Northern Third Track project. Larson Anthropological Archaeological Services suggested that the "Ca'sqwEd" village and "QolEq!" is in the vicinity (Forsman et al. 1998; Shufelt 2009). Prior to the Puyallup River dredging, "Saoxe'xele'ux" would have been on the same side of the river as the Project APE. Today, because the river was straightened and relocated, it is on the opposite side (Flenniken and Trautman 2013:4-5). The "combat place" is recorded as an archaeological site, and the "principal man" recorded as living there was Chief Chee-Chawp-Wich, who was married to Chief Seattle's niece, Mary Hote

(Shufelt 2009). The son of Chief Chee-Chawp-Wich, John Knott (or John Khote, pronounced Hote) was likely the fourth chief in the family and was an important informant of T.T. Waterman (Shufelt 2009; Flenniken and Trautman 2013:4-5). "Casqwo'd-tsid" is believed to be a little more than 1 mile to the north-northwest of the Project APE and is associated with a pre-contact shell midden site (45PI467) (Shufelt 2009).

3.2 Historic (Post-Contact) Setting

Captain George Vancouver's 1792 exploration of Puget Sound marked the first Euroamerican exploration and mapping of the region (Kirk and Alexander 1990:271; Morgan 1979). However, it was not until 1832 that the earliest Euroamerican settlement in the region was established at Fort Nisqually, at the southern end of Puget Sound. Also in the early 1830s, William Fraser Tolmie was the first settler to explore the Puyallup River valley as medical officer for the Hudson's Bay Company. Led by Nuckalkat, a Puyallup Indian, and several other Native American guides, Dr. Tolmie passed through the valley where approximately 2,000 Puyallup Indians lived on his route to Mount Rainier (Costa et al. 2017). In 1841, the American Wilkes Expedition traveled to the Tacoma area, calling it Commencement Bay, and surveyed and mapped the bay and surrounding area.

More than 12,000 Lushootseed speakers occupied the Puget Sound region prior to European contact; however, by the mid-1850s, the 1850 Donation Land Act increased British and American settlement substantially, and epidemics that these newcomers brought with them reduced the native population in the Puget Sound region to only 5,000 (Suttles and Lane 1990:501; Shapley 2009). As white settlers began to move into the area in larger numbers, tensions grew between the natives and newcomers. In 1853, Washington Territorial Governor and Superintendent of Indian Affairs, Isaac Stevens, was given a mandate to remove native peoples from their land to open up the territory for Euroamerican settlement. He sought to sign treaties with all the tribes in the region, including those around Puget Sound, and to place them on reservations. In late December 1854, Stevens, along with General George Gibbs and local officials, met with 600 natives, including members of the Nisqually, Puyallup, and Squaxin tribes near She-na-nam, or Medicine Creek (now known as McAllister Creek), approximately 20 miles southwest of Tacoma, in Nisqually, to sign what is known as the Medicine Creek Treaty (Shufelt 2009).

The Medicine Creek Treaty dissolved native peoples title to 2.2 million acres of their traditional lands; retained many traditional rights such as hunting, root and berry gathering, fishing, and grazing land for horses; and created the Puyallup, Muckleshoot, and Squaxin Island reservations (Ruby and Brown 1992; Trautman and Flenniken 2016). The original Puyallup reservation, at 1,280 acres, was the largest of the three reservations created. Conflict over increasing encroachment of whites into native lands and dissatisfaction with treaty terms brought open hostilities in 1854 and 1855 between members of the Nisqually, Muckleshoot, Puyallup, and Klickitat tribes against the U.S. military and local militiamen, typically referred to as the Puget Sound Indian Wars (Costa et al. 2017). The Puyallup reservation was subsequently enlarged to

18,062 acres in January 1856, and some Nisqually, Cowlitz, and Muckleshoot groups joined the Puyallup on their reservation (Becker 2006).

While still relying on fishing, individuals living on the reservation began to raise wheat, oats, and hay in the meadows. Under Article 10 of the Medicine Creek Treaty, the United States was to establish (within 1 year from the ratification and for a period of 20 years) an agricultural and industrial school, and blacksmith and carpenter shops. The United States was also to employ a blacksmith, carpenter, and farmer for the 20-year term to instruct the natives in each trade. In addition, the Medicine Creek Treaty called for the employment of a physician to reside at the central agency to furnish medicine and advice to the sick (Shufelt 2009). Land on the Puyallup reservation was divided into 178 allotments assigned to individual families (Ruby and Brown 1992; Trautman and Flenniken 2016).

As Tacoma continued to grow, whites pressured for removal of restrictions on the Puyallup reservation, leading to allotting and patenting of tribal lands even before Congress passed the General Allotment Act in 1887. Congress authorized selling off of reservation tracts, which led to the most valuable waterfront land passing into the hands of the timber, railroad, and land speculation companies. Between 1890 and 1909, the Puyallup lost nearly all of their original reservation lands.

By 1910, the population of Tacoma had grown from a few hundred people in 1873 to 83,000 (Galacci 1999; Robinson 1989) as a result of the construction of the Northern Pacific rail line from Kalama to Tacoma. Immigrants came from various parts of the United States, Scandinavia, Germany, Great Britain, Canada, and China. Tacoma's population surged during the boom years between 1887, when the transcontinental railroad through the Stampede Pass was completed with Tacoma as one terminus, and 1893, when an economic depression struck the region. Lumber was Puget Sound's major export for much of its early history; in fact, Washington was the top lumber-producing state in 1910 with 63 percent of the state's wageworkers dependent upon the forest products industry for jobs (Schwantes 1996:215). Many of the Puget Sound mill towns were established after the devastating San Francisco fires of 1852 and 1908. Virgin timber stands and natural deepwater anchorages provided ships refuge from the Pacific storms. Soon, inlets up and down Puget Sound were exporting timber down the coast (Schwantes 1996:217; Shufelt 2009).

The first fill event near the Project APE, on the Puyallup River, likely occurred as part of the USACE Flood Control Act (Kent 2004) in 1945 and 1950. The project straightened the trajectory of the Puyallup River, filling in the natural oxbow course of the river and moving the terminus of Clear Creek into the Puyallup River, north and west of its historic confluence. It is reported that areas in the vicinity of the Clear Creek and Puyallup River confluence were topped with fill at least four subsequent times, including with fill from the construction of the Tacoma Dome as recently as 1980 (Marchetti 2009).

A 1984 U.S. Supreme Court ruling returned a small portion of the acreage (a 12-acre parcel) that was exposed when the Puyallup River was diverted in the early and middle 20th century (Ruby

and Brown 1992). A negotiated agreement in 1988 between the PTOI, the State of Washington, the U.S. Government, local governments, and private property owners returned 900 acres to the PTOI along with a monetary settlement if the tribe relinquished further land claims (PTOI, n.d.; Flenniken and Trautman 2013).

The PTOI was among the Washington tribes who benefitted from the in the *U.S. vs. Washington* (Boldt Decision) legal decision that reinforced treaty rights, entitling the tribes to 50 percent of the harvestable runs of salmon and steelhead at their usual and accustomed fishing places.

3.3 Clear Creek Trout Farm

Placing the Clear Creek trout hatchery into a historical context was facilitated by review of a newspaper article entitled “Trout Hatcheries in Area Find Prosperity” (*The News Tribune* 1953). In 1953, most of Washington’s 64 privately licensed trout farms were in the western part of the state, with 28 of them in the Tacoma area alone. New trout farms were frequent, but the demand continued well ahead of supply. Multiple types of trout farming often overlapped, from pleasure resort trade (“you catch them and cook them”) to assembly line trout “manufacturing” business (fish raised strictly for wholesale trade and transported in tank trucks, etc.). Between those two types of operations are farms like the Clear Creek Trout Farm, where Claude W. Lathrop sold to customers who wanted their fish caught and cleaned or who preferred to fish them out themselves for fun (see Figure 6). Lathrop also sold quantities directly to hotels, restaurants, and other buyers, which were shipped on occasion, and sometimes also sold to wholesale fish houses.



Figure 6: 1947 Advertisement for Clear Creek Trout Farm

The most pressing problem of all trout growers was food. At the Clear Creek Trout Farm, the fish ate more than a ton a day of salmon scraps and byproducts in winter and about one-fourth of that amount in summer. There was a constant need to feed the live fish; approximately every 60 days, some 2 million fish matured in the ponds.

The Lathrop family lived at the hatchery for 13 years (*The News Tribune* 1953). Claude Lathrop developed the property with efficiency in mind. The hatchery grew to 52 troughs in the hatchery; each trough had 42 baskets, each containing 30,000 eggs that hatched every 30 days. The commercial demand for fish resulted in the industry's expansion into the 1950s.

McCleary and Drew (Troutlodge founders) purchased the trout farm in the 1970s. From the 1970s to 1990s, according to aerial photos, the site was further developed to reflect its current configuration. According to its website, Troutlodge became one of the top producers of trout, researching and developing the science in support of farm raised trout at this and other facilities (Troutlodge 2023).

This account of the Lathrops and their operation at the Clear Creek Trout Farm hatchery is a momentary slice of time. In 1953 and the years immediately beyond, both recreational trout fishing and industrial trout production for retail sale were important. Today, there are many other kinds of wild and farmed fish products available to consumers (salmon, for example), in part due to the world-wide supply chain of imported fresh and frozen products. The Lathrops' operation, as it developed over time, reflects the growing need for fresh trout that were farmed and brought to market throughout the Pacific Coast and the contribution of Puget Sound and Tacoma area hatcheries in that supply chain.

4.0 Background and Literature Review

4.1 Historical Maps

General Land Office Historical Plats

General Land Office (GLO) survey plats associated with Project APE survey units were reviewed for cultural resources. No cultural resources (roads/trails, fence lines, irrigation systems, buildings), or land ownership, are depicted in or immediately adjacent to the Project APE. The GLO survey maps from 1867 and 1868 do show the Project area as part of the original Puyallup Reservation, but no land on the Puyallup Reservation had been platted (Office of the United States Surveyor General 1867, 1868, 1873, and 1874).

According to the GLO maps from 1867 and 1868, the original Puyallup reservation land lay on both sides of the Puyallup River, which meanders considerably in its original course near the current Project area (Office of the United States Surveyor General 1867, 1868) (Figure 7). On the maps, Clear Creek position crosses southeast to northwest through the Project's APE. It is part of a network of long branching and meandering streams draining lands on the south side of the Puyallup River. As shown in the maps, in the southwest quarter of Section 13, two nearly parallel trails run west to east, the northernmost one reaching the Puyallup River where it veers south, and the southernmost one going into extensive wetlands to the east.

In 1874, when the Puyallup reservation was surveyed, the meandering nature of the Puyallup River and extensive wetlands were even more visible (Figure 8).

A historic map of the Puyallup reservation shows tribal allotments in 1892 (Figure 9). In 1893, the U.S. Congress passed the Puyallup Act, which allowed the sale of tribal allotments to non-Indians (Slagle 1979). The APE intersects the allotments of William Meander, in the sout**Error! Reference source not found.**). A portion of the Puyallup Indian Commission report of August 26, 1896, is included in a larger survey (United States Senate 1934) that identifies William Meander as holding patent (allotment) number 50 for a total 142.76 acres. This included 22.76 acres of agricultural land adjacent to the Puyallup River, identified as "homestead," in addition to 120 acres of upland ("hill land") within the Project APE. The upland forested hills were devalued--as unused and uninhabited--in the report to the Indian Commission and were recommended for sale (U.S. Department of the Interior 1892).

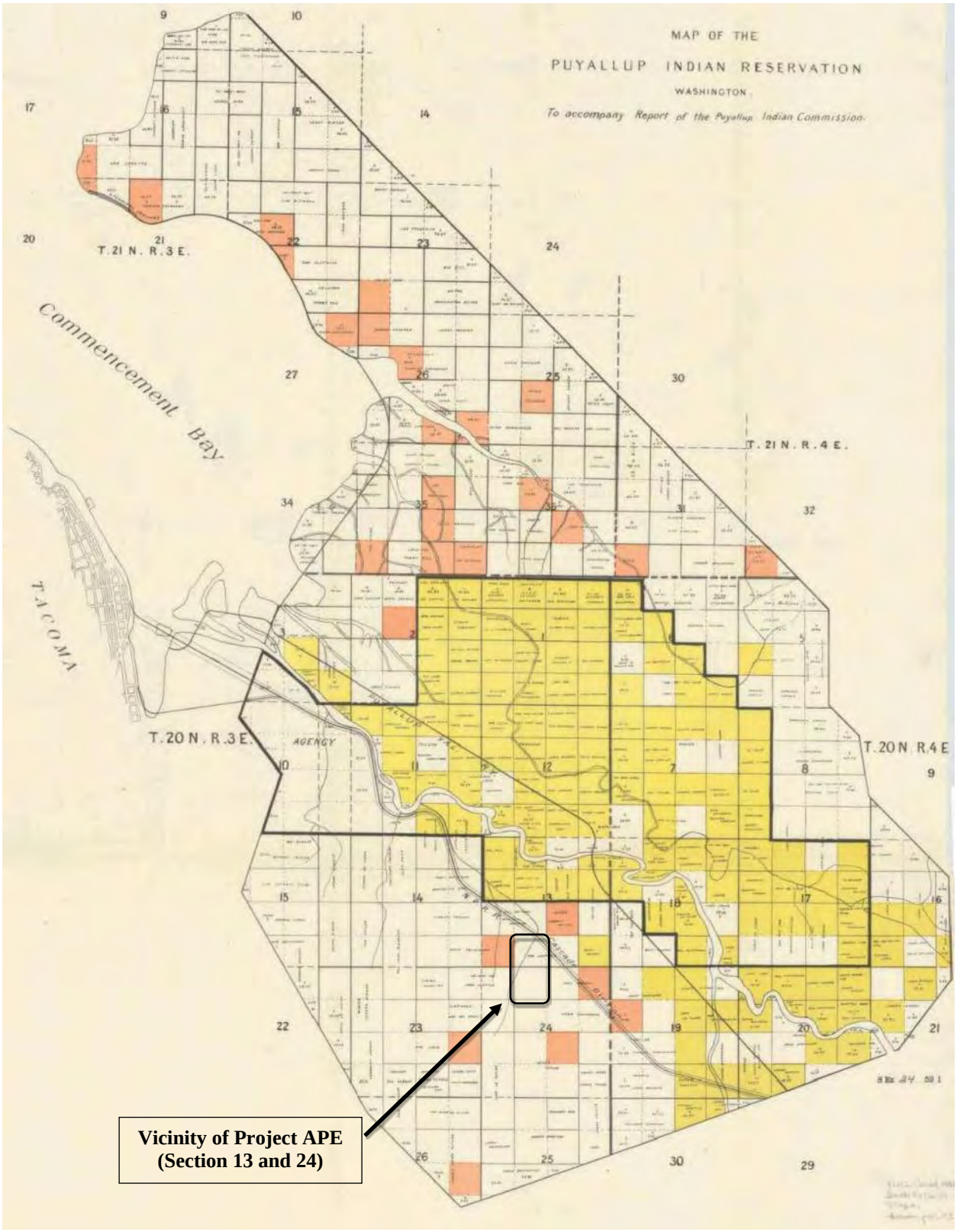


Note: Accessed at https://glorecords.blm.gov.

Figure 7: 1867 GLO Map; Township 30 North, Range 3 East, Willamette Meridian; Pierce County, Washington



Figure 8: 1874 GLO Map; Pierce County, Washington



Note: Accessed from https://content.libraries.wsu.edu/digital/collection/maps/id/219/.

Figure 9: 1892 Tribal Lands Map Showing William Meander Allotment in Project APE

A legend describing the meaning of the yellow and orange colors on Figure 9 has not been identified; however, descriptions within the Puyallup Indian Commission Report (Department of the Interior 1892) suggest that the yellow parcels were the agricultural homesteads initially prioritized to remain under control of tribal members within a reduced reservation area, while non-colored parcels were those prioritized for sale to non-Indians—primarily for residential development between Tacoma and Puyallup. The orange-colored parcels on Figure 9 are not explicitly described, but they may be allotments where a land sale was encumbered (e.g., the patent holder was unwilling to sell or was deceased) or where site conditions were less desirable for purchase. The 1896 tabulation of patent owners within the Puyallup Reservation ends with the note, "All the land within this reservation has long since been sold, except a small portion in the Indian addition to the city of Tacoma, and possibly a portion of a half a dozen allotments which were retained by Indians."

Historic Topographic Maps

Topographic maps were reviewed from 1897 to 2020 (www.usgs.gov). The Great Northern Railroad line is visible running along the north end of the Project APE starting in 1897, and the historic Pioneer Way Road appears to run through the APE in 1897 and 1900. By 1941, the road had been shifted to run just north of the northern border of the APE. The Puyallup River, which meandered considerably in the 1897 and 1900 maps, had been graded, straightened, and brought slightly farther south towards the APE by 1941.

Metsker Maps

Maps from Metsker's Atlas of Pierce County (Metsker) from 1951, 1960, and 1965 were reviewed (HistoricMapWorks.com). The 1951 Metsker map shows the Project site, along with several other nearby parcels, were owned by J.A. Bowler. Adjoining parcels also appear to have been owned by private parties. The 1960 and 1965 Metsker maps show similar ownership patterns, but ownership for the Project site is shown as C. Lathrop.

4.2 Historic Aerial Photographs

Aerial photographs were reviewed from 1940 to present (1940, 1941, 1944, 1957, 1968, 1972, 1980, 1990, 2006, 2011, 2015, and 2019). The 1940 aerial photos are part of the Puget Sound River History Project (University of Washington 2023). The original 9-by-7-inch aerial photos, found in the USACE Archives, were scanned as individual, 600 dots per inch (dpi), TIFF files by the University of Washington Department of Earth & Space Sciences in 2003 and were orthorectified into quad-map sheets. Based on review of the photos, markedly more development occurs after 1990, especially development of neighborhoods to the east and west of the Project APE, but tree cover along the creek and in the vicinity of the Project area is relatively consistent throughout time period reviewed. See Appendix A for historical photos.

4.3 Property Ownership Search

An online search of Pierce County records of deeds for the property ownership in the Project APE (Pierce County 2023) reveals the ownership of the Clear Creek Trout Farm from the 1940s through the 1970s. The Clear Creek Trout Farm began sometime between 1941 and 1947. The Lathrops lived there for 13 years after purchasing the property from previous owners (*The News Tribune* 1953). Troutlodge's McCleary purchased the property from C. Lathrop in 1972, and Troutlodge continues to own the land.

4.4 Previous Investigations within 0.5 Mile of the Project APE

A number of cultural resources investigations have been completed near the Project APE. Of the 13 investigations recorded in DAHP, 10 are archaeological cultural resources surveys, one is a monitoring report, and two are historic structure surveys. None of the investigations recorded sites within the Project APE.

Cultural Resource Studies and Sites

SR 509 Team staff conducted a search of information provided on the DAHP WISAARD database on October 19, 2023, to determine if any archaeological sites, historic properties, and/or cultural resource surveys have been previously recorded within a 0.5-mile radius of the Project APE (DAHP 2023). Table 1 presents a summary of previously-conducted cultural resource studies within 0.5 mile of the Project APE.

Table 1. Previously Conducted Cultural Resource Studies within 0.5-Mile Radius of the Project APE

NADB Number	Distance to APE	Year	Author		Method
1340365	0.1 mile	1998	Leonard A. Forsman	Letter to Lloyd Skinner Regarding Proposed RTA South Corridor Puyallup Burlington Northern Third Track Cultural Resource Management	Survey
1693059	0.25 mile	2019	David Munsell	USDA-NRCS Cultural Resources Survey for the Rawley Johnson Project in Pierce County, Washington, EQIP Contract 740546190N3	Survey
1693993	0.3 mile	2020	Barbara Bundy	Cultural Resources Survey Report, Parcel 129 Wetland Mitigation Site	Survey
1684534	0.3 mile	2014	Brandy Rinck	Preliminary Cultural Resources Assessment of the Upper Clear Creek Mitigation Property Habitat Restoration, Tacoma	Survey
1693992	0.3 mile	2020	Chrisanne Beckner	Port of Tacoma Clear Creek Architectural Survey and Inventory: Historic Structures Survey Report	Survey

Note: NADB = National Archaeological Database

Archaeological Resources

Based upon review of the WISAARD database, significant portions of the Project APE have not been surveyed. Two cultural resources have been documented within 0.5 mile of portions of the Project APE: one historic refuse scatter, potentially eligible for the NRHP, and one isolate (Table 2).

Table 2. Previously Recorded Archaeological Sites within 0.5-Mile Radius of the Project APE

Smithsonian No.	Distance to APE	Year	Site Type	Description	Status
PI00664	0.5 mile	2004	Historic Refuse Scatter	Historic Scatter 2, 70 X 120 M, 1940s–1970s	Potentially Eligible for the NRHP
PI01383	0.5 mile	2015	Pre-Contact Lithic Isolate	Jasper thumbnail scraper	Not eligible

In addition, two sites were located a little more than 1 mile distant: the Yamamoto Site, a recently-identified (June 2023) historic refuse scatter associated with a former house site, and a pre-contact shell midden (45PI467) located near where Clear Creek once flowed into the Puyallup River and believed to be associated with the village Casqwo'd-tsid, described by

T.T. Waterman (Waterman and Greiner 1921). The buried, pre-contact shell midden site is located to the north-northwest of the APE, south of the Puyallup River. It contains faunal remains, lithic tools and debitage, organic material, and fire-cracked rock (Shufelt 2009) and is eligible for NRHP listing.

Historic Properties

Based upon a review of the WISAARD database, the parcels within the Project APE have not been previously surveyed or evaluated for NRHP eligibility. Seventeen built environment resources (mostly residences) within 0.5 mile of the Project APE have been recorded; none were determined to be eligible for or were previously listed in the NRHP. Table 23 summarizes the results of the database queries.

Table 3. Previously Surveyed Historic Properties within 0.5-Mile Radius of the Project APE

Property ID/ Resource Number	Name	Location	Type	Built	NRHP
9561/23372	N/A	3618 Pioneer Way, Tacoma	Building	Not Provided	Not Provided (legacy data)
1009703	N/A	4104 50th Ave E, Tacoma	Building	Not Provided	NE
12646	4512 53rd St E, Tacoma	4512 53rd St E, Tacoma	Structure	1940	No Determ.
130316	N/A	4603 44th St E, Tacoma	Structure	1961	NE
142703	N/A	4219 47th Ave E, Tacoma	Building	1965	NE
146329	N/A	4002 47th Ave E, Tacoma	Building	1963	No Determ.
29562	Andy's Auto Parts	4718 Pioneer E, Tacoma	Structure	Not Provided	No Determ.
586400	N/A	4016 47th Ave E, Tacoma	Building	1960	NE
586405	Boe Residence	4015 47th Ave E, Tacoma	Building	1963	No Determ.
679105	N/A	4718 44th St E, Tacoma	Structure	1950	NE
672508	N/A	4722 44th St, Tacoma	Structure	1950	NE
672509	Sienkiewich Residence	4014 50th Ave E, Tacoma	Building	1958	NE
705428	N/A	4610 44th St E, Tacoma	Structure	Not Provided	NE
713076	Residence	4006 38th St E, Tacoma	Building	Not Provided	NE
721457	Residence	3604 40th Ave E, Tacoma	Building	1900	NE
724932	N/A	4812 44th St E, Tacoma	Structure	Not Provided	NE
88954	N/A	3604 40th Ave E, Tacoma	Building	circa 1900	NE

Note:

N/A = not applicable; C = Contributing; E= NRHP Eligible; NE = Not NRHP Eligible; No Determ. = property has not been evaluated for NRHP eligibility

Traditional Cultural Properties

WSDOT, on behalf of FHWA, consults with the Washington State Historic Preservation Officer (SHPO) and the appropriate Tribes that may have an interest in the Project area, pursuant to the Programmatic Agreement between FHWA, Federal Transit Administration, WSDOT, FHWA Western Federal Lands Highway Division, the Advisory Council on Historic Preservation, and the SHPO Regarding Implementation of the Federal Aid Highway Program in Washington State, and the letter of December 3, 2018, from FHWA to WSDOT (regarding Tribal Consultation, Section 106). Records on file at DAHP do not indicate any traditional cultural properties (TCPs) have been reported, at this time, within or near the Project APE. WSDOT has also participated in government-to-government consultation with the following four federally recognized tribes since the beginning of the Gateway Program: Muckleshoot Indian Tribe, PTOI, Snoqualmie Indian Tribe, and the Confederated Tribes and Bands of the Yakama Nation. WSDOT also consulted with the Duwamish Tribe (not federally recognized) as an interested party. Tribal representatives have been and will continue to be provided opportunities to review and comment on the Section 106 APE and draft survey reports for cultural resources. Continuing tribal consultation may help identify any NRHP-eligible TCPs.

5.0 Methods

None of the Project APE was surveyed for archaeological resources. No subsurface investigation was conducted at this time due to restricted access at the Project site. SR 509 Team personnel conducted a literature review for the Project vicinity through the DAHP WISAARD online database for recorded cultural and built environment resources within and in the vicinity of the revised Project APE (DAHP 2023). Background research included a review of online historical narratives, previous surveys, and historic maps of the Project area.

5.1 Archaeological Resources Methodology

The Project is located in an area identified in the WISAARD predictive model layer as high risk, with survey highly advised per DAHP's Washington Statewide Archaeology Predictive Model Report (DAHP 2009). WSDOT will conduct archaeological field investigations after WSDOT has purchased the property, and all areas of potential surface disturbance, including channel grading locations and temporary laydown and staging areas, will be examined for the presence of cultural material and to confirm current conditions. Future field investigations will be conducted by qualified archaeologists who meet the Secretary of the Interior's Standards and will consist of pedestrian survey and subsurface investigation in the APE. Shovel test pits will be placed in areas of minimal previous ground disturbance every 15 meters in an attempt to identify, minimize, and avoid any cultural resources present at the site. Locations are approximate and may be adjusted in the field due to conditions including conflicts with existing utilities/infrastructure, standing water, and steepness of slope. Stream cut banks and fallen tree root wads may allow for subsurface visibility in lieu of some test pits. It is acknowledged that there has been a long-term occupation of the area and the land around it, and, while the past use of the Project area in particular is unknown, the long duration of occupation in the Project vicinity makes the area a high probability for cultural resources. The goal of the shovel testing will be to reach any intact surfaces that might exist below fill. If the archaeologists are unable to reach pre-Holocene surfaces, methods will need to be adjusted. Additional methods or steps to identify cultural resources could include either deep testing or trenching, or construction monitoring.

If cultural resources are present within the APE, they will be recorded on archaeological site forms or Historic Property Inventory Forms (HPIF), depending on the nature of the resource. If there are NRHP-eligible resources within the APE, the Project's effects on those resources will be determined in consultation with tribes and consulting parties, per Section 106, and application of the criteria for determining adverse effects. All effort will be made to involve the PTOI in consultation and to minimize impacts to resources.

5.2 Historic Resources Methodology

Buildings within the Project's direct and indirect APE that were built in or before 1978 were analyzed for potential effects. Parcels located within the direct and indirect APE were evaluated as part of a reconnaissance, desktop study using information from Pierce County tax assessor

data and aerial photography. Background review identified no previously recorded historic resources within the Project area but identified 17 previously recorded resources within 0.5 mile of the Project APE (see Table 3). Once access to the Project site is granted, field investigations will supplement the desktop survey, consistent with a reconnaissance level historic property survey.

6.0 Results

Cultural resources documented within the Project APE? No

Cultural resources recorded/observed:

- □ building(s)
- □ site(s)
- □ structure(s)
- □ historic district(s)
- □ feature(s)
- □ isolated find(s)
- □ see attached
- □ artifact(s)
- □ object(s)

6.1 Historic Built Environment Resources within the Direct and Indirect Revised Project APE

The cultural resources assessment of the Project included background research, a desktop survey of historic properties, and preparation of this report. Background review identified no previously recorded archaeological or historic resources within the Project APE. Eight historic-age built environment resources are present within the Project APE; however, none of them have been determined to be eligible for the NRHP. Table 4 details the historic resources in the APE and Appendix B includes all of the HPIFs for this survey effort. NRHP eligibility is discussed in the HPIFs.

Table 4. Historic-Age Built Environment Resources within the Direct and Indirect Project APE

DAHP Property No.	Property Address/ Parcel Number	Date of Construction	DAHP Site Type	No. of Inventoried Buildings within the Parcel
1	4320 44th Ave E, Tacoma 0320133035	1972	Residence	1
2	4408 44th Ave E, Tacoma 0320133036	1970	Residence	1
3	4710 44th Ave E, Tacoma 0320133052	1977	Residence	1
4	4720 44th Ave E, Tacoma 0320133054	1974	Residence	1
5	4822 44th Ave E, Tacoma 0320242141	1920	Residence	2
6	4401 Vickery Ave E, Tacoma 0320133048	1940	Residence	multiple
7	4008 Pioneer Way E, Tacoma 03201330130, 0320133051, 0320133053, 0320133057, 0320133060, 0320133061	1960s	Fish Hatchery	multiple
8	4624 44th Ave E 0320133062	1980	Residence	1

National Register of Historic Places Eligibility Discussion

Table 5 summarizes and the following section provides a general discussion of NRHP eligibility of the eight historic built environment resources, which are organized per survey ID (reflecting the expanded APE documentation). Specific NRHP eligibility recommendations for each individual property are provided in the HPIFs (see Appendix B). All properties were evaluated as part of a reconnaissance, desktop study and based on a drive-by survey and review of Pierce County tax assessor data and aerial photography (Pierce County 2023).

Table 5. Recorded Historic Built Environment National Register of Historic Places Eligibility Overview

DAHP Property No.	Property Address/ Parcel Number	DAHP Site Type	NRHP Eligibility
1	4320 44th Ave E, Tacoma 0320133035	Residence	Not Eligible
2	4408 44th Ave E, Tacoma 0320133036	Residence	Not Eligible
3	4710 44th Ave E, Tacoma 0320133052	Residence	Not Eligible
4	4720 44th Ave E, Tacoma 0320133054	Residence	Not Eligible
5	4822 44th Ave E, Tacoma 0320242141	Residence	Not Eligible
6	4401 Vickery Ave E, Tacoma 0320133048	Residence	Not Eligible
7	4008 Pioneer Way, Tacoma 0320133013, 0320133051, 0320133053, 0320133057, 0320133060, 0320133061	Fish Hatchery	Not Eligible
8	4624 44th Ave E 0320133062	Residence	Not noted in APE update

Historic Age Residences in the APE

Each property listed in Table 5 was evaluated using the following National Register criteria for evaluation:

- Criterion A: For a property to be individually eligible under Criterion A, it would need to be associated with an historical event or pattern of events or trends significant on the local, state, or national level.
- Criterion B: To be found eligible under NRHP Criterion B, the property would need to be directly associated with a person considered historically significant at the local, state, or

national level, and it would need to be the place (or part of the place) where that person performed the work for which he or she is known.

- Criterion C: To be considered eligible for listing on the NRHP under Criterion C, the residence must embody distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic values.

- Criterion D: To be considered eligible for listing on the NRHP under Criterion D, the property must be significant as a source of important historical information and must yield important information about historic construction methods, materials, or technologies.

4320 44th Avenue East, Tacoma: Built in 1972 and remodeled in 1992 through 1996, this single-family residence is an example of a split-level Ranch house. It was purchased by Ed McLeary, founder of Troutlodge, in 2012, according to assessor data. No images of this property are available. The description is based on assessor data. Given its recent age and that it was remodeled in 1996, the loss of integrity of design, materials, and workmanship would preclude NRHP eligibility under any of the criteria for eligibility. The 1992 remodel included construction of an enclosed pool addition to the existing single-family residence, doubling its footprint (https://matterhornwab.co.pierce.wa.us/publicgis/). The exterior appears to have a secondary siding of stucco, most likely applied after or as part of the remodel, as the exterior finish is consistent on both the original volume and 1992 pool addition. Windows are vinyl replacement, fixed picture windows and metal framed horizontal sliding windows in the upper story (the latter appear original). Decorative, metal grates are secured to the exterior of the upstairs windows. The roof is a side-gabled configuration with overhanging eaves and clad in wood shingles; a chimney protrudes from the east-facing slope of the roof. The chimney is stucco-covered, as well. An attached carport was also added.

The property located at 4320 44th Avenue E is not recommended eligible under Criterion A. Given the haphazard neighborhood development patterns in unincorporated Pierce County, this property does not appear to be part of a specific, planned suburban pattern of development (i.e., tracts of subdivided property with multiple, similarly designed, single-family dwellings constructed after World War II). The residence located at 4320 44th Avenue E does not appear to have connections to specific activities or events, or patterns of development that had a lasting impact on the community or region. Therefore, the property does not have significance under Criterion A.

The property was purchased by Ed McLeary, founder of Troutlodge, Inc., in 2012, according to assessor data. No other ownership information was readily available. Assessor's records do not list previous owners, and no information on the property came up during a Google search to suggest the property would be significant under Criterion B. Therefore, the property does not appear to be significant under Criterion B.

The residence at 4320 44th Avenue E appears to be comprised of common and ordinary features with no distinct characteristics in method, construction, materials, design, or artistic value, and it is the work of a master. The residence was built originally in 1972 and was expanded in 1992 with the addition of an indoor pool. Within the context of split-level Ranch houses in Tacoma and rural Pierce County, there are better, intact representative examples. Therefore, the subject property is not significant under Criterion C.

The subject property is not recommended eligible under Criterion D. The property does not appear to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. It is a common example of its type that provides no important information about the general trends of low-density residential development that occurred in rural Pierce County following World War II that cannot be obtained through documentary sources. Therefore, the structure has not yielded and is not likely to yield information important in prehistory or history. For these reasons, the subject property is not considered significant under Criterion D.

Integrity: The residence's integrity of design, materials, workmanship have been compromised due to the replacement of windows and exterior siding, and a large addition to the north elevation. It retains integrity of location, feeling. and association as it is still legible as a split-level Ranch house.

4408 44th Avenue East, Tacoma: There are two residences on this property. The first is a one-story single family residence (Ranch style) built in 1970 and remodeled in 1983. It is rectangular in plan and has a side-gabled roof clad in composition shingles. The exterior is clad in wide horizontal siding with T-1-11 accents in the gable end and on the main elevation. Windows are vinyl, horizontal sliding units (replacements) and also metal framed horizontal sliding windows.

The second single-family residence on the property dates to 1965 and was remodeled in 2007, according to assessor records. It is rectangular in plan, one and one-half stories in height, and clad in wood siding. It has a side-gabled roof clad in metal seamed roofing material and features a gabled dormer above the main entrance. Visible windows are all vinyl replacement, horizontal sliding units. According to assessor data, the exterior renovations included a covered porch with metal roof.

The residences located at 4408 44th Avenue E are not recommended as eligible under Criterion A. Given the haphazard neighborhood development patterns in unincorporated Pierce County, this property does not appear to be part of a specific, planned suburban pattern of development (i.e., tracts of subdivided property with multiple, similarly designed, single-family dwellings constructed after World War II). The residences located at 4408 44th Avenue E do not appear to have connections to specific activities or events or patterns of development that had a lasting impact on the community or region. Therefore, the property does not have significance under Criterion A.

The property was owned by Claude Lathrop prior to its sale in 2002, according to assessor data. No other ownership information was readily available. Assessor's records do not list previous owners from the historic period, and no publicly-available information on the property suggests the property could be significant under Criterion B. Therefore, the property does not appear to be significant under Criterion B.

The residences at 4408 44th Avenue E appears to consist of common and ordinary features with no distinctive characteristics in method, construction, materials, design, or artistic value, and they are not the work of a master. The residences were built in 1970 and 1965 and were remodeled in 1983 and 2007, respectively. Within the context of single-family residences in Tacoma and rural Pierce County, there are better, intact representative examples of their type. Therefore, the subject property is not considered significant under Criterion C.

The property is not recommended eligible under Criterion D: The property does not appear to be significant as a source of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. It is a common example of its type that provides no important information about the general trends of low-density residential development that occurred in rural Pierce County following World War II that cannot be obtained through documentary sources. Therefore, the structures have not yielded and are not likely to yield information important in prehistory or history. For these reasons, the subject property is not considered significant under NRHP Criterion D.

Integrity: Both residences lack integrity of design, materials, and workmanship due to the replacement of windows, exterior siding, and, for the 1965 residence, a large addition to the north elevation and vinyl replacement windows with faux divided lites. The 1970 residence retains integrity of location, feeling, and association as it is still legible as a split-level Ranch house.

4710 44th Avenue East, Tacoma: This two-story, single-family residence is oriented toward a large field and set back from the roadway by approximately 50 feet. The vernacular wood-frame constructed dwelling dates to 1977, but it was remodeled in 1987. It is front-gabled in its configuration, and the exterior is sheathed in horizontal siding (presumed to be wood), while the roof is clad in composition shingles and features overhanging eaves with exposed beams. Windows are horizontal sliding units in metal frames, flanked by non-functional, decorative shutters. A (non-original) porch, added in 1987, extends the length of the main elevation.

The residence located at 4710 44th Avenue E is not recommended eligible under Criterion A. Given the haphazard neighborhood development patterns in unincorporated Pierce County, this property does not appear to be part of a specific, planned suburban pattern of development (i.e., tracts of subdivided property with multiple, similarly designed, single-family dwellings constructed after World War II). The residence located at 4710 44th Avenue E does not appear to have connections to specific activities or events or patterns of development that had a lasting impact on the community or region. Therefore, the property does not have significance under Criterion A.

Assessor's records do not list previous owners from the historic period, and no information on the property came up during a Google search to suggest the property would be significant under Criterion B. Therefore, the property does not appear to be significant under Criterion B.

This residence is a vernacular expression of its type. Within the context of single-family residences in Tacoma and rural Pierce County, there are better, intact representative examples. Therefore, the subject property is not considered significant under Criterion C.

The property is not recommended eligible under Criterion D. The subject property does not appear to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. It is a common example of its type that provides no important information about the general trends of low-density residential development that occurred in rural Pierce County following World War II that cannot be obtained through documentary sources. Therefore, the structure has not yielded and is not likely to yield information important in prehistory or history. For these reasons, the subject property is not considered significant under NRHP Criterion D.

Integrity: The residence was altered in 1987, according to assessor data, but the extent of the renovations is unclear— the porch facing east appears to be newer, and the carport is underneath it (an "add on" according to assessor data). As such, the residence at 4710 44th Avenue E appears to retain all aspects of integrity, with the exception of its design.

4720 44th Avenue East, Tacoma: This one-story, single-family residence is rectangular in plan, with a gabled porch extending from the main façade. The frame-constructed volume rests on a concrete masonry unit foundation. It is set back from the roadway approximately 20 feet. This Ranch house dates to 1974 and was remodeled in 1985, according to assessor data. The exterior is clad in wide, horizontal siding, oversized ashlar-faced brick veneer adjacent to the main entrance, and the side-gabled roof is sheathed in composition shingles. The eaves are slightly overhanging with a fascia board visible at the gable end. Beneath the end gable, the cladding is diagonally oriented. The (non-original) porch addition and renovated garage are visible from the public right-of-way. Windows are vinyl replacement sash and horizontal sliding units.

This single-family residence located at 4720 44th Avenue E is not recommended eligible under Criterion A. Given the haphazard neighborhood development patterns in unincorporated Pierce County, the subject property does not appear to be part of a specific, planned suburban pattern of development (i.e., tracts of subdivided property with multiple, similarly designed, single-family dwellings constructed after World War II). The residence located at 4720 44th Avenue E does not appear to have connections to specific activities or events or patterns of development that had a lasting impact on the community or region. Therefore, the property does not have significance under Criterion A.

Assessor's records do not list previous owners from the historic period, and no additional publicly-available ownership information on the property was available to suggest the property

would be significant under Criterion B. Therefore, the property does not appear to be significant under Criterion B.

The residence at 4720 44th Avenue E appears to consist of common and ordinary features with no distinctive characteristics in method, construction, materials, design, or artistic value, and it is not the work of a master. The residence was built in 1974 (remodeled in 1983). Within the context of single-family residences in Tacoma and rural Pierce County, there are better, more intact representative examples of their type. Therefore, the subject property is not considered significant under Criterion C.

The property is not recommended eligible under Criterion D. The subject property does not appear to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. It is a common example of its type that provides no important information about the general trends of low-density residential development that occurred in rural Pierce County following World War II that cannot be obtained through documentary sources. Therefore, the structure has not yielded and is not likely to yield information important in prehistory or history. For these reasons, the subject property is not considered significant under Criterion D.

Integrity: The subject property has been modified from its original design (garage renovated and windows replaced). It retains integrity of materials, workmanship, location, feeling and association, and it is still legible as a Ranch house.

4822 44th Avenue East, Tacoma: This front-gabled, single-family residence dates to 1920 and was remodeled in 1958. It is an example of a Craftsman cottage clad in horizontal clapboard siding with corner boards, and the roof is sheathed in composition shingles. Windows are double-hung, vinyl replacement units within their original openings, featuring a tri-partite picture window adjacent to the gabled porch. Knee brackets accent the overhanging eaves. No rafter tails were noted. A detached garage is located next to the residence and has similar finish materials.

This single-family residence located at 4822 44th Avenue E is not recommended eligible under Criterion A. Given the haphazard neighborhood development patterns in unincorporated Pierce County, the subject property does not appear to be part of a specific, planned suburban pattern of development, nor does the residence located at 4822 44th Avenue E appear to have connections to specific activities, events, or patterns of development that had a lasting impact on the community or region. Therefore, the property does not have significance under Criterion A.

Assessor's records do not list previous owners from the historic period, and no information was publicly available to suggest the property would be significant under Criterion B. Therefore, the property does not appear to be significant under Criterion B.

The residence at 4822 44th Avenue E appears to comprise common and ordinary features with no distinctive characteristics in method, construction, materials, design, or artistic value, and it is not the work of a master. The residence was built in 1920 (remodeled in 1953, but not known to

what extent). Within the context of single-family residences in Tacoma and rural Pierce County, there are better, intact representative examples of Craftsman cottages. Therefore, the subject property is not considered significant under Criterion C.

The property is not recommended eligible under Criterion D. The subject property does not appear to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. It is a common example of its type that provides no important information about the general trends of low-density residential development that occurred in rural Pierce County that cannot be obtained through documentary sources. Therefore, the structure has not yielded and is not likely to yield information important in prehistory or history. For these reasons, the subject property is not considered significant under Criterion D.

Integrity: The subject property has been modified from its original design (windows replaced with vinyl units, and a covered wood porch). It retains moderate integrity of materials, workmanship, location, feeling, and association.

4401 Vickery Avenue East, Tacoma: This one-story, single-family residence dates to 1940 but was remodeled in 1968, according to assessor data. The parcel also has a shop and barn. No clear views from public right-of-way were available as part of the desktop survey. Because the residence was remodeled in 1968, it is unlikely to be considered NRHP eligible under Criterion C due to a lack of integrity of design, materials, and workmanship. No elements of the subject property represent a significant type, period, or method of construction; it is a relatively commonplace expression of World War II-era residential architecture.

This single-family residence located at 4401 Vickery Avenue E is not recommended eligible under Criterion A. Given the haphazard neighborhood development patterns in unincorporated Pierce County, the subject property does not appear to be part of a specific, planned suburban pattern of development, nor does the subject property appear to have connections to specific activities or events or patterns of development that had a lasting impact on the community or region. Therefore, the property does not have significance under Criterion A.

Assessor’s records do not list previous owners from the historic period, and no information on the property came up during a Google search to suggest the property would be significant under Criterion B. Therefore, the property does not appear to be significant under Criterion B.

The residence at 4401 Vickery Avenue E appears to consist of common and ordinary features with no distinctive characteristics in method, construction, materials, design, or artistic value, nor is it the work of a master. The residence was built in 1940 (remodeled in 1968, but not known to what extent). Within the context of single-family residences in Tacoma and rural Pierce County built during the interwar period, there are better, intact, representative examples of this type. Therefore, the subject property is not considered significant under Criterion C.

The property is not recommended eligible under Criterion D. The subject property does not appear to be significant as a source, or likely source, of important historical information, nor

does it appear likely to yield important information about historic construction methods, materials, or technologies. It is a common example of its type that provides no important information about the general trends of low-density residential development that occurred in rural Pierce County that cannot be obtained through documentary sources. Therefore, the structure has not yielded and is not likely to yield information important in prehistory or history. For these reasons, the subject property is not considered significant under Criterion D.

Integrity: Given the lack of access to the property, it is unclear how much of the residence was altered in 1968. Improvements that were made, such as the enclosure of the porch and the addition of a deck and carport, would suggest that its integrity of design, materials, and workmanship have been compromised.

4624 44th Avenue East, Tacoma: This two-story, single-family residence dates to 1980 and was remodeled in 1988, according to assessor data. It is rectangular in plan, side-gabled in orientation, and set back from the street by 50 feet. A detached two-car garage is adjacent to the house. The property is unlikely to be considered NRHP eligible under Criteria C due to a lack of integrity of design, materials, and workmanship.

The subject property was built in 1980 and is not yet 50 years of age. It has been altered from original and lacks integrity of design, as the windows have been replaced with vinyl clad, fixed and horizontal sliding units.

Fish Hatchery

4008 Pioneer Way East (Troutlodge, formerly Clear Creek Trout Farm): The Clear Creek Trout Farm was a hatchery originally built in the 1940s. In its current configuration, it has 56 raceways, pollution abatement ponds, dams, and warehouse buildings. It was purchased in the 1970s by Troutlodge (a business founded in 1945). According to the Troutlodge website, this facility serves as a brood stock farm and also handles fish for private and public stocking (Troutlodge 2023). Reportedly, the company has a separate laboratory for fish pathology and genetics. The company operates at eight locations within Washington and Idaho as well as in Chile and Isle of Man. The company began as a commercial operation and a local food supplier and has grown into one of the largest suppliers of live trout, with customers including WDFW, tribes, and public utility districts, among others (Troutlodge 2023).

The Troutlodge property consists of six parcels (listed in Table 5) in Pierce County, Washington. In its current configuration, the property contains constructed ponds, concrete-lined raceways, storage/warehouse structures (dating to the 1960s), and, possibly, a residence. Site access was not permitted; therefore, Pierce County assessor data and aerial photographs were utilized for this resource description. Historical aerial photos are included in Appendix A.

Aerial photographs indicate that the property was wooded and generally undeveloped in 1941. Pioneer Way East and 44th Avenue East, as well as several rural developments and the rail line, are visible in the 1941 aerial photograph. Areas adjoining the property appear to be rural residential or agricultural in nature; a few small orchards were observed.

By 1944, the subject property appears to have been developed with several buildings and ponds. Increased residential development on top of the hill to the west of the property occurred between 1941 and 1944.

By 1957, the subject property appears to be developed with a fish hatchery, although the ponds and buildings are not in the same configuration as they are currently. One rectangular building appears in the central portion of the property with two rectangular pools situated to the north and south of the building. One oval-shaped pool is located farther to the north with a road running north-south through the property, as it does today. Increased residential development is shown along 44th Avenue East and on the hilltop to the west.

Aerial photographs dating to 1968 show increased development of the hatchery facility with more ponds and buildings. The two square pools remain; however, the rectangular building between them had been removed prior to 1968. One square building (assumed to be the current two-story structure) is shown to the north of the northern square pool, and a second building is visible south of the southern pool. Seven irregularly shaped pools are shown in the vicinity of the oval-shaped pool that was previously in the northern portion of the property. A portion of the western side of the property appears to have been cleared for development. Development of the surrounding area appears similar to that shown in the 1957 photograph, except for the addition of what appears to be a power substation between the northeast boundary of the subject property and 44th Avenue East.

Increased hatchery development on the subject property is visible in the 1972 photograph. Three of the northern ponds are redeveloped into roughly square-shaped ponds (which appear to be the same as those currently on the property), and a third pool has been constructed between the two pre-existing square pools (these may still be present on the property). Several residences are shown on the western portion of the property. Additionally, residential development occurred in the surrounding area between 1968 and 1972.

Photographs from 1980 and 1990 appear similar to the 1972 photograph. However, the 2006 through 2022 aerial coverage depicts the hatchery as it appears today, with one long pool on the southern portion of the property and a road extending south beyond the property.

Significance and NRHP Eligibility Discussion

To be considered eligible for listing on the NRHP under Criterion A, a hatchery must be associated with events that have made a significant contribution to the broad patterns of our history. In its current configuration (structures, raceways, dams, human-made ponds, roads dating to the 1960s and up to the present), the Troutlodge, formerly Clear Creek Trout Farm property does not appear to be associated with the earliest (late 1800s) historic development of government-run fish hatcheries that mass-produced anadromous fish populations in the Pacific Northwest. It is not associated directly with specific trends in hatchery development history; fish hatcheries are common in the Project vicinity and Puget Sound region, in general. By 1953, most of Washington state's 64 private, licensed trout farms were located in the west, and 28 of them

were in the Tacoma area. The subject property is just one of Troutlodge's holdings associated with fish propagation on the west coast; however, it is not one of Troutlodge' s original sites. (The company was formed in 1945 but not at the subject property.) Because the property has no clear association historically with important trends in fish propagation and research, it is not considered NRHP eligible under Criterion A.

The Clear Creek Trout Farm property does not appear to be eligible under NRHP Criterion B. The subject property was purchased by Troutlodge founders Ed McLeary and Ken Drew from Claude Lathrop in the 1970s. According to the Troutlodge website, Troutlodge originally operated at a facility near the headwaters of Rocky Ford Creek near Moses Lake in eastern Washington in the 1940s (Troutlodge 2023). Therefore, McLeary and Drew's early work would be associated with that property. When the facility was named Clear Creek Trout Farm, the former operator, Claude W. Lathrop, lived there for 13 years as owner/operator. No other information was readily available to ascertain Lathrop's contributions to trout farming in Pierce County. As a result, the subject property does not appear to be the location where the Troutlodge founders would have made their research and development contributions to the industry.

To be considered eligible for listing on the NRHP under Criterion C, the subject property must embody distinctive characteristics of a type, period, or method of installation, or represent the work of a master or possess high artistic values. The subject property appears to comprise common and ordinary structures with no distinct characteristics in method, construction, materials, design, or artistic value, and the facility is not the work of a master. The facility was originally built in the 1940s and was expanded over time to its current configuration with 56 raceways, two warehouse structures, human-made ponds, dams, and roads.

Under Criterion D, the property does not appear to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. This does not preclude the potential to encounter buried deposits during construction. (See Section 7.0, *Management Recommendations*, for further details.). Once a site visit is conducted, this will be more clearly articulated.

Integrity: The property lacks integrity of design, materials, and workmanship, and lacks characteristics related to setting, feel, and association because to many significant changes to its ponds, raceways, and structures that occurred on the subject property between 1945 and the 1970s.

6.2 Archaeological Resources within the Direct and Indirect Revised Project APE

Although no archaeological resources have been identified previously in the Project APE, DAHP considers the area to lie within an area of high to very high risk probability for the presence of pre-contact period archaeological sites (DAHP 2009), as discussed in Section 5.1, *Archaeological Resources Methodology*. Certainly, the modifications over the decades from development of the hatchery may have reduced the overall high probability to lower levels of

sensitivity or risk (probability) in certain locations. Further recommendations are discussed in Section 7.2, *Archaeological and Cultural Resource Recommendations.*

7.0 Management Recommendations

7.1 Historic Built Environment Recommendations

No NRHP-eligible, historic built environment resources are present in the Project APE, nor are there contributing elements of an historic district, as no historic districts are present (see Table 5). As a result, there would not be Project-related impacts to historic built environment resources. No additional work is warranted for these resources.

7.2 Archaeological and Cultural Resource Recommendations

The Project is located in an area identified in DAHP's WISAARD predictive model layer as high risk, with survey highly advised per DAHP's Washington Statewide Archaeology Predictive Model Report (DAHP 2009).

Archaeological resources have cultural importance to tribes and also have scientific value. The uplands surrounding the APE are in lower zones of archaeological sensitivity. In general, areas in the predictive model report that are shown as having high risk (color code 4) or very high risk (color code 5) for containing archaeological resources tend to correlate with such factors as distance to water, proximity to critically important terrestrial and aquatic resources in pre-contact times, slope, and other variables such as mapped geology and soils. Previous survey data that reveal locations of known or recorded archaeological sites are also variables taken into consideration in the predictive model. Previous impacts from urban development or other land and water alterations can reduce an otherwise high or moderate probability area to one of low probability.

Until subsurface testing can be conducted, the Project APE should be considered to lie within a high to very high risk probability area for the presence of pre-contact period archaeological sites. Certainly, the modifications over the decades from development of the trout farm may have reduced the overall high probability to lower levels of sensitivity or risk (probability) in some locations.

Proposed Field Methods

The proposed archaeological survey will include both a non-invasive pedestrian survey and subsurface testing that will include hand excavation and, if necessary, mechanical testing to penetrate through any areas of modern overburden or naturally deposited sediments that may be sealing deeper cultural deposits. Shell midden deposits have been found in the region that are deeper than what can be discovered through shovel testing alone. Pedestrian survey includes walking the site to document (with photos and notes) any structures on the site that are over 50 years old as well as to observe surface soils and any stream cut banks, fallen tree root balls, or other existing conditions that would provide an opportunity to view subsurface deposits.

Subsurface testing will include hand excavation of shovel tests. Depending on shovel testing results, mechanical excavation may be needed to check for the presence or absence of deeply

buried shell midden or other cultural deposits. Generally speaking, when shovel tests or mechanical excavations encounter Holocene age glacial drift deposits, there is no further possibility of encountering deeply buried cultural deposits. All of the proposed shovel tests will sample archaeologically sensitive areas and actual field results will likely confirm or adjust the expectations provided by the DAHP predictive model report (DAHP 2009).

Shovel tests are typically 40 to 50 centimeters (16 to 20 inches) across in size and can reach a depth of 1 meter (approximately 3 feet) below existing ground surface. Soils will be screened through wire mesh in order to help find any artifacts that might be present, and a hand auger might be used at the bottom of the shovel test in order to achieve greater depth than is possible using the shovel. Each test pit will be backfilled using the material that was screened. In addition to each shovel test, there may be some remaining disturbance at the surface where the materials were screened—this would typically consist of some remnant loose soils and disturbed vegetation (if present). Mechanical testing may include trenches or deeper pits. Subsurface exploration can be phased to coordinate with project excavation as deeper soil horizons are exposed.

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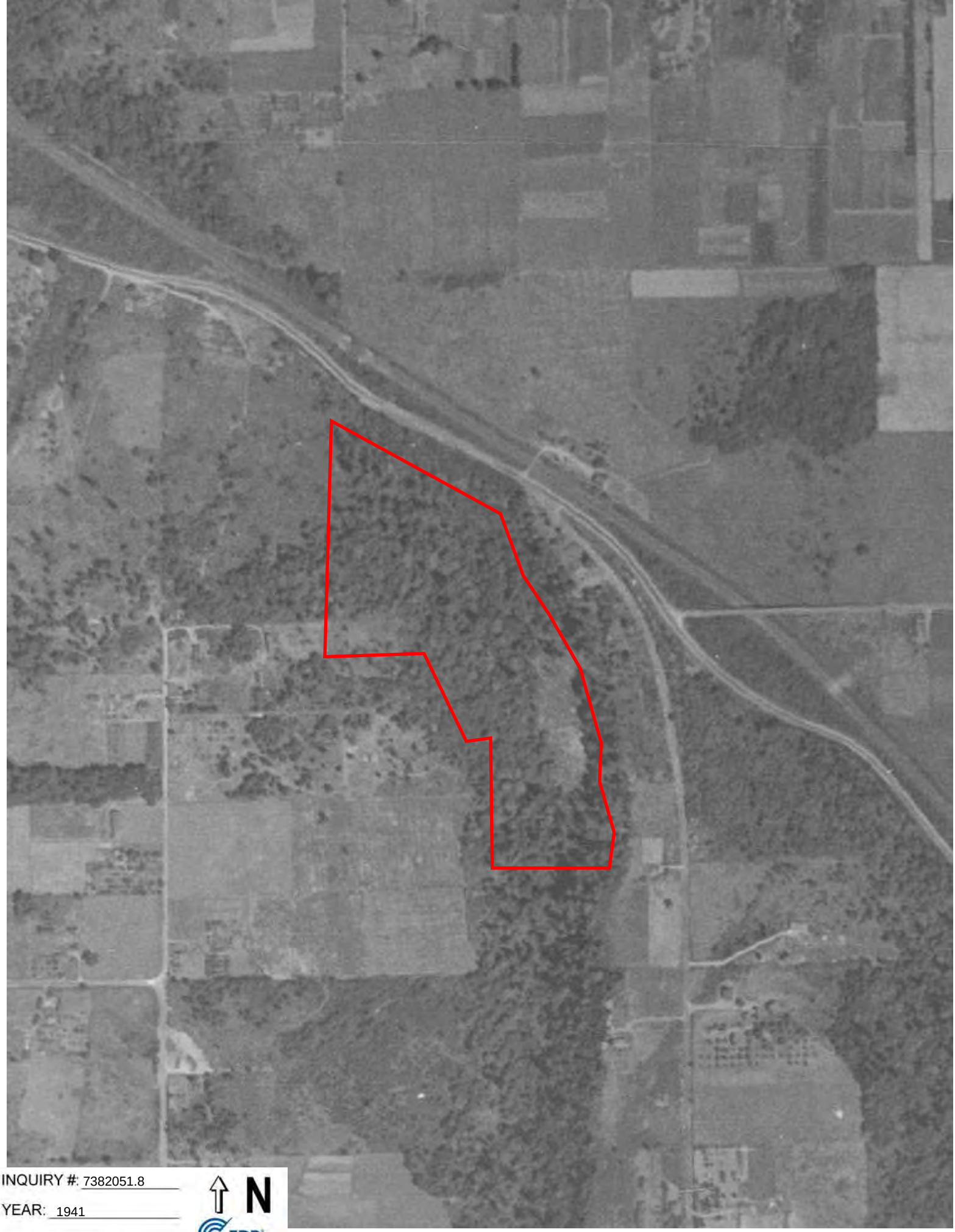
Appendix A.
Historic Aerial Photographs
Received from Environmental Data Resources, Inc
Request #7382051.8
July 5, 2023



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YEAR: 1941

= 500'

N

EDR


INQUIRY #: 7382051.8
YEAR: 1944
= 500'
N
EDR


INQUIRY #: 7382051.8
YEAR: 1957
= 500'
N
EDR


INQUIRY #: 7382051.8
YEAR: 1968
= 500'
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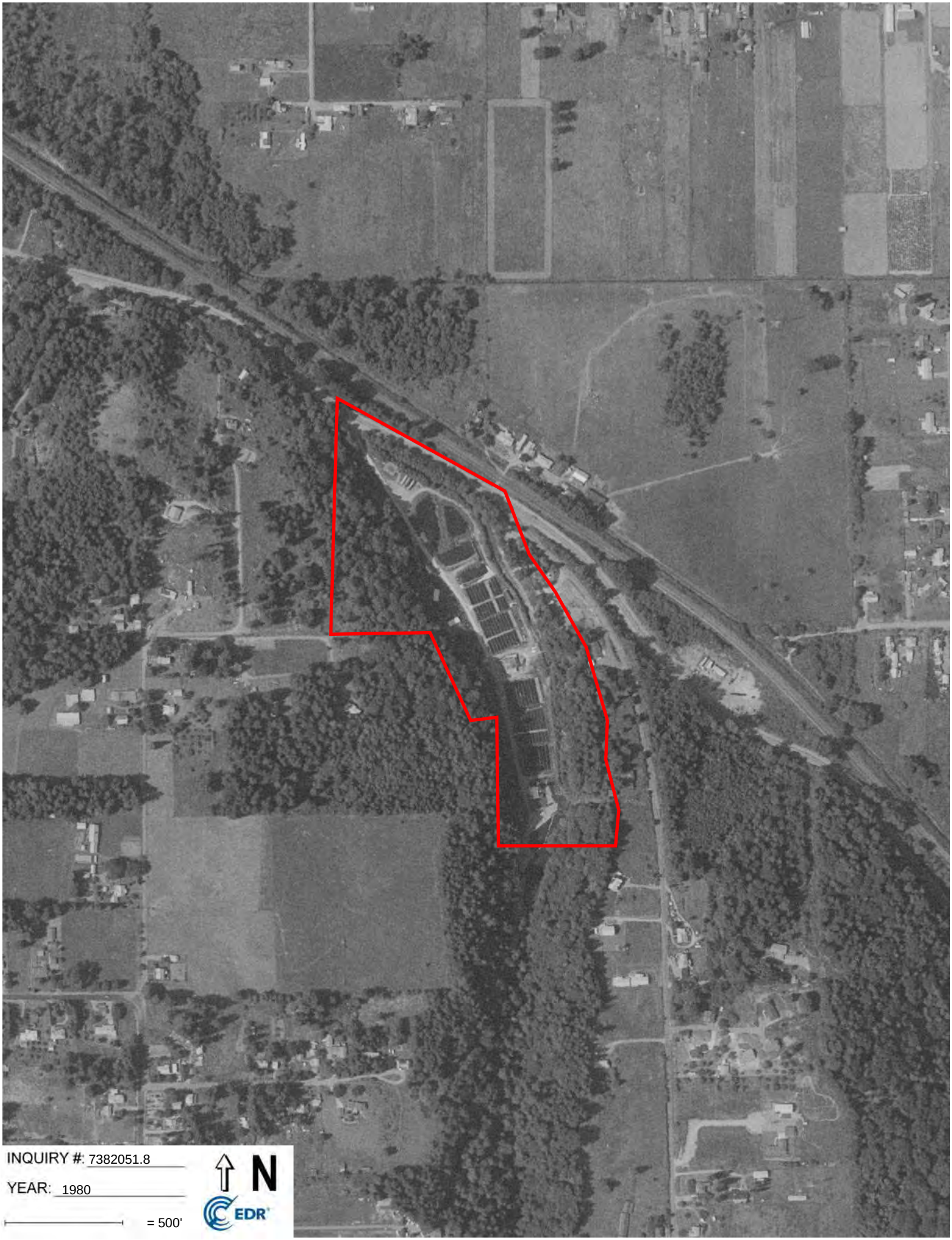
EDR


INQUIRY #: 7382051.8
YEAR: 1972
= 500'
N
EDR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YEAR: 1980
= 500'
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EDR


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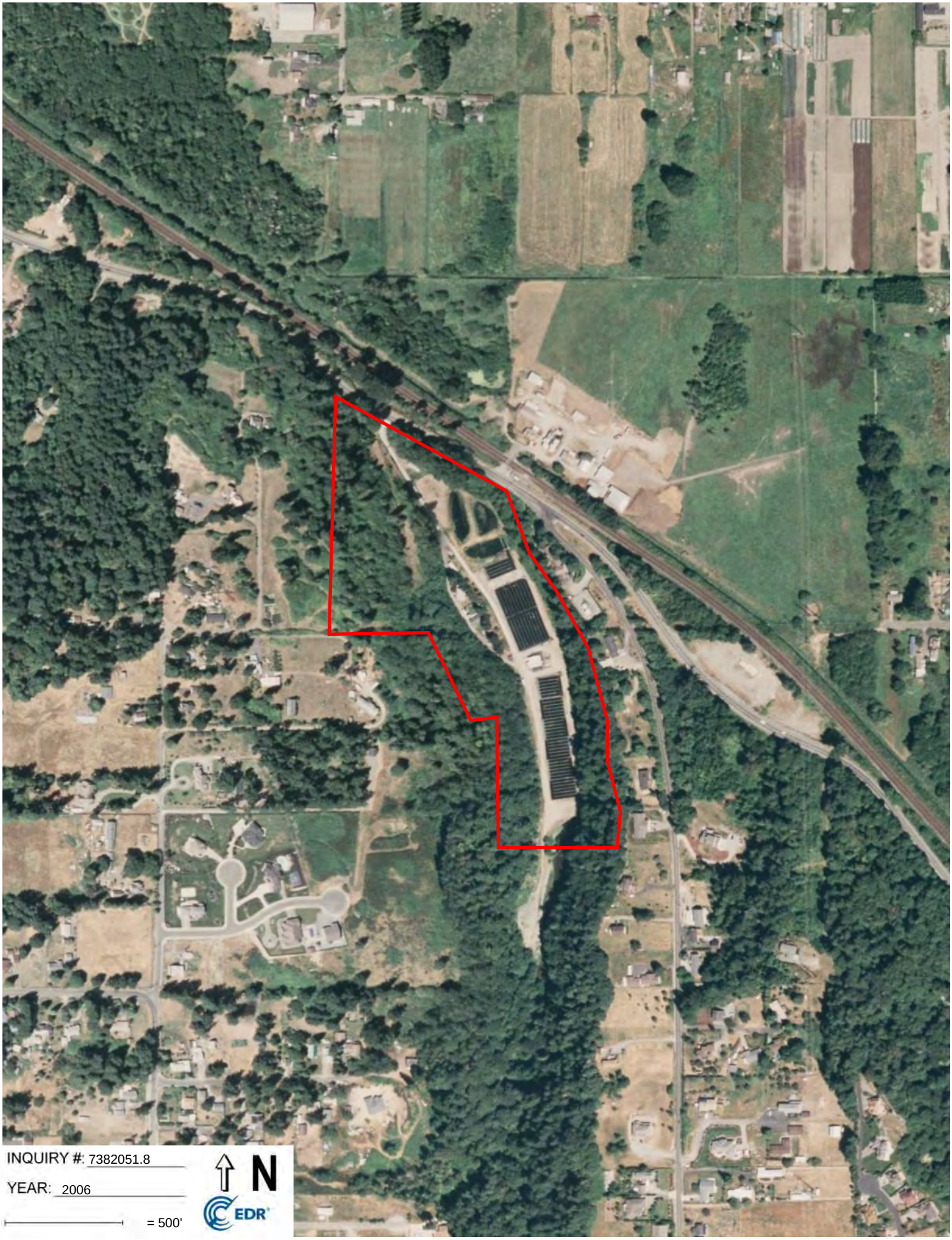
YEAR: 1990
= 500'
N
EDR
Subject boundary not shown because it exceeds image extent or image is not georeferenced.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YEAR: 2006
= 500'
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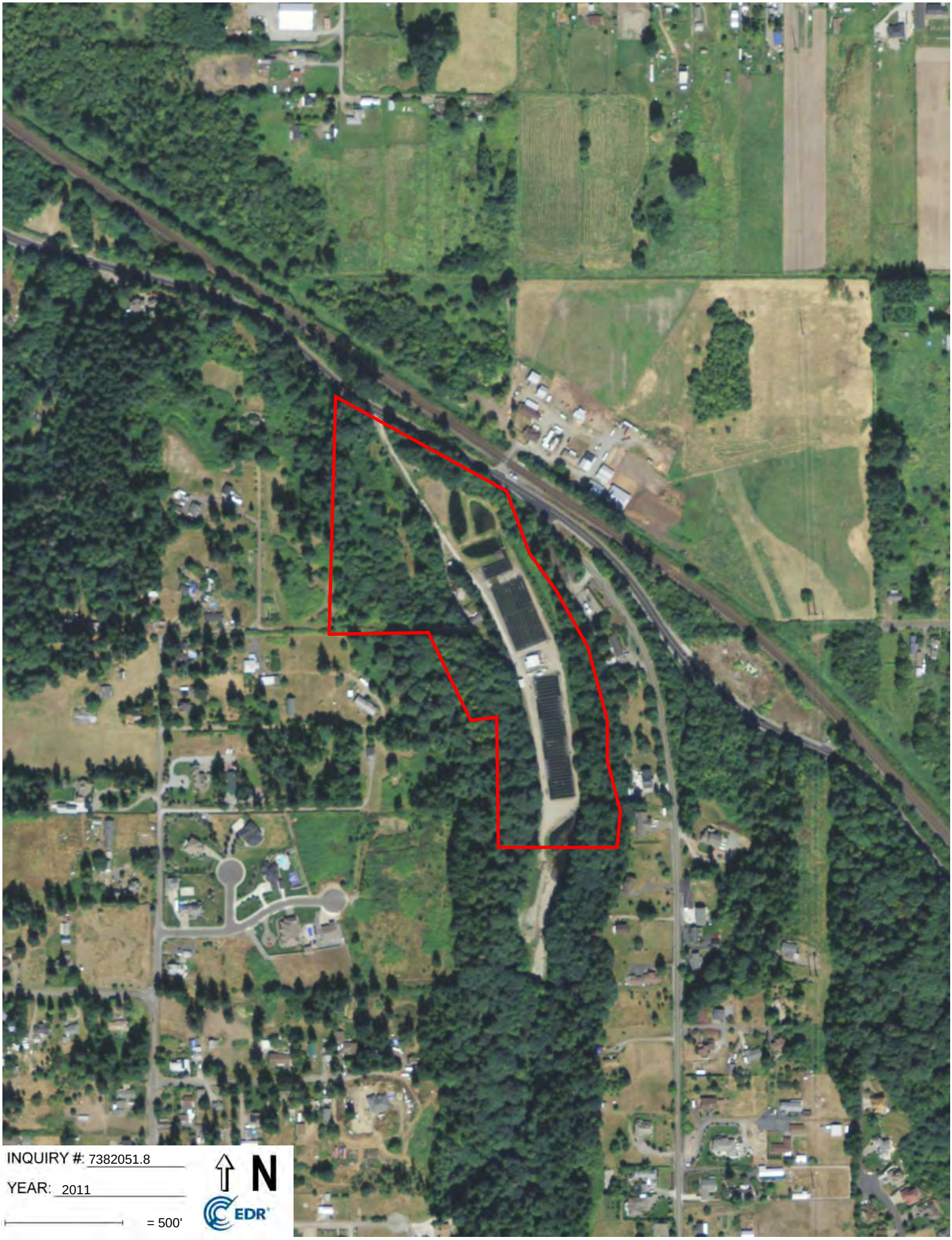
EDR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YEAR: 2011
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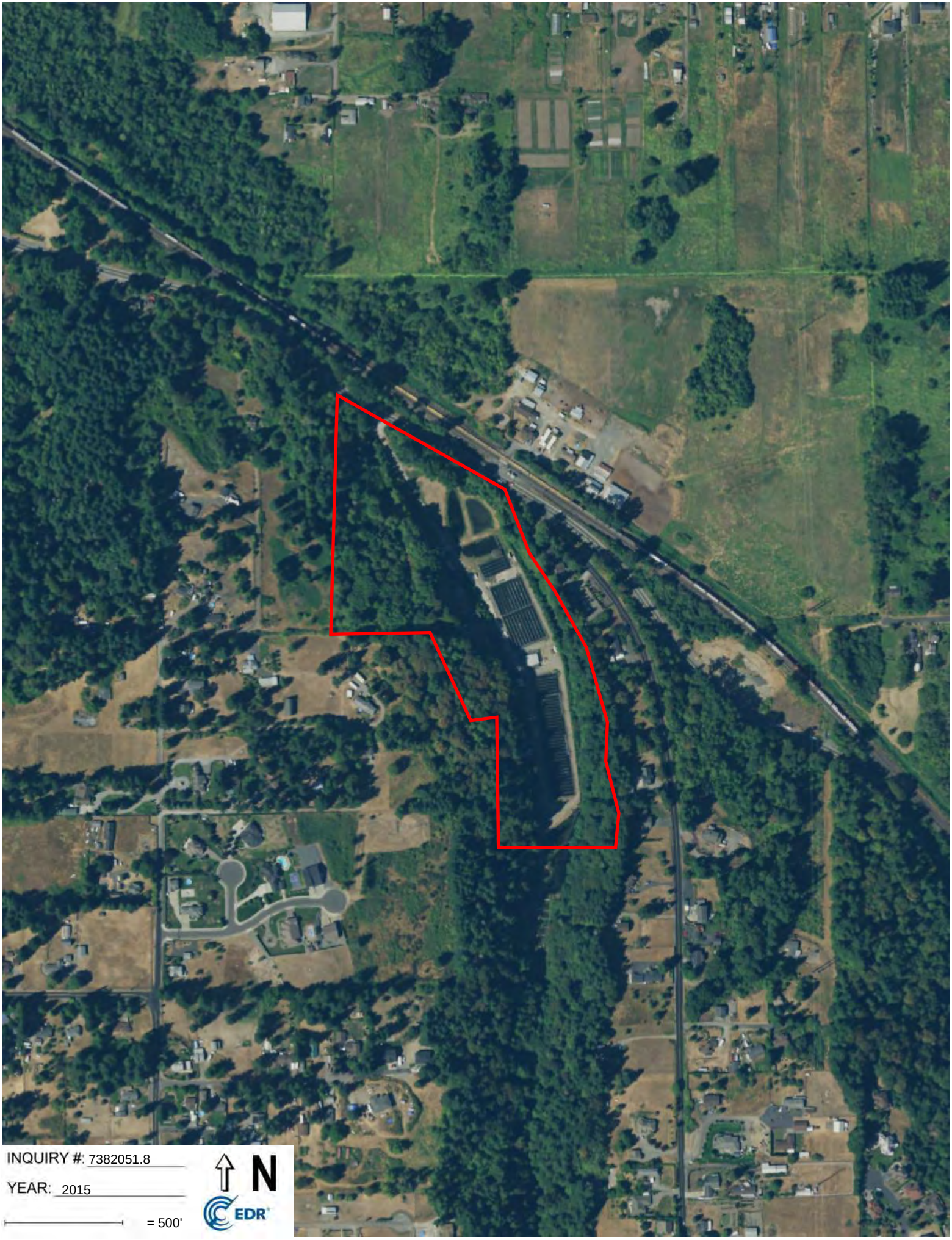
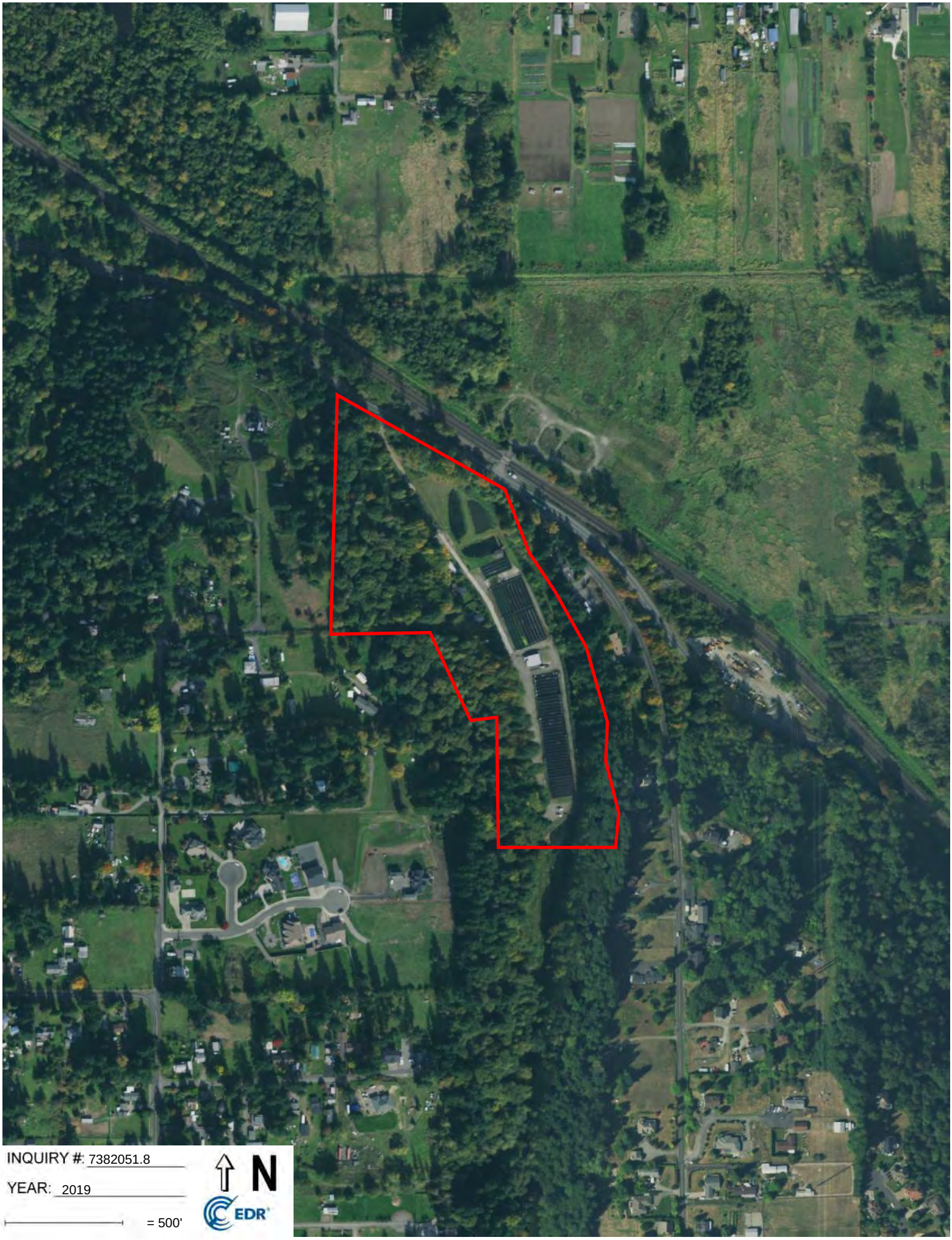
EDR


INQUIRY #: 7382051.8
YEAR: 2015
= 500'
N
EDR


INQUIRY #: 7382051.8
YEAR: 2019
= 500'
N
EDR

Appendix B.
Historic Property Inventory Forms (HPIF)

Historic Property Report

Historic Name: Serverns Residence

Property ID: 731985

Location





Address: 4320 44th Ave E, Tacoma, Washington, 98443

Geographic Areas: Pierce County Certified Local Government, Pierce County, T20 R03E Section 13, PUYALLUP Quadrangle

Information

Number of stories: 2.00

Construction Dates:

Construction Type	Year	Circa

Historic Use:

Category	Subcategory
Domestic	Domestic - Single-Family House
Domestic	Domestic - Single-Family House

Historic Context:

Category

Architect/Engineer:

Category	Name or Company

Thematics:

Local Registers and Districts

Name	Date Listed	Notes

Project History

Historic Property Report

Historic Name: Serverns Residence Property ID: 731985

Project Number, Organization, Project Name	Resource Inventory	SHPO Determination	SHPO Determined By, Determined Date
2017-07-05354, , SR 509- SeaTac to I-5		Survey/Inventory	

Historic Property Report

Historic Name: Serverns Residence

Property ID: 731985

Photos



4320 44th Avenue E



4320 44th Avenue E: detail of upper story of main elevation

Historic Property Report

Historic Name: Serverns Residence

Property ID: 731985

Inventory Details - 10/19/2023

Common name: Severns Residence

Date recorded: 10/19/2023

Field Recorder: Leslie Schwab

Field Site number: survey ID 01

SHPO Determination

Detail Information

Characteristics:

Category	Item
Foundation	Concrete - Poured
Form Type	Single Dwelling - Split Level
Roof Type	Gable - Front
Roof Material	Asphalt/Composition - Shingle
Cladding	Wood
Structural System	Wood - Braced Frame
Structural System	Wood - Platform Frame

Surveyor Opinion

Property appears to meet criteria for the National Register of Historic Places: No

Significance narrative:

The property located 4320 44th Avenue E is not recommended eligible under Criterion A. In order for a property to be individually eligible under Criterion A, it would need to be associated with an historical event or pattern of events or trends significant on the local, state or national level. Given the haphazard neighborhood development patterns in unincorporated Pierce County this property does not appear to be part of a specific, planned suburban pattern of development (i.e., tracts of subdivided property with multiple, similarly designed, single-family dwellings constructed after World War II). The residence located at 4320 44th Avenue E does not appear to have connections to specific activities or events, or patterns of development that had a lasting impact on the community or region. Therefore, the property does not have significance under Criterion A.

To be found eligible under NRHP Criterion B, the property would need to be directly associated with a person considered historically significant at the local, state, or national level, and it would need to be the place (or part of the place) where that person performed the work for which he or she is known. The property was purchased by Ed McLeary, founder of Troutlodge, Inc. in 2012, according to assessor data. No other ownership information was readily available. Assessor's records do not list previous owners, and no information on the property came up during a Google search to suggest the property would be significant under Criterion B. Therefore, the property does not appear to be significant under Criterion B.

To be considered eligible for listing on the NRHP under Criterion C, the residence must embody distinctive characteristics of a type, period, or method of construction, represent the work of a master, or possess high artistic values. The residence at 4320 44th Avenue E appears to consist of common and ordinary features with no distinct characteristics in method, construction, materials, design, or artistic value; nor is it the work of a master. The residence was built originally in 1972 and was expanded in 1992 with the addition of an indoor pool. Within the context of split-level Ranch houses in Tacoma and rural Pierce County, there are better, intact representative examples. Therefore, the subject property is not significant under Criterion C.

The subject property is not recommended eligible under Criterion D: The property does not appear to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. It is a common example of its type that provides no important information about the general trends of low-density residential development that occurred in rural Pierce County following World War II that cannot be obtained through documentary sources. Therefore, the structure has not yielded and is not likely to yield information important in prehistory or history. For these reasons, the subject property is not considered significant under NRHP Criterion D.

Integrity: The residence's integrity of design, materials, workmanship have been compromised due to the replacement of windows, exterior siding, and a large addition to the north elevation. It retains integrity of location, feeling and association as it is still legible as a split-level ranch house.

Historic Property Report

Historic Name: Serverns Residence

Property ID: 731985

Physical description: 4320 44th Ave E, Tacoma, was built in 1972 and remodeled in 1992-1996. It is a single-family residence and an example of a split-level Ranch house. The 1992 remodel included construction of an enclosed pool addition to the existing SFR, doubling its footprint (source: https://matterhornwab.co.pierce.wa.us/publicgis/). The exterior appears to have a secondary siding of stucco, most likely applied after or as part of the remodel, as the exterior finish is consistent on both the original volume and 1992 pool addition. Windows are vinyl replacement, fixed picture windows and metal framed horizontal sliding windows in the upper story (the latter appear original). Decorative, metal grates are secured to the exterior of the upstairs windows. The roof is a side gabled configuration with overhanging eaves and clad in wood shingles; a chimney protrudes from the east-facing slope of the roof. The chimney is stucco-covered, as well. An attached carport was also added.

Bibliography: Pierce County Assessor Data Accessed 10/19/23
https://atip.piercecountywa.gov/app/v2/propertySummary/0320133035

Historic Property Report

Historic Name: Shafer Residence

Property ID: 731987

Location





Address: 4408 44th Ave E, Tacoma, Washington, 98443

Geographic Areas: Pierce County Certified Local Government, PUYALLUP Quadrangle, Pierce County, T20 R03E Section 13

Information

Number of stories: 1.50

Construction Dates:

Construction Type	Year	Circa
Built Date	1970	☐

Historic Use:

Category	Subcategory
Domestic	Domestic - Single-Family House
Domestic	Domestic - Single-Family House

Historic Context:

Category

Architect/Engineer:

Category	Name or Company

Thematics:

Local Registers and Districts

Name	Date Listed	Notes

Project History

Historic Property Report

Historic Name: Shafer Residence

Property ID: 731987

Project Number, Organization, Project Name	Resource Inventory	SHPO Determination	SHPO Determined By, Determined Date
2017-07-05354, , SR 509- SeaTac to I-5		Survey/Inventory	

Historic Property Report

Historic Name: Shafer Residence

Property ID: 731987

Photos



4408 44th Ave E



4408 44th Ave E

Historic Property Report

Historic Name: Shafer Residence

Property ID: 731987

Inventory Details - 10/19/2023

Common name: Shafer Residence

Date recorded: 10/19/2023

Field Recorder: Leslie Schwab

Field Site number: Survey ID 02

SHPO Determination

Detail Information

Characteristics:

Category	Item
Foundation	Concrete - Poured
Form Type	Single Dwelling - Side Gable
Roof Material	Asphalt/Composition - Shingle
Cladding	Wood
Structural System	Wood - Platform Frame
Plan	Rectangle

Surveyor Opinion

Significance narrative: The residences located at 4408 44th Avenue E are not recommended eligible under Criterion A. For a property to be individually eligible under Criterion A, it would need to be associated with an historical event or pattern of events or trends significant on the local, state, or national level. Given the haphazard neighborhood development patterns in unincorporated Pierce County, this property does not appear to be part of a specific, planned suburban pattern of development (i.e., tracts of subdivided property with multiple, similarly designed, single-family dwellings constructed after World War II). The residences located at 4408 44th Avenue E do not appear to have connections to specific activities or events or patterns of development that had a lasting impact on the community or region. Therefore, the property does not have significance under Criterion A.

To be found eligible under NRHP Criterion B, the property would need to be directly associated with a person considered historically significant at the local, state, or national level, and it would need to be the place (or part of the place) where that person performed the work for which he or she is known. The property was owned by Claude Lathrop prior to its sale in 2002, according to assessor data. No other ownership information was readily available. Assessor's records do not list previous owners from the historic period ,and no information on the property came up during a Google search to suggest the property would be significant under Criterion B. Therefore, the property does not appear to be significant under Criterion B.

To be considered eligible for listing on the NRHP under Criterion C, the residences must embody distinctive characteristics of a type, period, or method of construction, represent the work of a master, or possess high artistic values. The residence at 4408 44th Avenue E appears to consist of common and ordinary features with no distinctive characteristics in method, construction, materials, design, or artistic value; nor are they the work of a master. The residences were built in 1970 (remodeled in 1983) and 1965 (remodeled in 2007), respectively. Within the context of single-family residences in Tacoma and rural Pierce County, there are better, intact representative examples of their type. Therefore, the subject property is not considered significant under Criterion C.

The property is not recommended eligible under Criterion D: The property does not appear to be significant as a source, or source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. It is a common example of its type that provides no important information about the general trends of low-density residential development that occurred in rural Pierce County following World War II that cannot be obtained through documentary sources. Therefore, the structure has not yielded and is not likely to yield information important in prehistory or history. For these reasons, the subject property is not considered significant under NRHP Criterion D.

Integrity: Both residences lack integrity of design, materials, workmanship due to the replacement of windows, exterior siding, and, for the 1965 residence, a large addition to the north elevation and vinyl replacement windows with faux divided lites. The 1970s residence retains integrity of location, feeling, and association as it is still legible as a split-level ranch house.

Historic Property Report

Historic Name: Shafer Residence

Property ID: 731987

Physical description:

There are two residences on this property. The first is a one-story single-family residence (Ranch house) built in 1970 and remodeled in 1983, according to assessor data. It is rectangular in plan and has a side gabled roof clad in composition shingles. The exterior is clad in wide horizontal siding with T-1-11 accents in the gable end and on the main elevation. Windows are vinyl, horizontal sliding units (replacements) and also metal framed horizontal sliding windows.

The second single family residence on the premises dates to 1965 and was remodeled in 2007, according to assessor records. It is rectangular in plan, 1 1/2 stories in height, and clad in wood siding. it has a side-gabled roof clad in metal seamed roofing material and features a gabled dormer above the main entrance. Visible windows are all vinyl replacement, horizontal sliding units. According to assessor data, the exterior renovations included a covered porch with metal roof.

Bibliography:

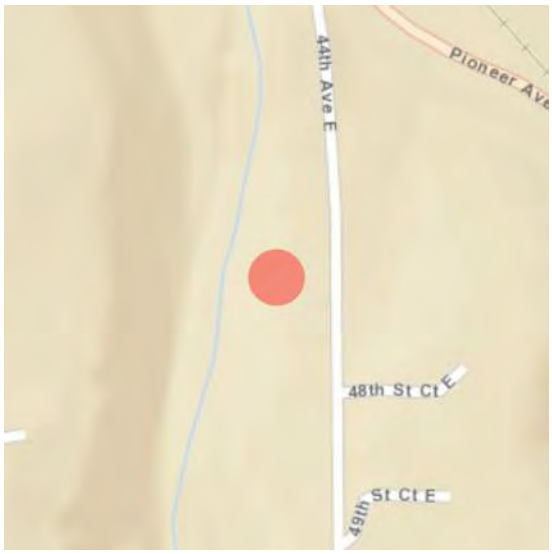
Pierce County Assessor Data, Accessed 10/19/23
https://atip.piercecountywa.gov/app/v2/parcelSearch/search

Historic Property Report

Historic Name: Huang Residence

Property ID: 731988

Location





Address: 4710 44th Ave E, Tacoma, Washington, 98443

Geographic Areas: PUYALLUP Quadrangle, Pierce County Certified Local Government, T20 R03E Section 13, Pierce County

Information

Number of stories: 2.00

Construction Dates:

Construction Type	Year	Circa

Historic Use:

Category	Subcategory
Domestic	Domestic - Single-Family House
Domestic	Domestic - Single-Family House

Historic Context:

Category

Architect/Engineer:

Category	Name or Company

Thematics:

Local Registers and Districts

Name	Date Listed	Notes

Project History

Historic Property Report

Historic Name: Huang Residence

Property ID: 731988

Project Number, Organization, Project Name	Resource Inventory	SHPO Determination	SHPO Determined By, Determined Date
2017-07-05354, , SR 509- SeaTac to I-5		Survey/Inventory	

Historic Property Report

Historic Name: Huang Residence

Property ID: 731988

Photos



4710 44th Ave E



4710 44th Ave E
general view of east and south elevations

Historic Property Report

Historic Name: Haung Residence

Property ID: 731988

Inventory Details - 10/19/2023

Common name: Huang Residence

Date recorded: 10/19/2023

Field Recorder: Leslie Schwab

Field Site number: Survey ID 03

SHPO Determination

Detail Information

Characteristics:

Category	Item
Foundation	Concrete - Poured
Form Type	Single Dwelling
Roof Type	Gable - Front
Roof Material	Asphalt/Composition - Shingle
Cladding	Wood
Structural System	Wood - Platform Frame
Plan	Rectangle

Surveyor Opinion

Significance narrative: The residence located at 4710 44th Avenue E is not recommended eligible under Criterion A. For a property to be individually eligible under Criterion A, it would need to be associated with an historical event or pattern of events or trends significant on the local, state or national level. Given the haphazard neighborhood development patterns in unincorporated Pierce County, this property does not appear to be part of a specific, planned suburban pattern of development (i.e., tracts of subdivided property with multiple, similarly designed, single-family dwellings constructed after World War II). The residence located at 4710 44th Avenue E does not appear to have connections to specific activities or events or patterns of development that had a lasting impact on the community or region. Therefore, the property does not have significance under Criterion A.

To be found eligible under NRHP Criterion B, the property would need to be directly associated with a person considered historically significant at the local, state, or national level, and it would need to be the place (or part of the place) where that person performed the work for which he or she is known. Assessor's records do not list previous owners from the historic period, and no information on the property came up during a Google search to suggest the property would be significant under Criterion B. Therefore, the property does not appear to be significant under Criterion B.

To be considered eligible for listing on the NRHP under Criterion C, the residence at 4710 44th Avenue E must embody distinctive characteristics of a type, period, or method of construction, represent the work of a master, or possess high artistic values. The subject property appears to consist of common and ordinary features with no distinctive characteristics in method, construction, materials, design, or artistic value; nor is it the work of a master. This residence is a vernacular expression of its type. Within the context of single-family residences in Tacoma and rural Pierce County, there are better, intact representative examples. Therefore, the subject property is not considered significant under Criterion C.

The property is not recommended eligible under Criterion D. The subject property does not appear to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. It is a common example of its type that provides no important information about the general trends of low-density residential development that occurred in rural Pierce County following World War II that cannot be obtained through documentary sources. Therefore, the structure has not yielded and is not likely to yield information important in prehistory or history. For these reasons, the subject property is not considered significant under NRHP Criterion D.

Integrity: The residence was altered in 1987 according to assessor data, but it is unclear the extent of the renovations. The porch facing east appears to be newer and the carport is underneath it (an "add on" according to assessor data). As such, the residence at 4710 44th Avenue E appears to retain all aspects of integrity with the exception of its design.

Physical description: This two-story single-family residence is oriented toward a large field and set back from the roadway by approximately 20 feet. The vernacular wood-frame-constructed dwelling dates to 1977 but was remodeled in 1987. It is front gabled in its configuration and the exterior is sheathed in horizontal siding (presumed to be wood), and the roof is clad in composition shingles and features overhanging eaves with exposed roof beams. Windows are horizontal sliding units in metal frames, flanked by non-functional, decorative, shutters. A porch extends the length of the main elevation, added in 1987.

Bibliography: Pierce County Assessor data accessed 10/19/23
https://atip.piercecountywa.gov/app/v2/propertyDetail/0320133052/building

Historic Property Report

Historic Name: Alto Residence

Property ID: 731989

Location





Address: 4720 44th Ave E, Tacoma, Washington, 98443

Geographic Areas: Pierce County Certified Local Government, T20 R03E Section 13, PUYALLUP Quadrangle, Pierce County

Information

Number of stories: 1.00

Construction Dates:

Construction Type	Year	Circa

Historic Use:

Category	Subcategory
Domestic	Domestic - Single-Family House
Domestic	Domestic - Single-Family House

Historic Context:

Category

Architect/Engineer:

Category	Name or Company

Thematics:

Local Registers and Districts

Name	Date Listed	Notes

Project History

Historic Property Report

Historic Name: Alto Residence

Property ID: 731989

Project Number, Organization, Project Name	Resource Inventory	SHPO Determination	SHPO Determined By, Determined Date
2017-07-05354, , SR 509- SeaTac to I-5		Survey/Inventory	

Photos



4720 44th Ave E



4720 44th Ave E: detail of garage and main entrance at porch



4720 44th Ave E: west and south elevations

Historic Property Report

Historic Name: Alto Residence

Property ID: 731989

Inventory Details - 10/19/2023

Common name: Alto Residence

Date recorded: 10/19/2023

Field Recorder: Leslie Schwab

Field Site number: Survey ID 04

SHPO Determination

Detail Information

Characteristics:

Category	Item
Foundation	Concrete - Poured
Form Type	Single Dwelling - Ranch
Roof Type	Gable
Roof Material	Asphalt/Composition - Shingle
Cladding	Wood
Structural System	Wood - Platform Frame
Plan	Rectangle

Surveyor Opinion

Significance narrative: This single-family residence located at 4720 44th Avenue E is not recommended eligible under Criterion A. In order for a property to be individually eligible under Criterion A, it would need to be associated with an historical event or pattern of events or trends significant on the local, state, or national level. Given the haphazard neighborhood development patterns in unincorporated Pierce County, the subject property does not appear to be part of a specific, planned suburban pattern of development (i.e., tracts of subdivided property with multiple, similarly designed, single-family dwellings constructed after World War II). The residence located at 4720 44th Avenue E does appear to have connections to specific activities or events or patterns of development that had a lasting impact on the community or region. Therefore, the property does not have significance under Criterion A.

To be found eligible under NRHP Criterion B, the property would need to be directly associated with a person considered historically significant at the local, state, or national level, and it would need to be the place (or part of the place) where that person performed the work for which he or she is known. Assessor's records do not list previous owners from the historic period and no information on the property came up during a Google search to suggest the property would be significant under Criterion B. Therefore, the property does not appear to be significant under Criterion B.

To be considered eligible for listing on the NRHP under Criterion C, the residences must embody distinctive characteristics of a type, period, or method of construction, represent the work of a master, or possess high artistic values. The residence at 4720 44th Avenue E appears to consist of common and ordinary features with no distinctive characteristics in method, construction, materials, design, or artistic value; nor are they the work of a master. The residence was built in 1974 (remodeled in 1983). Within the context of single-family residences in Tacoma and rural Pierce County, there are better, intact representative examples of their type. Therefore, the subject property is not considered significant under Criterion C.

The property is not recommended eligible under Criterion D. The subject property does not appear to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. It is a common example of its type that provides no important information about the general trends of low-density residential development that occurred in rural Pierce County following World War II that cannot be obtained through documentary sources. Therefore, the structure has not yielded and is not likely to yield information important in prehistory or history. For these reasons, the subject property is not considered significant under NRHP Criterion D.

Integrity: The subject property has been modified from its original design (garage renovated and windows replaced). It retains integrity of materials, workmanship, location, feeling, and association, and it is still legible as a Ranch house.

Historic Property Report

Historic Name: Alto Residence

Property ID: 731989

Physical description: 4720 44th Ave E, Tacoma. This one-story, single-family residence is rectangular in plan, with a gabled porch extending from the main façade. The frame-constructed volume rests on a concrete masonry unit foundation. It is set back from the roadway approximately 20 feet. This Ranch house dates to 1974 and was remodeled in 1985, according to assessor data. The exterior is clad in wide, horizontal siding, oversized, ashlar-faced brick veneer adjacent to the main entrance, and the side-gabled roof is sheathed in composition shingles. The eaves are slightly overhanging with a fascia board visible at the gable ends. Beneath the end gable, the cladding is diagonally oriented. The (non-original) porch addition and renovated garage are visible from the public right of way. Windows are vinyl replacement sash and horizontal sliding units.

Bibliography: Pierce County Assessor Data Accessed 10/19/23
https://atip.piercecountywa.gov/app/v2/propertyDetail/0320133054/building

Historic Property Report

Historic Name: Residence

Property ID: 731990

Location





Address: 4822 44th Ave E, Tacoma, Washington, 98443

Geographic Areas: Pierce County, T20 R03E Section 24, Pierce County Certified Local Government, PUYALLUP Quadrangle

Information

Number of stories: N/A

Construction Dates:

Construction Type	Year	Circa
Built Date	1920	☐
Remodel	1958	☐

Historic Use:

Category	Subcategory
Domestic	Domestic - Single-Family House
Domestic	Domestic - Single-Family House

Historic Context:

Category

Architect/Engineer:

Category	Name or Company

Historic Property Report

Historic Name: Residence

Property ID: 731990

Thematics:

Local Registers and Districts

Name	Date Listed	Notes

Project History

Project Number, Organization, Project Name	Resource Inventory	SHPO Determination	SHPO Determined By, Determined Date
2017-07-05354, , SR 509- SeaTac to I-5		Survey/Inventory	

Historic Property Report

Historic Name: Residence

Property ID: 731990

Photos



4822 44th Ave E



4822 44th Ave E: detail view of vinyl replacement windows



4822 44th Ave E: detail of main elevation

Historic Property Report

Historic Name: Residence

Property ID: 731990

Inventory Details - 10/19/2023

Common name: Shimamura Residence

Date recorded: 10/19/2023

Field Recorder: Leslie Schwab

Field Site number: Survey ID 05

SHPO Determination

Detail Information

Characteristics:

Category	Item
Foundation	Concrete - Poured
Form Type	Single Dwelling
Roof Type	Gable - Front
Roof Material	Asphalt/Composition - Shingle
Cladding	Wood - Clapboard
Structural System	Wood - Balloon Frame
Plan	Rectangle

Styles:

Period	Style Details
Early 20th Century American Movements (1900-1940)	Craftsman

Surveyor Opinion

Significance narrative:

This single-family residence located at 4822 44th Avenue E is not recommended eligible under Criterion A. For a property to be individually eligible under Criterion A, it would need to be associated with an historical event or pattern of events or trends significant on the local, state, or national level. Given the haphazard neighborhood development patterns in unincorporated Pierce County, the subject property does not appear to be part of a specific, planned suburban pattern of development, nor does the residence located at 4822 44th Avenue E appear to have connections to specific activities or events or patterns of development that had a lasting impact on the community or region. Therefore, the property does not have significance under Criterion A.

To be found eligible under NRHP Criterion B, the subject property would need to be directly associated with a person considered historically significant at the local, state, or national level, and it would need to be the place (or part of the place) where that person performed the work for which he or she is known. Assessor's records do not list previous owners from the historic period, and no information on the property came up during a Google search to suggest the property would be significant under Criterion B. Therefore, the property does not appear to be significant under Criterion B.

To be considered eligible for listing on the NRHP under Criterion C, the subject property must embody distinctive characteristics of a type, period, or method of construction, represent the work of a master, or possess high artistic values. The residence at 4822 44th Avenue E appears to consist of common and ordinary features with no distinctive characteristics in method, construction, materials, design, or artistic value; nor are they the work of a master. The residence was built in 1920 (remodeled in 1953, but not known to what extent). Within the context of single-family residences in Tacoma and rural Pierce County, there are better, intact representative examples of Craftsman cottages. Therefore, the subject property is not considered significant under Criterion C.

The property is not recommended eligible under Criterion D. The subject property does not appear to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. It is a common example of its type that provides no important information about the general trends of low-density residential development that occurred in rural Pierce County that cannot be obtained through documentary sources. Therefore, the structure has not yielded and is not likely to yield information important in prehistory or history. For these reasons, the subject property is not considered significant under NRHP Criterion D.

Integrity: The subject property has been modified from its original design (windows replaced with vinyl units, and a covered wood porch). It retains moderate integrity of materials, workmanship, location, feeling and association.

Physical description:

This front-gabled, single-family residence dates to 1920, but it was remodeled in 1958. It is an example of a Craftsman cottage, it is clad in horizontal clapboard siding (with cornerboards), and the roof is sheathed in composition shingles. Windows are double-hung, vinyl replacement units within their original openings, featuring a tri-partite picture window adjacent to the gabled porch on the main facade. Knee brackets accent the overhanging eaves. No rafter tails are noted. A detached garage is located next to the residence and has similar finish materials.

Bibliography:

Pierce County Assessor Data Accessed 10/19/23
https://atip.piercecountywa.gov/app/v2/propertyDetail/0320242141/building

City of Tacoma Historic Preservation webpages
https://www.cityoftacoma.org/government/city_departments/planning_and_development_services/historic_preservation/tacomas_historic_districts

Historic Property Report

Historic Name: McCord Residence

Property ID: 731991

Location





Address: 4401 Vickery Ave E, Tacoma, Washington, 98443

Geographic Areas: T20 R03E Section 13, Pierce County Certified Local Government, Pierce County, TACOMA SOUTH Quadrangle

Information

Number of stories: 1.00

Construction Dates:

Construction Type	Year	Circa
Remodel	1968	☐
Built Date	1940	☐

Historic Use:

Category	Subcategory
Domestic	Domestic - Single-Family House
Domestic	Domestic - Single-Family House

Historic Context:

Category

Architect/Engineer:

Category	Name or Company

Historic Property Report

Historic Name: McCord Residence

Property ID: 731991

Thematics:

Local Registers and Districts

Name	Date Listed	Notes

Project History

Project Number, Organization, Project Name	Resource Inventory	SHPO Determination	SHPO Determined By, Determined Date
2017-07-05354, , SR 509- SeaTac to I-5		Survey/Inventory	

Historic Property Report

Historic Name: McCord Residence

Property ID: 731991

Photos



4401 Vickery Ave

Historic Property Report

Historic Name: McCord Residence

Property ID: 731991

Inventory Details - 10/19/2023

Common name: McCord Residence

Date recorded: 10/19/2023

Field Recorder: Leslie Schwab

Field Site number: Survey ID 06

SHPO Determination

Detail Information

Characteristics:

Category	Item
Foundation	Concrete - Poured
Form Type	Single Dwelling
Roof Type	Gable
Roof Material	Asphalt/Composition - Shingle
Cladding	Wood
Structural System	Wood - Platform Frame
Plan	Rectangle

Surveyor Opinion

Significance narrative:

This single-family residence located at 4401 Vickery Avenue E is not recommended eligible under Criterion A. For a property to be individually eligible under Criterion A, it would need to be associated with an historical event or pattern of events or trends significant on the local, state, or national level. Given the haphazard neighborhood development patterns in unincorporated Pierce County, the subject property does not appear to be part of a specific, planned suburban pattern of development, nor does the subject property appear to have connections to specific activities or events or patterns of development that had a lasting impact on the community or region. Therefore, the property does not have significance under Criterion A.

To be found eligible under NRHP Criterion B, the subject property would need to be directly associated with a person considered historically significant at the local, state, or national level, and it would need to be the place (or part of the place) where that person performed the work for which he or she is known. Assessor's records do not list previous owners from the historic period and no information on the property came up during a google search to suggest the property would be significant under Criterion B. Therefore, the property does not appear to be significant under Criterion B.

To be considered eligible for listing on the NRHP under Criterion C, the subject property must embody distinctive characteristics of a type, period, or method of construction, represent the work of a master, or possess high artistic values. The residence at 4401 Vickery Avenue E appears to consist of common and ordinary features with no distinctive characteristics in method, construction, materials, design, or artistic value; nor are they the work of a master. The residence was built in 1940 (remodeled in 1968, but not known to what extent). Within the context of single-family residences in Tacoma and rural Pierce County built during the interwar period, there are better, intact, representative examples of of this type. Therefore, the subject property is not considered significant under Criterion C.

The property is not recommended eligible under Criterion D. The subject property does not appear to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. It is a common example of its type that provides no important information about the general trends of low-density residential development that occurred in rural Pierce County that cannot be obtained through documentary sources. Therefore, the structure has not yielded and is not likely to yield information important in prehistory or history. For these reasons, the subject property is not considered significant under NRHP Criterion D.

Integrity: Given the lack of access to the property, it is unclear how much of the residence was altered in 1968. Improvements included enclosure of the porch and addition of a deck and carport; this would suggest that its integrity of design, materials and workmanship have been compromised.

Physical description:

This one-story, single-family residence dates to 1940 but it was remodeled in 1968, according to assessor data. The property also has a shop and barn on the parcel. No clear views from public right of way were available.

Bibliography:

Pierce County Assessor data Accessed 10/19/23
https://atip.piercecountywa.gov/app/v2/propertyDetail/0320133048/building

Historic Property Report

Historic Name: Clear Creek Trout Farm

Property ID: 731993

Location





Address: 4008 Pioneer Way E, Tacoma, Washington, 98443

Geographic Areas: Pierce County Certified Local Government, T20 R03E Section 13, PUYALLUP Quadrangle, Pierce County

Information

Number of stories: N/A

Construction Dates:

Construction Type	Year	Circa
Built Date	1940	☑
Addition	1944	☑
Addition	1968	☑

Historic Use:

Category	Subcategory
Industry/Processing/Extraction	Industry/Processing/Extraction - Waterworks
Industry/Processing/Extraction	Industry/Processing/Extraction - Waterworks

Historic Context:

Category

Architect/Engineer:

Category	Name or Company

Historic Property Report

Historic Name: Clear Creek Trout Farm

Property ID: 731993

Thematics:

Local Registers and Districts

Name	Date Listed	Notes

Project History

Project Number, Organization, Project Name	Resource Inventory	SHPO Determination	SHPO Determined By, Determined Date
2017-07-05354, , SR 509- SeaTac to I-5		Survey/Inventory	

Photos



4008 Pioneer Way: general view

Historic Property Report

Historic Name: Clear Creek Trout Farm

Property ID: 731993

Inventory Details - 10/19/2023

Common name: Clear Creek Trout Farm (Troutlodge)

Date recorded: 10/19/2023

Field Recorder: Leslie Schwab

Field Site number:

SHPO Determination

Detail Information

Characteristics:

Category	Item
Foundation	Concrete - Poured
Form Type	Utilitarian

Surveyor Opinion

Significance narrative:

To be considered eligible for listing on the NRHP under Criterion A, a hatchery must be associated with events that have made a significant contribution to the broad patterns of our history. In its current configuration (structures, raceways, dams, human-made ponds, roads dating to the 1960s up to present), the Clear Creek Trout Farm and hatchery does not appear to be associated with the earliest (late-1800s) historic development of government-run fish hatcheries that mass-produced anadromous fish populations in the Pacific Northwest. It is not associated directly with specific trends in hatchery development history; fish hatcheries are common in the project vicinity and Puget Sound region, in general. By 1953, the majority of Washington state's 64 private licensed trout farms were located in the west and 28 of them in the Tacoma area alone. The subject property is just one of the company's holdings associated with fish propagation on the west coast, however, it is not one of Troutlodge's original sites (the company was formed in 1945 but not at this location). Because there is no clear association historically with important trends in fish propagation and research, it is not considered NRHP eligible under Criterion A.

Clear Creek Trout Farm does not appear to be eligible under NRHP Criterion B. The subject property was purchased by Troutlodge founders Ed McLeary and Ken Drew from Claude Lathrop in the 1960s A ccording to the Troutlodge website, Troutlodge originally operated at a facility near the headwaters of Rocky Ford Creek near Moses Lake in Eastern Washington in the 1940s; therefore, McLeary and Drew's early work would be associated with that property. Under the name of Clear Creek Trout Farm, the former operator, Claude W. Lathrop, lived there for13 years as owner/operator. No other information was readily available to ascertain Lathrop's contributions to trout farming in Pierce County, as a result, the subject property does not appear to be the location where the founders would have made their research and development contributions to the industry.

To be considered eligible for listing on the NRHP under Criterion C, the hatchery must embody distinctive characteristics of a type, period, or method of installation, or represent the work of a master, or possess high artistic values. The hatchery appears to consist of common and ordinary structures with no distinct characteristics in method, construction, materials, design, or artistic value; nor is the facility the work of a master. The facility was built originally in the 1940s and expanded over time to its current configuration comprising 56 raceways, two warehouse structures, human-made ponds, dams, and roads.

The property is not recommended eligible under Criterion D. The property does not appear to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies.

Integrity: The property lacks integrity of design, materials, or workmanship, setting, feel and association. the subject property has undergone significant changes to its ponds, raceways, and structures between 1945 and 1970s.

Physical description:

Clear Creek Trout Farm hatchery was originally built in the 1940s as a commercial and recreational fish hatchery. In its current configuration, it has 56 raceways, pollution abatement ponds, dams, and warehouse buildings. It was purchased in the 1960s by Troutlodge, Inc. (a business founded in 1945). This facility serves as a brood stock farm

and also handles fish for private and public stocking. Reportedly, the company has a separate laboratory for fish pathology and genetics. The company operates at eight locations within Washington and Idaho as well as in Chile and Isle of Man. According to the company website, Troutlodge began as a commercial operation and a local food supplier. The company has grown into one of the largest suppliers of live trout, with customers including WDFW, tribes, and public utility districts, among others.

Clear Creek Trout Farm, located at 4008 Pioneer Way East, consists of six parcels: 0320133013, 0320133051, 0320133053, 0320133057, 0320133060, 0320133061 in Pierce County, Washington. In its current configurationm the subject property contains human-made ponds, concrete-lined raceways, storage/warehouse structures (dating to the 1960s) and possibly a residence. Site access was not permitted; therefore, Pierce County Assessor data and aerial photographs were utilized for this resource description.

Aerial photographs indicate that the site was wooded and generally undeveloped in 1941. Pioneer Way E and 44th Avenue E, as well as several rural developments and the rail line, are visible in the 1941 aerial photograph. Areas adjoining the site appear to be rural residences or agricultural in nature with a few small orchards observed.

By 1944 the subject property appears to have been developed with several buildings and ponds. Increased residential development on top of the hill to the west of the site occurred during this time period.

By 1957 the subject property was developed with the existing fish hatchery, although the ponds and buildings are not in the same configuration as they are currently. One rectangular building appears in the central portion of the property with two rectangular pools situated to the north and south of the building. One oval-shaped pool is located farther to the north with a road running north-south through the site as it does today. There is also a second residential property adjoining the site to the east. Increased residential development is shown along 44th Avenue E and on the hilltop to the west.

Aerial photographs dating to 1968 show increased development of the hatchery facility with more ponds and buildings. The two square pools remained; however, the rectangular building between them had been removed prior to 1968. One square building (assumed to be the current two-story structure) is shown to the north of the northern square pool, and a second building is shown south of the southern pool. Seven irregular shaped pools are shown in the vicinity of the previous oval-shaped pool in the northern portion of the site. A portion of the western side of the site appears to have been cleared for development. The development of the surrounding area appears similar to the 1957 photograph except for the addition of a possible power substation between the northeast boundary of the site and 44th Avenue E.

Increased hatchery development at the site is visible in the 1972 photograph. Three of the northern ponds were redeveloped into roughly square-shaped ponds (these appear to be the same as are currently present at the site), and a third pool had been constructed between the two pre-existing square pools (these may be the same pools that are present at the site today, but that is more uncertain). Several residences are shown on the western portion of the site. Additionally, residential development continued in the surrounding area between 1968 and 1972.

Photographs from 1980 and 1990 appear similar to the 1972 photograph. However, the 2006 through 2022 aerial coverage depict the hatchery as it appears today with one long

pool on the southern portion of the site and a road extending south beyond the Site.

Bibliography:

Pierce County Assessor data Accessed 10/19/23
https://atip.piercecountywa.gov/app/v2/propertyDetail/0320133013/summary

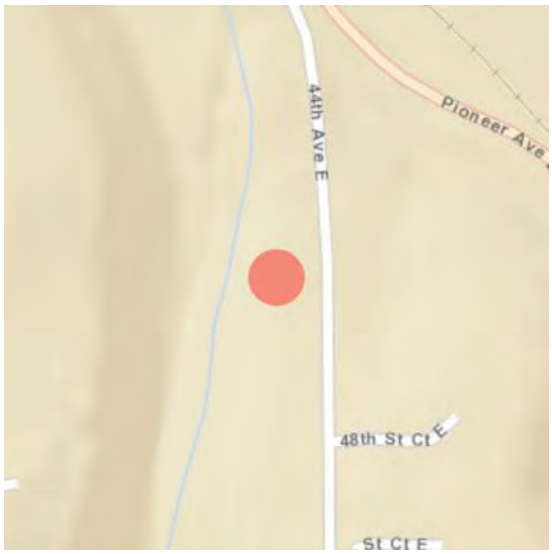
Trout Hatcheries in Area Find Prosperity (The News Tribune, Tacoma, Washington, January 4, 1953, pages 18 and 31)

Historic Property Report

Historic Name: Hoskins-Hinchey Residence

Property ID: 732003

Location





Address: 4624 44th Ave E, Tacoma, Washington, 98443

Geographic Areas: Pierce County Certified Local Government, T20 R03E Section 13, Pierce County, PUYALLUP Quadrangle

Information

Number of stories: 2.00

Construction Dates:

Construction Type	Year	Circa
Built Date	1980	☐
Remodel	1988	☐

Historic Use:

Category	Subcategory
Domestic	Domestic - Single-Family House
Domestic	Domestic - Single-Family House

Historic Context:

Category

Architect/Engineer:

Category	Name or Company

Historic Property Report

Historic Name: Hoskins-Hinchey Residence Property ID: 732003

Thematics:

Local Registers and Districts

Name	Date Listed	Notes

Project History

Project Number, Organization, Project Name	Resource Inventory	SHPO Determination	SHPO Determined By, Determined Date
2017-07-05354, , SR 509- SeaTac to I-5		Survey/Inventory	

Historic Property Report

Historic Name: Hoskins-Hinchey Residence

Property ID: 732003

Photos



4624 44th Ave E



4624 44th Ave E

Historic Property Report

Historic Name: Hoskins-Hinchey Residence Property ID: 732003

Inventory Details - 10/19/2023

Common name: Hoskins-Hinchey Residence

Date recorded: 10/19/2023

Field Recorder: Leslie Schwab

Field Site number: Survey ID 08

SHPO Determination

Detail Information

Characteristics:

Category	Item
Foundation	Concrete - Poured
Form Type	Single Dwelling
Roof Type	Gable - Side
Roof Material	Asphalt/Composition - Shingle
Cladding	Wood
Structural System	Wood - Platform Frame
Plan	Irregular

Surveyor Opinion

Significance narrative: This property was surveyed at a desktop, reconnaissance level. The property was built in 1980 and remodeled in 1988, according to assessor data. Because this residence is not yet 50 years of age, it would need to be exemplary in its design and considered NRHP eligible under Criterion Consideration G. Integrity of design has been compromised due to replacement of windows and additions such as a porch on the main elevation. Given these alterations, it would not be considered eligible under this criterion consideration.

Physical description: This two-story, single-family residence dates to 1980 and wasremodeled in 1988, according to assessor data. It is rectangular in plan, side-gabled in orientation, and set back from the street by 50 feet. A detached two-car garage is adjacent to the house. The exterior is clad in wide, horizontal siding (presumed to be wood), and the roof is sheathed in composition shingles. Windows are fixed and horizontal sliding units in vinyl frames. Dormers on the upper floor are both shed roof and octagonal in configuration. The entrance is reached via an uncovered patio that leads from the detached garage.

Bibliography: https://atip.piercecountywa.gov/app/v2/propertyDetail/0320133062/building

Appendix C.
Programmatic Agreement

PROGRAMMATIC AGREEMENT AMONG THE FEDERAL HIGHWAY ADMINISTRATION, THE FEDERAL TRANSIT ADMINISTRATION, THE WASHINGTON STATE HISTORIC PRESERVATION OFFICER, THE ADVISORY COUNCIL ON HISTORIC PRESERVATION, FEDERAL HIGHWAY ADMINISTRATION WESTERN FEDERAL LANDS HIGHWAY DIVISION, AND THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION REGARDING THE FEDERAL AID HIGHWAY, FEDERAL LANDS HIGHWAY, AND FEDERAL TRANSIT PROGRAMS IN WASHINGTON STATE

WHEREAS, the Federal Highway Administration Washington Division (FHWA), under the authority of 23 U.S.C. 101 et seq., implements the Federal-aid Highway Program in the state of Washington by funding and approving state and locally sponsored transportation projects that are administered by the Washington State Department of Transportation (WSDOT); and

WHEREAS, the Federal Transit Administration (FTA), administers the Federal Transit Program authorized by 49 U.S.C. Chapter 53; and

WHEREAS, the Federal Highway Administration Western Federal Lands Highway Division (WFLHD), administers the Federal Lands Highway Program authorized by 23 U.S.C. § 201, et seq.; and

WHEREAS, "Programs" is used in this agreement to refer to the Federal-aid Highway Program, the Federal Transit Program, and the Federal Lands Highway Program collectively; and

WHEREAS, FTA has determined that projects authorized by FTA are undertakings pursuant to Section 106 and may have an effect on historic properties, and the FTA will utilize this Agreement for WSDOT projects subject to FTA funding and/or approvals.; and

WHEREAS, WFLHD has professional cultural resources staff who serve in the same role for WFLHD projects as WSDOT's professional cultural resources staff do for FHWA and FTA projects.; and

WHEREAS, the Washington Division FHWA Division Administrator and the FTA Regional Administrator are the "Agency Officials" responsible for ensuring that WSDOT projects receiving approvals or funding from FHWA and/or FTA in the State of Washington comply with Section 106 of the National Historic Preservation Act (NHPA)(54 U.S.C. § 306108), as amended, and codified in its implementing regulations, 36 CFR Part 800, as amended (August 5, 2004); and

WHEREAS, WSDOT administers Federal-aid projects throughout the State of Washington as authorized by Title 23 U.S.C 302; and

WHEREAS, the responsibilities of the Washington State Historic Preservation Officer (SHPO) under Section 106 of the NHPA and 36 CFR Part 800 are to advise, assist, review, and consult with Federal agencies as they carry out their historic preservation responsibilities and to respond to Federal agencies' requests within a specified period of time; and

WHEREAS, FHWA has determined that construction, maintenance, and emergency relief projects as part of the Program, and related FHWA approvals for changes in access to the Interstate System in Washington are undertakings pursuant to Section 106 of the NHPA and may have an effect upon properties included in, or eligible for inclusion in, the National Register of Historic Places (NRHP), hereafter referred to as historic properties, and has consulted with the Washington SHPO and the Advisory Council on Historic Preservation (ACHP) pursuant to Section 800.14(b)of the regulations implementing Section 106 of the NHPA; and

WHEREAS, FHWA, FTA, and WFLHD have consulted with Federally-recognized Indian tribes (Tribes) with ancestral lands in Washington about this Agreement, have requested their comments, and have taken any comments received into account. These Tribes are listed in Appendix A; and

WHEREAS, any project involving tribal lands as defined in 36 CFR 800.16(x) shall not be governed by this agreement, but shall be reviewed by FHWA, FTA, or WFLHD in accordance with 36 CFR 800; and

WHEREAS, pursuant to the consultation conducted under 36 CFR 800.14(b), the signatories have developed this Programmatic Agreement (Agreement) in order to establish an efficient and effective program alternative for taking into account the effects of each Agency's Programs on historic properties in Washington and for affording the ACHP a reasonable opportunity to comment on undertakings covered by this agreement; and

WHEREAS, FHWA has notified the public, Federal and State agencies, and Certified Local Governments (CLGs) about this Agreement, has requested their comments, and has taken any comments received into account;

WHEREAS, WSDOT has participated in the consultation and has been invited to be a signatory to this Agreement; and

WHEREAS, WSDOT, FHWA, FTA and WFLHD agree that any MOA signed under this agreement stands in lieu of a state permit for all adverse effects off federal lands, as per RCW 27.53.

WHEREAS, this Agreement shall supersede the following previous Programmatic Agreements among the FHWA, SHPO, ACHP, and WSDOT: *Programmatic Agreement Among the Federal Highway Administration, the Washington State Department of Transportation, the Advisory Council on Historic Preservation, and the Washington State Historic Preservation Officer Regarding Implementation of the Federal-Aid Highway Program in Washington State, and two amendments to this agreement dated March 7, 2007 and August 2, 2012*.

NOW, THEREFORE, FHWA, FTA, WFLHD, the SHPO, the ACHP, and WSDOT agree that the Programs in Washington shall be carried out in accordance with the following stipulations to consider the effects of the Programs on historic properties in Washington and that these stipulations shall govern compliance of the Programs with Section 106 of the NHPA until this Agreement expires or is terminated.

STIPULATIONS

The FHWA, FTA, and WFLHD, with the assistance of WSDOT, shall ensure that the following measures are carried out:

I. APPLICABILITY AND SCOPE

A. This Agreement sets forth the process by which FHWA, and FTA, with the assistance of WSDOT; and WFLHD without the assistance of WSDOT will meet their responsibilities pursuant to Section 106 and 110 of the NHPA (54 U.S.C. §§ 306102 and 306108).

B. The objective of this Agreement is to make more efficient the methods by which FHWA, WFLHD, FTA, and WSDOT review individual undertakings processed under Section 106 that may affect historic properties and to establish the process by which FHWA, WFLHD, and FTA (who retain ultimate Section 106 responsibility, except where such responsibility has been delegated to WSDOT) carry out their Section 106 responsibilities.

C. Through this Agreement, FHWA and FTA authorize WSDOT's professional cultural resources staff to initiate and, in many cases, conclude consultation with the SHPO and other consulting parties for purposes of compliance with Section 106 of the NHPA.

D. WFLHD's professional cultural resources staff conducts consultation with the SHPO and other consulting parties for purposes of compliance with Section 106 of the NHPA.

E. Through this Agreement, FHWA, FTA, WFLHD and WSDOT establish categories of projects (Appendix B) that do not require review and consultation with the SHPO but that may still require tribal consultation.

F. FHWA, WFLHD and FTA retain the responsibility to consult with Tribes as required under 36 CFR 800, as amended, except for those activities delegated to WSDOT by this Agreement.

G. This Agreement shall not apply to undertakings that occur on or affect tribal lands as they are defined in 36 CFR 800.16(x). For such undertakings, FHWA, FTA, and WFLHD shall follow the procedures in 36 CFR Part 800.

H. Cooperating Federal Agencies who recognize FHWA, WFLHD, or FTA as the lead Federal agency for an undertaking may fulfill their obligations under Section 106 of NHPA per 36 CFR 800.2(a)(2), if FHWA, WFLHD, or FTA, and WSDOT follow the requirements of this Agreement and the cooperating agency's undertaking does not have the potential to

cause effects to historic properties beyond those considered by the lead federal agency and WSDOT.

I. FHWA, FTA and WFLHD agree that all information and consultation site forms, reports etc. will be transmitted and documented through the Washington Information System for Architectural and Archaeological Records Data (WISAARD).

J. FHWA, FTA and WFLHD agree that ACHP has released guidance defining the parameters of using financial mitigation to support SHPOs' development and maintenance of electronic cultural resource information systems. If there is a reasonable relationship to the undertaking and there is not more appropriate targeted mitigation, then mitigation funds may be appropriate mitigation. .

K. All correspondence held by SHPO is subject to the State Public Records Act unless explicitly exempted under RCW 42.56.310

II. DEFINITIONS

A. *Screened Projects*: Screened Projects are activities that are presumed to have no potential or minimal potential to cause effects to historic properties and can be exempted from further Section 106 review by a WSDOT or WFLHD Cultural Resources Specialist. Those activities identified in Appendix B are undertakings per 36 CFR 800.y and will not require review by FHWA, FTA, the SHPO, or the ACHP, so long as they are reviewed by a WSDOT or WFLHD Cultural Resources Specialist and all terms and conditions set forth in this stipulation and Appendix B are met.

B. *Ground Disturbance*: Any activity that moves, compacts, alters, displaces, or penetrates the ground surface of previously undisturbed soils. ''Undisturbed soils'' refers to soils that possess significant intact and distinct natural soil horizons. Previously undisturbed soils may occur below the depth of disturbed soils.

C. For purposes of this agreement, the definitions provided in 36 CFR Part 800.16 (a) through (y) shall apply whenever applicable.

III. PROFESSIONAL QUALIFICATIONS STANDARDS

Projects screened per Appendix B of this Agreement must be reviewed by a WSDOT or WFLHD Cultural Resources Specialist who meets the Secretary of the Interior's Professional Qualifications Standards (published in 48 FR 44738-44739). Actions prescribed by this Agreement that involve the identification, evaluation, recording, treatment, monitoring, or disposition of historic properties, or that involve the reporting or documentation of such actions in the form of reports, forms, or other records, shall be carried out by or under the direct supervision of a person or persons

who meet the Secretary of the Interior's Professional Qualifications Standards (published in 48 FR 44738-44739).

IV. RESPONSIBILITIES

The following section identifies the responsibilities of FHWA, FTA, WFLHD and WSDOT in complying with the terms of this Agreement.

A. FHWA and FTA Responsibilities

1. Consistent with the requirements of 36 CFR 800.2(a) and 800.2(a)(1-4), FHWA and FTA remain legally responsible for ensuring that the terms of this Agreement are carried out and for all findings and determinations made pursuant to this Agreement by WSDOT under the authority of FHWA or FTA. At any point in the Section 106 process, FHWA or FTA may inquire as to the status of any undertaking carried out under the authority of this Agreement and may participate directly in any undertaking at its discretion.
2. FHWA and FTA retain the responsibility for government-to-government consultation with Tribes as defined in 36 CFR 800.16(m), but delegate to WSDOT to undertake consultation on their behalf unless a Tribe requests otherwise. FHWA and FTA retain responsibility for government-to-government consultation regarding issues outside of NHPA Section 106 consultation, in particular, treaty right issues.
3. FHWA and FTA shall be responsible for resolving disputes and objections pursuant to Stipulation XI.C of this Agreement.

B. WFLHD Responsibilities

1. Consistent with the requirements of 36 CFR 800.2(a) and 800.2(a)(1-4), WFLHD is responsible for ensuring that the terms of this Agreement are carried out and for all findings and determinations made pursuant to this Agreement for WFLHD projects, including screened projects.
2. WFLHD retains the responsibility for government-to-government consultation with Tribes as defined in 36 CFR 800.16(m) when WFLHD is the lead federal agency.

C. WSDOT and WFLHD Cultural Resources Specialist Responsibilities

WSDOT will employ staff who meet the Secretary of the Interior's Professional Qualifications Standards (48 FR 44738-9) and who will independently perform the work and consultation described in 36 CFR 800.3 – 36 CFR 800.5 (including any succeeding revisions to the regulations) on behalf of FHWA or FTA. Assignment of these responsibilities is based on

adequate and appropriate performance by WSDOT as evaluated in monitoring by FHWA and FTA pursuant to Stipulation XI.A of this Agreement.

WFLHD staff meeting the Secretary of the Interior's Professional Qualifications Standards (48 FR 44738-9), will perform the work and consultation described in 36 CFR 800.3 – 36 CFR 800.5 for WFLHD Projects.

These responsibilities include carrying out the following requirements:

1. 36 CFR 800.3(a) Determine whether the undertaking is a type of activity that has the potential to cause effects on historic properties.
2. 36 CFR 800.3(c) and (d) Determine whether the undertaking may occur on or has the potential to affect historic properties on tribal lands.
3. 36 CFR 800.3(e) Solicit public comment and involvement.
4. 36 CFR 800.3 Identify additional consulting parties who should be invited to participate in the undertakings covered by this Agreement.
5. 36 CFR 800.4(a) and (b) Determine and document, in consultation with the SHPO, the scope of identification efforts and level of effort, including the undertaking's area of potential effects (APE).
6. 36 CFR 800.4 In consultation with the SHPO, identify properties within the APE included in or eligible for listing in the NRHP.
7. 36 CFR 800.5(a)(1) Determine whether historic properties may be affected by the undertaking by applying the criteria of adverse effect.
8. 36 CFR 800.6 In consultation with: FHWA, FTA, or WFLHD; the SHPO; the ACHP (if it has chosen to participate); and any other consulting parties; address any adverse effects through the development, circulation, and execution of a Memorandum of Agreement, as appropriate.
9. WSDOT shall provide FHWA or FTA copies of all correspondence sent out on its behalf (e.g. letters to SHPO or Tribes).
10. WSDOT shall post on their website a list, updated monthly, of those projects under their review that meet the conditions in Appendix B and will not require further Section 106 review. Any interested party can subscribe to the WSDOT mailing list on the WSDOT website, and WSDOT will send monthly reminders to subscribers when the lists are updated. Should any party have questions or concerns involving such undertakings and desire to engage in consultation, the listing will contain contact information and further consultation shall occur.
11. WFLHD will maintain their own separate mailing list.

V. CONSULTATION WITH TRIBES

A. FHWA, FTA, and WFLHD recognize that they have a unique legal relationship with Indian tribes set forth in the Constitution of the United States, treaties, statutes, and court decisions; and that consultation with an Indian tribe must therefore recognize the government-to-government relationship between the federal government and Indian tribes. Nothing in this Agreement affects or changes FHWA, FTA, or WFLHD trust responsibilities and obligations toward Indian tribes. Consultation with Indian tribes must also recognize and respect the government-to-government relationships that exist among federal and state governments and federally-recognized Indian tribes. The Section 106 review process is one of the consultations within the framework of those government-to-government relationships established by the NHPA, treaties, and other laws, agreements and policies, including the Washington State Centennial Accord[1]. Accordingly, the parties recognize that consultation with Indian tribes is also carried out that is not related to the Section 106 process.

B. WSDOT, FHWA, FTA, and WFLHD shall ensure that Indian tribes are provided information regarding proposed undertakings early in project planning and are invited to participate in consultation in accordance with the requirements of Section 101(d)(6) of the NHPA and 36 CFR Part 800. Nothing in this Agreement abrogates FHWA, FTA, or WFLHD's responsibility for government-to-government consultation with Indian tribes at their request. Upon receipt of a written request from any Indian tribe or officially designated representative of an Indian tribe to consult with FHWA or FTA in lieu of or in addition to WSDOT, FHWA or FTA, respectively, shall consult with that Indian tribe for the particular undertaking or program.

C. WSDOT will document any consultation with Indian tribes WSDOT conducts on behalf of FHWA or FTA, and provide FHWA or FTA, respectively, the opportunity to participate directly in such consultation on individual undertakings as the circumstances warrant; WSDOT will not conduct consultation on behalf of WFLHD. WSDOT shall keep FHWA or FTA informed of the status of such consultation, provide advance notice of meetings so that FHWA or FTA respectively will have the opportunity to attend if desired, and supply documents including meeting notes and correspondence to FHWA or FTA respectively to meet the needs of effective consultation. WSDOT, FHWA, FTA, and WFLHD shall abide by the confidentiality provisions of Section 304 of the NHPA in determining what information may be provided to non-federal parties (16 USC § 470w-3).

[1] *Centennial Accord between the Federally Recognized Indian Tribes in Washington State and the State of Washington.* The accord, dated August 4, 1989, between the Governor of Washington State and the 29 federally-recognized Indian tribes, is to better achieve mutual goals through an improved relationship between their sovereign governments, and provides the framework for a government-to-government relationship.

D. Before stipulations of this Agreement regarding tribal consultation may be implemented, FHWA, WFLHD, and FTA shall send a joint letter to each Indian tribe in Washington State, as well as to Indian tribes outside the State but with interests in historic properties in the State, notifying the tribes of the execution of this Agreement, transmitting a copy of the Agreement, noting that WSDOT may initiate consultation with Indian tribes for FHWA and FTA undertakings carried out under provisions of this Agreement, and giving Indian tribes the option of consulting directly with FHWA or FTA for individual undertakings or types of undertakings.

E. FHWA, FTA and WFLHD will provide SHPO with all copies of tribal correspondence unless a tribe requests otherwise.

VI. PARTICIPATION OF OTHER CONSULTING PARTIES AND THE PUBLIC

A. Additional Consulting Parties

1. Consulting parties shall be identified by WSDOT, or by WFLHD's professional cultural resources staff, in consultation with the SHPO pursuant to 36 CFR 800.3(c-f) and their participation in undertakings covered under this Agreement shall be governed by 36 CFR 800.3(f)(3). Individuals and organizations with a demonstrated interest in an undertaking shall be invited by WSDOT in consultation with FHWA or FTA , or by WFLHD to participate in the Section 106 process. Any land owner whose land may be affected by an undertaking shall be invited by WSDOT or WFLHD to participate in the Section 106 process. Written requests by individuals, organizations, and agencies to become consulting parties will be evaluated on a case-by-case basis by WSDOT and FHWA or FTA, or by WFLHD in consultation with the SHPO.

B. Public Involvement

1. Public involvement in planning and implementing undertakings covered by this Agreement shall be governed by FHWA, FTA, WFLHD and WSDOT environmental compliance procedures, including but not limited to FHWA's Technical Advisory and similar and subsequent guidance documents. Public involvement and the release of information hereunder shall be consistent with 36 CFR 800.2(d), 800.3(e), and 800.1 l(c)(l and 3).

2. WSDOT or WFLHD shall continue to seek and consider the views of the public in a manner that reflects the nature and complexity of the undertaking and its effects on historic properties, and the likely interest of the public in the effects on historic properties, to remain consistent with the intent of 36 CFR Part 800, as amended.

3. For those actions that do not routinely require public review and comment (e.g., screened projects), appropriate public involvement should be based on the specifics of

the situation and commensurate with the type and location of historic properties, and the undertaking's potential impacts on them.

4. WSDOT shall make FHWA, FTA, and SHPO aware of any and all public controversy as it relates to the historic properties potentially affected by the proposed undertaking, including properties of religious and/or cultural significance to Indian tribes.

VII. PROJECT REVIEW

A. All projects will be reviewed by a WSDOT or WFLHD Cultural Resources Specialist to determine if all terms and conditions set forth in this stipulation and Appendix B are satisfactorily met for Screened Projects. Those undertakings identified in Appendix B will not require review by FHWA, FTA, the SHPO, or the ACHP.

1. WSDOT or WFLHD cultural resource staff will evaluate each undertaking for potential effects to historic properties. At a minimum, evaluations shall consist of review of Washington Information System for Architectural and Archaeological Records Data (WISAARD) records, project files, and project plans and specifications. Field investigations will be performed at the discretion of WSDOT's or WFLHD's cultural resource staff. Provided an undertaking is limited to the activities listed in Appendix B, and has no known public controversy related to historic properties, no further coordination pursuant to Section 106 shall be required.
2. In situations where undertakings meet the terms and conditions of this stipulation and Appendix B but portions of the undertaking are located on Tribal or federal property, WSDOT will apply the screening per Appendix B to the non-Tribal or non-federal property and conduct Section 106 review for the portion of the undertaking occurring on Tribal or federal land.
3. For any undertaking that does not meet the terms and conditions of Appendix B, WSDOT and WFLHD will follow 36 CFR 800 and Section IV.C of this Agreement.

VIII. EMERGENCY SITUATIONS

For the purposes of this Agreement, emergencies are defined as occurrences that require emergency highway system and facility repairs that are necessary to 1) protect the life, safety, or health of the public; 2) minimize the extent of damage to highway or transit systems and facilities; 3) protect remaining highway or transit facilities; or 4) restore essential traffic and function. The following stipulations apply to emergency situations:

A. Repairs to address emergency situations as defined above can occur regardless of

funding category, and regardless of declarations made by federal, state, or local agencies.

B. If the emergency repair project could affect historic properties, WSDOT or WFLHD cultural resources staff shall notify the SHPO; FHWA, FTA, or WFLHD; and Tribes within 72 hours of the undertaking.

C. For projects where the repair must be made within the first 30 days of the occurrence of the event that caused the emergency or the declaration of the emergency by an appropriate authority, the processing of environmental documentation will happen concurrently or after the fact. In these cases, WSDOT or WFLHD will comply with the procedures in Stipulation VII of this agreement to the extent possible, but the reviews will likely be conducted after the emergency work is completed. In all cases, WSDOT or WFLHD will notify FHWA, FTA, SHPO, ACHP, and affected Tribes within seven days of commencing the emergency undertaking.

D. For projects taking longer than 30 days for repair, WSDOT or WFLHD will comply with the procedures in Stipulations IV and VII.

IX. POST-REVIEW DISCOVERIES

A. Planning for Subsequent Discoveries

When WSDOT's or WFLHD's identification efforts indicate that historic properties are likely to be discovered during implementation of an undertaking, WSDOT or WFLHD shall include in any environmental document, contract, and specifications a plan for discovery of such properties. Implementation of the plan as originally proposed, or modified as necessary owing to the nature and extent of the properties discovered, will be in accordance with 36 CFR 800.4-6.

B. Late Discoveries

1. If previously unidentified archaeological or historic properties, or unanticipated effects, are discovered after WSDOT has completed its review under this Agreement, that portion of the project will stop immediately, in accordance with WSDOT Standard Specification 1-07.16(4) Archaeological and Historical Objects and Standard Specification 1-07.16(4)A Inadvertent Discovery of Human Remains (Appendix C). WFLHD will handle such occurrences per their standard policies.
2. WSDOT will notify the responsible Federal agency as soon as is practical, or within 24 hours.
3. No further construction in the area of the discovery will proceed until the requirements of 36 CFR 800.13 have been satisfied, including consultation with Indian tribes that may attach traditional cultural and religious significance to the discovered property.

4. WSDOT or WFLHD will notify the responsible Federal agency and will consult with SHPO and Indian tribes, as appropriate, to record, document, and evaluate NRHP eligibility of the property and the project's effect on the property, and to design a plan for avoiding, minimizing, or mitigating adverse effects on the eligible property.
5. For WSDOT projects, if neither the SHPO nor an Indian tribe files an objection within 72 hours of WSDOT's plan for addressing the discovery, WSDOT may carry out the requirements of 36 CFR 800.13 on behalf of FHWA or FTA, and the ACHP does not need to be notified.
6. For WFLHD projects, if neither SHPO nor an Indian tribe files an objection within 72 hours of WFLHD's plan for addressing the discovery, WFLHD may carry out the requirements of 36 CFR 800.13 and the ACHP does not need to be notified.

X. IDENTIFICATION AND TREATMENT OF HUMAN REMAINS

A. In the event that human remains are identified prior to, during, or after WSDOT project construction, WSDOT will develop a treatment plan in consultation with FHWA or FTA and the SHPO. If it is determined that the human remains are associated with a Native American occupation, WSDOT and FHWA or FTA will consult with the Tribes prior to the development of a treatment plan.

B. In the event that human remains are identified prior to, during, or after WFLHD project construction, WFLHD will develop a treatment plan in consultation with the SHPO. If it is determined that the human remains are associated with a Native American occupation, WFLHD will consult with the Tribes prior to the development of a treatment plan.

C. All work conducted on or involving human remains and abandoned cemeteries will comply with Chapter 27.44 Revised Code of Washington, if on the public or private lands of the State of Washington.

B. All work involving human remains and abandoned cemeteries on federal lands will comply with the Native American Graves Protection and Repatriation Act.

XI. ADMINISTRATIVE STIPULATIONS

A. Monitoring and Reporting

1. WSDOT shall prepare separately for FHWA, FTA, and SHPO a list of undertakings on which WSDOT has proceeded without further Section 106 review, in reliance on the procedure pursuant to Stipulation VII and Appendix B of this Agreement monthly. WFLHD shall similarly prepare a list for SHPO. The lists shall be made available to the

public and distributed to all consulting parties, including Tribes, who notify WSDOT or WFLHD of the desire to be supplied with the lists.

2. WSDOT, SHPO, FHWA, WFLHD, and FTA will consult via e-mail annually to determine if formal review is needed to evaluate the conduct of the Section 106 program. FHWA, WFLHD and FTA will notify ACHP of any review meetings and the ACHP may participate at its discretion. Notes documenting any review meetings held will be distributed to FHWA, WFLHD FTA, WSDOT and ACHP. Through these reviews, performance measures may be adopted for purposes of accountability and reporting to interested parties.

3. Each WSDOT region and mode shall on an annual basis contact Indian tribes to review ongoing effectiveness of this Agreement with regard to tribal consultation, and to discuss upcoming projects. The manner of communication to the Indian tribes will be determined by each WSDOT region and mode, in conjunction with affected tribes, with the objective of effective, meaningful consultation. Each WSDOT region and mode shall provide an annual report to FHWA and FTA summarizing their outreach to Indian tribes. This report will be submitted by the end of the Federal fiscal year, September 30.

B. Training

WSDOT, FHWA WFLHD, and FTA will coordinate to conduct training in cultural resources management and Section 106 implementation requirements and procedures, both for Cultural Resources Specialists and for other employees.

C. Resolving Objections to Implementation of this Agreement

1. Should any signatory party object in writing to FHWA, FTA, or WFLHD regarding the way the terms of this Agreement are carried out, FHWA, FTA, or WFLHD will immediately notify the other signatory parties of the objection and proceed to consult with the objecting party to resolve the objection. FHWA, FTA, or WFLHD will honor the request of any signatory party to participate in the consultation and will take any comments provided by such parties into account. FHWA, FTA, or WFLHD shall establish a reasonable time frame for such consultations.

2. Should any signatory party object to a WSDOT or FHWA, FTA, or WFLHD determination of eligibility, FHWA, FTA, or WFLHD will submit the determination to the Keeper of the National Register of Historic Places for resolution.

3. If the objection is resolved through consultation, FHWA, FTA, or WFLHD may authorize the disputed action to proceed in accordance with the terms of such resolution.

4. If after initiating such consultation, FHWA, FTA, or WFLHD determines that the objection cannot be resolved through consultation, FHWA, FTA, or WFLHD shall forward all documentation relevant to the objection to the ACHP and other signatory parties, including FHWA, FTA, or WFLHD's proposed response to the objection. Within 30 days after receipt of all pertinent documentation, ACHP shall exercise one of

the following options:

i. Advise FHWA, FTA, or WFLHD that ACHP concurs in FHWA, FTA, or WFLHD's proposed response to the objection, whereupon FHWA, FTA, or WFLHD will respond to the objection accordingly; or

ii. Provide FHWA, FTA, or WFLHD with recommendations, which FHWA, FTA, or WFLHD shall take into account in reaching a final decision regarding its response to the objection; or

iii. Notify FHWA, FTA, or WFLHD that the objection will be referred for comment pursuant to 36 CFR 800.7(a)(4) and proceed to refer the objection and comment. In this event, FHWA, FTA, or WFLHD shall ensure that the Agency Official is prepared to take the resulting comments into account in accordance with 36 CFR 800.7(a)(4).

5. Should ACHP not exercise one of the foregoing options within 30 days after receipt of all pertinent documentation, FHWA, FTA, or WFLHD may assume ACHP's concurrence in its proposed response to the objection.

6. FHWA, FTA, or WFLHD shall take into account any ACHP recommendation or comment and any comments from the other signatory parties to this Agreement in reaching a final decision regarding the objection. FHWA, FTA, or WFLHD's responsibility to carry out all actions under this Agreement that are not the subjects of the objection shall remain unchanged.

7. FHWA, FTA, or WFLHD shall provide all other signatory parties to this Agreement with a written copy of its final decision regarding any objection addressed pursuant to this Stipulation.

8. FHWA, FTA, or WFLHD may authorize any action subject to objection under this Stipulation to proceed, provided the objection has been resolved in accordance with the terms of this Stipulation.

9. At any time during implementation of the terms of this Agreement, should any member of the public raise an objection in writing pertaining to such implementation to any signatory party to this Agreement, that signatory party shall immediately notify FHWA, FTA, or WFLHD. FHWA, FTA, or WFLHD shall immediately notify the other signatory parties in writing of the objection. Any signatory party may choose to comment on the objection to FHWA, FTA, or WFLHD. FHWA, FTA, or WFLHD shall establish a reasonable time frame for this comment period. FHWA, FTA, or WFLHD shall consider the objection, and in reaching its decision, FHWA, FTA, or WFLHD will take all comments from the other parties into account. Within 15 days following closure of the comment period, FHWA, FTA, or WFLHD will render a decision regarding the objection and respond to the objecting party. FHWA, FTA, or

WFLHD will promptly notify the other parties of its decision in writing, including a copy of the response to the objecting party.

D. Documentation Standards

All documentation that supports findings and determinations made under this Agreement must be consistent with 36 CFR 800.11 and meet DAHP documentation and uploading requirements to WISAARD.

XII. AMENDMENT

A. Any signatory party to this Agreement may at any time propose amendments, whereupon all signatory parties shall consult to consider such amendment. This Agreement may be amended only upon written concurrence of all signatory parties.

B. Each attachment to this Agreement may be individually amended through consultation of the signatory parties without requiring amendment of the Agreement, unless the signatory parties through such consultation decide otherwise.

XIII. TERMINATION

A. Any signatory party may terminate their participation in this agreement. If this Agreement is not amended as provided for in Stipulation XV or if any signatory party proposes termination of this Agreement for other reasons, the party proposing termination shall notify the other signatory parties in writing, explain the reasons for proposing termination, and consult with the other parties for no more than 30 days to seek alternatives to termination.

B. Should such consultation result in an agreement on an alternative to termination, the signatory parties shall proceed in accordance with that agreement.

C. Should such consultation fail, the signatory party proposing termination may terminate their agency's participation in this Agreement by promptly notifying the other parties in writing; the termination of this Agreement by either FHWA, FTA, or WFLHD does not terminate the Agreement for the other signatories.

D. Should an agency's participation in this Agreement be terminated, that agency would carry out the requirements of 36 CFR Part 800 for individual undertakings.

E. If all parties agree to termination, beginning with the date of termination, FHWA, FTA, or WFLHD shall ensure that until and unless a new Agreement is executed for the actions covered by this Agreement, such undertakings shall be reviewed individually in accordance with 36 CFR 800.4-800.6.

XIV. CONFIDENTIALITY

All parties to this Agreement acknowledge that information about historic properties, potential historic properties, or properties considered historic for purposes of this Agreement are or may be subject to the provisions of Section 304 of NHPA. Section 304 allows FHWA, FTA, or WFLHD to withhold from disclosure to the public, information about the location, character, or ownership of a historic resource if the agency determines that disclosure may: 1) cause a significant invasion of privacy; 2) risk harm to the historic resource; or 3) impede the use of a traditional religious site by practitioners. Having so acknowledged, all parties to this Agreement will ensure that all actions and documentation prescribed by this Agreement are, where necessary, consistent with the requirements of Section 304 of the NHPA.

XV. DURATION OF AGREEMENT

This Agreement shall remain in effect for a period of five years after the date it takes effect, unless it is terminated prior to that time. Ninety days prior to the conclusion of the five year period, WSDOT will notify all parties in writing. If there are no objections from consulting parties, the term of the Agreement will automatically be extended for an additional five years. If any party objects to extending the Agreement, or proposes amendments, WSDOT will consult with the parties to consider amendments or other actions to avoid termination.

Execution and implementation of this Agreement evidences that FHWA, FTA, or WFLHD have delegated certain Section 106 responsibilities to WSDOT, and have afforded ACHP a reasonable opportunity to comment on the Programs and their individual undertakings in Washington; that FHWA, FTA, or WFLHD have taken into account the effects of the Programs and their individual undertakings on historic properties, and that FHWA, FTA, or WFLHD have complied with Section 106 of the NHPA and 36 CFR 800 for the Programs and their individual undertakings.

Signatories:

By: Daniel M. Mathis Date: 11/06/2018
Daniel M. Mathis, Division Administrator
Federal Highway Administration Washington Division

By: _____ Date: _____
Linda M. Gehrke, Regional Administrator
Federal Transit Administration, Region 10

By: _____ Date: _____
Ricardo Suarez, Division Director
Federal Highway Administration Western Federal Lands Highway Division

By: _____ Date: _____
Allyson Brooks, Ph.D., Director, State Historic Preservation Officer
Washington State Department of Archaeology and Historic Preservation

By: _____ Date: _____
John M. Fowler, Executive Director
Advisory Council on Historic Preservation

By: _____ Date: _____
Roger Millar, Secretary of Transportation
Washington State Department of Transportation

Execution and implementation of this Agreement evidences that FHWA, FTA, or WFLHD have delegated certain Section 106 responsibilities to WSDOT, and have afforded ACHP a reasonable opportunity to comment on the Programs and their individual undertakings in Washington; that FHWA, FTA, or WFLHD have taken into account the effects of the Programs and their individual undertakings on historic properties, and that FHWA, FTA, or WFLHD have complied with Section 106 of the NHPA and 36 CFR 800 for the Programs and their individual undertakings.

Signatories:

By: _____ Date: _____
Daniel M. Mathis, Division Administrator
Federal Highway Administration Washington Division

By: LINDA M GEHRKE Digitally signed by LINDA M GEHRKE DN: c=US, o=U.S. Government, ou=FTA FTASeattleWA, ou=DOT FTASeattleWA, cn=LINDA M GEHRKE Date: 2018.11.20 10:28:46 -08'00' Date: _____
Linda M. Gehrke, Regional Administrator
Federal Transit Administration, Region 10

By: _____ Date: _____
Ricardo Suarez, Division Director
Federal Highway Administration Western Federal Lands Highway Division

By: _____ Date: _____
Allyson Brooks, Ph.D., Director, State Historic Preservation Officer
Washington State Department of Archaeology and Historic Preservation

By: _____ Date: _____
John M. Fowler, Executive Director
Advisory Council on Historic Preservation

By: _____ Date: _____
Roger Millar, Secretary of Transportation
Washington State Department of Transportation

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Signatories:

By: _____ Date: _____
Daniel M. Mathis, Division Administrator
Federal Highway Administration Washington Division

By: _____ Date: _____
Linda M. Gehrke, Regional Administrator
Federal Transit Administration, Region 10

By: _____ Date: 10/30/2018
Ricardo Suarez, Division Director
Federal Highway Administration Western Federal Lands Highway Division

By: _____ Date: _____
Allyson Brooks, Ph.D., Director, State Historic Preservation Officer
Washington State Department of Archaeology and Historic Preservation

By: _____ Date: _____
John M. Fowler, Executive Director
Advisory Council on Historic Preservation

By: _____ Date: _____
Roger Millar, Secretary of Transportation
Washington State Department of Transportation

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Signatories:

By: _____ Date: _____
Daniel M. Mathis, Division Administrator
Federal Highway Administration Washington Division

By: _____ Date: _____
Linda M. Gehrke, Regional Administrator
Federal Transit Administration, Region 10

By: _____ Date: _____
Ricardo Suarez, Division Director
Federal Highway Administration Western Federal Lands Highway Division

By: _____ Date: 11/19/18
Allyson Brooks, Ph.D., Director, State Historic Preservation Officer
Washington State Department of Archaeology and Historic Preservation

By: _____ Date: 12/4/18
John M. Fowler, Executive Director
Advisory Council on Historic Preservation

By: _____ Date: _____
Roger Millar, Secretary of Transportation
Washington State Department of Transportation

Execution and implementation of this Agreement evidences that FHWA, FTA, or WFLHD have delegated certain Section 106 responsibilities to WSDOT, and have afforded ACHP a reasonable opportunity to comment on the Programs and their individual undertakings in Washington; that FHWA, FTA, or WFLHD have taken into account the effects of the Programs and their individual undertakings on historic properties, and that FHWA, FTA, or WFLHD have complied with Section 106 of the NHPA and 36 CFR 800 for the Programs and their individual undertakings.

Signatories:

By: _____ Date: _____
Daniel M. Mathis, Division Administrator
Federal Highway Administration Washington Division

By: _____ Date: _____
Linda M. Gehrke, Regional Administrator
Federal Transit Administration, Region 10

By: _____ Date: _____
Ricardo Suarez, Division Director
Federal Highway Administration Western Federal Lands Highway Division

By: _____ Date: _____
Allyson Brooks, Ph.D., Director, State Historic Preservation Officer
Washington State Department of Archaeology and Historic Preservation

By: _____ Date: _____
John M. Fowler, Executive Director
Advisory Council on Historic Preservation

By: _____ Date: 11/9/18
Roger Millar, Secretary of Transportation
Washington State Department of Transportation

APPENDIX A

Tribes Consulted with on Amended Statewide Programmatic Agreement[2]

There are 29 federally-recognized Washington state tribes, and 5 federally-recognized out-of-state tribes that were consulted with on this agreement.

Washington State Tribes

Chehalis Confederated Tribes	Quinault Indian Nation
Colville Confederated Tribes	Samish Nation
Cowlitz Indian Tribe	Sauk-Suiattle Tribe
Hoh Indian Tribe	Shoalwater Bay Tribe
Jamestown S'Klallam Tribe	Skokomish Tribe
Kalispel Tribe of Indians	Snoqualmie Indian Tribe
Lower Elwha Klallam Tribe	Spokane Tribe of Indians
Lummi Nation	Squaxin Island Tribe
Makah Nation	Stillaguamish Tribe of Indians
Muckleshoot Tribe	Suquamish Tribe
Nisqually Tribe	Swinomish Tribe
Nooksack Tribe	Tulalip Tribes
Port Gamble S'Klallam Tribe	Upper Skagit Tribe
Puyallup Tribe	Yakama Nation
Quileute Nation	

Out-of-State Tribes

Coeur D'Alene Tribe	
Confederated Tribes of Grand Ronde Community of Oregon	
Confederated Tribes of the Umatilla	
Confederated Tribes of Warm Springs	
Nez Perce Tribe	

[2] This Appendix is part of a Programmatic Agreement titled,
Programmatic Agreement among the Federal Highway Administration, the Federal Transit Administration, the Washington State Historic Preservation Officer, the Advisory Council on Historic Preservation, the Western Federal Lands Highway Division, and the Washington State Department of Transportation regarding the Federal-aid Highway, Federal Lands Highway, and Federal Transit Programs in Washington State.

APPENDIX B

Screened Highway, Bridge, and Transit Infrastructure Activities Presumed to Have Minimal Potential to Cause Effects:

An undertaking of one or more of the types listed below will not require further Section 106 review with SHPO, FHWA, or FTA once the undertaking has been reviewed by a WSDOT or WFLHD Cultural Resources Specialist to ensure that the location or nature of the activity is such that it is unlikely to affect an historic property. The list below may apply to either FTA or FHWA activities.

If at any time during the undertaking information becomes available that would make this procedure inapplicable, including but not limited to the discovery of historic properties or human remains, Section 106 review shall be initiated by WSDOT on behalf of FHWA or FTA, or by WFLHD in accordance with Stipulation VII of this Programmatic Agreement.

A-1 Roadway surface replacement, overlays, shoulder treatments, rumble strips, pavement repair, seal coating, pavement grinding, and pavement marking that do not include ground disturbance or is within the demonstrated vertical and horizontal limits of previous disturbance.

A-2 Installation, replacement, or repair of maintenance equipment, safety appurtenances, and traffic control devices, including but not limited to guardrails, barriers, glare screens, snow and ice detectors, energy attenuators, cameras, lighting, signs, signals, and informational signage/kiosks, provided the activity is in-kind replacement or does not include ground disturbance or is within the demonstrated vertical and horizontal limits of previous construction or disturbance.

A-3 Fencing within the demonstrated vertical and horizontal limits of previous construction or disturbance.

A-4 Landscaping or revegetation within the demonstrated vertical and horizontal limits of previous construction or disturbance.

A-5 In-kind emergency repairs to maintain the structural integrity of a bridge, structure, or roadway, and to remove landslide and rockslide material from travel lanes and shoulders.

A-6 Hazardous waste removal and disposal that requires immediate removal within the demonstrated vertical and horizontal limits of previous construction or disturbance.

A-7 Work within existing permitted material source pits, quarries or other borrow sources; or borrow pits that have been previously inventoried by WSDOT and where no cultural resources were identified.

A-8 Stripping and painting of bridges.

A-9 Replacement of bridge expansion joints.

A-10 Bridge deck pavers and striping projects.

A-11 In-kind repair or replacement of curb and gutter, sidewalks and catch basins, and other components of NRHP bridges not considered character defining.

A-12 Removal of vegetation or fallen rock in the clear zone along a roadway.

A-13 Work within interchanges, medians of divided highways, or between a highway and an adjacent frontage road within the demonstrated vertical and horizontal limits of previous construction or disturbance.

A-14 Replacement or extension of culverts and other drainage structures which do not extend beyond the vertical and horizontal limits of previous construction or disturbance for the existing culvert or drainage structure.

A-15 Construction of turning lanes and pockets, auxiliary lanes, sidewalks, and shoulder widening within the demonstrated vertical and horizontal limits of previous construction or disturbance.

A-16 Slope flattening done within the demonstrated vertical and horizontal limits of previous construction or disturbance.

A-17 Placement of riprap or other erosion control method to prevent erosion within the demonstrated vertical and horizontal limits of previous construction or disturbance.

A-18 Construction activities in areas of continuous slides, other mass wasting, or unstable landforms as evidenced by geotechnical core samples or other geotechnical evaluation.

A-19 Roadway widening within the demonstrated vertical and horizontal limits of previous construction or disturbance

A-20 Installation, maintenance, repair, or rehabilitation of bicycle and pedestrian lanes, paths, and related facilities within the demonstrated vertical and horizontal limits of previous construction or disturbance.

A-21 Trenching or other excavation to install, replace, or repair electrical, water, sewer lines, fiber optics, telephone cable, or other utilities within the demonstrated vertical and horizontal limits of previous construction or disturbance.

A-22 Construction staging areas or other locations proposed for temporary use during construction within the demonstrated vertical and horizontal limits of previous construction or disturbance.

A-23 Geotechnical borings, data collection, and non-invasive environmental sampling required to support the planning or design of an undertaking.

A-24 Soil pits dug by hand using shovels or augers for delineating wetland boundaries, characterizing wetland soils, or characterizing potential hazardous materials.

A-25 Borrowing of rock and rock removal and stabilization activities (e.g. rock scaling, bolting) within existing rights-of-way.

A-26 Real estate leases and surpluses.

A-27 Stormwater retrofit activities designed to divert and treat highway runoff, including but not limited to installation of curbing, spillways, filter strips, and biofiltration swales, within the demonstrated vertical and horizontal limits of previous construction or disturbance.

A-28 All bridges constructed after 1945 that meet the definition of "common bridge types" in Sec. V (A-D), Federal Register Vol. 77, No. 222, p. 68794 and that 1) have not been previously NRHP listed in or determined eligible; 2) are not truss, arch, movable, suspension, cable-stayed, or covered bridges; or 3) are not included in WSDOT's Common Bridges in WA Excluded from ACHP's Program Comment for Common Post-1945 Concrete and Steel Bridges Exemption (https://www.environment.fhwa.dot.gov/histpres/bridges_list.asp)

A-29 All Interstate components not included in FHWA's Final List of National and Exceptionally Significant Features of the Interstate Highway System (https://www.environment.fhwa.dot.gov/histpres/highways_list.asp).

A-30 Repair and/or maintenance activities at bus stop sites on existing shelters, signs, pads, sidewalks, lights, and other passenger amenities, including ADA improvements.

A-31 Replacement at bus stop sites of existing shelters, signs, pads, sidewalks, lights, and other passenger amenities, provided the replacements are in-kind (i.e., the same or comparable in size, appearance, and function) and they are within the existing horizontal and vertical footprint, or extend the footprint only minimally to accommodate improvements, and any ground disturbance is minimal and is in previously disturbed areas.

A-32 Improvements inside an existing bus shelter that have no visual impact or minimal visual impact to those outside the shelter (e.g., adding light or transit information signage in an existing shelter).

A-33 Placing a bus stop and bus stop/information sign, but not a shelter, at a new location.

A-34 Acquisition, installation, rehabilitation, replacement, and maintenance of equipment, within or accommodated by existing facilities, that does not result in a change in functional use of

the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts.

A-35 Maintenance and/or rehabilitation of stand-alone recreation, pedestrian, or bicycle facilities, such as: a multi-use pathway, lane, trail, or pedestrian bridge; and transit plaza amenities.

A-36 Activities, including repairs, replacements, and rehabilitations, designed to promote transportation safety, security, accessibility and effective communication within or adjacent to existing right-of-way, such as: the deployment of Intelligent Transportation Systems and components; installation and improvement of safety and communications equipment, including hazard elimination and mitigation; installation of passenger amenities and traffic signals.

Screened Washington State Ferries Terminal Activities Presumed to Have Minimal Potential to Cause Effects:

B-1 Minor repair and maintenance activities necessary for continued safe operation of terminal facilities including, but not limited to: repair and maintenance of wingwall rub timbers and polyethylene fender panels; wood, steel, and polyethylene dolphin fender panels; cross bracing; hanger bars; transfer spans; bolting and lashing on dolphins and other offshore structures; counterweight cables; repair and replacement of existing anchor chains and anchors associated with floating dolphins and wing dolphins; and repair to existing structures that are not NRHP eligible.

B-2 Replacement of existing structures including, but not limited to, bridge seat, towers, wingwalls, dolphins, and overhead loading and passenger walkway facilities.

B-3 Repair and replacement of trestles including decking, stringers, pile caps, and piling supporting the trestle, provided there is no expansion of the trestle.

B-4 Repair and replacement of bulkheads of the same size and location.

B-5 Roadway surface replacement, overlays, shoulder treatments, rumble strips, pavement repair, seal coating, pavement grinding, and pavement marking that do not include ground disturbance or is within the demonstrated vertical and horizontal limits of previous disturbance.

B-6 Fencing within the demonstrated vertical and horizontal limits of previous construction or disturbance.

B-7 Landscaping or revegetation within the demonstrated vertical and horizontal limits of previous construction or disturbance.

B-8 Installation, replacement, or repair of safety appurtenances and traffic control devices, including but not limited to guardrails, barriers, glare screens, snow and ice detectors, energy

attenuators, cameras, lighting, signs, signals, and informational signage/kiosks; provided the activity does not include ground disturbance or is within the demonstrated vertical and horizontal limits of previous construction or disturbance.

B-9 Repair or replacement of curb and gutter, catch basins, and other drainage structures within the demonstrated vertical and horizontal limits of previous construction or disturbance.

B-10 Emergency repairs to maintain the structural integrity of a structure.

B-11 Geotechnical borings, data collection, and non-invasive environmental sampling required to support the planning or design of an undertaking.

B-12 Trenching or other excavation to install, replace, or repair electrical, water, sewer lines, fiber optics, telephone cable, or other utilities within the demonstrated vertical and horizontal limits of previous construction or disturbance.

B-13 Installation of bicycle and pedestrian lanes, paths, and related facilities within the demonstrated vertical and horizontal limits of previous construction or disturbance.

B-14 Placement of riprap or other erosion control method to prevent erosion within the demonstrated vertical and horizontal limits of previous construction or disturbance.

B-15 Installation, replacement, repair, or maintenance activities conducted on existing vessels, provided that the vessels are not NRHP eligible, or if NRHP eligible, the activities do not have a potential to affect the integrity of the character-defining elements that make the vessel eligible to the NRHP.

APPENDIX C

WSDOT Standard Specifications

1-07.16(4) Archaeological and Historical Objects

Archaeological or historical objects, such as ruins, sites, buildings, artifacts, fossils, or other objects of antiquity that may have significance from a historical or scientific standpoint, which may be encountered by the Contractor, shall not be further disturbed. The Contractor shall immediately notify the Engineer of any such finds.

The Engineer will determine if the material is to be salvaged. The Contractor may be required to stop Work in the vicinity of the discovery until such determination is made. The Engineer may require the Contractor to suspend Work in the vicinity of the discovery until salvage is accomplished.

If the Engineer finds that the suspension of Work in the vicinity of the discovery increases or decreases the cost or time required for performance of any part of the Work under this Contract, the Engineer will make an adjustment in payment or the time required for the performance of the Work in accordance with Sections 1-04.4 and 1-08.8.

1-07.16(4)A Inadvertent Discovery of Human Skeletal Remains

If human skeletal remains are encountered by the Contractor, they shall not be further disturbed. The Contractor shall immediately notify the Engineer of any such finds, and shall cease all Work adjacent to the discovery, in an area adequate to provide for the total security and protection of the integrity of the skeletal remains. The Engineer may require the Contractor to suspend Work in the vicinity of the discovery until final determinations are made and removal of the skeletal remains is completed.

If the Engineer finds that the suspension of Work in the vicinity of the discovery increases or decreases the cost or time required for performance of any part of the Work under this Contract, the Engineer will make an adjustment in payment or the time required for the performance of the Work in accordance with Sections 1-04.4 and 1-08.8.e cost or time required for performance of any part of the Work under this Contract, the Engineer will make an adjustment in payment or the time required for the performance of the Work in accordance with Sections 1-04.4 and 1-08.8.

Attachment 9 – Washington Department of Archaeology and Historic Preservation Concurrence Letter

Allyson Brooks Ph.D., Director
State Historic Preservation Officer

December 5, 2023

Mrs. Cassandra Manetas
Cultural Resources Specialist
WA State Dept. of Transportation
999 Third Ave, Suite 2300
Seattle, WA. 98104

In future correspondence please refer to:
Project Tracking Code: 2017-07-05354
Property: SR 509- SeaTac to I-5
Re: Not Eligible; No Historic Properties Affected

Dear Mrs. Manetas:

Thank you for contacting the Department of Archaeology and Historic Preservation (DAHP) and providing a copy of the cultural resources survey report for the above referenced project. First, we concur that the following properties are not eligible for inclusion in the National Register of Historic Places:

- Property ID: 731985 Residence 4320 44th Ave E, Tacoma, WA, 98443
- Property ID: 731987 Residence 4408 44th Ave E, Tacoma, WA, 98443
- Property ID: 731988 Residence 4710 44th Ave E, Tacoma, WA, 98443
- Property ID: 731989 Residence 4720 44th Ave E, Tacoma, WA, 98443
- Property ID: 731990 Residence 4822 44th Ave E, Tacoma, WA, 98443
- Property ID: 731991 Residence 4401 Vickery Ave E, Tacoma, WA, 98443
- Property ID: 731993 Clear Creek Trout Farm 4008 Pioneer Way E, Tacoma, WA, 98443
- Property ID: 732003 Residence 4624 44th Ave E, Tacoma, WA, 98443

We also concur with the recommendations made in the report and your finding of No Historic Properties Affected. As a result of our concurrence, further contact with DAHP on this matter is not necessary.

However, if information becomes available and/or the scope of work changes, please resume consultation with DAHP and all consulting parties. In the event that archaeological or historic materials are discovered during project activities, work in the immediate vicinity must stop, the area secured, and contact made with concerned tribes and DAHP for further consultation.

We appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive as you consult under the requirements of 36 CFR 800.4(a)(4).

These comments are based on the information available at the time of this review and on behalf of the State Historic Preservation Officer (SHPO) in conformance with Section 106 of the National Historic Preservation Act and its implementing regulations 36 CFR 800.

Thank you for the opportunity to review and comment. If you have any questions, please feel free to contact me.

Sincerely,



Dennis Wardlaw
Transportation Archaeologist
(360) 485-5014
dennis.wardlaw@dahp.wa.gov

Attachment 10 – Aquatic Resources Assessment Report

AQUATIC RESOURCES ASSESSMENT REPORT

SR 509/
Clear Creek Restoration Project

Pierce County, Washington

Work Order: XL6735
WIN: A50907X
PIN: 150907X

Prepared By
Puget Sound Gateway Program
SR 509 Completion Project

March 2024

WSDOT

AQUATIC RESOURCES ASSESSMENT REPORT

SR 509/
Clear Creek Restoration Project

March 2024

Prepared By:

Maki Dalzell, Environmental Scientist
(425) 456-8611
HNTB Corporation

Logan Dougherty, Environmental Scientist
(425) 456-8581
HNTB Corporation

Project Engineer:

Amiri Ali, P.E., SR 509 Stage 2 Project Manager
(425) 805-5313
WSDOT Puget Sound Gateway Program

Title VI Notice to Public

It is the Washington State Department of Transportation's (WSDOT) policy to assure that no person shall, on the grounds of race, color, national origin, or sex, as provided by Title VI of the Civil Rights Act of 1964, be excluded from participation in, be denied the benefits of, or be otherwise discriminated against under any of its federally funded programs and activities. Any person who believes his/her Title VI protection has been violated, may file a complaint with WSDOT's Office of Equal Opportunity (OEO). For additional information regarding Title VI complaint procedures and/or information regarding our non-discrimination obligations, please contact OEO's Title VI Coordinator at (360) 705-7090.

Americans with Disabilities Act (ADA) Information

This material can be made available in an alternate format by emailing the Office of Equal Opportunity at wsdotada@wsdot.wa.gov or by calling toll free, 855-362-4ADA(4232). Persons who are deaf or hard of hearing may make a request by calling the Washington State Relay at 711.

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Appendix A. Precipitation Data

Monthly Precipitation Data for Seattle-Tacoma International Airport, Washington

Daily Precipitation for 10 Days Preceding Fieldwork, Seattle-Tacoma International Airport, Washington

Appendix B. Wetland Delineation Data Sheets

Appendix C. Wetland Rating Summaries and Figures

Acronyms and Abbreviations

Corps	U.S. Army Corps of Engineers
DNR	Washington Department of Natural Resources
Ecology	Washington State Department of Ecology
ESA	Endangered Species Act
HGM	hydrogeomorphic wetland classification
HUC	hydraulic unit code
OHWM	ordinary high water mark
PCC	Pierce County Code
PEM	palustrine emergent
PFO	palustrine forested
PSS	palustrine scrub-shrub
SR 509	State Route 509
TMDL	Total Maximum Daily Load
WDFW	Washington State Department of Fish and Wildlife
WSDOT	Washington State Department of Transportation
WRIA	water resource inventory area

1. Introduction

The Washington State Department of Transportation (WSDOT) proposes to construct the State Route (SR) 509/Clear Creek Restoration Project that will remove two fish-passage barriers and other infrastructure related to an existing commercial fish hatchery and restore natural stream processes at the Clear Creek Restoration Project site.

The Project site is located along Clear Creek, a tributary of the Puyallup River within the Puyallup-White watershed [water resource inventory area (WRIA) 10]. It is located at 4008 Pioneer Way East on privately-owned parcels in unincorporated Pierce County, Washington and within the Puyallup Tribe of Indians (PTOI) reservation boundary.

The development and operation of the commercial fish hatchery has disrupted the historic natural stream processes. The fish hatchery has been privately operating since the 1970s and currently draws surface water from Clear Creek, between 3.5 and 3.7 million gallons per day. The two existing fish passage barriers (dams) on site [Washington Department of Fish and Wildlife (WDFW) IDs 600317 and 600318] are located at river mile 1.9 of Clear Creek. The two dams are barriers that prevent anadromous fish from migrating upstream and divert stream flow, preventing sediment transport downstream. This contributes to degraded habitat and downstream conditions.

The Clear Creek Restoration Project will open 2.6 miles of habitat upstream of the dams, enhance habitat and provide passage for anadromous fish on Clear Creek by removing the two fish passage barriers and restoring natural processes in the Clear Creek stream channel and floodplain.

The purpose of this report is to identify and describe wetlands, streams, and jurisdictional waters occurring within the project. This report helps WSDOT:

- Avoid and minimize impacts to wetlands and other waters during the project design process and construction
- Document wetland and stream boundary determinations for review by regulatory authorities

This report provides supporting documentation for potential federal, state, and local permit applications.

All waters identified in this report are assumed to be under U.S. Army Corps of Engineers (Corps) jurisdiction unless otherwise noted.

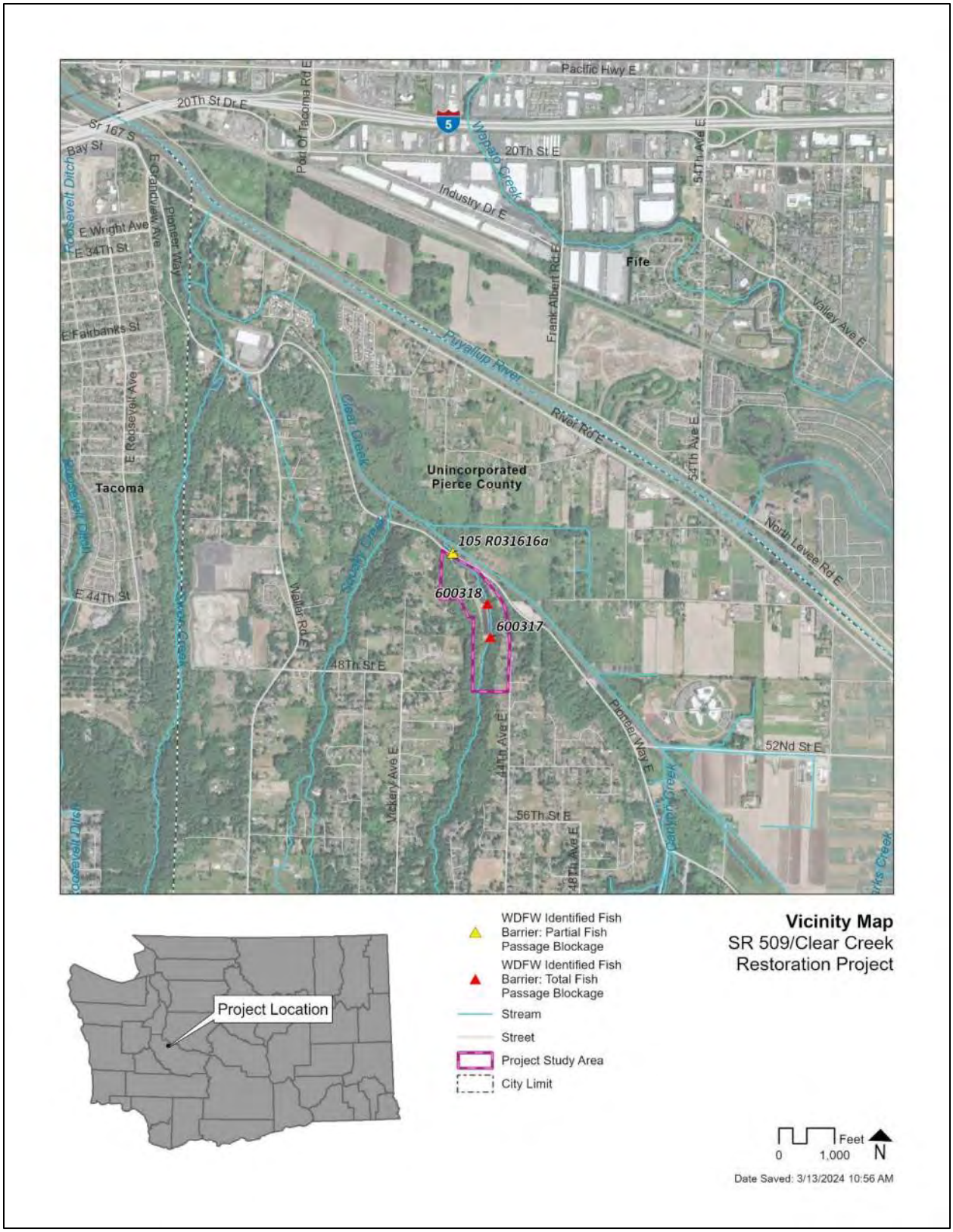

Figure 1. Vicinity Map

2. Proposed Project

2.1. Location

The Project is located at 4008 Pioneer Way East on privately-owned property in unincorporated Pierce County, Washington and within the PTOI reservation boundary (Figure 1). Geographically, the Project is within Sections 13 and 24 of Township 20 North, Range 3 East. The Project is within the Puyallup – White Water Resource Inventory Area (WRIA) 10 in the Puyallup River subbasin (12-digit hydraulic unit code [HUC] 171100140502).

2.2. Existing Conditions

Clear Creek flows into the Project site through a forested ravine from the south. The stream flows through the middle of the Project site, passing over two dams associated with the property's operation as a trout farm (WDFW Site ID 600318 and 600317) (WDFW 2022a). The stream continues through the property in a heavily modified and constrained channel, eventually leaving the property via a box culvert under Pioneer Way East (WDFW Site ID 105 R031616a). A list of existing fish barriers is included in Table 1.

Table 1. **Washington Department of Fish and Wildlife Fish Barriers in Project Vicinity**

WDFW Site ID	Road Name	Owner Type	Barrier?	Barrier Reason	Percent Passable
600317	N/A	Private	Yes, to be removed	WS Drop	0
600318	N/A	Private	Yes, to be removed	WS Drop	0
105 R031616a	Pioneer Way E	County	Yes, partial	Velocity	33

N/A = not applicable

2.3. Project Description

The purpose of the Project is to complete habitat restoration and enhancement to satisfy commitments made during the tribal consultation and permitting for WSDOT's SR 509 Completion Project and SR 167 Completion Project. Restoring Clear Creek to natural stream processes will provide immediate benefits to fish and aquatic life by:

- Removing two fish passage barriers (WDFW ID 600317 and WDFW ID 600318)
- Opening approximately 2.6 miles of spawning habitat that is currently inaccessible to anadromous fish including Federally protected Puget Sound Chinook salmon
- Restoring stream processes including floodplain connectivity, sediment continuity, and flood conveyance
- Eliminating surface water withdrawals and improving water quality and quantity
- Improving spawning and rearing habitat and habitat complexity

The Clear Creek Restoration Project will open 2.6 miles of habitat upstream of the dams, enhance habitat and provide passage for anadromous fish on Clear Creek by removing the two fish passage barriers and restoring natural processes in the Clear Creek stream channel and

floodplain. The Clear Creek Restoration Project will remove existing infrastructure, regrade the stream channel, install large woody material (LWM), create new side-channel habitat, expand the floodplain for rearing habitat, and plant riparian vegetation for improved stream shading and nutrient input. Project work includes grading and demolition above and below ordinary high-water mark.

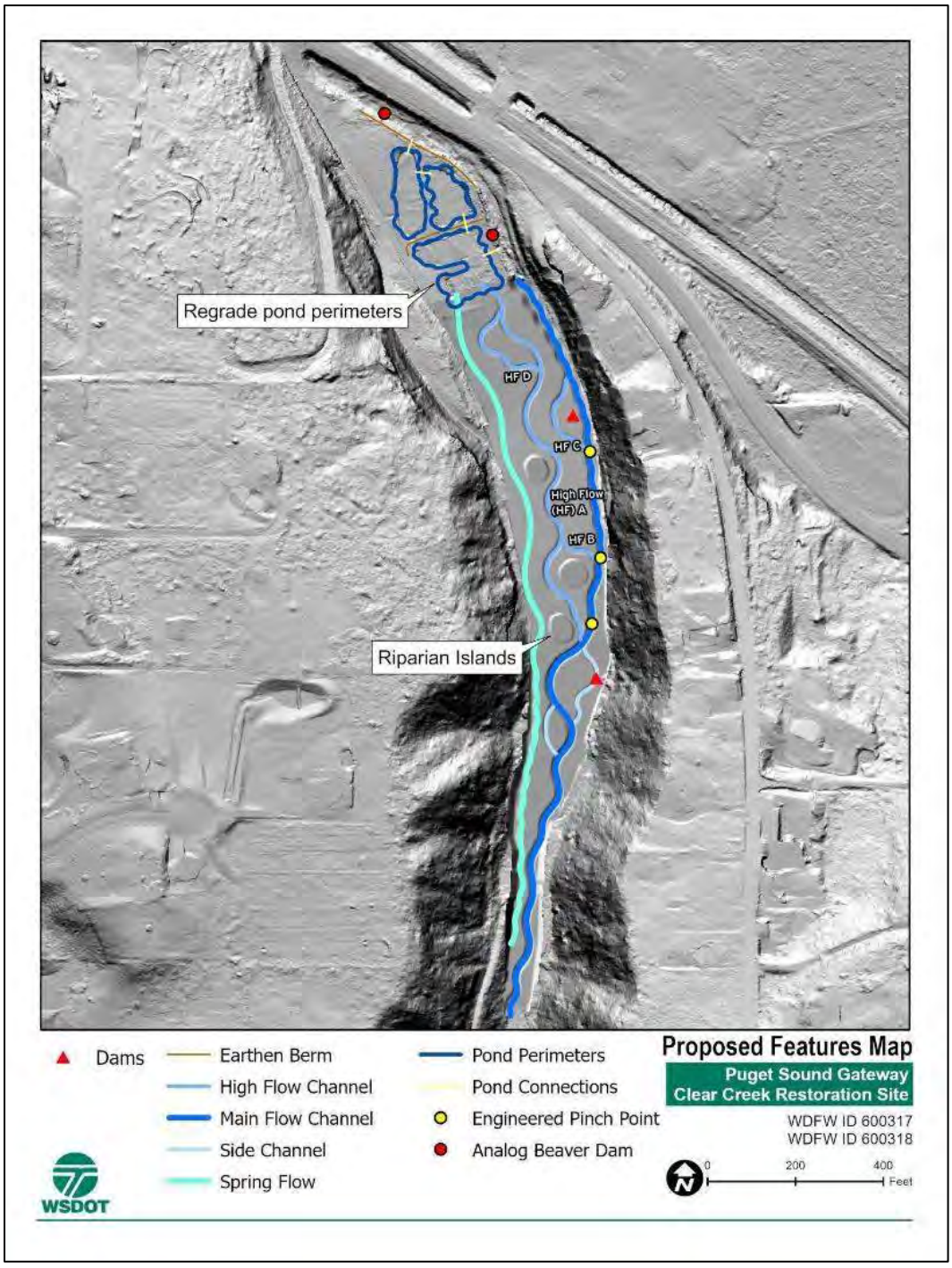

Figure 2. Conceptual Site Plan

3. Methods

3.1. Wetland and Stream Identification, Delineation, and Classification

WSDOT biologists delineated wetlands and streams according to state and federal laws and policies, as outlined by agency technical guidelines and resources in the *Environmental Manual* (WSDOT 2021). Wetland resources were delineated using guidelines and methods described in the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) as amended with the *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Western Mountains, Valleys and Coast Region* (Environmental Laboratory 2010). Wetland boundaries were identified in the field by WSDOT biologists and surveyed in the field by a WSDOT survey crew. In general, the wetland verification and delineation consisted of three main tasks:

- Assessing vegetation, soil, and hydrologic characteristics to identify areas meeting the wetland criteria
- Evaluating constructed drainage features to determine if they would be regulated as wetlands, streams, or ditches
- Marking wetland boundaries

For precipitation analysis, biologists used methods described in Chapter 19 of the *Engineering Field Handbook* (NRCS 2015). Scientific plant names in this report are from the Corps National Wetland Plant List, version 3.5 (USACE 2020). Hydric soil conditions were assessed using Field Indicators of Hydric Soils in the United Sates, Version 8.2 (NRCS 2018). Precipitation analysis results were summarized in table format (Appendix A). Vegetation, soil, and hydrology information were recorded in the field on wetland delineation data sheets (Appendix B).

Wetlands delineated within the study area were classified according to:

- U.S. Fish and Wildlife Service Cowardin classification system (Cowardin et al. 1979)
- 2004 Western Washington wetland rating system (Hruby 2004) (Appendix C)
- 2014 Western Washington wetland rating system (Hruby 2014) (Appendix C)
- The hydrogeomorphic wetland classification (HGM) system (Brinson 1993)

Pierce County wetland buffers (Pierce County 2022) were applied to the wetlands in the project. Buffer widths are 50 feet, based on wetland rating and intensity of land use impacts. Buffers were applied based on high intensity land use. Wetland buffer condition within the study area was assessed using the following criteria:

- Land use (e.g., agriculture, residential, commercial, and industrial).
- Buffer vegetation structure (tree, shrub, herb, vine, and un-vegetated).
- Buffer vegetation community (dominant plant species per strata, native vs. non-native dominants, and description of invasive species or noxious weeds).

The ordinary high water mark (OHWM) of Clear Creek was delineated using Corps guidance for OHWM identification (USACE 2005, 2014) and the methods described in the Washington State

Department of Ecology (Ecology) publication, *Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State* (Anderson et al. 2016).

Fish presence was determined based on available WDFW Fish Passage Inventory (WDFW 2022a) and Fish Distribution data (NWIFC 2022).

Pierce County classifies water types in accordance with Pierce County Code (PCC) Section 18E.40.060 Buffer Requirements. Water types are classified as follows:

> ***Type S1:*** *Marine waters designated as Marine Shoreline Critical Salmon Habitat.*
>
> ***Type F1****: All segments of natural waters within the bankfull widths of defined channels or within lakes, ponds, or impoundments which provide habitat for or support any portion of the lifecycle of a critical fish species (3). Waters that are diverted for use by federal, state, tribal, or private fish hatcheries shall be considered to be Type F1 waters upstream from the point of diversion for 1,500 feet and tributaries if highly significant for protection of downstream water quality.*
>
> ***Type F2:*** *Type F1 water adjacent to a landslide hazard area as set forth in Chapter 18E.80 PCC (Pierce County 2022)*
>
> ***Type N1:*** *Perennial or seasonal non-fish bearing (3) natural waters within the bankfull widths of defined channels that are not Type F1 or F2 waters but are located within ¼ mile of the confluence with a Type F1 or F2 water*
>
> ***Type N2:*** *Perennial or seasonal non-fish bearing (3) natural waters within bankfull width of defined channels that are not Type F1 or F2 waters and are either located more than 1/4 mile upstream from the confluence with a Type F1 or F2 water or are not connected to a Type F1 or F2 water*
>
> ***Type N3:*** *Lakes or ponds that do not support any critical fish species (3)*

Pierce County stream buffers (Pierce County 2022) were applied to the stream in the project. When wetland and stream buffers overlap, the area is only counted once, and the wider buffer was applied.

3.2. Wetland Functional Assessment

Each wetland was assigned an HGM classification (Brinson 1993) to assess how the wetland functions in the landscape setting based on three fundamental factors: position in the landscape (geomorphic setting), water source (hydrology), and the flow and fluctuation of the water once in the wetland (hydrodynamics). The Ecology wetland rating systems (Hruby 2004, 2014) provide a summarized tool to determine HGM classification prior to prescribing the wetland point to determine its category and properly account for the wetland's functions relative to others of its type.

4. Existing Conditions

4.1. Study Area

The study area for the Project includes landscapes along the proposed stream alignment located south of Pioneer Way East (Figure 3).

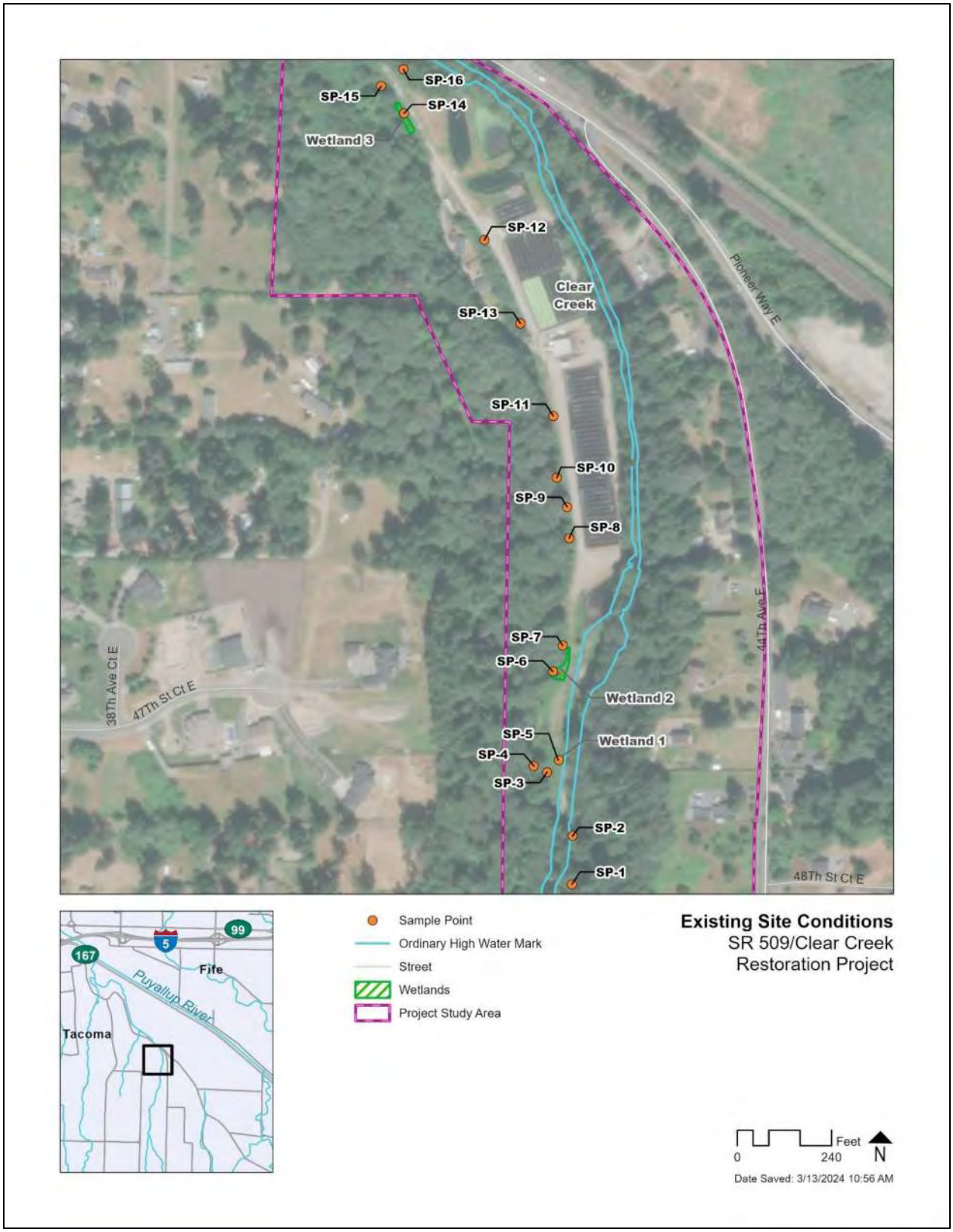

Figure 3. Existing Site Conditions

4.2. Landscape Setting

The study area is located in the Puyallup River subbasin (12-digit HUC 171100140502), more specifically in the Clear/Clarks Creek subbasin. This drainage basin encompasses approximately 32.9 square miles and includes rural, residential, and urban environments (Pierce County 2006). The elevation in the subbasin ranges from 500 feet to 20 to 30 feet, where the creeks drain into the Puyallup River (Pierce County 2006).

The study area is characterized as a ravine with steep, forested hillslopes to the east and west. The study area is in unincorporated Pierce County, and includes driveways, parking areas, and infrastructure associated with the site's existing use as a trout farm. The study area is surrounded by sing-family residences to the east, south, and west, and is bordered by Pioneer Way East to the north. Clear Creek flows through a forested ravine and enters the study area from the south. The stream exits the site via a culvert beneath Pioneer Way East.

4.3. Watershed Description

The Project is located in WRIA 10 (Puyallup-White), HUC 171100140502 Puyallup River. The Puyallup-White watershed drains approximately 1,040 square miles (Puyallup River Watershed Council 2014). The watershed includes three major river systems: the Puyallup River, White River, and Carbon River. Mount Rainier is located at the upper reaches of the watershed and its runoff forms the headwaters of each of the three major river systems.

Clear Creek drains through the study area. The stream is mapped as a perennial riverine feature (R3UBHx) by the National Wetland Inventory (USFWS 2021). The fish hatchery raceways and associated settling ponds are mapped as freshwater ponds (USFWS 2021). No wetlands are mapped by National Wetland Inventory within the study area. Clear Creek is not mapped as a 303(d) water by Ecology.

4.4. Climate and Weather

The study area occurs in the Puget Sound lowlands, which have a maritime climate with mild temperatures year-round, not often dropping below freezing in the winter months or exceeding 100 degrees Fahrenheit in the summer months. The region experiences heavy rain in the winter months and relatively dry summers (NRCS 2022a).

The Regional Delineation Supplement Version 2.0 (USACE 2010) recommends using methods described in Chapter 19 of the *Engineering Field Handbook* (NRCS 2015) to determine if precipitation occurring in the three full months prior to the site visit was normal, drier than normal, or wetter than normal. Actual rainfall is compared to the normal range of the 30-year average. When considering the three prior months as a whole, wetter than normal precipitation conditions were present prior to field work (Appendix A).

Light precipitation was recorded in the ten days preceding field work (Appendix A).

4.5. Vegetation

The center of the study area is occupied by the trout farm and lacks vegetation. The steep hillslopes extending to the east and west of the valley floor are forested, with a canopy dominated by bigleaf maple (*Acer macrophyllum*), Douglas fir (*Pseudotsuga menziesii)*, and western redcedar (*Thuja plicata).* The understory is composed of osoberry (*Oemleria*

cerasiformis), salmonberry (*Rubus spectabilis),* and swordfern (*Polystichum munitum).* Areas near the toe of slope, adjacent to Clear Creek and the fish hatchery, are dominated by invasive species including Himalayan blackberry (*Rubus armeniacus)* and reed canarygrass (*Phalaris arundinacea).*

4.6. Growing Season

The growing season was beginning during the February site visits. During the February 14 site visit, herbaceous plants were beginning to emerge and leaf buds were present on trees and shrubs. During the February 25 site visit, leaves had begun to appear on certain shrubs and more herbaceous plants had emerged.

4.7. Soils

Mapped soils in the study area include Snohomish silty clay loam, Alderwood gravelly sandy loam, Kitsap silt loam, Xerochrepts, and urban landb (Figure 4) (NRCS 2022b). The area of the proposed Project is mapped as Xerochrepts and urban land. Xerochrepts soils are characterized as sandy and gravelly outwash and consist of well drained soils (NRCS 2022b).

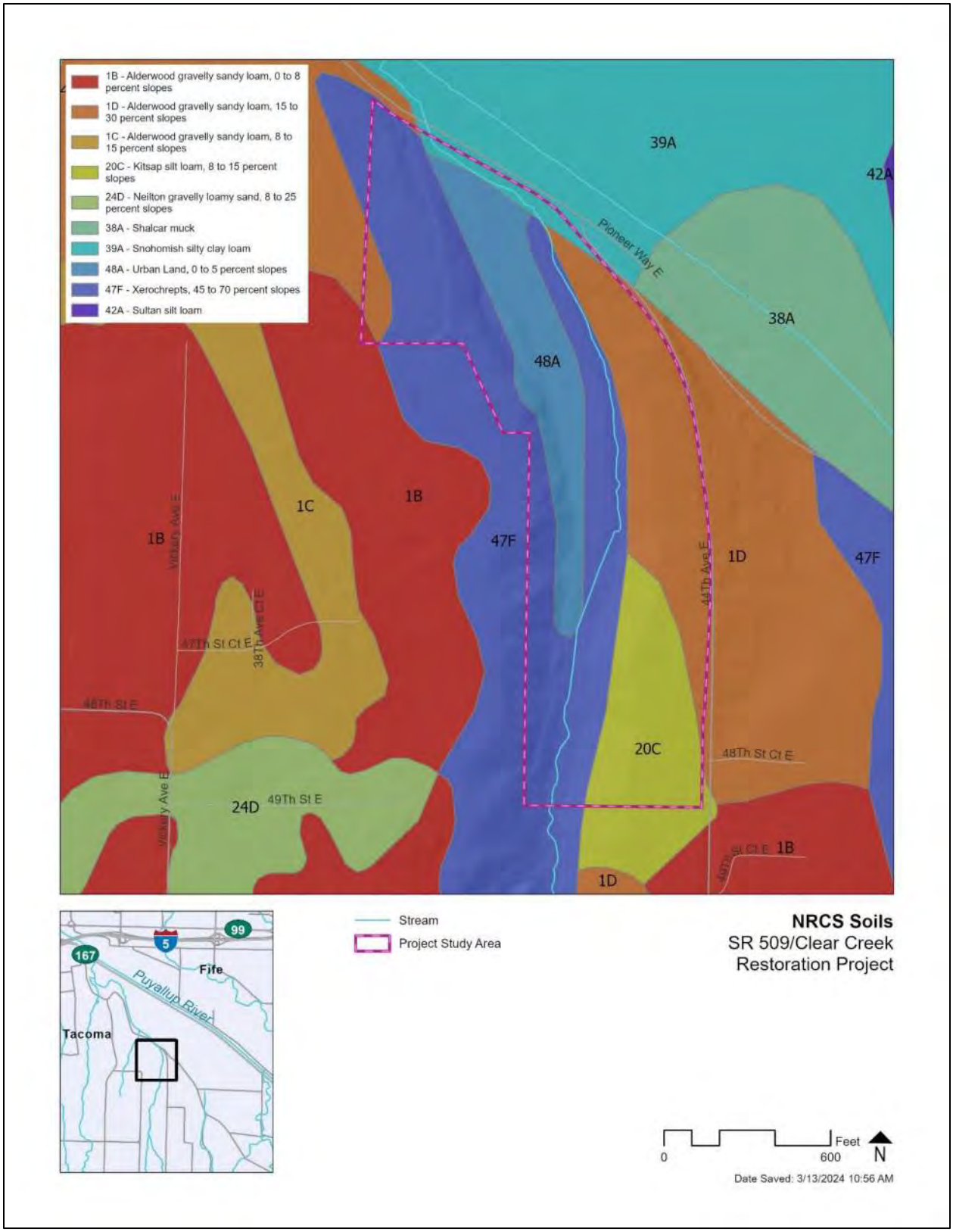

Figure 4. Mapped Soils in and near the Study Area

4.8. Delineated Wetlands and Streams

Wetland scientists identified and delineated three wetlands and the OHWM of Clear Creek in February of 2022 (Table 2 and Figure 3).

Table 2. **Summary of Wetlands and Streams Delineated in the Study Area**

Wetland[a]	Wetland Classification				Wetland Size (acre)	Buffer Width (feet)[e]	Buffer Condition
	Cowardin[b]	HGM	Ecology[c]	Local Jurisdiction[d]			
Wetland 1	PEM	Depressional	III	IV	0.01	50	Clear Creek to the east; forested hillslope to the west, gravel access road to the north and south.
Wetland 2	PEM, PSS	Slope	III	IV	0.03	50	Gravel access road and Clear Creek to the east, forested hillslope to the north and west, gravel access road and trimmed vegetation stockpiles to the south.
Wetland 3	PEM, PSS	Slope	III	IV	0.03	50	Gravel driveway to the east and north, forested hillslope to the west and south.
Clear Creek Type F1	N/A	N/A	N/A	N/A	N/A	150	Forested hillslope and residential land use to the east, Retaining wall and trout farm facility to the west.

[a] Wetland identifier
[b] Cowardin Class based on vegetation: PSS = palustrine scrub-shrub, PEM = palustrine emergent (Cowardin et al. 1979).
[c] Ecology rating (Hruby 2014)
[d] Pierce County classifies wetlands based on the 2004 Washington State Wetland Rating System (Pierce County 2022)

[e] Pierce County wetland buffer width based on wetland category and high intensity land use (Pierce County 2022)

4.8.1. Wetlands

WSDOT biologists identified and delineated three wetlands in the study area. Soil pits recorded in these wetlands fulfilled the criteria for hydrophytic vegetation, hydric soils, and wetland hydrology. Delineation data sheets (Appendix B) and wetland rating forms (Appendix C) are provided. Wetlands are summarized in Tables 3 through 5.

Table 3. **Wetland 1 Summary**

WETLAND 1 – INFORMATION SUMMARY	
Location:	West of Clear Creek; south of trout farm facility, within access road



Local Jurisdiction	Pierce County
Ecology Rating (2014)	III
Local Rating	IV
Pierce County Buffer Width	50 feet
Wetland Size	0.01 acre (218 sq. ft.)
Cowardin Class	PEM
HGM Class	Depressional
Wetland Data Sheet	SP-5
Upland Data Sheet	SP-4

Wetland Delineation	
Dominant Vegetation	Herbaceous – reed canarygrass, watercress (*Nasturtium officinale*)
Soils	Soil matrices of 10YR 2/1 and 2.5Y 3/1 with hydrogen sulfide odor observed in the upper 10 inches of the soil surface. Indicator Hydrogen Sulfide (A4) was met.
Hydrology	Hillside seeps are the primary hydrology source for this wetland. These seeps converge on a historic access road that is cut into the hillslope west of Clear Creek. This access road directs the seeps' flow downhill to a second, flat access road that parallels Clear Creek at the toe of slope. The water pools in a depression within this access road, forming Wetland 1. Two inches of surface water was observed. Indicators Surface Water (A1), Water Table (A2), and Saturation (A3) were met.
Rationale for Delineation	Depressional wetland with hydric soils, hydrophytic vegetation, and surface water present. Hydrology and topography were helpful in determining the wetland boundary. Wetland is a concave depression with two inches of surface water. Adjacent upland areas, including hill slopes, lacked soil saturation.
Wetland Rating and Functions	
Rationale for Local Rating	The PCC classifies wetlands based on the 2004 Washington State Wetland Rating System (Pierce County 2022). Wetland 1 is rated as a Category IV.
Functions	Wetland 1 has moderate to low site potential due to an intermittent outlet, mowed vegetation, being mostly seasonally ponded, no habitat interspersion, and no special habitat features. Landscape potential is low to moderate due to a lack of stormwater input and minimal nearby pollutant- and runoff-generating land uses to the west, and moderate surrounding habitat. Value is high due to the wetland being mapped within the Puyallup River Bacteria Total Maximum Daily Load (TMDL) and Puyallup River Multiparameter TMDL, flooding downstream along Clear Creek, and proximity to four priority habitats.
Wetland Buffers	
Buffer Condition	Buffer includes forested hillslope areas dominated by native deciduous and coniferous trees to the west and mowed access road areas to the north and south. Forested buffer area provides screening and habitat functions. The mowed area of the buffer provides little buffering function.

Table 4. **Wetland 2 Summary**

WETLAND 2 – INFORMATION SUMMARY	
Location:	West of Clear Creek and access road; south of trout farm facility



Local Jurisdiction	Pierce County
Ecology Rating (2014)	III
Local Rating	IV
Pierce County Buffer Width	50 feet
Wetland Size	0.03 acre (1,481 sq. ft.)
Cowardin Class	PSS, PEM
HGM Class	Slope
Wetland Data Sheet	SP-6
Upland Data Sheet	SP-7

Wetland Delineation	
Dominant Vegetation	Shrubs – Himalayan blackberry, red alder (*Alnus rubra)* saplings Herbaceous – reed canarygrass
Soils	Soil matrix of 2.5Y 3/2 from 0 to 6 inches, and soil matrix of 10Y 4/1 from 6 to 18 inches. Indicator Loamy Gleyed Matrix (F2) met.
Hydrology	Hillside seeps are the primary hydrology source for this wetland. Soils were saturated to the surface and a water table was present at a depth of 3 inches. Indicators High Water Table (A2) and Saturation (A3) were met.
Rationale for Delineation	Slope wetland with hydric soils, hydrophytic vegetation, and a high water table present. Hydrology and hydric soils were helpful in determining the wetland boundary. Wetland soils were gleyed and were saturated to the surface, and a water table was present at a depth of 3 inches. Adjacent upland areas lacked hydric soils and soil saturation.
Wetland Rating and Functions	
Rationale for Local Rating	The PCC classifies wetlands based on the 2004 Washington State Wetland Rating System (Pierce County 2022). Wetland 2 is rated as a Category IV.
Functions	Wetland 2 has low site potential due to a steep slope, dense uncut herbaceous plants covering 50% to 90% of the wetland area, one hydroperiod, low habitat interspersion, and no special habitat features. Landscape potential is low to moderate due to minimal uphill pollutant- and runoff-generating land uses and moderate surrounding habitat. Value is high due to the wetland being mapped within the Puyallup River Bacteria TMDL and Puyallup River Multiparameter TMDL, flooding downstream along Clear Creek, and proximity to four priority habitats.
Wetland Buffers	
Buffer Condition	Buffer includes forested hillslope areas dominated by native deciduous and coniferous trees to the west and mowed and managed access road areas to the east. The forested buffer area provides screening and habitat functions. The mowed area of the buffer provides little buffering function.

Table 5. **Wetland 3 Summary**

WETLAND 3 – INFORMATION SUMMARY	
Location:	West of gravel driveway; south of E Pioneer Way and north of trout farm facility



Local Jurisdiction	Pierce County
Ecology Rating (2014)	III
Local Rating	IV
Pierce County Buffer Width	50 feet
Wetland Size	0.03 acre (1,089 sq. ft.)
Cowardin Class	PSS, PEM
HGM Class	Slope
Wetland Data Sheet	SP-15
Upland Data Sheet	SP-14

Wetland Delineation	
Dominant Vegetation	Shrubs – Himalayan blackberry, salmonberry Herbaceous – reed canarygrass, stinging nettle (*Urtica dioica)*
Soils	A soil matrix of 2.5Y 3/1 with redoximorphic concentrations was observed from 5 to 14 inches. Indicator Redox Dark Surface (F6) met.
Hydrology	Hillside seeps are the primary hydrology source for this wetland. Soil was saturated to a depth of 2 inches and a water table was present at a depth of 6 inches. Indicators High Water Table (A2) and Saturation (A3) were met.
Rationale for Delineation	Slope wetland with hydric soils, hydrophytic vegetation, and a high water table present. Hydric soils and hydrology were helpful in determining the wetland boundary. Wetland soils had matrices of chroma 1 to 2 and a water table present. Adjacent upland areas had soil matrices of chroma 3 and lacked any saturation.
Wetland Rating and Functions	
Rationale for Local Rating	The PCC classifies wetlands based on the 2004 Washington State Wetland Rating System (Pierce County 2022). Wetland 3 is rated as a Category IV.
Functions	Wetland 3 has low site potential due to mowed vegetation, dense uncut herbaceous plants covering 25% to 50% of the wetland area, one hydroperiod, low habitat interspersion, and no special habitat features. Landscape potential is low to moderate due to minimal uphill pollutant- and runoff-generating land uses, and moderate surrounding habitat. Value is high due to the wetland being mapped within the Puyallup River Bacteria TMDL and Puyallup River Multiparameter TMDL, flooding downstream along Clear Creek, and proximity to four priority habitats.
Wetland Buffers	
Buffer Condition	Buffer consists of forested hillslope areas dominated by native deciduous and coniferous trees to the west and gravel driveway areas to the east. The forested buffer area provides screening and habitat functions. The driveway area of the buffer provides little buffering function.

4.8.2. Streams

In addition to the delineated wetlands, WSDOT biologists delineated the OHWM of Clear Creek. The characteristics of Clear Creek are summarized in Table 6, below.

Table 6. **Clear Creek Summary**

Clear Creek - INFORMATION SUMMARY		
	**Stream Name**	Clear Creek
	Long./Lat. ID Number	1223927472341
	WRIA Name/ Stream Number	Puyallup-White/ 0026
	WDFW Site ID	600318, 600317
	Local Jurisdiction	Pierce County
	DNR Water Type [a]	Type F
	Local Stream Rating	Type F1
	Buffer Width [b]	150 feet
Location of Stream Relative to Study Area	The creek flows through the study area from south to north. The stream flows along the east boundary of the trout farm property, then turns northwest to flow along the south side of Pioneer Way East. The stream leaves the site via an 8.5-foot-wide box culvert under Pioneer Way East at the northwest corner of the study area.	
Connectivity	Flows originate from two main forks that begin approximately 4 miles upstream of the study area. These forks converge approximately 1 mile upstream of the study area. After leaving the study area, the stream continues to flow south for approximately 1.7 miles through the Puyallup River floodplain before converging with Swan Creek and discharging to the Puyallup River.	
Fish Habitat	Within the study area, the stream is confined by concrete walls and riprap along its banks. A segment of the stream adjacent to the trout farm facility has a fully paved streambed. Due to narrowly confined, modified channel, there are minimal pools and riffles, and this stream segment provides poor fish habitat. There are two existing diversion dams within the site, and the upper dam is located at river mile 1.9. These dams prevent fish passage to upstream areas of Clear Creek.	
Documented Fish Use[c]	Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*Oncorhynchus kisutch*), pink salmon (*Oncorhynchus gorbuscha*), chum salmon (*Oncorhynchus keta*), steelhead (*Oncorhynchus mykiss*), searun cutthroat trout (*Oncorhynchus clarkii)*, and resident cutthroat trout (*Oncorhynchus clarki clarki*)	
Riparian/Buffer Condition	The east buffer west of the creek is in good condition with forested slopes. Near the north end of the study area, the east buffer is partially truncated by residential land use at the top of the slope. The west buffer is truncated by the trout farm infrastructures, including gravel road, parking areas, and concrete raceway structures. Where the stream curves to the northwest, it is bordered by Pioneer Way East. Vegetated buffer areas contain bigleaf maple, Douglas fir, western redcedar, osoberry, Himalayan blackberry, salmonberry, and sword fern.	

[a] Documented fish species known to occur in the stream from available data sources (WDFW 2022a; WDFW 2022b; NWIFC 2022).

[b] DNR Water Type: Type F = fish bearing or with physical criteria to support potential fish use (DNR 2022a, 2022b)

[c] Pierce County buffers applied (Pierce County 2022)

5. Sensitive Plants, Fish and Wildlife

Potential project-related effects on Endangered Species Act (ESA)-listed threatened and endangered species, ESA proposed and designated critical habitat, and Essential Fish Habitat under the Magnuson-Stevens Fisheries Conservation and Management Act, will be evaluated and documented separately. Potential impacts on fish habitat will be addressed as part of the consultation for ESA and the Magnuson-Stevens Fisheries Conservation and Management Act.

5.1. Plants

The Washington State Department of Natural Resources (DNR) Natural Heritage Information System has no record of any rare plants or high-quality ecosystems in the study area (DNR 2022c). State or federally listed plant species were not identified in the field during site visits.

5.2. Wildlife and Priority Habitat Species

Table 7 lists species that are mapped in the study area (WDFW 2022a; WDFW 2022b; NWIFC 2022).

Table 7. **WDFW Priority Habitats and Species Occurring in the Study Area**

Common Name	Scientific Name	Location in Relation to Project
Chinook salmon	*Oncorhynchus tshawytscha*	Clear Creek (downstream of barriers)
Coho salmon	*Oncorhynchus kisutch*	Clear Creek (downstream of barriers)
Pink salmon	*Oncorhynchus gorbuscha*	Clear Creek (downstream of barriers)
Chum salmon	*Oncorhynchus keta*	Clear Creek (downstream of barriers)
Steelhead	*Oncorhynchus mykiss*	Clear Creek (downstream of barriers)
Searun cutthroat trout	*Oncorhynchus clarkii*	Clear Creek (downstream of barriers)
Resident cutthroat trout	*Oncorhynchus clarki*	Clear Creek (downstream of barriers)
Big Brown Bat	*Ptesicus fuscus*	Mapped at township level
Biodiversity areas and corridor	NA	Forested areas; extends south from study area
Waterfowl concentrations	NA	North edge of study area; extends north from study area

5.3. Priority Habitats

Priority habitat in the study area includes in-stream habitat and riparian habitat associated with Clear Creek. Forested portions of the site are part of a mapped terrestrial habitat biodiversity area and corridor (WDFW 2022a). Snags and logs are present throughout the stream corridor and forested areas. No wetlands of high conservation value, rare plants, or sensitive plants are mapped in or adjacent to the study area (DNR 2022d).

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Appendix A. Precipitation Data

Monthly Precipitation Data for Seattle-Tacoma International Airport, Washington

The Regional Delineation Supplement Version 2.0 (USACE 2010) recommends using methods described in Chapter 19 of the Engineering Field Handbook (NRCS 2015) to determine if precipitation occurring in the three full months prior to the site visit was normal, drier than normal, or wetter than normal. Actual rainfall is compared to the normal range of the 30-year average. The following table shows this information.

		Long-term rainfall records[a]							
	Month	**3 Years in 10 (less than)**	**Avg.**	**3 Years in 10 (more than)**	**Rainfall[a]**	**Condition (dry, wet, normal)[b]**	**Condition Value**	**Month Weight Value**	**Product (previous two columns)**
1st prior month	Jan.	3.58	5.13	6.10	7.06	Wet	3	3	9
2nd prior month	Dec.	3.94	5.62	6.68	4.08	Normal	2	2	4
3rd prior month	Nov.	4.10	5.90	7.02	10.26	Wet	3	1	3
								Sum	**16**

Notes:

[a] NRCS 2022a
[b] Conditions are considered normal if they fall within the low and high range around the average.

If sum is		Condition Value:	
6–9	then prior period has been drier than normal	Dry (D)	= 1
10–14	then period has been normal	Normal (N)	= 2
15–18	then period has been wetter than normal	Wet (W)	= 3

Conclusions: **Wetter than normal** precipitation conditions were present prior to the February 2022 field visits.

Daily Precipitation for 10 Days Preceding Fieldwork, Seattle-Tacoma International Airport, Washington

To determine if light, moderate, or heavy precipitation occurred in the 10 days prior to field work, the 10-day total is compared to 1/3 of the monthly average precipitation for the month evaluated. Average rainfall during the month of February is 4.18 inches (NRCS 2022a).

Daily Precipitation Data Preceding February 2022 Field Visits (Seattle-Tacoma International Airport, Washington)

Date	Daily Precipitation (inches)	Sum of 10 Days Prior
2/4/2022	0.03	
2/5/2022	0.04	
2/6/2022	0.00	
2/7/2022	T	
2/8/2022	T	
2/9/2022	T	
2/10/2022	T	
2/11/2022	0.00	
2/12/2022	0	
2/13/2022	0.00	
***2/14/2022**	**0.10**	**0.07**
2/15/2022	T	
2/16/2022	T	
2/17/2022	T	
2/18/2022	0.00	
2/19/2022	0.01	
2/20/2022	0.36	
2/21/2022	0.06	
2/22/2022	T	
2/23/2022	0.00	
2/24/2022	T	
***2/25/2022**	**0.00**	**0.43**

Notes:

* = Field work days

“T” values = indicate a trace value was recorded

Conclusions: **Light** precipitation was recorded in the ten days preceding field work.

Appendix B. Wetland Delineation Data Sheets

Appendix B includes the following sample point data sheets:

SP-1

SP-2

SP-3

SP-4

SP-5

SP-6

SP-7

SP-8

SP-9

SP-10

SP-11

SP-12

SP-13

SP-14

SP-15

SP-16

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TroutLodge | City/County: Pierce | Sampling Date: 2/14/2022

Applicant/Owner: WSDOT | State: WA | Sampling Point: SP-1

Investigator(s): MD, LD | Section, Township, Range: S13, T20N, R03E

Landform (hillslope, terrace, etc.): ravine | Local relief (concave, convex, none): Concave | Slope (%): 0

Subregion (LRR): A | Lat: 47.2130978 | Long: -122.3724744 | Datum: WGS84

Soil Map Unit Name: Xerochrepts, 45 to 70 percent slopes | NWI Classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? ○ Yes ◉ No (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? ◉ Yes ○ No

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	◉ Yes	○ No
Hydric Soil Present?	○ Yes	◉ No
Wetland Hydrology Present?	○ Yes	◉ No
Is the Sampled Area within a Wetland?	○ Yes	◉ No

Remarks:

Climatic conditions for February 2022 are considered "wetter than normal" per WETS table methodology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dom. Sp.?	Relative % Cover	Indicator Status
1.				
2.				
3.				
4.				
	= Total Cover			
Sapling/Shrub Stratum (Plot size:)				
1. *Rubus spectabilis*	50		83.3	FAC
2. *Oemleria cerasiformis*	10	N	16.7	FACU
3.				
4.				
5.				
	60 = Total Cover			
Herb Stratum (Plot size:)				
1. *Tolmiea menziesii*	60		75.0	FAC
2. *Urtica dioica*	20		25.0	FAC
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
	80 = Total Cover			
Woody Vine Stratum (Plot size:)				
1.				
2.				
	= Total Cover			

% Bare Ground in Herb Stratum 20

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	130	x 3 =	390
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	140 (A)		430 (B)

Prevalence Index = B/A = 3.071

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? ◉ Yes ○ No

Remarks:

~10% of moss is present

SOIL

Sampling Point: SP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR	3/2	100						Loamy sand	
6-16	2.5Y	3/2	100						Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ○ Yes ◉ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? ○ Yes ◉ No Depth (inches): _____

Water Table Present? ○ Yes ◉ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ◉ Yes ○ No Depth (inches): 13

Wetland Hydrology Present? ○ Yes ◉ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TroutLodge | City/County: Pierce | Sampling Date: 2/14/2022

Applicant/Owner: WSDOT | State: WA | Sampling Point: SP-2

Investigator(s): MD, LD | Section, Township, Range: S13, T20N, R03E

Landform (hillslope, terrace, etc.): ravine | Local relief (concave, convex, none): Concave | Slope (%): 0

Subregion (LRR): A | Lat: 47.2134836 | Long: -122.3704476 | Datum: WGS84

Soil Map Unit Name: Xerochrepts, 45 to 70 percent slopes | NWI Classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? ○ Yes ◉ No (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? ◉ Yes ○ No

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	◉ Yes	○ No
Hydric Soil Present?	○ Yes	◉ No
Wetland Hydrology Present?	○ Yes	◉ No

Is the Sampled Area within a Wetland? ○ Yes ◉ No

Remarks:

Climatic conditions for February 2022 are considered "wetter than normal" per WETS table methodology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dom. Sp.?	Relative % Cover	Indicator Status
1.				
2.				
3.				
4.				
	= Total Cover			
Sapling/Shrub Stratum (Plot size:)				
1. *Rubus spectabilis*	30		50.0	FAC
2. *Rubus armeniacus*	30		50.0	FAC
3.				
4.				
5.				
	60 = Total Cover			
Herb Stratum (Plot size:)				
1. *Tolmiea menziesii*	40		50.0	FAC
2. *Ranunculus repens*	30		37.5	FAC
3. *Carex deweyana*	10	N	12.5	FAC
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
	80 = Total Cover			
Woody Vine Stratum (Plot size:)				
1.				
2.				
	= Total Cover			

% Bare Ground in Herb Stratum 10

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	140	x 3 =	420
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	140 (A)		420 (B)

Prevalence Index = B/A = 3.000

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? ◉ Yes ○ No

Remarks:

~10% of moss is present

SOIL

Sampling Point: SP-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR	3/2	100						Loamy sand	
3-18	2.5Y	3/2	100						Gravelly sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ○ Yes ◉ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? ○ Yes ◉ No Depth (inches): _____

Water Table Present? ○ Yes ◉ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ○ Yes ◉ No Depth (inches): _____

Wetland Hydrology Present? ○ Yes ◉ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Soil pit approximately 3-4 feet away from the active channel. No hydrology was observed.

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TroutLodge | City/County: Pierce | Sampling Date: 2/14/2022

Applicant/Owner: WSDOT | State: WA | Sampling Point: SP-3

Investigator(s): MD, LD | Section, Township, Range: S13, T20N, R03E

Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): none | Slope (%): 3

Subregion (LRR): A | Lat: 47.213891 | Long: -122.372744 | Datum: WGS84

Soil Map Unit Name: Xerochrepts, 45 to 70 percent slopes | NWI Classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? ○ Yes ◉ No (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? ◉ Yes ○ No

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	◉ Yes	○ No
Hydric Soil Present?	○ Yes	◉ No
Wetland Hydrology Present?	◉ Yes	○ No
Is the Sampled Area within a Wetland?	○ Yes	◉ No

Remarks:
Sample plot is located southwest of WL 1, adjacent to a stormwater feature that flows down a historic road cut into the hillslope.
Climatic conditions for February 2022 are considered "wetter than normal" per WETS table methodology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dom. Sp.?	Relative % Cover	Indicator Status
1.				
2.				
3.				
4.				
	= Total Cover			
Sapling/Shrub Stratum (Plot size:)				
1. *Rubus armeniacus*	20		100.0	FAC
2.				
3.				
4.				
5.				
	20 = Total Cover			
Herb Stratum (Plot size:)				
1. *Phalaris arundinacea*	60		75.0	FACW
2. *Urtica dioica*	15	N	18.8	FAC
3. *Equisetum telmateia*	5	N	6.3	FACW
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
	80 = Total Cover			
Woody Vine Stratum (Plot size:)				
1.				
2.				
	= Total Cover			

% Bare Ground in Herb Stratum 20

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	65	x 2 =	130
FAC species	35	x 3 =	105
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		235 (B)

Prevalence Index = B/A = 2.350

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? ◉ Yes ○ No

Remarks:
~20% of moss is present

SOIL

Sampling Point: SP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR	3/2	100						Loamy sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ○ Yes ◉ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? ○ Yes ◉ No Depth (inches): _____

Water Table Present? ○ Yes ◉ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ◉ Yes ○ No Depth (inches): 12

Wetland Hydrology Present? ◉ Yes ○ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TroutLodge | City/County: Pierce | Sampling Date: 2/14/2022

Applicant/Owner: WSDOT | State: WA | Sampling Point: SP-4

Investigator(s): MD, LD | Section, Township, Range: S13, T20N, R03E

Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): none | Slope (%): 10

Subregion (LRR): A | Lat: 47.213923 | Long: -122.372898 | Datum: WGS84

Soil Map Unit Name: Xerochrepts, 45 to 70 percent slopes | NWI Classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? ○ Yes ◉ No (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? ◉ Yes ○ No

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	◉ Yes	○ No
Hydric Soil Present?	○ Yes	◉ No
Wetland Hydrology Present?	○ Yes	◉ No
Is the Sampled Area within a Wetland?	○ Yes	◉ No

Remarks:
Sample plot is located west of WL 1.
Climatic conditions for February 2022 are considered "wetter than normal" per WETS table methodology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30ft x 30ft)	Absolute % Cover	Dom. Sp.?	Relative % Cover	Indicator Status
1. *Alnus rubra*	60		100.0	FAC
2.				
3.				
4.				
	60	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft x 15ft)				
1. *Rubus armeniacus*	40		100.0	FAC
2.				
3.				
4.				
5.				
	40	= Total Cover		
Herb Stratum (Plot size: 5ft x 5ft)				
1. *Phalaris arundinacea*	20		66.7	FACW
2. *Urtica dioica*	10		33.3	FAC
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
	30	= Total Cover		
Woody Vine Stratum (Plot size: 5ft x 5ft)				
1.				
2.				
		= Total Cover		

% Bare Ground in Herb Stratum 70

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	110	x 3 =	330
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	130 (A)		370 (B)

Prevalence Index = B/A = 2.846

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? ◉ Yes ○ No

Remarks:

SOIL

Sampling Point: SP-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR	3/1	100						Sandy loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ○ Yes ◉ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? ○ Yes ◉ No Depth (inches): _____

Water Table Present? ○ Yes ◉ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ○ Yes ◉ No Depth (inches): _____

Wetland Hydrology Present? ○ Yes ◉ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Soil is dry to at least 16"

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TroutLodge | City/County: Pierce | Sampling Date: 2/14/2022

Applicant/Owner: WSDOT | State: WA | Sampling Point: SP-5

Investigator(s): MD, LD | Section, Township, Range: S13, T20N, R03E

Landform (hillslope, terrace, etc.): Depression | Local relief (concave, convex, none): Concave | Slope (%): 3

Subregion (LRR): A | Lat: 47.214000 | Long: -122.373000 | Datum: WGS84

Soil Map Unit Name: Xerochrepts, 45 to 70 percent slopes | NWI Classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? ○ Yes ◉ No (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? ◉ Yes ○ No

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	◉ Yes	○ No	**Is the Sampled Area within a Wetland?**	◉ Yes ○ No
Hydric Soil Present?	◉ Yes	○ No		
Wetland Hydrology Present?	◉ Yes	○ No		

Remarks:
Sample plot is located inside the boundary of WL 1.
Climatic conditions for February 2022 are considered "wetter than normal" per WETS table methodology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30ft x 30ft)	Absolute % Cover	Dom. Sp.?	Relative % Cover	Indicator Status
1.				
2.				
3.				
4.				
	= Total Cover			
Sapling/Shrub Stratum (Plot size: 15ft x 15ft)				
1. *Rubus armeniacus*	40		100.0	FAC
2.				
3.				
4.				
5.				
	40 = Total Cover			
Herb Stratum (Plot size: 5ft x 5ft)				
1. *Phalaris arundinacea*	70		77.8	FACW
2. *Nasturtium officinale*	20		22.2	OBL
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
	90 = Total Cover			
Woody Vine Stratum (Plot size: 5ft x 5ft)				
1.				
2.				
	= Total Cover			

% Bare Ground in Herb Stratum 10

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	70	x 2 =	140
FAC species	40	x 3 =	120
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	130 (A)		280 (B)

Prevalence Index = B/A = 2.154

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? ◉ Yes ○ No

Remarks:

SOIL

Sampling Point: SP-5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR	2/1	100						Sandy loam	
7-10	2.5Y	3/1	100						Sandy Loam	Hydrogen sulfide odor present

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☑ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ◉ Yes ○ No

Remarks:
Could not dig past 10"

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☑ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☑ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	◉ Yes	○ No	Depth (inches):	2
Water Table Present?	◉ Yes	○ No	Depth (inches):	0
Saturation Present? (includes capillary fringe)	◉ Yes	○ No	Depth (inches):	0

Wetland Hydrology Present? ◉ Yes ○ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TroutLodge | City/County: Pierce | Sampling Date: 2/14/2022

Applicant/Owner: WSDOT | State: WA | Sampling Point: SP-6

Investigator(s): MD, LD | Section, Township, Range: S13, T20N, R03E

Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): none | Slope (%): 10

Subregion (LRR): A | Lat: 47.2145534 | Long: -122.3725712 | Datum: WGS84

Soil Map Unit Name: Urban Land, 0 to 5 percent slopes | NWI Classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? ○ Yes ◉ No (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? ◉ Yes ○ No

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	◉ Yes	○ No	**Is the Sampled Area within a Wetland?**	◉ Yes ○ No
Hydric Soil Present?	◉ Yes	○ No		
Wetland Hydrology Present?	◉ Yes	○ No		

Remarks:

Climatic conditions for February 2022 are considered "wetter than normal" per WETS table methodology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dom. Sp.?	Relative % Cover	Indicator Status
1.				
2.				
3.				
4.				
	= Total Cover			
Sapling/Shrub Stratum (Plot size:)				
1.				
2.				
3.				
4.				
5.				
	= Total Cover			
Herb Stratum (Plot size:)				
1. *Phalaris arundinacea*	90		90.0	FACW
2. *Urtica dioica*	10	N	10.0	FAC
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
	100 = Total Cover			
Woody Vine Stratum (Plot size:)				
1.				
2.				
	= Total Cover			

% Bare Ground in Herb Stratum

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		210 (B)

Prevalence Index = B/A = 2.100

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? ◉ Yes ○ No

Remarks:

SOIL

Sampling Point: SP-6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-6	2.5Y	3/2	100						Sandy loam	
6-18	10Y	4/1	100						Sandy loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☑ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? ◉ Yes ○ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? ○ Yes ◉ No Depth (inches):

Water Table Present? ◉ Yes ○ No Depth (inches): 3

Saturation Present? (includes capillary fringe) ◉ Yes ○ No Depth (inches): 0

Wetland Hydrology Present? ◉ Yes ○ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TroutLodge | City/County: Pierce | Sampling Date: 2/14/2022

Applicant/Owner: WSDOT | State: WA | Sampling Point: SP-7

Investigator(s): MD, LD | Section, Township, Range: S13, T20N, R03E

Landform (hillslope, terrace, etc.): Hillslope | Local relief (concave, convex, none): None | Slope (%): 10

Subregion (LRR): A | Lat: 47.2147669 | Long: -122.3726264 | Datum: WGS84

Soil Map Unit Name: Urban Land, 0 to 5 percent slopes | NWI Classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? ○ Yes ◉ No (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? ◉ Yes ○ No

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	◉ Yes	○ No
Hydric Soil Present?	○ Yes	◉ No
Wetland Hydrology Present?	○ Yes	◉ No

Is the Sampled Area within a Wetland? ○ Yes ◉ No

Remarks:
Sample plot is located west of WL 2.
Climatic conditions for February 2022 are considered "wetter than normal" per WETS table methodology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30ft x 30ft)	Absolute % Cover	Dom. Sp.?	Relative % Cover	Indicator Status
1.				
2.				
3.				
4.				
	= Total Cover			
Sapling/Shrub Stratum (Plot size: 15ft x 15ft)				
1. *Rubus armeniacus*	30		100.0	FAC
2.				
3.				
4.				
5.				
	30 = Total Cover			
Herb Stratum (Plot size: 5ft x 5ft)				
1. *Phalaris arundinacea*	100		100.0	FACW
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
	100 = Total Cover			
Woody Vine Stratum (Plot size: 5ft x 5ft)				
1.				
2.				
	= Total Cover			

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	30	x 3 =	90
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	130 (A)		290 (B)

Prevalence Index = B/A = 2.231

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? ◉ Yes ○ No

Remarks:

SOIL

Sampling Point: SP-7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR	3/2	100						Gravelly sandy loar	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ○ Yes ◉ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? ○ Yes ◉ No Depth (inches): _____

Water Table Present? ○ Yes ◉ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ○ Yes ◉ No Depth (inches): _____

Wetland Hydrology Present? ○ Yes ◉ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Soil is dry to at least 16"

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TroutLodge | City/County: Pierce | Sampling Date: 2/14/2022

Applicant/Owner: WSDOT | State: WA | Sampling Point: SP-8

Investigator(s): MD, LD | Section, Township, Range: S13, T20N, R03E

Landform (hillslope, terrace, etc.): toe of slope | Local relief (concave, convex, none): none | Slope (%): 1

Subregion (LRR): A | Lat: 47.2155092 | Long: -122.3724809 | Datum: WGS84

Soil Map Unit Name: Urban Land, 0 to 5 percent slopes | NWI Classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? ○ Yes ◉ No (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? ◉ Yes ○ No

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	◉ Yes	○ No
Hydric Soil Present?	○ Yes	◉ No
Wetland Hydrology Present?	○ Yes	◉ No

Is the Sampled Area within a Wetland? ○ Yes ◉ No

Remarks:
SP is approximately 3 feet west of the access road.
Climatic conditions for February 2022 are considered "wetter than normal" per WETS table methodology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dom. Sp.?	Relative % Cover	Indicator Status
1.				
2.				
3.				
4.				
	= Total Cover			
Sapling/Shrub Stratum (Plot size:)				
1. *Rubus armeniacus*	30		100.0	FAC
2.				
3.				
4.				
5.				
	30 = Total Cover			
Herb Stratum (Plot size:)				
1. *Phalaris arundinacea*	90		90.0	FACW
2. *Urtica dioica*	10	N	10.0	FAC
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
	100 = Total Cover			
Woody Vine Stratum (Plot size:)				
1.				
2.				
	= Total Cover			

% Bare Ground in Herb Stratum

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	40	x 3 =	120
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	130 (A)		300 (B)

Prevalence Index = B/A = 2.308

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? ◉ Yes ○ No

Remarks:

SOIL

Sampling Point: SP-8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-13	10YR	3/2	100						Loamy sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Compcated gravel

Depth (inches): 13

Hydric Soil Present? ○ Yes ◉ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? ○ Yes ◉ No Depth (inches): _____

Water Table Present? ○ Yes ◉ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ○ Yes ◉ No Depth (inches): _____

Wetland Hydrology Present? ○ Yes ◉ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TroutLodge | City/County: Pierce | Sampling Date: 2/25/2022

Applicant/Owner: WSDOT | State: WA | Sampling Point: SP-9

Investigator(s): MD, LD | Section, Township, Range: S13, T20N, R03E

Landform (hillslope, terrace, etc.): Swale | Local relief (concave, convex, none): Concave | Slope (%): 4

Subregion (LRR): A | Lat: 47.215736 | Long: -122.372614 | Datum: WGS84

Soil Map Unit Name: Urban Land, 0 to 5 percent slopes | NWI Classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? ○ Yes ◉ No (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? ◉ Yes ○ No

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	◉ Yes	○ No
Hydric Soil Present?	○ Yes	◉ No
Wetland Hydrology Present?	○ Yes	◉ No
Is the Sampled Area within a Wetland?	○ Yes	◉ No

Remarks:
Sample plot is located in shallow swale west of graveled area.
Climatic conditions for February 2022 are considered "wetter than normal" per WETS table methodology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30ft x 30ft)	Absolute % Cover	Dom. Sp.?	Relative % Cover	Indicator Status
1. *Acer macrophyllum*	20		100.0	FACU
2.				
3.				
4.				
	20	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft x 15ft)				
1. *Rubus spectabilis*	15		100.0	FAC
2.				
3.				
4.				
5.				
	15	= Total Cover		
Herb Stratum (Plot size: 5ft x 5ft)				
1. *Phalaris arundinacea*	80		72.7	FACW
2. *Urtica dioica*	30		27.3	FAC
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
	110	= Total Cover		
Woody Vine Stratum (Plot size: 5ft x 5ft)				
1.				
2.				
		= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	80	x 2 =	160
FAC species	45	x 3 =	135
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	145 (A)		375 (B)

Prevalence Index = B/A = 2.586

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? ◉ Yes ○ No

Remarks:

SOIL

Sampling Point: SP-9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR	3/2	100						Gravelly sandy loar	Cobble throughout soil.

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ○ Yes ◉ No

Remarks:
Could not dig past 12" due to cobble/compaction.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? ○ Yes ◉ No Depth (inches): _____

Water Table Present? ○ Yes ◉ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ◉ Yes ○ No Depth (inches): 0-6"

Wetland Hydrology Present? ○ Yes ◉ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Soil is saturated in the upper 6 inches, likely due to recent precipitaiton. Soil below 6 inches is dry.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TroutLodge | City/County: Pierce | Sampling Date: 2/14/2022

Applicant/Owner: WSDOT | State: WA | Sampling Point: SP-10

Investigator(s): MD, LD | Section, Township, Range: S13, T20N, R03E

Landform (hillslope, terrace, etc.): toe of slope | Local relief (concave, convex, none): none | Slope (%): 5

Subregion (LRR): A | Lat: 47.2152111 | Long: -122.3702475 | Datum: WGS84

Soil Map Unit Name: Urban Land, 0 to 5 percent slopes | NWI Classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? ○ Yes ◉ No (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? ◉ Yes ○ No

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	◉ Yes	○ No
Hydric Soil Present?	○ Yes	◉ No
Wetland Hydrology Present?	○ Yes	◉ No

Is the Sampled Area within a Wetland? ○ Yes ◉ No

Remarks:
SP is approximately 5 feet west of the access road.
Climatic conditions for February 2022 are considered "wetter than normal" per WETS table methodology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dom. Sp.?	Relative % Cover	Indicator Status
1. *Thuja plicata*	5		100.0	FAC
2.				
3.				
4.				
	5	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1. *Rubus armeniacus*	5		100.0	FAC
2.				
3.				
4.				
5.				
	5	= Total Cover		
Herb Stratum (Plot size:)				
1. *Phalaris arundinacea*	60		60.0	FACW
2. *Urtica dioica*	30		30.0	FAC
3. *Hypochaeris radicata*	10	N	10.0	FACU
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.				
2.				
		= Total Cover		

% Bare Ground in Herb Stratum

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	60	x 2 =	120
FAC species	40	x 3 =	120
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	110 (A)		280 (B)

Prevalence Index = B/A = 2.545

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? ◉ Yes ○ No

Remarks:

SOIL

Sampling Point: SP-10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR	3/2	100						Loamy sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Compcated gravel

Depth (inches): 16

Hydric Soil Present? ○ Yes ◉ No

Remarks:
Area appears to have gravel added to stabilize the slope

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? ○ Yes ◉ No Depth (inches): _____

Water Table Present? ○ Yes ◉ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ○ Yes ◉ No Depth (inches): _____

Wetland Hydrology Present? ○ Yes ◉ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TroutLodge | City/County: Pierce | Sampling Date: 2/25/2022

Applicant/Owner: WSDOT | State: WA | Sampling Point: SP-11

Investigator(s): MD, LD | Section, Township, Range: S13, T20N, R03E

Landform (hillslope, terrace, etc.): Depession | Local relief (concave, convex, none): Concave | Slope (%): 2

Subregion (LRR): A | Lat: 47.216367 | Long: -122.372775 | Datum: WGS84

Soil Map Unit Name: Urban Land, 0 to 5 percent slopes | NWI Classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? ○ Yes ◉ No (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? ◉ Yes ○ No

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	◉ Yes	○ No
Hydric Soil Present?	○ Yes	◉ No
Wetland Hydrology Present?	○ Yes	◉ No
Is the Sampled Area within a Wetland?	○ Yes	◉ No

Remarks:
Sample plot is located in shallow depression west of graveled area, near a catch basin.
Climatic conditions for February 2022 are considered "wetter than normal" per WETS table methodology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30ft x 30ft)	Absolute % Cover	Dom. Sp.?	Relative % Cover	Indicator Status
1. *Acer macrophyllum*	30		100.0	FACU
2.				
3.				
4.				
	30	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft x 15ft)				
1. *Rubus armeniacus*	5		100.0	FAC
2.				
3.				
4.				
5.				
	5	= Total Cover		
Herb Stratum (Plot size: 5ft x 5ft)				
1. *Phalaris arundinacea*	100		76.9	FACW
2. *Symphytum officinale*	30		23.1	UPL
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
	130	= Total Cover		
Woody Vine Stratum (Plot size: 5ft x 5ft)				
1.				
2.				
		= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	5	x 3 =	15
FACU species	30	x 4 =	120
UPL species	30	x 5 =	150
Column Totals:	165 (A)		485 (B)

Prevalence Index = B/A = 2.939

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? ◉ Yes ○ No

Remarks:

SOIL

Sampling Point: SP-11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR	3/2	100						Sandy Loam	Cobble throughout soil.

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ○ Yes ◉ No

Remarks:
Could not dig past 12" due to cobble/compaction.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? ○ Yes ◉ No Depth (inches): _____

Water Table Present? ○ Yes ◉ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ○ Yes ◉ No Depth (inches): _____

Wetland Hydrology Present? ○ Yes ◉ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Soil is dry to at least 12"

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TroutLodge | City/County: Pierce | Sampling Date: 2/14/2022

Applicant/Owner: WSDOT | State: WA | Sampling Point: SP-12

Investigator(s): MD, LD | Section, Township, Range: S13, T20N, R03E

Landform (hillslope, terrace, etc.): toe of slope | Local relief (concave, convex, none): none | Slope (%): 0

Subregion (LRR): A | Lat: 47.2170788 | Long: -122.3706154 | Datum: WGS84

Soil Map Unit Name: Urban Land, 0 to 5 percent slopes | NWI Classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? ○ Yes ◉ No (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? ◉ Yes ○ No

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	◉ Yes	○ No
Hydric Soil Present?	○ Yes	◉ No
Wetland Hydrology Present?	◉ Yes	○ No
Is the Sampled Area within a Wetland?	○ Yes	◉ No

Remarks:
SP is approximately 2 feet west of the access road.
Climatic conditions for February 2022 are considered "wetter than normal" per WETS table methodology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dom. Sp.?	Relative % Cover	Indicator Status
1.				
2.				
3.				
4.				
	= Total Cover			
Sapling/Shrub Stratum (Plot size:)				
1. *Rubus armeniacus*	20		100.0	FAC
2.				
3.				
4.				
5.				
	20 = Total Cover			
Herb Stratum (Plot size:)				
1. *Phalaris arundinacea*	50		58.8	FACW
2. *Agrostis stolonifera*	30		35.3	FAC
3. *Juncus effusus*	5	N	5.9	FACW
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
	85 = Total Cover			
Woody Vine Stratum (Plot size:)				
1. *Hedera helix*	5		100.0	FACU
2.				
	5 = Total Cover			

% Bare Ground in Herb Stratum 15

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	55	x 2 =	110
FAC species	50	x 3 =	150
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	110 (A)		280 (B)

Prevalence Index = B/A = 2.545

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? ◉ Yes ○ No

Remarks:

SOIL

Sampling Point: SP-12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-10	2.5Y	3/2	100						Loamy sand	80% of the profile is gravel

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Compcated gravel

Depth (inches): 10

Hydric Soil Present? ○ Yes ◉ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? ○ Yes ◉ No Depth (inches): _____

Water Table Present? ○ Yes ◉ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ◉ Yes ○ No Depth (inches): 0

Wetland Hydrology Present? ◉ Yes ○ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TroutLodge | City/County: Pierce | Sampling Date: 2/25/2022

Applicant/Owner: WSDOT | State: WA | Sampling Point: SP-13

Investigator(s): MD, LD | Section, Township, Range: S13, T20N, R03E

Landform (hillslope, terrace, etc.): Hillslope | Local relief (concave, convex, none): None | Slope (%): 2

Subregion (LRR): A | Lat: 47.217012 | Long: -122.373129 | Datum: WGS84

Soil Map Unit Name: Urban Land, 0 to 5 percent slopes | NWI Classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? ○ Yes ◉ No (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? ◉ Yes ○ No

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	◉ Yes	○ No
Hydric Soil Present?	○ Yes	◉ No
Wetland Hydrology Present?	○ Yes	◉ No
Is the Sampled Area within a Wetland?	○ Yes	◉ No

Remarks:
Sample plot is located in grassy area west of graveled area.
Climatic conditions for February 2022 are considered "wetter than normal" per WETS table methodology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30ft x 30ft)	Absolute % Cover	Dom. Sp.?	Relative % Cover	Indicator Status
1.				
2.				
3.				
4.				
	= Total Cover			
Sapling/Shrub Stratum (Plot size: 15ft x 15ft)				
1. *Rubus armeniacus*	20		100.0	FAC
2.				
3.				
4.				
5.				
	20 = Total Cover			
Herb Stratum (Plot size: 5ft x 5ft)				
1. *Poa pratensis*	100		87.0	FAC
2. *Phalaris arundinacea*	15	N	13.0	FACW
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
	115 = Total Cover			
Woody Vine Stratum (Plot size: 5ft x 5ft)				
1.				
2.				
	= Total Cover			

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	120	x 3 =	360
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	135 (A)		390 (B)

Prevalence Index = B/A = 2.889

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? ◉ Yes ○ No

Remarks:

SOIL

Sampling Point: SP-13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR	3/1	100						Sandy Loam	Cobble throughout soil.

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ○ Yes ◉ No

Remarks:
Could not dig past 9" due to cobble/compaction.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? ○ Yes ◉ No Depth (inches): _____

Water Table Present? ○ Yes ◉ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ○ Yes ◉ No Depth (inches): _____

Wetland Hydrology Present? ○ Yes ◉ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Soil is dry to at least 9" (could not dig further due to cobble/compaction)

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TroutLodge | City/County: Pierce | Sampling Date: 2/14/2022

Applicant/Owner: WSDOT | State: WA | Sampling Point: SP-14

Investigator(s): MD, LD | Section, Township, Range: S13, T20N, R03E

Landform (hillslope, terrace, etc.): toe of slope | Local relief (concave, convex, none): none | Slope (%): 0

Subregion (LRR): A | Lat: 47.2184335 | Long: -122.3739848 | Datum: WGS84

Soil Map Unit Name: Urban Land, 0 to 5 percent slopes | NWI Classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? ○ Yes ◉ No (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? ◉ Yes ○ No

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	○ Yes	◉ No
Hydric Soil Present?	○ Yes	◉ No
Wetland Hydrology Present?	○ Yes	◉ No
Is the Sampled Area within a Wetland?	○ Yes	◉ No

Remarks:
SP is approximately 2 feet west of the access road.
Climatic conditions for February 2022 are considered "wetter than normal" per WETS table methodology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dom. Sp.?	Relative % Cover	Indicator Status
1.				
2.				
3.				
4.				
	= Total Cover			
Sapling/Shrub Stratum (Plot size:)				
1. *Rubus spectabilis*	30		100.0	FAC
2.				
3.				
4.				
5.				
	30 = Total Cover			
Herb Stratum (Plot size:)				
1. *Phalaris arundinacea*	20		50.0	FACW
2. *Cardamine oligosperma*	5	N	12.5	FAC
3. *Cerastium arvense*	15		37.5	FACU
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
	40 = Total Cover			
Woody Vine Stratum (Plot size:)				
1. *Rubus ursinus*	20		100.0	FACU
2.				
	20 = Total Cover			

% Bare Ground in Herb Stratum 60

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	35	x 3 =	105
FACU species	35	x 4 =	140
UPL species	0	x 5 =	0
Column Totals:	90 (A)		285 (B)

Prevalence Index = B/A = 3.167

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? ○ Yes ◉ No

Remarks:
Moss ~60%

SOIL

Sampling Point: SP-14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR	3/3	100						Loamy sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Compcated gravel

Depth (inches): 16

Hydric Soil Present? ○ Yes ◉ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? ○ Yes ◉ No Depth (inches): _____

Water Table Present? ○ Yes ◉ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ○ Yes ◉ No Depth (inches): _____

Wetland Hydrology Present? ○ Yes ◉ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TroutLodge | City/County: Pierce | Sampling Date: 2/25/2022

Applicant/Owner: WSDOT | State: WA | Sampling Point: SP-15

Investigator(s): MD, LD | Section, Township, Range: S13, T20N, R03E

Landform (hillslope, terrace, etc.): Hillslope | Local relief (concave, convex, none): None | Slope (%): 2

Subregion (LRR): A | Lat: 47.218644 | Long: -122.374604 | Datum: WGS84

Soil Map Unit Name: Urban Land, 0 to 5 percent slopes | NWI Classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? ○ Yes ◉ No (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? ◉ Yes ○ No

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	◉ Yes	○ No	**Is the Sampled Area within a Wetland?**	◉ Yes ○ No
Hydric Soil Present?	◉ Yes	○ No		
Wetland Hydrology Present?	◉ Yes	○ No		

Remarks:
Sample plot is located within the boundary of WL 3.
Climatic conditions for February 2022 are considered "wetter than normal" per WETS table methodology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30ft x 30ft)	Absolute % Cover	Dom. Sp.?	Relative % Cover	Indicator Status
1.				
2.				
3.				
4.				
	= Total Cover			
Sapling/Shrub Stratum (Plot size: 15ft x 15ft)				
1. *Rubus spectabilis*	50		100.0	FAC
2.				
3.				
4.				
5.				
	50 = Total Cover			
Herb Stratum (Plot size: 5ft x 5ft)				
1. *Urtica dioica*	50		66.7	FAC
2. *Phalaris arundinacea*	25		33.3	FACW
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
	75 = Total Cover			
Woody Vine Stratum (Plot size: 5ft x 5ft)				
1.				
2.				
	= Total Cover			

% Bare Ground in Herb Stratum 25

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	100	x 3 =	300
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	125 (A)		350 (B)

Prevalence Index = B/A = 2.800

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? ◉ Yes ○ No

Remarks:

SOIL

Sampling Point: SP-15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR	2/2	100						Loam	
5-14	2.5Y	3/1	95	7.5YR	3/4	5	C	M	Sandy clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ◉ Yes ○ No

Remarks:
Soil concentrations in the 5-12" layer are distinct.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	○ Yes	◉ No	Depth (inches):	
Water Table Present?	◉ Yes	○ No	Depth (inches):	6
Saturation Present? (includes capillary fringe)	◉ Yes	○ No	Depth (inches):	2

Wetland Hydrology Present? ◉ Yes ○ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TroutLodge | City/County: Pierce | Sampling Date: 2/25/2022

Applicant/Owner: WSDOT | State: WA | Sampling Point: SP-16

Investigator(s): MD, LD | Section, Township, Range: S13, T20N, R03E

Landform (hillslope, terrace, etc.): Hillslope | Local relief (concave, convex, none): None | Slope (%): 5

Subregion (LRR): A | Lat: 47.218765 | Long: -122.374379 | Datum: WGS84

Soil Map Unit Name: Urban Land, 0 to 5 percent slopes | NWI Classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? ○ Yes ◉ No (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? ◉ Yes ○ No

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	◉ Yes	○ No	**Is the Sampled Area within a Wetland?** ○ Yes ◉ No
Hydric Soil Present?	○ Yes	◉ No	
Wetland Hydrology Present?	◉ Yes	○ No	

Remarks:
Sample plot is located within an alder stand near the property entrance gate, north of the driveway. Area appears to have been a parking area for a building that has not been in use for several decades.
Climatic conditions for February 2022 are considered "wetter than normal" per WETS table methodology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30ft x 30ft)	Absolute % Cover	Dom. Sp.?	Relative % Cover	Indicator Status
1. *Alnus rubra*	80		100.0	FAC
2.				
3.				
4.				
	80	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft x 15ft)				
1. *Rubus armeniacus*	10		100.0	FAC
2.				
3.				
4.				
5.				
	10	= Total Cover		
Herb Stratum (Plot size: 5ft x 5ft)				
1. *Phalaris arundinacea*	60		85.7	FACW
2. *Equisetum telmateia*	10	N	14.3	FACW
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
	70	= Total Cover		
Woody Vine Stratum (Plot size: 5ft x 5ft)				
1.				
2.				
		= Total Cover		

% Bare Ground in Herb Stratum 30

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	70	x 2 =	140
FAC species	90	x 3 =	270
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	160 (A)		410 (B)

Prevalence Index = B/A = 2.563

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? ◉ Yes ○ No

Remarks:

SOIL

Sampling Point: SP-16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR	3/3	100						Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? ○ Yes ◉ No

Remarks:
Could not dig past 6". Compact gravel or pavement below.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	◉ Yes	○ No	Depth (inches):	2
Water Table Present?	◉ Yes	○ No	Depth (inches):	0
Saturation Present? (includes capillary fringe)	◉ Yes	○ No	Depth (inches):	0

Wetland Hydrology Present? ◉ Yes ○ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Soil is ponding in this heavily compacted area.

Appendix C. Wetland Rating Summaries and Figures

Appendix C includes wetland rating forms and all required figures for each wetland.

Wetland name or number 1

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland 1 Date of site visit: 2/14/22

Rated by L. Dougherty, M. Dalzell Trained by Ecology? ☑ Yes ☐ No Date of training 10/18

HGM Class used for rating Depressional Wetland has multiple HGM classes? ☐ Y ☑ N

NOTE: **Form is not complete without the figures requested** *(figures can be combined)*.

Source of base aerial photo/map ESRI Online

OVERALL WETLAND CATEGORY III (based on functions ☑ or special characteristics ☐)

1. Category of wetland based on FUNCTIONS

☐ **Category I** – Total score = 23 - 27

☐ **Category II** – Total score = 20 - 22

☑ **Category III** – Total score = 16 - 19

☐ **Category IV** – Total score = 9 - 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
	Circle the appropriate ratings			
Site Potential	H ☐ M ☑ L ☐	H ☐ M ☐ L ☑	H ☐ M ☐ L ☑	
Landscape Potential	H ☐ M ☐ L ☑	H ☐ M ☐ L ☑	H ☐ M ☑ L ☐	
Value	H ☑ M ☐ L ☐	H ☑ M ☐ L ☐	H ☑ M ☐ L ☐	TOTAL
Score Based on Ratings	6	5	6	17

Score for each function based on three ratings *(order of ratings is not important)*

9 = H,H,H
8 = H,H,M
7 = H,H,L
7 = H,M,M
6 = H,M,L
6 = M,M,M
5 = H,L,L
5 = M,M,L
4 = M,L,L
3 = L,L,L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I ☐ II ☐
Wetland of High Conservation Value	I ☐
Bog	I ☐
Mature Forest	I ☐
Old Growth Forest	I ☐
Coastal Lagoon	I ☐ II ☐
Interdunal	I ☐ II ☐ III ☐ IV ☐
None of the above	★

Wetland name or number 1

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	1
Hydroperiods	D 1.4, H 1.2	2
Location of outlet (*can be added to map of hydroperiods)*	D 1.1, D 4.1	2
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	D 2.2, D 5.2	3
Map of the contributing basin	D 4.3, D 5.3	5
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	4
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	6
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	7

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream *(can be added to another figure)*	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of **dense** trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of **dense, rigid** trees, shrubs, and herbaceous plants (*can be added to figure above)*	S 4.1	
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number 1

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the entire unit usually controlled by tides except during floods?

☑ NO – go to 2 ☐ **YES** – the wetland class is **Tidal Fringe** – go to 1.1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

☑ **NO – Saltwater Tidal Fringe (Estuarine)** ☐ **YES – Freshwater Tidal Fringe**

*If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to score functions for estuarine wetlands.*

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

☑ NO – go to 3 ☐ **YES** – The wetland class is **Flats**

*If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.*

3. Does the entire wetland unit **meet all** of the following criteria?

The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;

___At least 30% of the open water area is deeper than 6.6 ft (2 m).

☑ NO – go to 4 ☐ **YES –** The wetland class is **Lake Fringe** (Lacustrine Fringe)

4. Does the entire wetland unit **meet all** of the following criteria?

___The wetland is on a slope (*slope can be very gradual*),

___The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,

___The water leaves the wetland **without being impounded**.

☑ NO – go to 5 ☐ **YES –** The wetland class is **Slope**

NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

5. Does the entire wetland unit **meet all** of the following criteria?

The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

___The overbank flooding occurs at least once every 2 years.

Wetland name or number 1

☑ NO – go to 6 ☐ **YES** – The wetland class is **Riverine**

NOTE: The Riverine unit can contain depressions that are filled with water when the river is not flooding

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? *This means that any outlet, if present, is higher than the interior of the wetland.*

☐ NO – go to 7 ☑ **YES** – The wetland class is **Depressional**

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

☐ NO – go to 8 ☐ **YES** – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated	HGM class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE

*If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.*

Wetland name or number 1

DEPRESSIONAL AND FLATS WETLANDS

Water Quality Functions - Indicators that the site functions to improve water quality

D 1.0. Does the site have the potential to improve water quality?	
D 1.1. Characteristics of surface water outflows from the wetland: ☐ Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). points = 3 ☑ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 1 ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1	2
D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic *(use NRCS definitions)*. ☐ Yes = 4 ☑ No = 0	0
D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes): ☐ Wetland has persistent, ungrazed, plants > 95% of area points = 5 ☐ Wetland has persistent, ungrazed, plants > ½ of area points = 3 ☑ Wetland has persistent, ungrazed plants > 1/10 of area points = 1 ☐ Wetland has persistent, ungrazed plants < 1/10 of area points = 0	1
D 1.4. Characteristics of seasonal ponding or inundation: *This is the area that is ponded for at least 2 months. See description in manual.* ☑ Area seasonally ponded is > ½ total area of wetland points = 4 ☐ Area seasonally ponded is > ¼ total area of wetland points = 2 ☐ Area seasonally ponded is < ¼ total area of wetland points = 0	4
Total for D 1 Add the points in the boxes above	7

Rating of Site Potential If score is: ☐ **12-16 = H** ☑ **6-11 = M** ☐ **0-5 = L** *Record the rating on the first page*

D 2.0. Does the landscape have the potential to support the water quality function of the site?	
D 2.1. Does the wetland unit receive stormwater discharges? ☐ Yes = 1 ☑ No = 0	0
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? ☐ Yes = 1 ☑ No = 0	0
D 2.3. Are there septic systems within 250 ft of the wetland? ☐ Yes = 1 ☑ No = 0	0
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3? Source_____ ☐ Yes = 1 ☑ No = 0	0
Total for D 2 Add the points in the boxes above	0

Rating of Landscape Potential If score is: ☐ **3 or 4 = H** ☐ **1 or 2 = M** ☑ **0 = L** *Record the rating on the first page*

D 3.0. Is the water quality improvement provided by the site valuable to society?	
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? ☐ Yes = 1 ☑ No = 0	0
D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list? ☑ Yes = 1 ☐ No = 0	1
D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (*answer YES if there is a TMDL for the basin in which the unit is found*)? ☑ Yes = 2 ☐ No = 0	2
Total for D 3 Add the points in the boxes above	3

Rating of Value If score is: ☑ **2-4 = H** ☐ **1 = M** ☐ **0 = L** *Record the rating on the first page*

D 3.2: Areas of Commencement Bay are mapped as 303(d)-listed waters.
D 3.3: Wetland is mapped within the Puyallup River Multiparameter TMDL and Puyallup River Bacteria TMDL.

Wetland name or number 1

DEPRESSIONAL AND FLATS WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation

D 4.0. Does the site have the potential to reduce flooding and erosion?

D 4.1. Characteristics of surface water outflows from the wetland:

- ☐ Wetland is a depression or flat depression with no surface water leaving it (no outlet) points = 4
- ☑ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet points = 2
- ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch points = 1
- ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 0

2

D 4.2. Depth of storage during wet periods: *Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.*

- ☐ Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7
- ☐ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5
- ☐ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3
- ☐ The wetland is a "headwater" wetland points = 3
- ☐ Wetland is flat but has small depressions on the surface that trap water points = 1
- ☑ Marks of ponding less than 0.5 ft (6 in) points = 0

0

D 4.3. Contribution of the wetland to storage in the watershed: *Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself.*

- ☐ The area of the basin is less than 10 times the area of the unit points = 5
- ☐ The area of the basin is 10 to 100 times the area of the unit points = 3
- ☑ The area of the basin is more than 100 times the area of the unit points = 0
- ☐ Entire wetland is in the Flats class points = 5

0

Total for D 4 — Add the points in the boxes above: **2**

Rating of Site Potential If score is: ☐ **12-16 = H** ☐ **6-11 = M** ☑ **0-5 = L** *Record the rating on the first page*

D 5.0. Does the landscape have the potential to support hydrologic functions of the site?

D 5.1. Does the wetland receive stormwater discharges? ☐ Yes = 1 ☑ No = 0 — **0**

D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? ☐ Yes = 1 ☑ No = 0 — **0**

D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? ☐ Yes = 1 ☑ No = 0 — **0**

Total for D 5 — Add the points in the boxes above: **0**

Rating of Landscape Potential If score is: ☐ **3 = H** ☐ **1 or 2 = M** ☑ **0 = L** *Record the rating on the first page*

D 6.0. Are the hydrologic functions provided by the site valuable to society?

D 6.1. The unit is in a landscape that has flooding problems. *Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.*

The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds):

- ☑ • Flooding occurs in a sub-basin that is immediately down-gradient of unit. points = 2
- ☐ • Surface flooding problems are in a sub-basin farther down-gradient. points = 1
- ☐ Flooding from groundwater is an issue in the sub-basin. points = 1

The existing or potential outflow from the wetland is so constrained by human or natural conditions that the

- ☐ water stored by the wetland cannot reach areas that flood. *Explain why* _____ points = 0
- ☐ There are no problems with flooding downstream of the wetland. points = 0

2

D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? ☐ Yes = 2 ☑ No = 0 — **0**

Total for D 6 — Add the points in the boxes above: **2**

Rating of Value If score is: ☑ **2-4 = H** ☐ **1 = M** ☐ **0 = L** *Record the rating on the first page*

Wetland name or number 1

These questions apply to wetlands of all HGM classes.

HABITAT FUNCTIONS - Indicators that site functions to provide important habitat

H 1.0. Does the site have the potential to provide habitat?

H 1.1. Structure of plant community: *Indicators are Cowardin classes and strata within the Forested class.* Check the Cowardin plant classes in the wetland. *Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

- ☐ Aquatic bed
- ☑ Emergent
- ☐ Scrub-shrub (areas where shrubs have > 30% cover)
- ☐ Forested (areas where trees have > 30% cover)

4 structures or more: ☐ points = 4
3 structures: ☐ points = 2
2 structures: ☐ points = 1
1 structure: ☑ points = 0

If the unit has a Forested class, check if:

- ☐ The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon

0

H 1.2. Hydroperiods

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (*see text for descriptions of hydroperiods*).

- ☐ Permanently flooded or inundated
- ☑ Seasonally flooded or inundated
- ☐ Occasionally flooded or inundated
- ☐ Saturated only

4 or more types present: ☐ points = 3
3 types present: ☐ points = 2
2 types present: ☐ points = 1
1 type present: ☑ points = 0

- ☐ Permanently flowing stream or river in, or adjacent to, the wetland
- ☐ Seasonally flowing stream in, or adjacent to, the wetland
- ☐ **Lake Fringe wetland** ☐ **2 points**
- ☐ **Freshwater tidal wetland** ☐ **2 points**

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft^2.

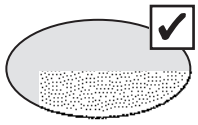
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. ***Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle***

If you counted:
- > 19 species ☐ points = 2
- 5 - 19 species ☑ points = 1
- < 5 species ☐ points = 0

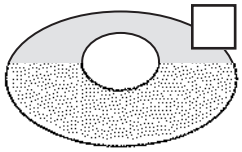
1

H 1.4. Interspersion of habitats

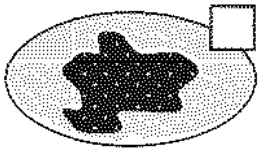
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



None = 0 points

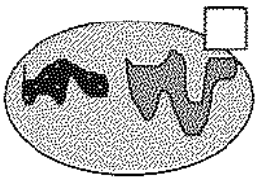


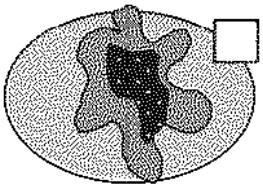
Low = 1 point

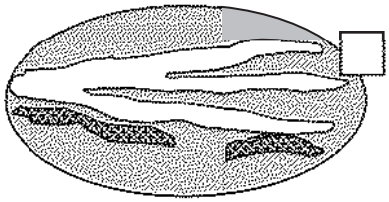


Moderate = 2 points

All three diagrams in this row are **HIGH** = 3points







0

Wetland name or number 1

H 1.5. Special habitat features: Check the habitat features that are present in the wetland. *The number of checks is the number of points.* ☐ Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). ☐ Standing snags (dbh > 4 in) within the wetland ☐ Undercut banks are present for at least 6.6 ft (2 m) **and/or** overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) ☐ Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present *(cut shrubs or trees that have not yet weathered where wood is exposed)* ☐ At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated *(structures for egg-laying by amphibians)* ☐ Invasive plants cover less than 25% of the wetland area in every stratum of plants (*see H 1.1 for list of strata*)	0
Total for H 1 Add the points in the boxes above	1

Rating of Site Potential If score is: ☐ **15-18 = H** ☐ **7-14 = M** ☑ **0-6 = L** *Record the rating on the first page*

H 2.0. Does the landscape have the potential to support the habitat functions of the site?

H 2.1. Accessible habitat (include *only habitat that directly abuts wetland unit*). *Calculate:* % undisturbed habitat 12.90 + [(% moderate and low intensity land uses)/2] 11.20 = 24.10 % If total accessible habitat is: ☐ > 1/3 (33.3%) of 1 km Polygon points = 3 ☑ 20-33% of 1 km Polygon points = 2 ☐ 10-19% of 1 km Polygon points = 1 ☐ < 10% of 1 km Polygon points = 0	2
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. *Calculate:* % undisturbed habitat 21.60 + [(% moderate and low intensity land uses)/2] 25.20 = 46.80 % ☐ Undisturbed habitat > 50% of Polygon points = 3 ☐ Undisturbed habitat 10-50% and in 1-3 patches points = 2 ☑ Undisturbed habitat 10-50% and > 3 patches points = 1 ☐ Undisturbed habitat < 10% of 1 km Polygon points = 0	1
H 2.3. Land use intensity in 1 km Polygon: If ☐ > 50% of 1 km Polygon is high intensity land use points = (- 2) ☑ ≤ 50% of 1 km Polygon is high intensity points = 0	0
Total for H 2 Add the points in the boxes above	3

Rating of Landscape Potential If score is: ☐ **4-6 = H** ☑ **1-3 = M** ☐ **< 1 = L** *Record the rating on the first page*

H 3.0. Is the habitat provided by the site valuable to society?

H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? *Choose only the highest score that applies to the wetland being rated.* Site meets ANY of the following criteria: ☑ points = 2 ☑ It has 3 or more priority habitats within 100 m (see next page) ☐ It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists) ☐ It is mapped as a location for an individual WDFW priority species ☐ It is a Wetland of High Conservation Value as determined by the Department of Natural Resources ☐ It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan ☐ Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1 ☐ Site does not meet any of the criteria above points = 0	2

Rating of Value If score is: ☑ **2 = H** ☐ **1 = M** ☐ **0 = L** *Record the rating on the first page*

Wetland name or number 1

WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdfw.wa.gov/publications/00165/wdfw00165.pdf or access the list from here: http://wdfw.wa.gov/conservation/phs/list/)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: ***NOTE:*** *This question is independent of the land use between the wetland unit and the priority habitat.*

— **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).

✓ **Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).

Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock.

Old-growth/Mature forests: Old-growth west of Cascade crest – Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.

— **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 – see web link above*).

✓ **Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.

— **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 – see web link above*).

✓ **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.

— **Nearshore**: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page).*

Caves: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.

Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.

Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.

✓ **Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

Wetland name or number 1

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type *Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.*	**Category**
SC 1.0. Estuarine wetlands Does the wetland meet the following criteria for Estuarine wetlands? ☐ The dominant water regime is tidal, ☐ Vegetated, and ☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to **SC 1.1** ☑ No= **Not an estuarine wetland**	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? ☐ Yes = **Category I** ☐ No - Go to **SC 1.2**	**Cat. I** ☐
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (If non-native species are *Spartina*, see page 25) ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. ☐ The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. ☐ Yes = **Category I** ☐ No = **Category II**	**Cat. I** ☐ **Cat. II** ☐
SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? ☑ Yes – Go to **SC 2.2** ☐ No – Go to **SC 2.3** SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? ☐ Yes = **Category I** ☑ No = **Not a WHCV** SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf ☐ Yes **– Contact WNHP/WDNR and go to SC 2.4** ☐ No **= Not a WHCV** SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? ☐ Yes = **Category I** ☐ No = **Not a WHCV**	**Cat. I** ☐
SC 3.0. Bogs Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? *Use the key below.* ***If you answer YES you will still need to rate the wetland based on its functions.*** SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile? ☐ Yes – Go to **SC 3.3** ☑ No – Go to **SC 3.2** SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? ☐ Yes – Go to **SC 3.3** ☑ No = **Is not a bog** SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? ☐ Yes = **Is a Category I bog** ☐ No – Go to **SC 3.4** **NOTE:** If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog. SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy? ☐ Yes = **Is a Category I bog** ☐ No = **Is not a bog**	**Cat. I** ☐

Wetland name or number 1

SC 4.0. Forested Wetlands

Does the wetland have at least 1 contiguous acre of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? ***If you answer YES you will still need to rate the wetland based on its functions.***

☐ **Old-growth forests** (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more.

☐ **Mature forests** (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm).

☐ Yes = **Category I** ☑ No = **Not a forested wetland for this section**

Cat. I ☐

SC 5.0. Wetlands in Coastal Lagoons

Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?

☐ The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks

☐ The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon *(needs to be measured near the bottom)*

☐ Yes – Go to **SC 5.1** ☑ No = **Not a wetland in a coastal lagoon**

Cat. I ☐

SC 5.1. Does the wetland meet all of the following three conditions?

☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100).

☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland.

☐ The wetland is larger than $^{1}/_{10}$ ac (4350 ft^2)

☐ Yes = **Category I** ☑ No = **Category II**

Cat. II ☐

SC 6.0. Interdunal Wetlands

Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? ***If you answer yes you will still need to rate the wetland based on its habitat functions.***

In practical terms that means the following geographic areas:

☐ Long Beach Peninsula: Lands west of SR 103

☐ Grayland-Westport: Lands west of SR 105

☐ Ocean Shores-Copalis: Lands west of SR 115 and SR 109

☐ Yes – Go to **SC 6.1** ☑ No = **not an interdunal wetland for rating**

Cat I ☐

SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? ☐ Yes = **Category I** ☐ No – Go to **SC 6.2**

Cat. II ☐

SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?

☐ Yes = **Category II** ☐ No – Go to **SC 6.3**

Cat. III ☐

SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac?

☐ Yes = **Category III** ☐ No = **Category IV**

Cat. IV ☐

Category of wetland based on Special Characteristics

If you answered No for all types, enter "Not Applicable" on Summary Form

NA



Figure 1: Wetland 1

Cowardin Class

Scale: 1:600

0 10 20 40 60 80

Feet

N

Ordinary High Water Mark (OHWM)

Wetland Assessment Unit

Cowardin

Emergent



Figure 2: Wetland 1
Hydroperiods

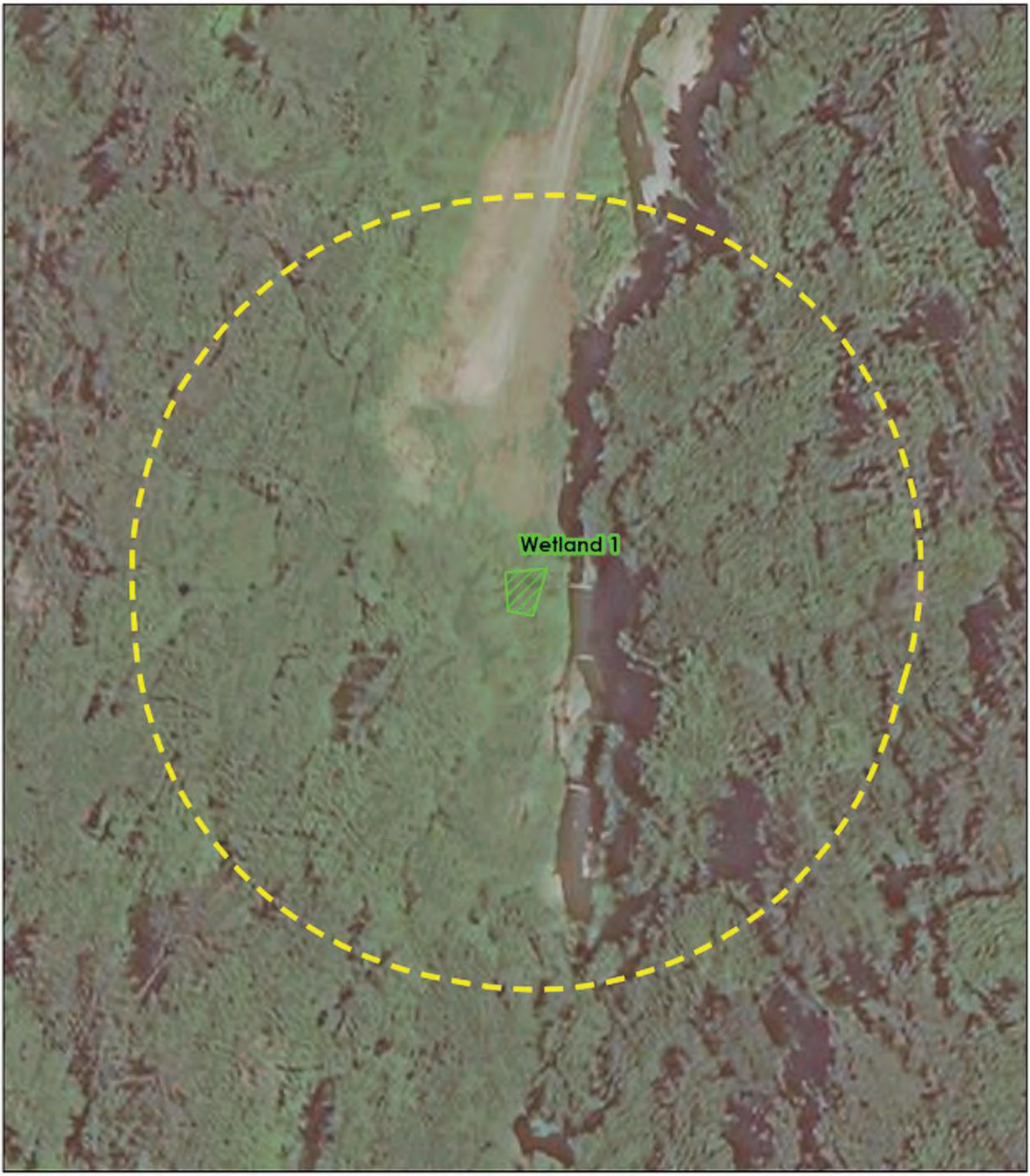


Figure 3: Wetland 1
150 Foot Buffer

150 Foot Buffer
Wetland Assessment Unit

Scale: 1:600
0 10 20 40 60 80
Feet
N

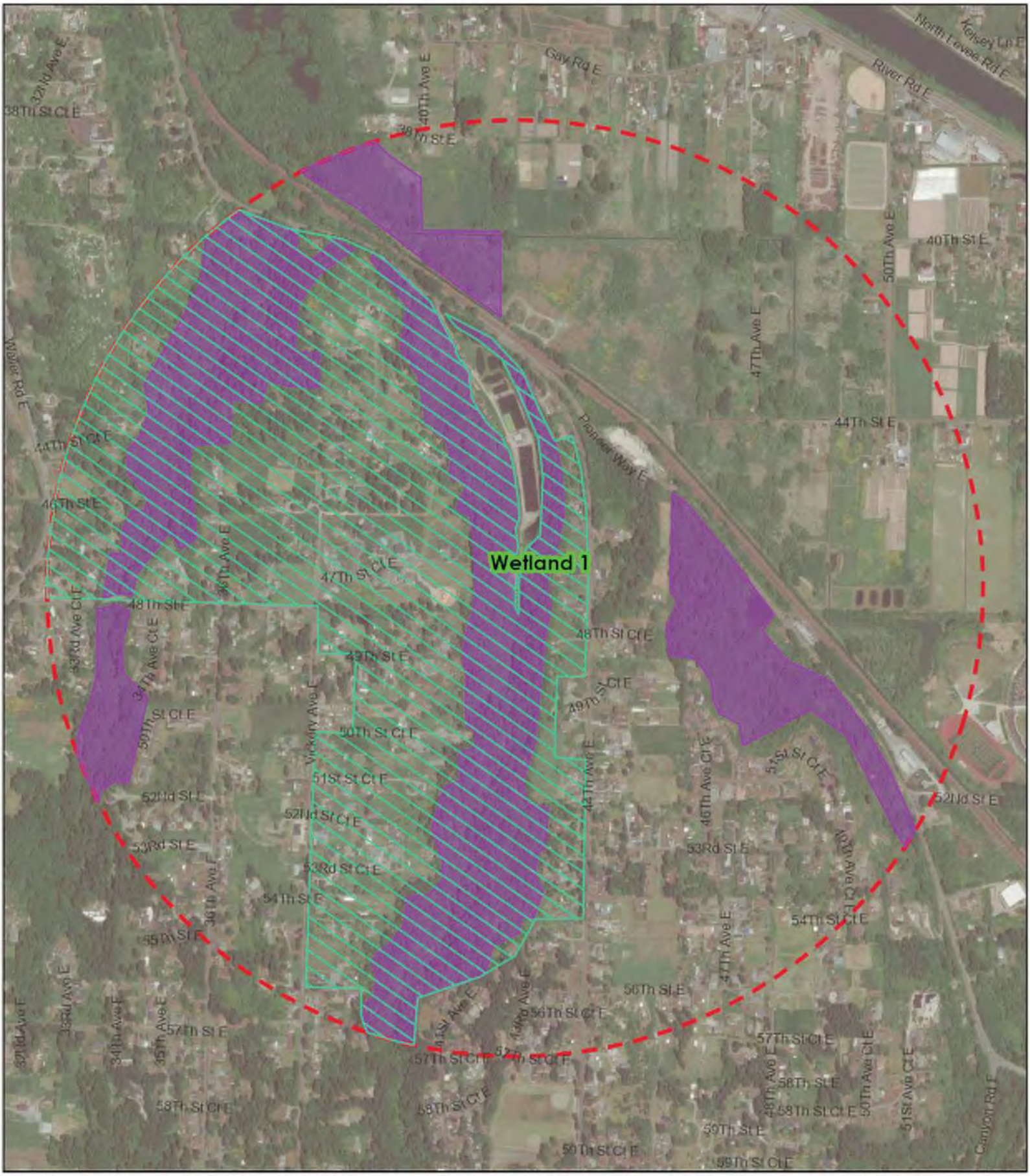


Figure 4: Wetland 1

1 Kilometer Buffer

Wetland Assessment Unit
Accessible Habitat
Undisturbed Habitat
1 Kilometer Buffer

Scale: 1:10,500

0 215 430 860 1,290 1,720

Feet

N

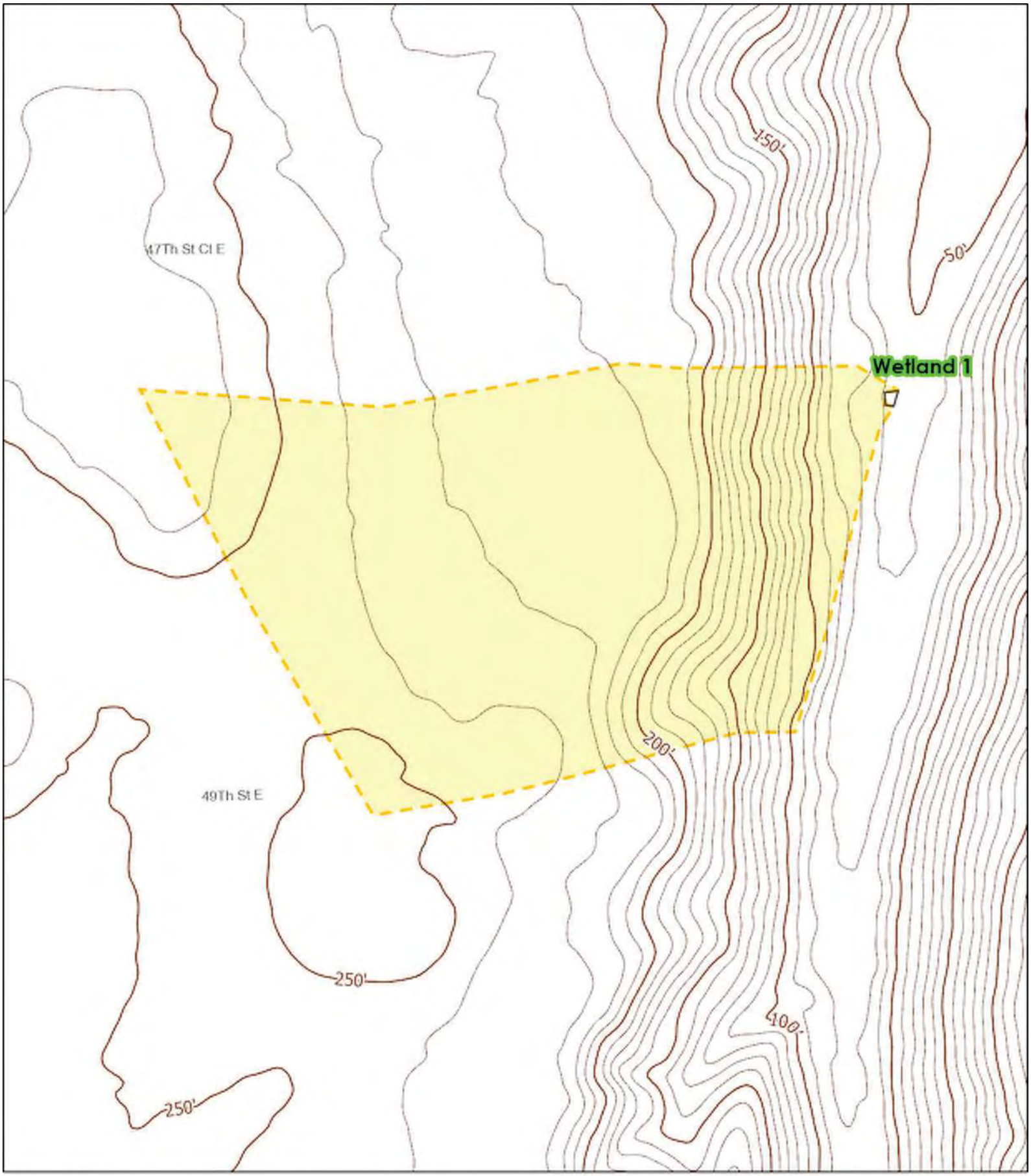


Figure 5: Wetland 1
Contributing Basin

Contributing Basin
Contour (10 Ft Interval)
Contour (50 Ft Interval)
Wetland Assessment Unit

Scale: 1:1,800
0 35 70 140 210 280
Feet
N

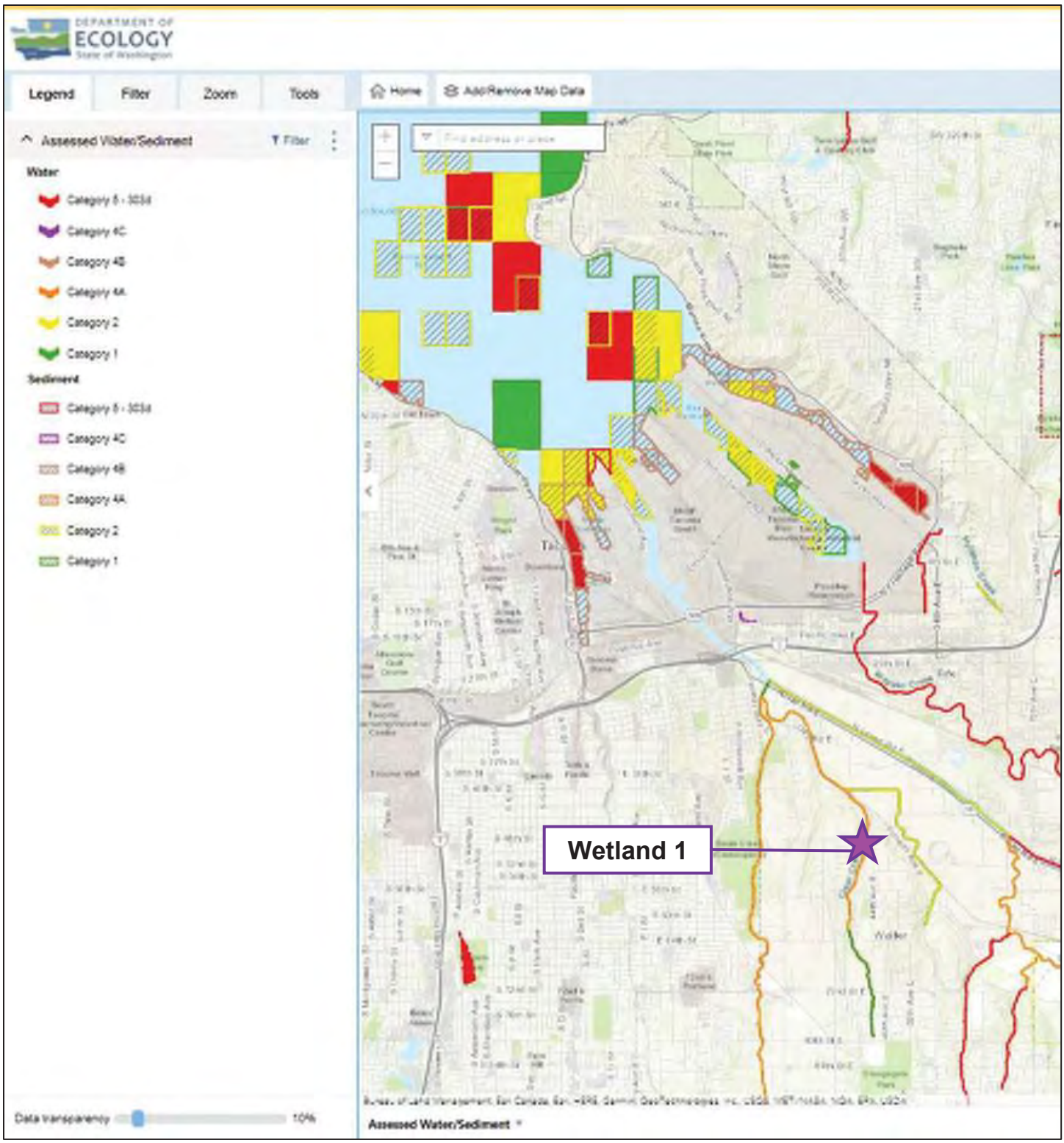


Figure 6: Wetland 1
303(d) Listed Waters

Note: Wetland drains to Clear Creek, which flows into the Puyallup River and eventually into Commencement Bay. Areas of Commencement Bay are mapped as 303(d) listed waters.

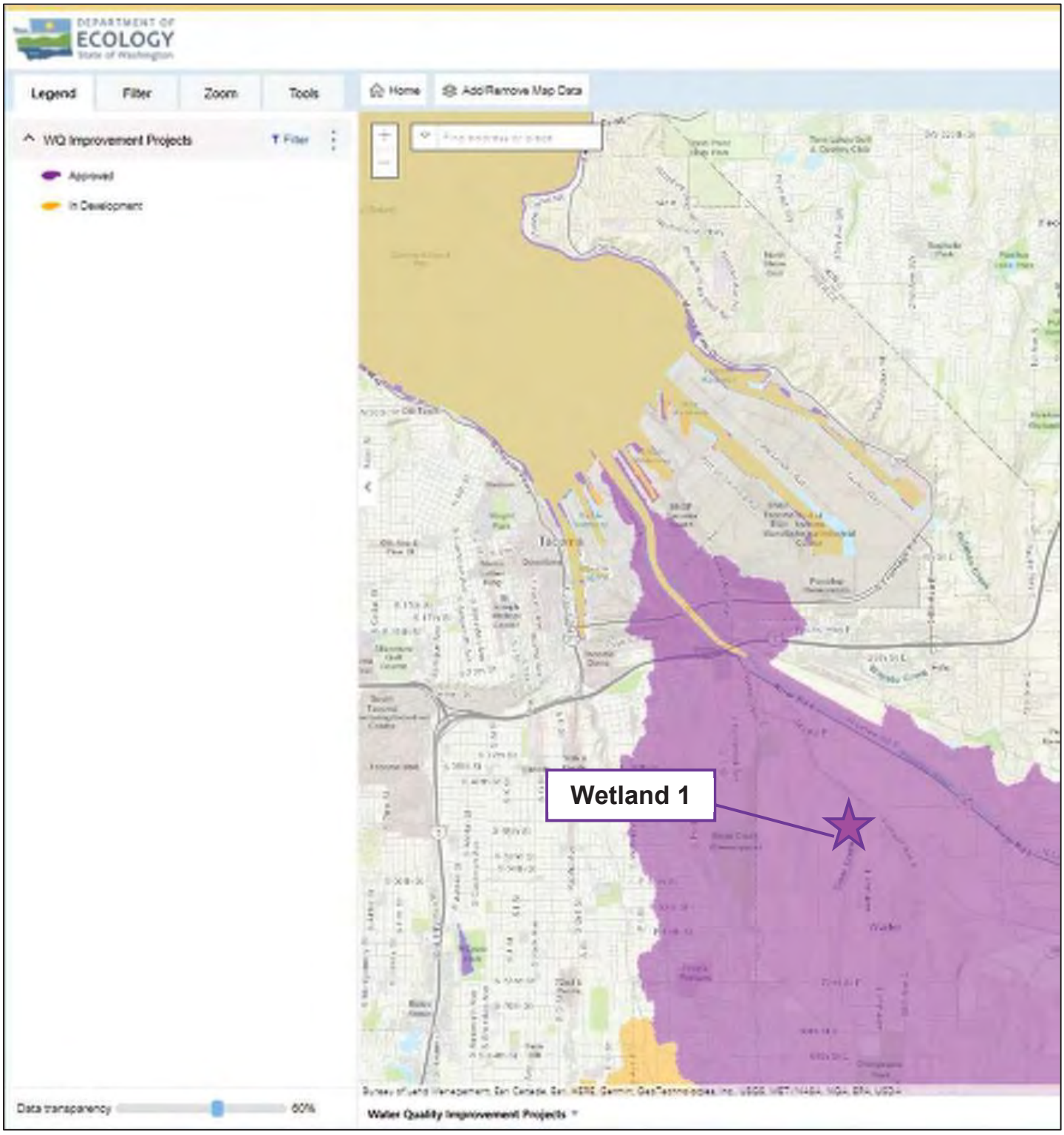


Figure 7: Wetland 1

Water Quality Improvement Projects

Note: The Project area is mapped within the Puyallup River Bacteria TMDL and Puyallup River Multiparameter TMDL.

Wetland name or number Wetland 1

WETLAND RATING FORM – WESTERN WASHINGTON
Version 2 - Updated July 2006 to increase accuracy and reproducibility among users
Updated Oct 2008 with the new WDFW definitions for priority habitats

Name of wetland (if known): Wetland 1 Date of site visit: 2/14/22

Rated by M. Dalzell, L. Dougherty Trained by Ecology? Yes X No___ Date of training 10/2018

SEC: 13 TWNSHP: 20N RNGE: 03E Is S/T/R in Appendix D? Yes___ No X

Map of wetland unit: Figure ____ Estimated size _____

SUMMARY OF RATING

Category based on FUNCTIONS provided by wetland

I___ II___ III___ IV X

Category I = Score >=70
Category II = Score 51-69
Category III = Score 30-50
Category IV = Score < 30

Score for Water Quality Functions	7
Score for Hydrologic Functions	4
Score for Habitat Functions	16
TOTAL score for Functions	27

Category based on SPECIAL CHARACTERISTICS of wetland

I___ II___ Does not Apply X

Final Category (choose the "highest" category from above) IV

Summary of basic information about the wetland unit

Wetland Unit has Special Characteristics		Wetland HGM Class used for Rating	
Estuarine		**Depressional**	X
Natural Heritage Wetland		**Riverine**	
Bog		**Lake-fringe**	
Mature Forest		**Slope**	
Old Growth Forest		**Flats**	
Coastal Lagoon		**Freshwater Tidal**	
Interdunal			
None of the above	X	Check if unit has multiple HGM classes present	

Wetland name or number Wetland 1

Does the wetland unit being rated meet any of the criteria below?

If you answer YES to any of the questions below you will need to protect the wetland according to the regulations regarding the special characteristics found in the wetland.

Check List for Wetlands That May Need Additional Protection (in addition to the protection recommended for its category)	YES	NO
SP1. *Has the wetland unit been documented as a habitat for any Federally listed Threatened or Endangered **animal or plant** species (T/E species)?* For the purposes of this rating system, "documented" means the wetland is on the appropriate state or federal database.		X
SP2. *Has the wetland unit been documented as habitat for any State listed Threatened or Endangered **animal** species?* For the purposes of this rating system, "documented" means the wetland is on the appropriate state database. Note: Wetlands with State listed plant species are categorized as Category I Natural Heritage Wetlands (see p. 19 of data form).		X
SP3. *Does the wetland unit contain individuals of Priority species listed by the WDFW for the state?*		X
SP4. *Does the wetland unit have a local significance in addition to its functions*? For example, the wetland has been identified in the Shoreline Master Program, the Critical Areas Ordinance, or in a local management plan as having special significance.		X

To complete the next part of the data sheet you will need to determine the Hydrogeomorphic Class of the wetland being rated.

The hydrogeomorphic classification groups wetlands into those that function in similar ways. This simplifies the questions needed to answer how well the wetland functions. The Hydrogeomorphic Class of a wetland can be determined using the key below. See p. 24 for more detailed instructions on classifying wetlands.

Wetland name or number Wetland 1

Classification of Wetland Units in Western Washington

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the entire unit usually controlled by tides (i.e. except during floods)?
NO – go to 2 **YES** – the wetland class is **Tidal Fringe**

If yes, is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)? **YES – Freshwater Tidal Fringe NO – Saltwater Tidal Fringe (Estuarine)**

*If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is rated as an **Estuarine** wetland.* Wetlands that were called estuarine in the first and second editions of the rating system are called Salt Water Tidal Fringe in the Hydrogeomorphic Classification. Estuarine wetlands were categorized separately in the earlier editions, and this separation is being kept in this revision. To maintain consistency between editions, the term "Estuarine" wetland is kept. Please note, however, that the characteristics that define Category I and II estuarine wetlands have changed (see p.).

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.
NO – go to 3 **YES** – The wetland class is **Flats**

If your wetland can be classified as a "Flats" wetland, use the form for **Depressional** wetlands.

3. Does the entire wetland unit **meet both** of the following criteria?
___The vegetated part of the wetland is on the shores of a body of permanent open water (without any vegetation on the surface) at least 20 acres (8 ha) in size;
___At least 30% of the open water area is deeper than 6.6 ft (2 m)?
NO – go to 4 **YES –** The wetland class is **Lake-fringe (Lacustrine Fringe)**

4. Does the entire wetland unit **meet all** of the following criteria?
____The wetland is on a slope (*slope can be very gradual*),
____The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks.
____The water leaves the wetland **without being impounded**?
NOTE: *Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3ft diameter and less than 1 foot deep).*
NO - go to 5 **YES –** The wetland class is **Slope**

5. Does the entire wetland unit **meet all** of the following criteria?

____ The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river

____ The overbank flooding occurs at least once every two years.

NOTE: The riverine unit can contain depressions that are filled with water when the river is not flooding.

NO - go to 6 **YES** – The wetland class is **Riverine**

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year. *This means that any outlet, if present, is higher than the interior of the wetland.*

NO – go to 7 **YES –** The wetland class is **Depressional**

7. Is the entire wetland unit located ~~in a very flat area with~~ no obvious depression and no overbank flooding. The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8 **YES** – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM clases. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within your wetland. NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM Classes within the wetland unit being rated	*HGM Class to Use in Rating*
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake-fringe	Lake-fringe
Depressional + Riverine along stream within boundary	Depressional
Depressional + Lake-fringe	Depressional
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE under wetlands with special characteristics

If you are unable still to determine which of the above criteria apply to your wetland, or if you have more than 2 HGM classes within a wetland boundary, classify the wetland as **Depressional** for the rating.

Wetland name or number Wetland 1

D	**Depressional and Flats Wetlands** **WATER QUALITY FUNCTIONS** - Indicators that the wetland unit functions to improve water quality	**Points** (only 1 score per box)
D	**D 1. Does the wetland unit have the potential to improve water quality?**	*(see p.38)*
D	D 1.1 Characteristics of surface water flows out of the wetland: Unit is a depression with no surface water leaving it (no outlet) points = 3 X Unit has an intermittently flowing, OR highly constricted permanently flowing outlet points = 2 Unit has an unconstricted, or slightly constricted, surface outlet (*permanently flowing*) points = 1 Unit is a "flat" depression (Q. 7 on key), or in the Flats class, with permanent surface outflow **and no obvious natural outlet** and/or outlet is a man-made ditch points = 1 (*If ditch is not permanently flowing treat unit as "intermittently flowing"*) Provide photo or drawing	**Figure ___** 2
D	S 1.2 The soil 2 inches below the surface (or duff layer) is clay or organic *(use NRCS definitions)* YES points = 4 X NO points = 0	0
D	D 1.3 Characteristics of persistent vegetation (emergent, shrub, and/or forest Cowardin class) Wetland has persistent, ungrazed, vegetation > = 95% of area points = 5 Wetland has persistent, ungrazed, vegetation > = 1/2 of area points = 3 X Wetland has persistent, ungrazed vegetation > = 1/10 of area points = 1 Wetland has persistent, ungrazed vegetation <1/10 of area points = 0 Map of Cowardin vegetation classes	**Figure ___** 1
D	D1.4 Characteristics of seasonal ponding or inundation. *This is the area of the wetland unit that is ponded for at least 2 months, but dries out sometime during the year. Do not count the area that is permanently ponded. Estimate area as the average condition 5 out of 10 yrs.* X Area seasonally ponded is > ½ total area of wetland points = 4 Area seasonally ponded is > ¼ total area of wetland points = 2 Area seasonally ponded is < ¼ total area of wetland points = 0 Map of Hydroperiods	**Figure ___** 4
D	**Total for D 1** *Add the points in the boxes above*	7
D	**D 2. Does the wetland unit have the opportunity to improve water quality?** Answer YES if you know or believe there are pollutants in groundwater or surface water coming into the wetland that would otherwise reduce water quality in streams, lakes or groundwater downgradient from the wetland. *Note which of the following conditions provide the sources of pollutants. A unit may have pollutants coming from several sources, but any single source would qualify as opportunity.* — Grazing in the wetland or within 150 ft — Untreated stormwater discharges to wetland — Tilled fields or orchards within 150 ft of wetland — A stream or culvert discharges into wetland that drains developed areas, residential areas, farmed fields, roads, or clear-cut logging — Residential, urban areas, golf courses are within 150 ft of wetland — Wetland is fed by groundwater high in phosphorus or nitrogen — Other_____ **YES** multiplier is **2** **NO** multiplier is **1**	*(see p. 44)* multiplier 1
D	**TOTAL - Water Quality Functions** Multiply the score from D1 by D2 ***Add score to table on p. 1***	7

Wetland name or number Wetland 1

D	**Depressional and Flats Wetlands** HYDROLOGIC FUNCTIONS - Indicators that the wetland unit functions to reduce flooding and stream degradation	**Points** (only 1 score per box)
	D 3. Does the wetland unit have the potential to reduce flooding and erosion?	***(see p.46)***
D	D 3.1 Characteristics of surface water flows out of the wetland unit Unit is a depression with no surface water leaving it (no outlet) points = 4 X Unit has an intermittently flowing, OR highly constricted permanently flowing outlet points = 2 Unit is a "flat" depression (Q. 7 on key), or in the Flats class, with permanent surface outflow **and no obvious natural outlet** and/or outlet is a man-made ditch points = 1 (*If ditch is not permanently flowing treat unit as "intermittently flowing"*) Unit has an unconstricted, or slightly constricted, surface outlet (*permanently flowing*) points = 0	2
D	D 3.2 Depth of storage during wet periods *Estimate the height of ponding above the bottom of the outlet. For units with no outlet measure from the surface of permanent water or deepest part (if dry).* Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7 The wetland is a "headwater" wetland" points = 5 Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5 Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3 Unit is flat (yes to Q. 2 or Q. 7 on key) but has small depressions on the surface that trap water points = 1 X Marks of ponding less than 0.5 ft points = 0	0
D	D 3.3 Contribution of wetland unit to storage in the watershed *Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself.* The area of the basin is less than 10 times the area of unit points = 5 The area of the basin is 10 to 100 times the area of the unit points = 3 X The area of the basin is more than 100 times the area of the unit points = 0 Entire unit is in the FLATS class points = 5	0
D	**Total for D 3** *Add the points in the boxes above*	2
D	**D 4. Does the wetland unit have the opportunity to reduce flooding and erosion?** Answer YES if the unit is in a location in the watershed where the flood storage, or reduction in water velocity, it provides helps protect downstream property and aquatic resources from flooding or excessive and/or erosive flows. Answer NO if the water coming into the wetland is controlled by a structure such as flood gate, tide gate, flap valve, reservoir etc. OR you estimate that more than 90% of the water in the wetland is from groundwater in areas where damaging groundwater flooding does not occur. *Note which of the following indicators of opportunity apply.* — Wetland is in a headwater of a river or stream that has flooding problems X Wetland drains to a river or stream that has flooding problems — Wetland has no outlet and impounds surface runoff water that might otherwise flow into a river or stream that has flooding problems — Other_____ **YES** multiplier is **2** **NO** multiplier is **1**	***(see p. 49)*** multiplier 2
D	**TOTAL - Hydrologic Functions** Multiply the score from D 3 by D 4 ***Add score to table on p. 1***	4

Wetland name or number Wetland 1

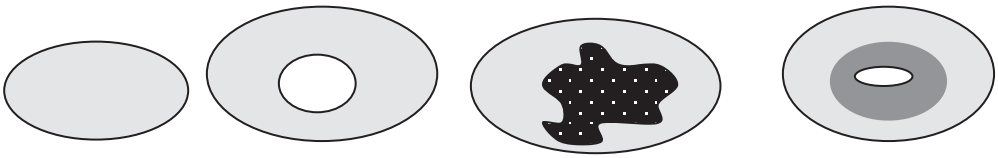
These questions apply to wetlands of all HGM classes. HABITAT FUNCTIONS - Indicators that unit functions to provide important habitat	**Points** (only 1 score per box)
H 1. Does the wetland unit have the <u>potential</u> to provide habitat for many species?	
H 1.1 <u>Vegetation structure</u> ***(see p. 72)***	**Figure ___**
Check the types of vegetation classes present (as defined by Cowardin)- Size threshold for each class is ¼ acre or more than 10% of the area if unit is smaller than 2.5 acres. ____Aquatic bed _X_Emergent plants ____Scrub/shrub (areas where shrubs have >30% cover) ____Forested (areas where trees have >30% cover) *If the unit has a forested class check if:* ____The forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the forested polygon *Add the number of vegetation structures that qualify. If you have:* 4 structures or more points = 4 3 structures points = 2 2 structures points = 1 1 structure points = 0 Map of Cowardin vegetation classes	0
H 1.2. <u>Hydroperiods</u> ***(see p. 73)***	**Figure ___**
Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ acre to count. (see text for descriptions of hydroperiods) ____Permanently flooded or inundated — 4 or more types present points = 3 _X_Seasonally flooded or inundated — 3 types present points = 2 ____Occasionally flooded or inundated — 2 types present point = 1 ____Saturated only — 1 type present points = 0 ____ Permanently flowing stream or river in, or adjacent to, the wetland ____ Seasonally flowing stream in, or adjacent to, the wetland ____ ***Lake-fringe wetland* = 2 points** ____***Freshwater tidal wetland* = 2 points** Map of hydroperiods	0
H 1.3. <u>Richness of Plant Species</u> ***(see p. 75)*** Count the number of plant species in the wetland that cover at least 10 ft^2. (*different patches of the same species can be combined to meet the size threshold)* *You do not have to name the species.* *Do not include Eurasian Milfoil, reed canarygrass, purple loosestrife, Canadian Thistle* If you counted: > 19 species points = 2 *List species below if you want to:* 5 - 19 species points = 1 < 5 species points = 0	1

Total for page 1

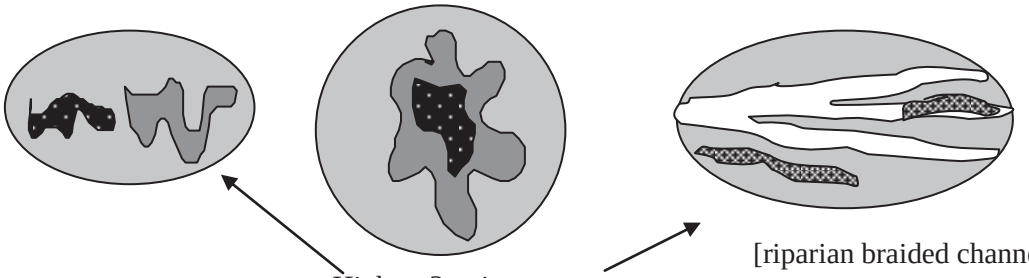
H 1.4. Interspersion of habitats ***(see p. 76)***

Decide from the diagrams below whether interspersion between Cowardin vegetation classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, medium, low, or none.

Figure ___



None = 0 points Low = 1 point Moderate = 2 points



High = 3 points [riparian braided channels]

NOTE: If you have four or more classes or three vegetation classes and open water the rating is always "high".

0

H 1.5. Special Habitat Features: ***(see p. 77)***

Check the habitat features that are present in the wetland. The number of checks is the number of points you put into the next column.

____Large, downed, woody debris within the wetland (>4in. diameter and 6 ft long).

____Standing snags (diameter at the bottom > 4 inches) in the wetland

____Undercut banks are present for at least 6.6 ft (2m) and/or overhanging vegetation extends at least 3.3 ft (1m) over a stream (or ditch) in, or contiguous with the unit, for at least 33 ft (10m)

____Stable steep banks of fine material that might be used by beaver or muskrat for denning (>30degree slope) OR signs of recent beaver activity are present *(cut shrubs or trees that have not yet turned grey/brown)*

____At least ¼ acre of thin-stemmed persistent vegetation or woody branches are present in areas that are permanently or seasonally inundated.*(structures for egg-laying by amphibians)*

____ Invasive plants cover less than 25% of the wetland area in each stratum of plants

NOTE: The 20% stated in early printings of the manual on page 78 is an error.

0

H 1. TOTAL Score - potential for providing habitat

Add the scores from H1.1, H1.2, H1.3, H1.4, H1.5

1

Comments

Wetland name or number Wetland 1

H 2. Does the wetland unit have the opportunity to provide habitat for many species?	
H 2.1 Buffers ***(see p. 80)*** *Choose the description that best represents condition of buffer of wetland unit. The highest scoring criterion that applies to the wetland is to be used in the rating. See text for definition of "undisturbed."* — 100 m (330ft) of relatively undisturbed vegetated areas, rocky areas, or open water >95% of circumference. No structures are within the undisturbed part of buffer**.** (relatively undisturbed also means no-grazing, no landscaping, no daily human use) **Points = 5** — 100 m (330 ft) of relatively undisturbed vegetated areas, rocky areas, or open water > 50% circumference. **Points = 4** X 50 m (170ft) of relatively undisturbed vegetated areas, rocky areas, or open water >95% circumference. **Points = 4** — 100 m (330ft) of relatively undisturbed vegetated areas, rocky areas, or open water > 25% circumference, . **Points = 3** — 50 m (170ft) of relatively undisturbed vegetated areas, rocky areas, or open water for > 50% circumference. **Points = 3** **If buffer does not meet any of the criteria above** — No paved areas (except paved trails) or buildings within 25 m (80ft) of wetland > 95% circumference. Light to moderate grazing, or lawns are OK. **Points = 2** — No paved areas or buildings within 50m of wetland for >50% circumference. Light to moderate grazing, or lawns are OK. **Points = 2** — Heavy grazing in buffer. **Points = 1** — Vegetated buffers are <2m wide (6.6ft) for more than 95% of the circumference (e.g. tilled fields, paving, basalt bedrock extend to edge of wetland **Points = 0**. — Buffer does not meet any of the criteria above. **Points = 1** Aerial photo showing buffers	**Figure ___** 4
H 2.2 Corridors and Connections ***(see p. 81)*** H 2.2.1 Is the wetland part of a relatively undisturbed and unbroken vegetated corridor (either riparian or upland) that is at least 150 ft wide, has at least 30% cover of shrubs, forest or native undisturbed prairie, that connects to estuaries, other wetlands or undisturbed uplands that are at least 250 acres in size? (*dams in riparian corridors, heavily used gravel roads, paved roads, are considered breaks in the corridor*). YES = **4 points** (*go to H 2.3*) NO = go to H 2.2.2 H 2.2.2 Is the wetland part of a relatively undisturbed and unbroken vegetated corridor (either riparian or upland) that is at least 50ft wide, has at least 30% cover of shrubs or forest, and connects to estuaries, other wetlands or undisturbed uplands that are at least 25 acres in size? **OR** a ~~**Lake fringe**~~ wetland, if it does not have an undisturbed corridor as in the question above? YES = **2 points** (*go to H 2.3*) NO = H 2.2.3 H 2.2.3 Is the wetland: within 5 mi (8km) of a brackish or salt water estuary OR within 3 mi of a large field or pasture (>40 acres) OR within 1 mi of a lake greater than 20 acres? YES = **1 point** NO = **0 points**	2

Total for page 6

H 2.3 Near or adjacent to other priority habitats listed by WDFW ***(see new and complete descriptions of WDFW priority habitats, and the counties in which they can be found, in the PHS report http://wdfw.wa.gov/hab/phslist.htm)*** Which of the following priority habitats are within 330ft (100m) of the wetland unit? *NOTE: the connections do not have to be relatively undisturbed.* ____**Aspen Stands:** Pure or mixed stands of aspen greater than 0.4 ha (1 acre). _X_**Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report p. 152*). ____**Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock. ____**Old-growth/Mature forests:** (Old-growth west of Cascade crest) Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 20 trees/ha (8 trees/acre) > 81 cm (32 in) dbh or > 200 years of age. **(**Mature forests) Stands with average diameters exceeding 53 cm (21 in) dbh; crown cover may be less that 100%; crown cover may be less that 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80 - 200 years old west of the Cascade crest. ____**Oregon white Oak:** Woodlands Stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158*). _X_**Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. ____**Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161*). X ____**Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources. ____ **Nearshore**: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report: pp. 167-169 and glossary in Appendix A).* ____**Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human. ____**Cliffs:** Greater than 7.6 m (25 ft) high and occurring below 5000 ft. ____**Talus:** Homogenous areas of rock rubble ranging in average size 0.15 - 2.0 m (0.5 - 6.5 ft), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. _X_**Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 51 cm (20 in) in western Washington and are > 2 m (6.5 ft) in height. Priority logs are > 30 cm (12 in) in diameter at the largest end, and > 6 m (20 ft) long. If wetland has **3 or more** priority habitats **= 4 points** If wetland has **2** priority habitats = **3 points** If wetland has **1** priority habitat **= 1 point** No habitats = 0 points *Note: All vegetated wetlands are by definition a priority habitat but are not included in this list. Nearby wetlands are addressed in question H 2.4)*	4

H 2.4 Wetland Landscape *(choose the **one** description of the landscape around the wetland that best fits*) ***(see p. 84)***	
X There are at least 3 other wetlands within ½ mile, and the connections between them are relatively undisturbed (light grazing between wetlands OK, as is lake shore with some boating, but connections should NOT be bisected by paved roads, fill, fields, or other development. points = 5	
The wetland is Lake-fringe on a lake with little disturbance and there are 3 other lake-fringe wetlands within ½ mile points = 5	5
There are at least 3 other wetlands within ½ mile, BUT the connections between them are disturbed points = 3	
The wetland is Lake-fringe on a lake **with** disturbance and there are 3 other lake-fringe wetland within ½ mile points = 3	
There is at least 1 wetland within ½ mile. points = 2	
There are no wetlands within ½ mile. points = 0	
H 2. TOTAL Score - opportunity for providing habitat *Add the scores from H2.1,H2.2, H2.3, H2.4*	15
TOTAL for H 1 from page 14	1
Total Score for Habitat Functions – add the points for H 1, H 2 and record the result on p. 1	16

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Please determine if the wetland meets the attributes described below and circle the appropriate answers and Category.

Wetland Type *Check off any criteria that apply to the wetland. Circle the Category when the appropriate criteria are met.*	**Category**
SC 1.0 Estuarine wetlands *(see p. 86)* Does the wetland unit meet the following criteria for Estuarine wetlands? — The dominant water regime is tidal, — Vegetated, and — With a salinity greater than 0.5 ppt. YES = Go to SC 1.1 NO X	
SC 1.1 Is the wetland unit within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? YES = Category I NO go to SC 1.2	**Cat. I**
SC 1.2 Is the wetland unit at least 1 acre in size and meets at least two of the following three conditions? YES = Category I NO = Category II — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. If the non-native *Spartina* spp. are the only species that cover more than 10% of the wetland, then the wetland should be given a dual rating (I/II). The area of Spartina would be rated a Category II while the relatively undisturbed upper marsh with native species would be a Category I. Do not, however, exclude the area of Spartina in determining the size threshold of 1 acre. — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland has at least 2 of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.	**Cat. I** **Cat. II** **Dual rating** **I/II**

SC 2.0 Natural Heritage Wetlands ***(see p. 87)*** Natural Heritage wetlands have been identified by the Washington Natural Heritage Program/DNR as either high quality undisturbed wetlands or wetlands that support state Threatened, Endangered, or Sensitive plant species. SC 2.1 Is the wetland unit being rated in a Section/Township/Range that contains a Natural Heritage wetland? *(this question is used to screen out most sites before you need to contact WNHP/DNR)* S/T/R information from Appendix D X or accessed from WNHP/DNR web site ___ YES____ – contact WNHP/DNR (see p. 79) and go to SC 2.2 NO X SC 2.2 Has DNR identified the wetland as a high quality undisturbed wetland or as or as a site with state threatened or endangered plant species? YES = Category I NO ____not a Heritage Wetland	**Cat. I**
SC 3.0 Bogs ***(see p. 87)*** Does the wetland unit (**or any part of the unit**) meet both the criteria for soils and vegetation in bogs? *Use the key below to identify if the wetland is a bog.* ***If you answer yes you will still need to rate the wetland based on its functions.*** 1. Does the unit have organic soil horizons (i.e. layers of organic soil), either peats or mucks, that compose 16 inches or more of the first 32 inches of the soil profile? (See Appendix B for a field key to identify organic soils)? Yes - go to Q. 3 No - go to Q. 2 2. Does the unit have organic soils, either peats or mucks that are less than 16 inches deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on a lake or pond? Yes - go to Q. 3 No - Is not a bog for purpose of rating 3. Does the unit have more than 70% cover of mosses at ground level, AND other plants, if present, consist of the "bog" species listed in Table 3 as a significant component of the vegetation (more than 30% of the total shrub and herbaceous cover consists of species in Table 3)? Yes – Is a bog for purpose of rating No - go to Q. 4 NOTE: If you are uncertain about the extent of mosses in the understory you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16" deep. If the pH is less than 5.0 and the "bog" plant species in Table 3 are present, the wetland is a bog. *1.* Is the unit forested (> 30% cover) with sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Englemann's spruce, or western white pine, WITH any of the species (or combination of species) on the bog species plant list in Table 3 as a significant component of the ground cover *(> 30% coverage of the total shrub/herbaceous cover)?* 2. YES = Category I No___ Is not a bog for purpose of rating	**Cat. I**

SC 4.0 Forested Wetlands *(see p. 90)* Does the wetland unit have at least 1 acre of forest that meet one of these criteria for the Department of Fish and Wildlife's forests as priority habitats? *If you answer yes you will still need to rate the wetland based on its functions.* — **Old-growth forests**: (west of Cascade crest) Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/acre (20 trees/hectare) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 inches (81 cm) or more. NOTE: The criterion for dbh is based on measurements for upland forests. Two-hundred year old trees in wetlands will often have a smaller dbh because their growth rates are often slower. The DFW criterion is and "OR" so old-growth forests do not necessarily have to have trees of this diameter. — **Mature forests**: (west of the Cascade Crest) Stands where the largest trees are 80 – 200 years old OR have average diameters (dbh) exceeding 21 inches (53cm); crown cover may be less that 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth. YES = Category I NO X not a forested wetland with special characteristics	**Cat. I**
SC 5.0 Wetlands in Coastal Lagoons *(see p. 91)* Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? — The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the wetland is located contains surface water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon *(needs to be measured near the bottom)* YES = Go to SC 5.1 NO X not a wetland in a coastal lagoon SC 5.1 Does the wetland meets all of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of invasive plant species (see list of invasive species on p. 74). — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland is larger than 1/10 acre (4350 square feet) YES = Category I NO = Category II	**Cat. I** **Cat. II**

SC 6.0 Interdunal Wetlands ***(see p. 93)*** Is the wetland unit west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? YES - go to SC 6.1 NO X not an interdunal wetland for rating ***If you answer yes you will still need to rate the wetland based on its functions.*** In practical terms that means the following geographic areas: • Long Beach Peninsula- lands west of SR 103 • Grayland-Westport- lands west of SR 105 • Ocean Shores-Copalis- lands west of SR 115 and SR 109 SC 6.1 Is the wetland one acre or larger, or is it in a mosaic of wetlands that is once acre or larger? YES = Category II NO – go to SC 6.2 SC 6.2 Is the unit between 0.1 and 1 acre, or is it in a mosaic of wetlands that is between 0.1 and 1 acre? YES = Category III	**Cat. II** **Cat. III**
Category of wetland based on Special Characteristics *Choose the "highest" rating if wetland falls into several categories, and record on p. 1.* If you answered NO for all types enter "Not Applicable" on p.1	NA

Wetland name or number 2

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland 2 Date of site visit: 2/14/22

Rated by L. Dougherty, M. Dalzell Trained by Ecology? ☑ Yes ☐ No Date of training 10/18

HGM Class used for rating Slope Wetland has multiple HGM classes? ☐ Y ☑ N

NOTE: **Form is not complete without the figures requested** *(figures can be combined)*.

Source of base aerial photo/map ESRI Online

OVERALL WETLAND CATEGORY III (based on functions ☑ or special characteristics ☐)

1. Category of wetland based on FUNCTIONS

- ☐ **Category I** – Total score = 23 - 27
- ☐ **Category II** – Total score = 20 - 22
- ☑ **Category III** – Total score = 16 - 19
- ☐ **Category IV** – Total score = 9 - 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
	Circle the appropriate ratings			
Site Potential	H ☐ M ☐ L ☑	H ☐ M ☐ L ☑	H ☐ M ☐ L ☑	
Landscape Potential	H ☐ M ☐ L ☑	H ☐ M ☐ L ☑	H ☐ M ☑ L ☐	
Value	H ☑ M ☐ L ☐	H ☑ M ☐ L ☐	H ☑ M ☐ L ☐	TOTAL
Score Based on Ratings	5	5	6	16

Score for each function based on three ratings *(order of ratings is not important)*

9 = H,H,H
8 = H,H,M
7 = H,H,L
7 = H,M,M
6 = H,M,L
6 = M,M,M
5 = H,L,L
5 = M,M,L
4 = M,L,L
3 = L,L,L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I ☐ II ☐
Wetland of High Conservation Value	I ☐
Bog	I ☐
Mature Forest	I ☐
Old Growth Forest	I ☐
Coastal Lagoon	I ☐ II ☐
Interdunal	I ☐ II ☐ III ☐ IV ☐
None of the above	★

Wetland name or number 2

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (*can be added to map of hydroperiods)*	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream *(can be added to another figure)*	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	1
Hydroperiods	H 1.2	2
Plant cover of **dense** trees, shrubs, and herbaceous plants	S 1.3	1
Plant cover of **dense, rigid** trees, shrubs, and herbaceous plants (*can be added to figure above)*	S 4.1	1
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	3
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	4
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	5
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	6

Wetland name or number 2

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the entire unit usually controlled by tides except during floods?

☑ NO – go to 2 ☐ **YES** – the wetland class is **Tidal Fringe** – go to 1.1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

☑ **NO – Saltwater Tidal Fringe (Estuarine)** ☐ **YES – Freshwater Tidal Fringe**

*If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to score functions for estuarine wetlands.*

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

☑ NO – go to 3 ☐ **YES** – The wetland class is **Flats**

*If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.*

3. Does the entire wetland unit **meet all** of the following criteria?

The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;

___At least 30% of the open water area is deeper than 6.6 ft (2 m).

☑ NO – go to 4 ☐ **YES –** The wetland class is **Lake Fringe** (Lacustrine Fringe)

4. Does the entire wetland unit **meet all** of the following criteria?

✓ The wetland is on a slope (*slope can be very gradual*),

✓ The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,

✓ The water leaves the wetland **without being impounded**.

☐ NO – go to 5 ☑ **YES –** The wetland class is **Slope**

NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

5. Does the entire wetland unit **meet all** of the following criteria?

The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

___The overbank flooding occurs at least once every 2 years.

Wetland name or number 2

☐ NO – go to 6 ☐ **YES** – The wetland class is **Riverine**

NOTE: The Riverine unit can contain depressions that are filled with water when the river is not flooding

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? *This means that any outlet, if present, is higher than the interior of the wetland.*

☐ NO – go to 7 ☐ **YES** – The wetland class is **Depressional**

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

☐ NO – go to 8 ☐ **YES** – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated	HGM class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE

*If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.*

Wetland name or number 2

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions to improve water quality

S 1.0. Does the site have the potential to improve water quality?	
S 1.1. Characteristics of the average slope of the wetland: *(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)* ☐ Slope is 1% or less — points = 3 ☐ Slope is > 1%-2% — points = 2 ☐ Slope is > 2%-5% — points = 1 ☑ Slope is greater than 5% — points = 0	0
S 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic *(use NRCS definitions)*: ☐ Yes = 3 ☑ No = 0	0
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. *Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.* ☐ Dense, uncut, herbaceous plants > 90% of the wetland area — points = 6 ☑ Dense, uncut, herbaceous plants > ½ of area — points = 3 ☐ Dense, woody, plants > ½ of area — points = 2 ☐ Dense, uncut, herbaceous plants > ¼ of area — points = 1 ☐ Does not meet any of the criteria above for plants — points = 0	3
Total for S 1 — Add the points in the boxes above	3

Rating of Site Potential If score is: ☐ **12 = H** ☐ **6-11 = M** ☑ **0-5 = L** *Record the rating on the first page*

S 2.0. Does the landscape have the potential to support the water quality function of the site?	
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? ☐ Yes = 1 ☑ No = 0	0
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources _____ ☐ Yes = 1 ☑ No = 0	0
Total for S 2 — Add the points in the boxes above	0

Rating of Landscape Potential If score is: ☐ **1-2 = M** ☑ **0 = L** *Record the rating on the first page*

S 3.0. Is the water quality improvement provided by the site valuable to society?	
S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? ☐ Yes = 1 ☑ No = 0	0
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? *At least one aquatic resource in the basin is on the 303(d) list.* ☑ Yes = 1 ☐ No = 0	1
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? *Answer YES if there is a TMDL for the basin in which unit is found.* ☑ Yes = 2 ☐ No = 0	2
Total for S 3 — Add the points in the boxes above	3

Rating of Value If score is: ☑ **2-4 = H** ☐ **1 = M** ☐ **0 = L** *Record the rating on the first page*

Wetland name or number 2

SLOPE WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream erosion

S 4.0. Does the site have the potential to reduce flooding and stream erosion?	
S 4.1. Characteristics of plants that reduce the velocity of surface flows during storms: Choose the points appropriate for the description that best fits conditions in the wetland. *Stems of plants should be thick enough (usually > 1/8 in), or dense enough, to remain erect during surface flows.* ☐ Dense, uncut, **rigid** plants cover > 90% of the area of the wetland points = 1 ☑ All other conditions points = 0	0

Rating of Site Potential If score is: ☐ **1 = M** ☑ **0 = L** *Record the rating on the first page*

S 5.0. Does the landscape have the potential to support the hydrologic functions of the site?	
S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff? ☐ Yes = 1 ☑ No = 0	0

Rating of Landscape Potential If score is: ☐ **1 = M** ☑ **0 = L** *Record the rating on the first page*

S 6.0. Are the hydrologic functions provided by the site valuable to society?	
S 6.1. Distance to the nearest areas downstream that have flooding problems: The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or ☑ natural resources (e.g., houses or salmon redds) points = 2 ☐ Surface flooding problems are in a sub-basin farther down-gradient points = 1 ☐ No flooding problems anywhere downstream points = 0	2
S 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? ☐ Yes = 2 ☑ No = 0	0
Total for S 6 Add the points in the boxes above	2

Rating of Value If score is: ☑ **2-4 = H** ☐ **1 = M** ☐ **0 = L** *Record the rating on the first page*

NOTES and FIELD OBSERVATIONS:

S 3.2: Areas of Commencement Bay are mapped as 303(d)-listed waters.
S 3.3: Wetland is mapped within the Puyallup River Multiparameter TMDL and Puyallup River Bacteria TMDL.

Wetland name or number 2

These questions apply to wetlands of all HGM classes.

HABITAT FUNCTIONS - Indicators that site functions to provide important habitat

H 1.0. Does the site have the potential to provide habitat?

H 1.1. Structure of plant community: *Indicators are Cowardin classes and strata within the Forested class.* Check the Cowardin plant classes in the wetland. *Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

- ☐ Aquatic bed
- ☑ Emergent
- ☑ Scrub-shrub (areas where shrubs have > 30% cover)
- ☐ Forested (areas where trees have > 30% cover)

4 structures or more: ☐ points = 4
3 structures: ☐ points = 2
2 structures: ☑ points = 1
1 structure: ☐ points = 0

If the unit has a Forested class, check if:

- ☐ The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon

1

H 1.2. Hydroperiods

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (*see text for descriptions of hydroperiods*).

- ☐ Permanently flooded or inundated
- ☐ Seasonally flooded or inundated
- ☐ Occasionally flooded or inundated*
- ☑ Saturated only
- ☐ Permanently flowing stream or river in, or adjacent to, the wetland
- ☐ Seasonally flowing stream in, or adjacent to, the wetland
- ☐ **Lake Fringe wetland** ☐ **2 points**
- ☐ **Freshwater tidal wetland** ☐ **2 points**

4 or more types present: ☐ points = 3
3 types present: ☐ points = 2
2 types present: ☐ points = 1
1 type present: ☑ points = 0

*Present but not 10% of wetland unit.

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft^2.

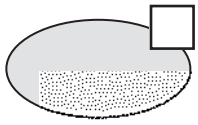
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. ***Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle***

If you counted:
- > 19 species ☐ points = 2
- 5 - 19 species ☑ points = 1
- < 5 species ☐ points = 0

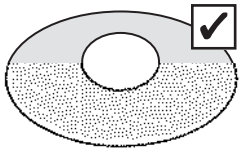
1

H 1.4. Interspersion of habitats

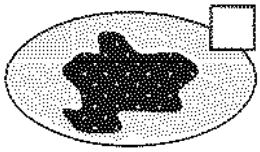
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



None = 0 points

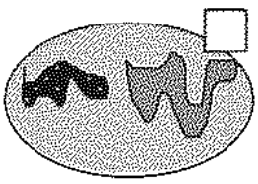


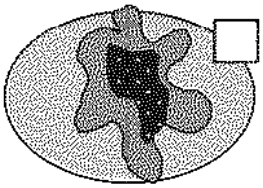
Low = 1 point

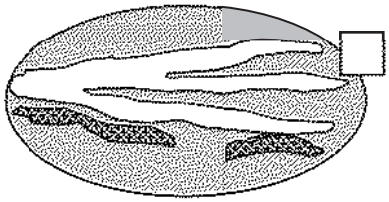


Moderate = 2 points

All three diagrams in this row are **HIGH** = 3points







1

Wetland name or number 2

H 1.5. Special habitat features: Check the habitat features that are present in the wetland. *The number of checks is the number of points.* ☐ Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). ☐ Standing snags (dbh > 4 in) within the wetland ☐ Undercut banks are present for at least 6.6 ft (2 m) **and/or** overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) ☐ Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present *(cut shrubs or trees that have not yet weathered where wood is exposed)* ☐ At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated *(structures for egg-laying by amphibians)* ☐ Invasive plants cover less than 25% of the wetland area in every stratum of plants (*see H 1.1 for list of strata*)	0
Total for H 1 Add the points in the boxes above	3

Rating of Site Potential If score is: ☐ **15-18 = H** ☐ **7-14 = M** ☑ **0-6 = L** *Record the rating on the first page*

H 2.0. Does the landscape have the potential to support the habitat functions of the site?

H 2.1. Accessible habitat (include *only habitat that directly abuts wetland unit*). *Calculate:* % undisturbed habitat 12.50 + [(% moderate and low intensity land uses)/2] 11.50 = 24.00 % If total accessible habitat is: ☐ > 1/3 (33.3%) of 1 km Polygon points = 3 ☑ 20-33% of 1 km Polygon points = 2 ☐ 10-19% of 1 km Polygon points = 1 ☐ < 10% of 1 km Polygon points = 0	2
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. *Calculate:* % undisturbed habitat 21.40 + [(% moderate and low intensity land uses)/2] 26.20 = 47.60 % ☐ Undisturbed habitat > 50% of Polygon points = 3 ☐ Undisturbed habitat 10-50% and in 1-3 patches points = 2 ☑ Undisturbed habitat 10-50% and > 3 patches points = 1 ☐ Undisturbed habitat < 10% of 1 km Polygon points = 0	1
H 2.3. Land use intensity in 1 km Polygon: If ☐ > 50% of 1 km Polygon is high intensity land use points = (- 2) ☑ ≤ 50% of 1 km Polygon is high intensity points = 0	0
Total for H 2 Add the points in the boxes above	3

Rating of Landscape Potential If score is: ☐ **4-6 = H** ☑ **1-3 = M** ☐ **< 1 = L** *Record the rating on the first page*

H 3.0. Is the habitat provided by the site valuable to society?

H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? *Choose only the highest score that applies to the wetland being rated.* Site meets ANY of the following criteria: ☑ points = 2 ☑ It has 3 or more priority habitats within 100 m (see next page) ☐ It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists) ☐ It is mapped as a location for an individual WDFW priority species ☐ It is a Wetland of High Conservation Value as determined by the Department of Natural Resources ☐ It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan ☐ Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1 ☐ Site does not meet any of the criteria above points = 0	2

Rating of Value If score is: ☑ **2 = H** ☐ **1 = M** ☐ **0 = L** *Record the rating on the first page*

Wetland name or number 2

WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdfw.wa.gov/publications/00165/wdfw00165.pdf or access the list from here: http://wdfw.wa.gov/conservation/phs/list/)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: ***NOTE:*** *This question is independent of the land use between the wetland unit and the priority habitat.*

— **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).

✓ **Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).

Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock.

Old-growth/Mature forests: Old-growth west of Cascade crest – Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.

— **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 – see web link above*).

✓ **Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.

— **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 – see web link above*).

✓ **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.

— **Nearshore**: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page).*

Caves: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.

Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.

Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.

✓ **Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

Wetland name or number 2

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type *Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.*	**Category**
SC 1.0. Estuarine wetlands Does the wetland meet the following criteria for Estuarine wetlands? ☐ The dominant water regime is tidal, ☐ Vegetated, and ☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to **SC 1.1** ☑ No= **Not an estuarine wetland**	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? ☐ Yes = **Category I** ☐ No - Go to **SC 1.2**	**Cat. I** ☐
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (If non-native species are *Spartina*, see page 25) ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. ☐ The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. ☐ Yes = **Category I** ☐ No = **Category II**	**Cat. I** ☐ **Cat. II** ☐
SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? ☑ Yes – Go to **SC 2.2** ☐ No – Go to **SC 2.3** SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? ☐ Yes = **Category I** ☑ No = **Not a WHCV** SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf ☐ Yes **– Contact WNHP/WDNR and go to SC 2.4** ☐ No **= Not a WHCV** SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? ☐ Yes = **Category I** ☐ No = **Not a WHCV**	**Cat. I** ☐
SC 3.0. Bogs Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? *Use the key below.* ***If you answer YES you will still need to rate the wetland based on its functions.*** SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile? ☐ Yes – Go to **SC 3.3** ☑ No – Go to **SC 3.2** SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? ☐ Yes – Go to **SC 3.3** ☑ No = **Is not a bog** SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? ☐ Yes = **Is a Category I bog** ☐ No – Go to **SC 3.4** **NOTE:** If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog. SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy? ☐ Yes = **Is a Category I bog** ☐ No = **Is not a bog**	**Cat. I** ☐

Wetland name or number 2

SC 4.0. Forested Wetlands

Does the wetland have at least 1 contiguous acre of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? ***If you answer YES you will still need to rate the wetland based on its functions.***

☐ **Old-growth forests** (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more.

☐ **Mature forests** (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm).

☐ Yes = **Category I** ☑ No = **Not a forested wetland for this section**

Cat. I ☐

SC 5.0. Wetlands in Coastal Lagoons

Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?

☐ The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks

☐ The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon *(needs to be measured near the bottom)*

☐ Yes – Go to **SC 5.1** ☑ No = **Not a wetland in a coastal lagoon**

Cat. I ☐

SC 5.1. Does the wetland meet all of the following three conditions?

☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100).

☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland.

☐ The wetland is larger than $^{1}/_{10}$ ac (4350 ft^2)

☐ Yes = **Category I** ☑ No = **Category II**

Cat. II ☐

SC 6.0. Interdunal Wetlands

Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? ***If you answer yes you will still need to rate the wetland based on its habitat functions.***

In practical terms that means the following geographic areas:

☐ Long Beach Peninsula: Lands west of SR 103

☐ Grayland-Westport: Lands west of SR 105

☐ Ocean Shores-Copalis: Lands west of SR 115 and SR 109

☐ Yes – Go to **SC 6.1** ☑ No = **not an interdunal wetland for rating**

Cat I ☐

SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? ☐ Yes = **Category I** ☐ No – Go to **SC 6.2**

Cat. II ☐

SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?

☐ Yes = **Category II** ☐ No – Go to **SC 6.3**

Cat. III ☐

SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac?

☐ Yes = **Category III** ☐ No = **Category IV**

Cat. IV ☐

Category of wetland based on Special Characteristics

If you answered No for all types, enter "Not Applicable" on Summary Form

NA



Figure 1: Wetland 2

Cowardin Class



Figure 2: Wetland 2
Hydroperiods

Scale: 1:600
0 10 20 40 60 80
Feet
N

Ordinary High Water Mark (OHWM)
Wetland Assessment Unit
Hydroperiod
Occasionally flooded
Saturated only



Figure 3: Wetland 2
150 Foot Buffer

150 Foot Buffer
Wetland Assessment Unit

Scale: 1:600
0 10 20 40 60 80
Feet
N

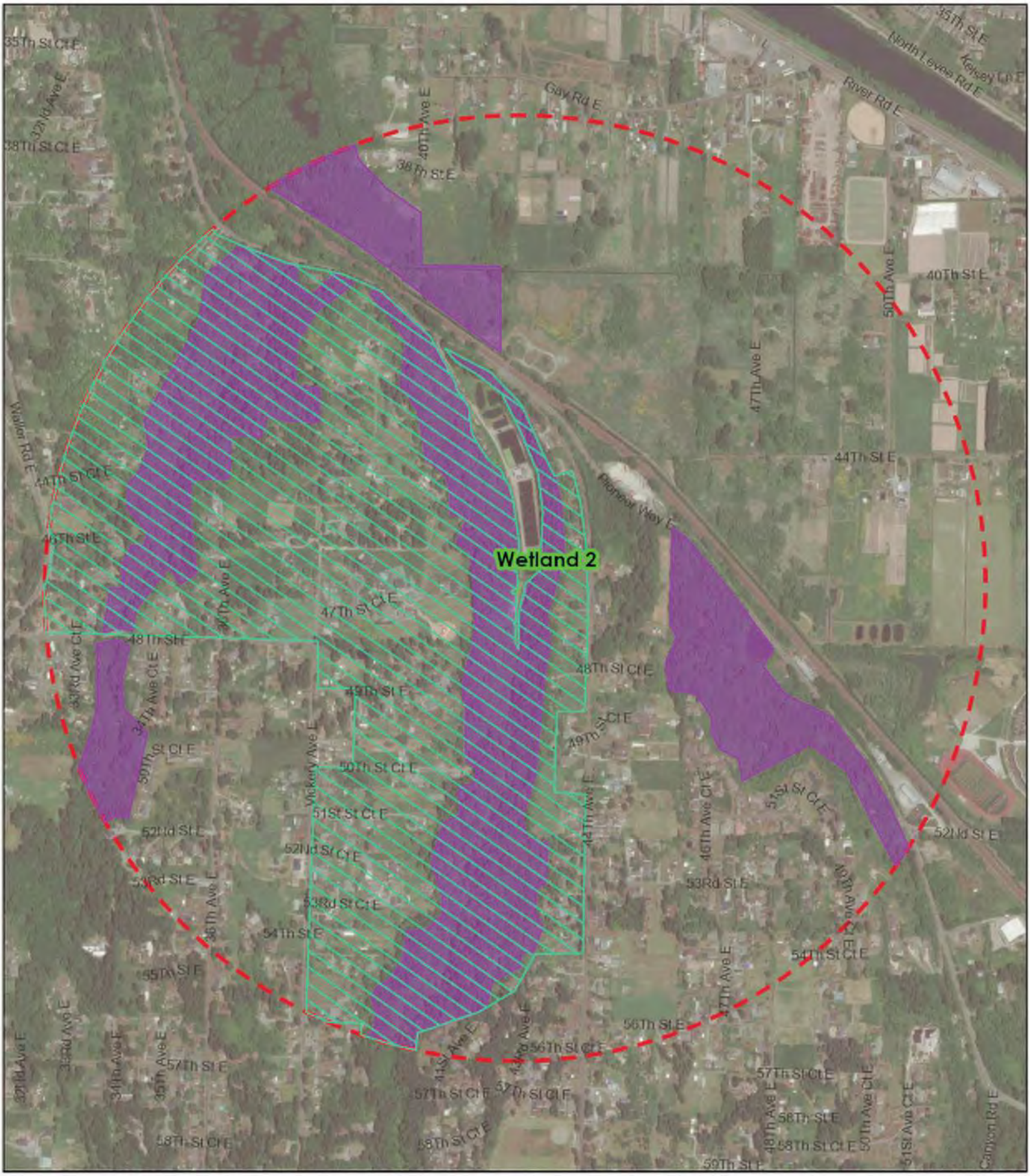


Figure 4: Wetland 2

1 Kilometer Buffer

Wetland Assessment Unit
Accessible Habitat
Undisturbed Habitat
1 Kilometer Buffer

Scale: 1:10,500

0 215 430 860 1,290 1,720

Feet

N

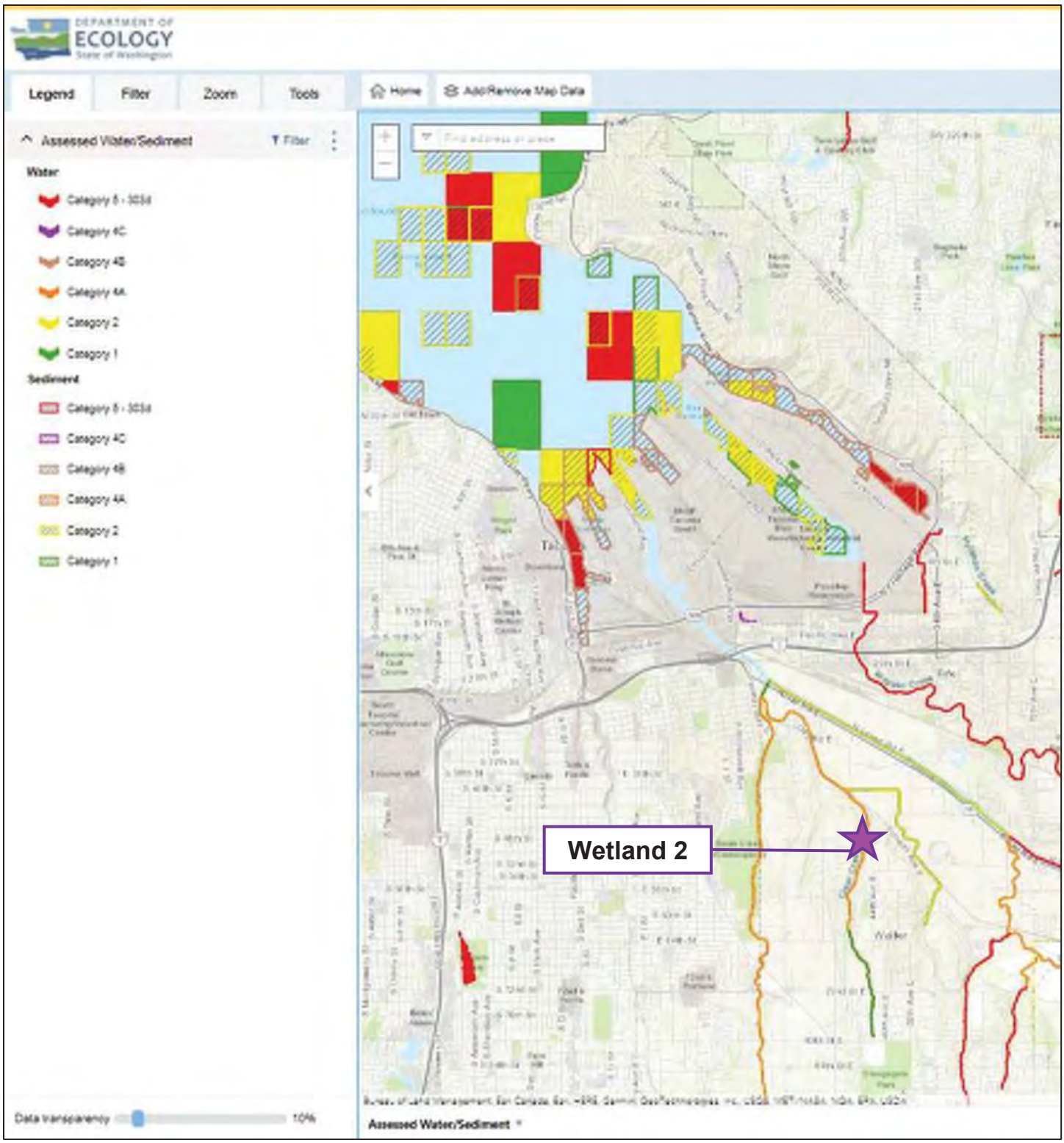


Figure 5: Wetland 2
303(d) Listed Waters

Note: Wetland lacks an outlet.

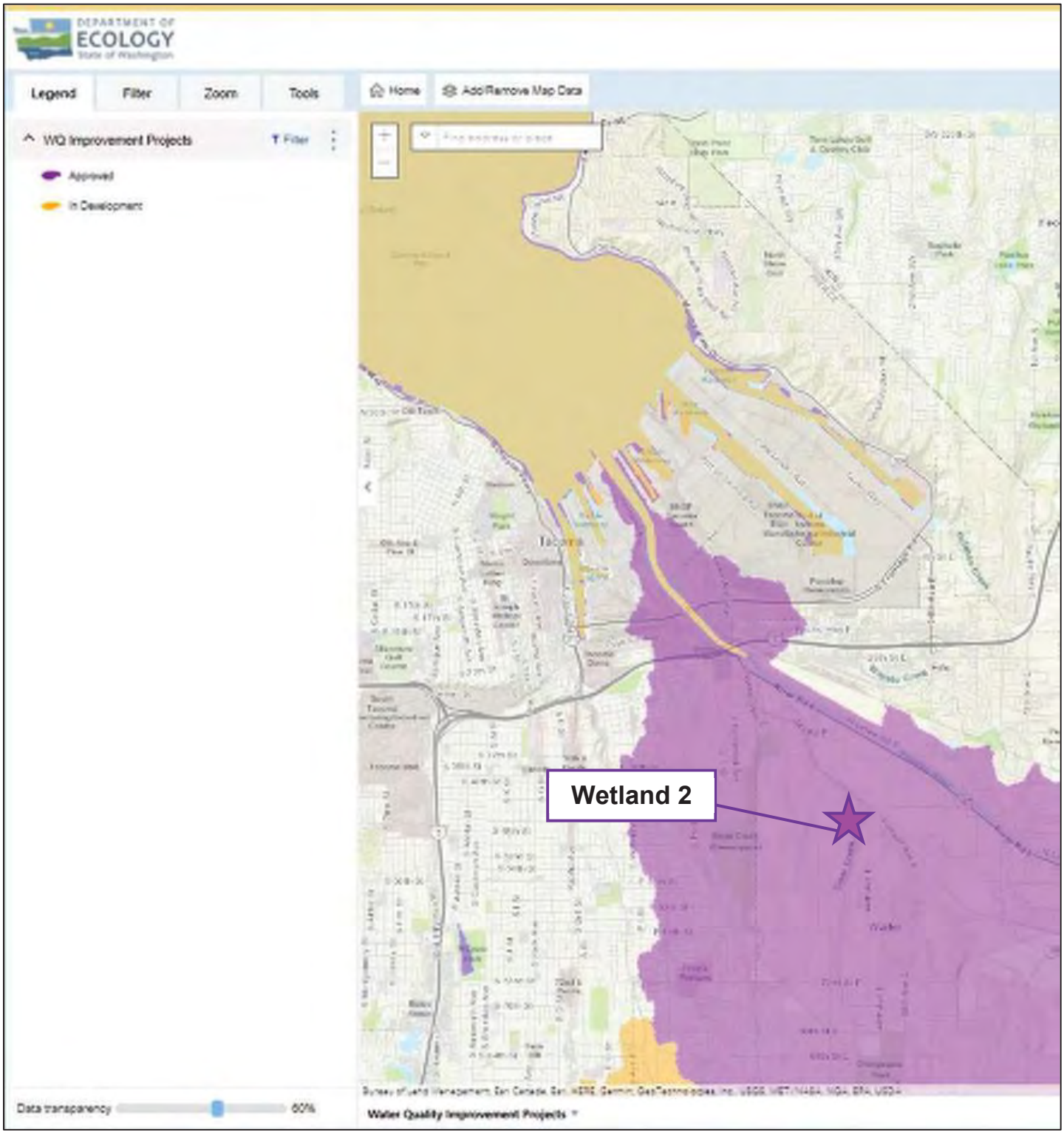


Figure 6: Wetland 2

Water Quality Improvement Projects

Note: The Project area is mapped within the Puyallup River Bacteria TMDL and Puyallup River Multiparameter TMDL.

Wetland name or number 3

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland 3 Date of site visit: 2/25/22

Rated by L. Dougherty, M. Dalzell Trained by Ecology? ☑ Yes ☐ No Date of training 10/18

HGM Class used for rating Slope Wetland has multiple HGM classes? ☐ Y ☑ N

NOTE: **Form is not complete without the figures requested** *(figures can be combined)*.

Source of base aerial photo/map ESRI Online

OVERALL WETLAND CATEGORY III (based on functions ☑ or special characteristics ☐)

1. Category of wetland based on FUNCTIONS

☐ **Category I** – Total score = 23 - 27

☐ **Category II** – Total score = 20 - 22

☑ **Category III** – Total score = 16 - 19

☐ **Category IV** – Total score = 9 - 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
	Circle the appropriate ratings			
Site Potential	H ☐ M ☐ L ☑	H ☐ M ☐ L ☑	H ☐ M ☐ L ☑	
Landscape Potential	H ☐ M ☐ L ☑	H ☐ M ☐ L ☑	H ☐ M ☑ L ☐	
Value	H ☑ M ☐ L ☐	H ☑ M ☐ L ☐	H ☑ M ☐ L ☐	TOTAL
Score Based on Ratings	5	5	6	16

Score for each function based on three ratings *(order of ratings is not important)*

9 = H,H,H
8 = H,H,M
7 = H,H,L
7 = H,M,M
6 = H,M,L
6 = M,M,M
5 = H,L,L
5 = M,M,L
4 = M,L,L
3 = L,L,L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I ☐ II ☐
Wetland of High Conservation Value	I ☐
Bog	I ☐
Mature Forest	I ☐
Old Growth Forest	I ☐
Coastal Lagoon	I ☐ II ☐
Interdunal	I ☐ II ☐ III ☐ IV ☐
None of the above	★

Wetland name or number 3

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (*can be added to map of hydroperiods)*	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream *(can be added to another figure)*	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	1
Hydroperiods	H 1.2	2
Plant cover of **dense** trees, shrubs, and herbaceous plants	S 1.3	1
Plant cover of **dense, rigid** trees, shrubs, and herbaceous plants (*can be added to figure above)*	S 4.1	1
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	3
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	4
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	5
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	6

Wetland name or number 3

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the entire unit usually controlled by tides except during floods?

☑ NO – go to 2 ☐ **YES** – the wetland class is **Tidal Fringe** – go to 1.1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

☑ **NO – Saltwater Tidal Fringe (Estuarine)** ☐ **YES – Freshwater Tidal Fringe**

*If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to score functions for estuarine wetlands.*

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

☑ NO – go to 3 ☐ **YES** – The wetland class is **Flats**

*If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.*

3. Does the entire wetland unit **meet all** of the following criteria?

The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;

___At least 30% of the open water area is deeper than 6.6 ft (2 m).

☑ NO – go to 4 ☐ **YES –** The wetland class is **Lake Fringe** (Lacustrine Fringe)

4. Does the entire wetland unit **meet all** of the following criteria?

✓ The wetland is on a slope (*slope can be very gradual*),

✓ The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,

✓ The water leaves the wetland **without being impounded**.

☐ NO – go to 5 ☑ **YES –** The wetland class is **Slope**

NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

5. Does the entire wetland unit **meet all** of the following criteria?

The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

___The overbank flooding occurs at least once every 2 years.

Wetland name or number 3

☐ NO – go to 6 ☐ **YES** – The wetland class is **Riverine**

NOTE: The Riverine unit can contain depressions that are filled with water when the river is not flooding

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? *This means that any outlet, if present, is higher than the interior of the wetland.*

☐ NO – go to 7 ☐ **YES** – The wetland class is **Depressional**

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

☐ NO – go to 8 ☐ **YES** – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated	HGM class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE

*If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.*

Wetland name or number 3

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions to improve water quality

S 1.0. Does the site have the potential to improve water quality?	
S 1.1. Characteristics of the average slope of the wetland: *(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)* ☐ Slope is 1% or less — points = 3 ☑ Slope is > 1%-2% — points = 2 ☐ Slope is > 2%-5% — points = 1 ☐ Slope is greater than 5% — points = 0	2
S 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic *(use NRCS definitions)*: ☐ Yes = 3 ☑ No = 0	0
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. *Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.* ☐ Dense, uncut, herbaceous plants > 90% of the wetland area — points = 6 ☐ Dense, uncut, herbaceous plants > ½ of area — points = 3 ☐ Dense, woody, plants > ½ of area — points = 2 ☑ Dense, uncut, herbaceous plants > ¼ of area — points = 1 ☐ Does not meet any of the criteria above for plants — points = 0	1
Total for S 1 — Add the points in the boxes above	3

Rating of Site Potential If score is: ☐ **12 = H** ☐ **6-11 = M** ☑ **0-5 = L** *Record the rating on the first page*

S 2.0. Does the landscape have the potential to support the water quality function of the site?	
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? ☐ Yes = 1 ☑ No = 0	0
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources _____ ☐ Yes = 1 ☑ No = 0	0
Total for S 2 — Add the points in the boxes above	0

Rating of Landscape Potential If score is: ☐ **1-2 = M** ☑ **0 = L** *Record the rating on the first page*

S 3.0. Is the water quality improvement provided by the site valuable to society?	
S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? ☐ Yes = 1 ☑ No = 0	0
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? *At least one aquatic resource in the basin is on the 303(d) list.* ☑ Yes = 1 ☐ No = 0	1
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? *Answer YES if there is a TMDL for the basin in which unit is found.* ☑ Yes = 2 ☐ No = 0	2
Total for S 3 — Add the points in the boxes above	3

Rating of Value If score is: ☑ **2-4 = H** ☐ **1 = M** ☐ **0 = L** *Record the rating on the first page*

Wetland name or number 3

SLOPE WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream erosion

S 4.0. Does the site have the potential to reduce flooding and stream erosion?	
S 4.1. Characteristics of plants that reduce the velocity of surface flows during storms: Choose the points appropriate for the description that best fits conditions in the wetland. *Stems of plants should be thick enough (usually > 1/8 in), or dense enough, to remain erect during surface flows.* ☐ Dense, uncut, **rigid** plants cover > 90% of the area of the wetland points = 1 ☑ All other conditions points = 0	0

Rating of Site Potential If score is: ☐ **1 = M** ☑ **0 = L** *Record the rating on the first page*

S 5.0. Does the landscape have the potential to support the hydrologic functions of the site?	
S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff? ☐ Yes = 1 ☑ No = 0	0

Rating of Landscape Potential If score is: ☐ **1 = M** ☑ **0 = L** *Record the rating on the first page*

S 6.0. Are the hydrologic functions provided by the site valuable to society?	
S 6.1. Distance to the nearest areas downstream that have flooding problems: The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or ☑ natural resources (e.g., houses or salmon redds) points = 2 ☐ Surface flooding problems are in a sub-basin farther down-gradient points = 1 ☐ No flooding problems anywhere downstream points = 0	2
S 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? ☐ Yes = 2 ☑ No = 0	0
Total for S 6 Add the points in the boxes above	2

Rating of Value If score is: ☑ **2-4 = H** ☐ **1 = M** ☐ **0 = L** *Record the rating on the first page*

NOTES and FIELD OBSERVATIONS:

S 3.2: Areas of Commencement Bay are mapped as 303(d)-listed waters.
S 3.3: Wetland is mapped within the Puyallup River Multiparameter TMDL and Puyallup River Bacteria TMDL.

Wetland name or number 3

These questions apply to wetlands of all HGM classes.

HABITAT FUNCTIONS - Indicators that site functions to provide important habitat

H 1.0. Does the site have the potential to provide habitat?

H 1.1. Structure of plant community: *Indicators are Cowardin classes and strata within the Forested class.* Check the Cowardin plant classes in the wetland. *Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

☐ Aquatic bed	4 structures or more: ☐ points = 4
☑ Emergent	3 structures: ☐ points = 2
☑ Scrub-shrub (areas where shrubs have > 30% cover)	2 structures: ☑ points = 1
☐ Forested (areas where trees have > 30% cover)	1 structure: ☐ points = 0

If the unit has a Forested class, check if:

☐ The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon

1

H 1.2. Hydroperiods

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (*see text for descriptions of hydroperiods*).

☐ Permanently flooded or inundated	4 or more types present: ☐ points = 3
☐ Seasonally flooded or inundated	3 types present: ☐ points = 2
☐ Occasionally flooded or inundated	2 types present: ☐ points = 1
☑ Saturated only	1 type present: ☑ points = 0
☐ Permanently flowing stream or river in, or adjacent to, the wetland	
☐ Seasonally flowing stream in, or adjacent to, the wetland	
☐ **Lake Fringe wetland**	☐ **2 points**
☐ **Freshwater tidal wetland**	☐ **2 points**

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft^2.

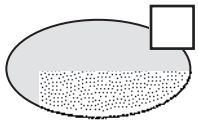
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. ***Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle***

If you counted: > 19 species	☐	points = 2
5 - 19 species	☑	points = 1
< 5 species	☐	points = 0

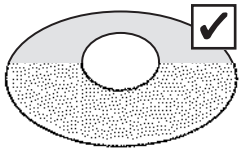
1

H 1.4. Interspersion of habitats

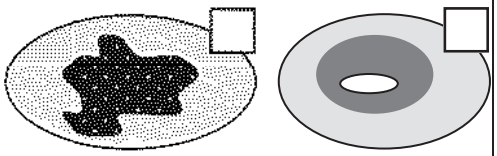
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



None = 0 points

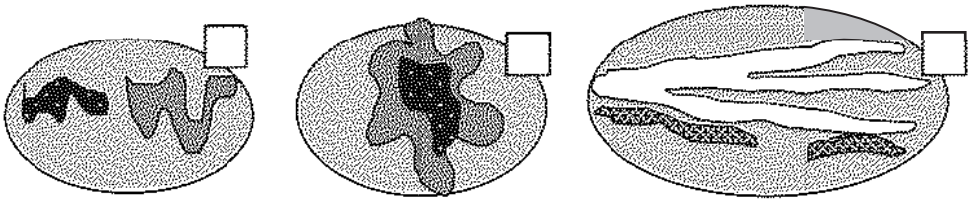


Low = 1 point



Moderate = 2 points

All three diagrams in this row are **HIGH** = 3points



1

Wetland name or number 3

H 1.5. Special habitat features: Check the habitat features that are present in the wetland. *The number of checks is the number of points.* ☐ Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). ☐ Standing snags (dbh > 4 in) within the wetland ☐ Undercut banks are present for at least 6.6 ft (2 m) **and/or** overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) ☐ Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present *(cut shrubs or trees that have not yet weathered where wood is exposed)* ☐ At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated *(structures for egg-laying by amphibians)* ☐ Invasive plants cover less than 25% of the wetland area in every stratum of plants (*see H 1.1 for list of strata*)	0
Total for H 1 Add the points in the boxes above	3

Rating of Site Potential If score is: ☐ **15-18 = H** ☐ **7-14 = M** ☑ **0-6 = L** *Record the rating on the first page*

H 2.0. Does the landscape have the potential to support the habitat functions of the site?

H 2.1. Accessible habitat (include *only habitat that directly abuts wetland unit*). *Calculate:* % undisturbed habitat 9.80 + [(% moderate and low intensity land uses)/2] 13.00 = 22.80 % If total accessible habitat is: ☐ > 1/3 (33.3%) of 1 km Polygon points = 3 ☑ 20-33% of 1 km Polygon points = 2 ☐ 10-19% of 1 km Polygon points = 1 ☐ < 10% of 1 km Polygon points = 0	2
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. *Calculate:* % undisturbed habitat 19.90 + [(% moderate and low intensity land uses)/2] 27.10 = 47.00 % ☐ Undisturbed habitat > 50% of Polygon points = 3 ☐ Undisturbed habitat 10-50% and in 1-3 patches points = 2 ☑ Undisturbed habitat 10-50% and > 3 patches points = 1 ☐ Undisturbed habitat < 10% of 1 km Polygon points = 0	1
H 2.3. Land use intensity in 1 km Polygon: If ☐ > 50% of 1 km Polygon is high intensity land use points = (- 2) ☑ ≤ 50% of 1 km Polygon is high intensity points = 0	0
Total for H 2 Add the points in the boxes above	3

Rating of Landscape Potential If score is: ☐ **4-6 = H** ☑ **1-3 = M** ☐ **< 1 = L** *Record the rating on the first page*

H 3.0. Is the habitat provided by the site valuable to society?

H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? *Choose only the highest score that applies to the wetland being rated.* Site meets ANY of the following criteria: ☑ points = 2 ☑ It has 3 or more priority habitats within 100 m (see next page) ☐ It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists) ☐ It is mapped as a location for an individual WDFW priority species ☐ It is a Wetland of High Conservation Value as determined by the Department of Natural Resources ☐ It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan ☐ Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1 ☐ Site does not meet any of the criteria above points = 0	2

Rating of Value If score is: ☑ **2 = H** ☐ **1 = M** ☐ **0 = L** *Record the rating on the first page*

Wetland name or number 3

WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdfw.wa.gov/publications/00165/wdfw00165.pdf or access the list from here: http://wdfw.wa.gov/conservation/phs/list/)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: ***NOTE:*** *This question is independent of the land use between the wetland unit and the priority habitat.*

— **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).

✓ **Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).

Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock.

Old-growth/Mature forests: Old-growth west of Cascade crest – Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.

— **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 – see web link above*).

✓ **Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.

— **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 – see web link above*).

✓ **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.

— **Nearshore**: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page).*

Caves: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.

Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.

Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.

✓ **Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

Wetland name or number 3

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type *Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.*	**Category**
SC 1.0. Estuarine wetlands Does the wetland meet the following criteria for Estuarine wetlands? ☐ The dominant water regime is tidal, ☐ Vegetated, and ☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to **SC 1.1** ☑ No= **Not an estuarine wetland**	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? ☐ Yes = **Category I** ☐ No - Go to **SC 1.2**	**Cat. I** ☐
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (If non-native species are *Spartina*, see page 25) ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. ☐ The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. ☐ Yes = **Category I** ☐ No = **Category II**	**Cat. I** ☐ **Cat. II** ☐
SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? ☑ Yes – Go to **SC 2.2** ☐ No – Go to **SC 2.3** SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? ☐ Yes = **Category I** ☑ No = **Not a WHCV** SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf ☐ Yes **– Contact WNHP/WDNR and go to SC 2.4** ☐ No **= Not a WHCV** SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? ☐ Yes = **Category I** ☐ No = **Not a WHCV**	**Cat. I** ☐
SC 3.0. Bogs Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? *Use the key below.* ***If you answer YES you will still need to rate the wetland based on its functions.*** SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile? ☐ Yes – Go to **SC 3.3** ☑ No – Go to **SC 3.2** SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? ☐ Yes – Go to **SC 3.3** ☑ No = **Is not a bog** SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? ☐ Yes = **Is a Category I bog** ☐ No – Go to **SC 3.4** **NOTE:** If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog. SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy? ☐ Yes = **Is a Category I bog** ☐ No = **Is not a bog**	**Cat. I** ☐

Wetland name or number 3

SC 4.0. Forested Wetlands

Does the wetland have at least 1 contiguous acre of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? ***If you answer YES you will still need to rate the wetland based on its functions.***

☐ **Old-growth forests** (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more.

☐ **Mature forests** (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm).

☐ Yes = **Category I** ☑ No = **Not a forested wetland for this section**

Cat. I ☐

SC 5.0. Wetlands in Coastal Lagoons

Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?

☐ The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks

☐ The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon *(needs to be measured near the bottom)*

☐ Yes – Go to **SC 5.1** ☑ No = **Not a wetland in a coastal lagoon**

Cat. I ☐

SC 5.1. Does the wetland meet all of the following three conditions?

☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100).

☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland.

☐ The wetland is larger than $^{1}/_{10}$ ac (4350 ft^2)

☐ Yes = **Category I** ☑ No = **Category II**

Cat. II ☐

SC 6.0. Interdunal Wetlands

Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? ***If you answer yes you will still need to rate the wetland based on its habitat functions.***

In practical terms that means the following geographic areas:

☐ Long Beach Peninsula: Lands west of SR 103

☐ Grayland-Westport: Lands west of SR 105

☐ Ocean Shores-Copalis: Lands west of SR 115 and SR 109

☐ Yes – Go to **SC 6.1** ☑ No = **not an interdunal wetland for rating**

Cat I ☐

SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? ☐ Yes = **Category I** ☐ No – Go to **SC 6.2**

Cat. II ☐

SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?

☐ Yes = **Category II** ☐ No – Go to **SC 6.3**

Cat. III ☐

SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac?

☐ Yes = **Category III** ☐ No = **Category IV**

Cat. IV ☐

Category of wetland based on Special Characteristics

If you answered No for all types, enter "Not Applicable" on Summary Form

NA



Figure 1: Wetland 3

Cowardin Class

Scale: 1:600

0 10 20 40 60 80

Feet

N

Dense Herbaceous Plant

Ordinary High Water Mark (OHWM)

Wetland Assessment Unit

Cowardin

Emergent

Scrub-Shrub



Figure 2: Wetland 3
Hydroperiods

Scale: 1:600
0 10 20 40 60 80
Feet
N

Ordinary High Water Mark (OHWM)
Wetland Assessment Unit
Hydroperiod
Saturated only



Figure 3: Wetland 3
150 Foot Buffer

150 Foot Buffer
Wetland Assessment Unit

Scale: 1:600
0 10 20 40 60 80
Feet
N

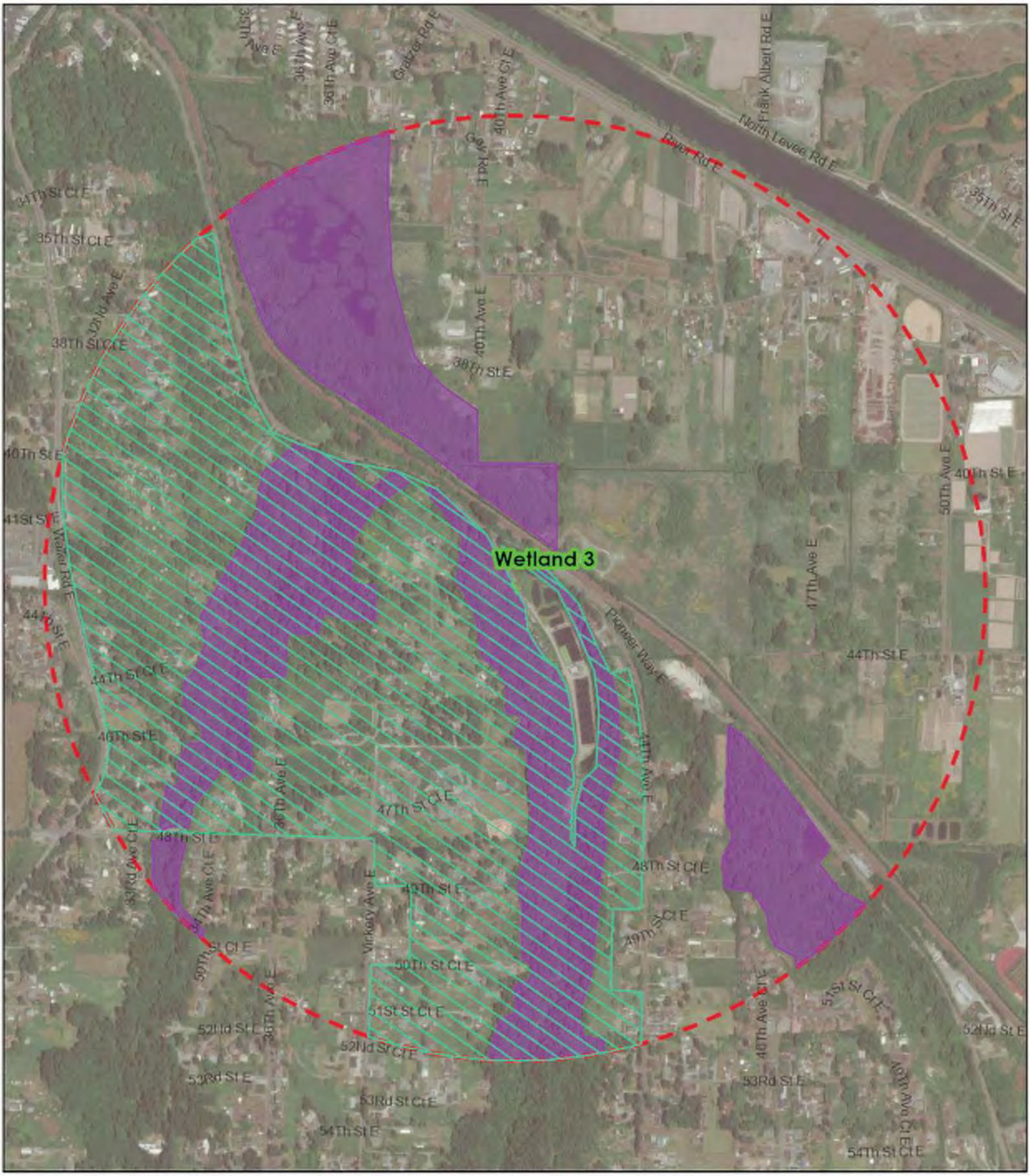


Figure 4: Wetland 3

1 Kilometer Buffer

Wetland Assessment Unit
Accessible Habitat
Undisturbed Habitat
1 Kilometer Buffer

Scale: 1:10,500

0 215 430 860 1,290 1,720

Feet

N

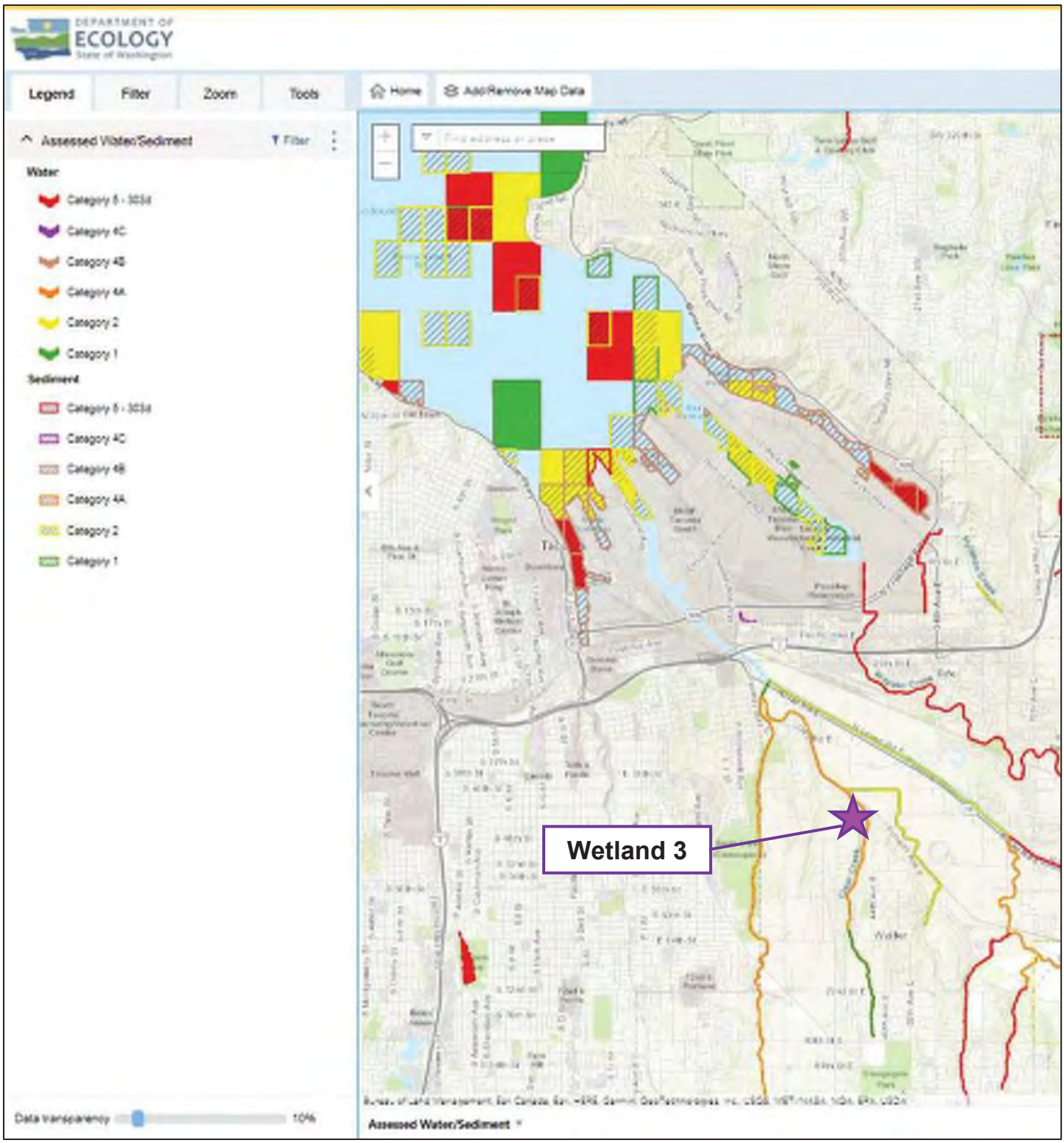


Figure 5: Wetland 3
303(d) Listed Waters

Note: Wetland drains to Clear Creek, which flows into the Puyallup River and eventually into Commencement Bay. Areas of Commencement Bay are mapped as 303(d) listed waters.

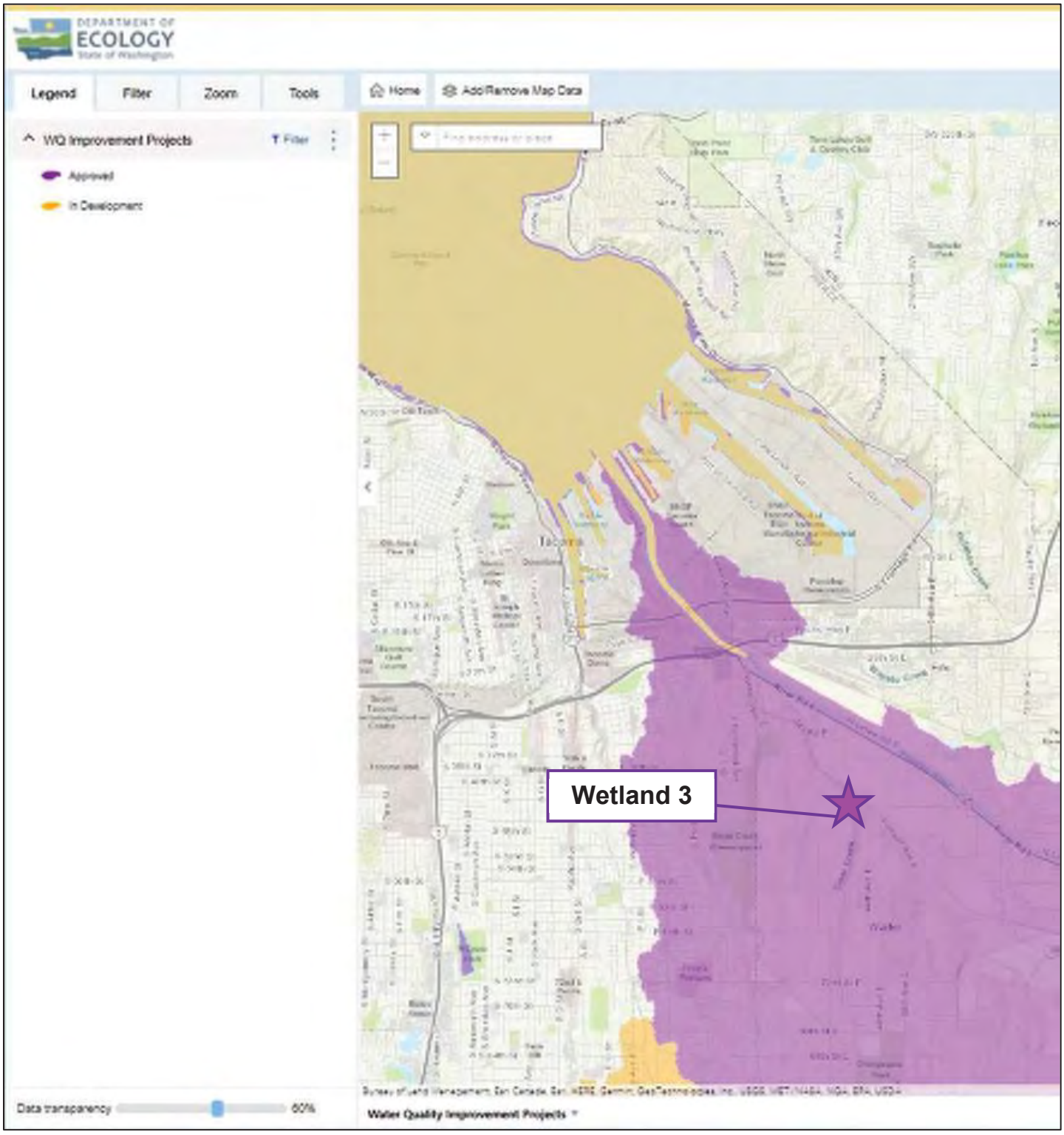


Figure 6: Wetland 3

Water Quality Improvement Projects

Note: The Project area is mapped within the Puyallup River Bacteria TMDL and Puyallup River Multiparameter TMDL.

Wetland name or number Wetland 3

WETLAND RATING FORM – WESTERN WASHINGTON
Version 2 - Updated July 2006 to increase accuracy and reproducibility among users
Updated Oct 2008 with the new WDFW definitions for priority habitats

Name of wetland (if known): Wetland 3 Date of site visit: 2/25/22

Rated by M. Dalzell, L. Dougherty Trained by Ecology? Yes X No___ Date of training 10/2018

SEC: 13 TWNSHP: 20N RNGE: 03E Is S/T/R in Appendix D? Yes___ No X

Map of wetland unit: Figure ____ Estimated size _____

SUMMARY OF RATING

Category based on FUNCTIONS provided by wetland

I___ II___ III___ IV X

Category I = Score >=70
Category II = Score 51-69
Category III = Score 30-50
Category IV = Score < 30

Score for Water Quality Functions	3
Score for Hydrologic Functions	2
Score for Habitat Functions	18
TOTAL score for Functions	23

Category based on SPECIAL CHARACTERISTICS of wetland

I___ II___ Does not Apply X

Final Category (choose the "highest" category from above) IV

Summary of basic information about the wetland unit

Wetland Unit has Special Characteristics		Wetland HGM Class used for Rating	
Estuarine		**Depressional**	
Natural Heritage Wetland		**Riverine**	
Bog		**Lake-fringe**	
Mature Forest		**Slope**	X
Old Growth Forest		**Flats**	
Coastal Lagoon		**Freshwater Tidal**	
Interdunal			
None of the above	X	Check if unit has multiple HGM classes present	

Wetland name or number Wetland 3

Does the wetland unit being rated meet any of the criteria below?

If you answer YES to any of the questions below you will need to protect the wetland according to the regulations regarding the special characteristics found in the wetland.

Check List for Wetlands That May Need Additional Protection (in addition to the protection recommended for its category)	YES	NO
SP1. *Has the wetland unit been documented as a habitat for any Federally listed Threatened or Endangered **animal or plant** species (T/E species)?* For the purposes of this rating system, "documented" means the wetland is on the appropriate state or federal database.		X
SP2. *Has the wetland unit been documented as habitat for any State listed Threatened or Endangered **animal** species?* For the purposes of this rating system, "documented" means the wetland is on the appropriate state database. Note: Wetlands with State listed plant species are categorized as Category I Natural Heritage Wetlands (see p. 19 of data form).		X
SP3. *Does the wetland unit contain individuals of Priority species listed by the WDFW for the state?*		X
SP4. *Does the wetland unit have a local significance in addition to its functions*? For example, the wetland has been identified in the Shoreline Master Program, the Critical Areas Ordinance, or in a local management plan as having special significance.		X

To complete the next part of the data sheet you will need to determine the Hydrogeomorphic Class of the wetland being rated.

The hydrogeomorphic classification groups wetlands into those that function in similar ways. This simplifies the questions needed to answer how well the wetland functions. The Hydrogeomorphic Class of a wetland can be determined using the key below. See p. 24 for more detailed instructions on classifying wetlands.

Wetland name or number Wetland 3

Classification of Wetland Units in Western Washington

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the entire unit usually controlled by tides (i.e. except during floods)?

NO – go to 2 **YES** – the wetland class is **Tidal Fringe**

If yes, is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)? **YES – Freshwater Tidal Fringe NO – Saltwater Tidal Fringe (Estuarine)**

*If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is rated as an **Estuarine** wetland.* Wetlands that were called estuarine in the first and second editions of the rating system are called Salt Water Tidal Fringe in the Hydrogeomorphic Classification. Estuarine wetlands were categorized separately in the earlier editions, and this separation is being kept in this revision. To maintain consistency between editions, the term "Estuarine" wetland is kept. Please note, however, that the characteristics that define Category I and II estuarine wetlands have changed (see p.).

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

NO – go to 3 **YES** – The wetland class is **Flats**

If your wetland can be classified as a "Flats" wetland, use the form for **Depressional** wetlands.

3. Does the entire wetland unit **meet both** of the following criteria?

___The vegetated part of the wetland is on the shores of a body of permanent open water (without any vegetation on the surface) at least 20 acres (8 ha) in size;

___At least 30% of the open water area is deeper than 6.6 ft (2 m)?

NO – go to 4 **YES –** The wetland class is **Lake-fringe (Lacustrine Fringe)**

4. Does the entire wetland unit **meet all** of the following criteria?

__X__The wetland is on a slope (*slope can be very gradual*),

__X__The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks.

__X__The water leaves the wetland **without being impounded**?

NOTE: *Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3ft diameter and less than 1 foot deep).*

NO - go to 5 **YES –** The wetland class is **Slope**

5. Does the entire wetland unit **meet all** of the following criteria?

____ The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river

____ The overbank flooding occurs at least once every two years.

NOTE: The riverine unit can contain depressions that are filled with water when the river is not flooding.

NO - go to 6 **YES** – The wetland class is **Riverine**

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year. *This means that any outlet, if present, is higher than the interior of the wetland.*

NO – go to 7 **YES –** The wetland class is **Depressional**

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding. The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8 **YES** – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM clases. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within your wetland. NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM Classes within the wetland unit being rated	*HGM Class to Use in Rating*
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake-fringe	Lake-fringe
Depressional + Riverine along stream within boundary	Depressional
Depressional + Lake-fringe	Depressional
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE under wetlands with special characteristics

If you are unable still to determine which of the above criteria apply to your wetland, or if you have more than 2 HGM classes within a wetland boundary, classify the wetland as **Depressional** for the rating.

Wetland name or number Wetland 3

S	**Slope Wetlands** WATER QUALITY FUNCTIONS - Indicators that the wetland unit functions to improve water quality	**Points** (only 1 score per box)
S	**S 1. Does the wetland unit have the potential to improve water quality?**	*(see p.64)*
S	S 1.1 Characteristics of average slope of unit: Slope is1% or less *(a 1% slope has a 1 foot vertical drop in elevation for every 100 ft horizontal distance*) points = 3 X Slope is 1% - 2% points = 2 Slope is 2% - 5% points = 1 Slope is greater than 5% points = 0	2
S	S 1.2 The soil 2 inches below the surface (or duff layer) is clay or organic *(use NRCS definitions)* YES = 3 points NO = 0 points	0
S	S 1.3 Characteristics of the vegetation in the wetland that trap sediments and pollutants: *Choose the points appropriate for the description that best fits the vegetation in the wetland. Dense vegetation means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 inches.* Dense, uncut, herbaceous vegetation > 90% of the wetland area points = 6 Dense, uncut, herbaceous vegetation > 1/2 of area points = 3 Dense, woody, vegetation > ½ of area points = 2 X Dense, uncut, herbaceous vegetation > 1/4 of area points = 1 Does not meet any of the criteria above for vegetation points = 0 Aerial photo or map with vegetation polygons	Figure ___ 1
S	**Total for S 1** *Add the points in the boxes above*	3
S	**S 2. Does the wetland unit have the opportunity to improve water quality?** Answer YES if you know or believe there are pollutants in groundwater or surface water coming into the wetland that would otherwise reduce water quality in streams, lakes or groundwater downgradient from the wetland. *Note which of the following conditions provide the sources of pollutants. A unit may have pollutants coming from several sources, but any single source would qualify as opportunity*. — Grazing in the wetland or within 150ft — Untreated stormwater discharges to wetland — Tilled fields, logging, or orchards within 150 feet of wetland — Residential, urban areas, or golf courses are within 150 ft upslope of wetland — Other_____ **YES** multiplier is **2** **NO** multiplier is **1**	*(see p.67)* multiplier 1
S	**TOTAL - Water Quality Functions** Multiply the score from S1 by S2 ***Add score to table on p. 1***	3

Comments

Wetland name or number Wetland 3

S	**Slope Wetlands**	
	S 3. Does the wetland unit have the potential to reduce flooding and stream erosion?	
S	S 3.1 Characteristics of vegetation that reduce the velocity of surface flows during storms. *Choose the points appropriate for the description that best fit conditions in the wetland. (stems of plants should be thick enough (usually > 1/8in), or dense enough, to remain erect during surface flows)* Dense, uncut, **rigid** vegetation covers > 90% of the area of the wetland. points = 6 Dense, uncut, **rigid** vegetation > 1/2 area of wetland points = 3 X Dense, uncut, **rigid** vegetation > 1/4 area points = 1 More than 1/4 of area is grazed, mowed, tilled or vegetation is not rigid points = 0	1
S	S 3.2 Characteristics of slope wetland that holds back small amounts of flood flows: The slope wetland has small surface depressions that can retain water over at least 10% of its area. YES points = 2 NO points = 0	0
S	*Add the points in the boxes above*	1
S	**S 4. Does the wetland have the opportunity to reduce flooding and erosion?** *(see p. 70)* Is the wetland in a landscape position where the reduction in water velocity it provides helps protect downstream property and aquatic resources from flooding or excessive and/or erosive flows? *Note which of the following conditions apply.* — Wetland has surface runoff that drains to a river or stream that has flooding problems — Other_____ *(Answer NO if the major source of water is controlled by a reservoir (e.g. wetland is a seep that is on the downstream side of a dam)* **YES** multiplier is **2** **NO** multiplier is **1**	multiplier 2
S	**TOTAL - Hydrologic Functions** Multiply the score from S 3 by S 4 ***Add score to table on p. 1***	2

Comments

Wetland name or number Wetland 3

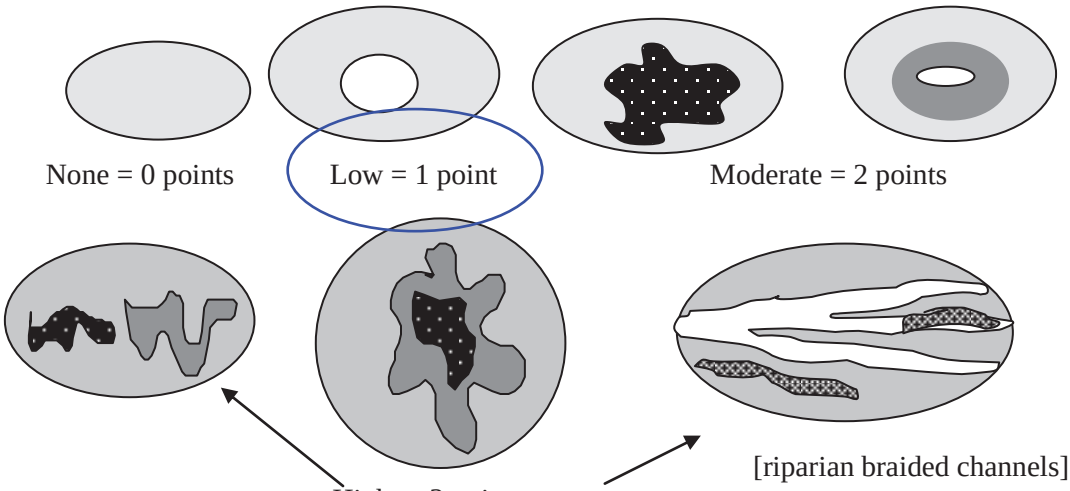
These questions apply to wetlands of all HGM classes. HABITAT FUNCTIONS - Indicators that unit functions to provide important habitat	**Points** (only 1 score per box)
H 1. Does the wetland unit have the <u>potential</u> to provide habitat for many species?	
H 1.1 <u>Vegetation structure</u> ***(see p. 72)***	**Figure ___**
Check the types of vegetation classes present (as defined by Cowardin)- Size threshold for each class is ¼ acre or more than 10% of the area if unit is smaller than 2.5 acres. ____Aquatic bed __X__Emergent plants __X__Scrub/shrub (areas where shrubs have >30% cover) ____Forested (areas where trees have >30% cover) *If the unit has a forested class check if:* ____The forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the forested polygon *Add the number of vegetation structures that qualify. If you have:* 4 structures or more points = 4 3 structures points = 2 2 structures points = 1 1 structure points = 0 Map of Cowardin vegetation classes	1
H 1.2. <u>Hydroperiods</u> ***(see p. 73)***	**Figure ___**
Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ acre to count. (see text for descriptions of hydroperiods) ____Permanently flooded or inundated — 4 or more types present points = 3 ____Seasonally flooded or inundated — 3 types present points = 2 ____Occasionally flooded or inundated — 2 types present point = 1 __X__Saturated only — 1 type present points = 0 ____ Permanently flowing stream or river in, or adjacent to, the wetland ____ Seasonally flowing stream in, or adjacent to, the wetland ____ ***Lake-fringe wetland* = 2 points** ____***Freshwater tidal wetland* = 2 points** Map of hydroperiods	0
H 1.3. <u>Richness of Plant Species</u> ***(see p. 75)*** Count the number of plant species in the wetland that cover at least 10 ft^2. (*different patches of the same species can be combined to meet the size threshold)* *You do not have to name the species.* *Do not include Eurasian Milfoil, reed canarygrass, purple loosestrife, Canadian Thistle* If you counted: > 19 species points = 2 *List species below if you want to:* 5 - 19 species points = 1 < 5 species points = 0	1

Total for page 2

H 1.4. Interspersion of habitats ***(see p. 76)***

Decide from the diagrams below whether interspersion between Cowardin vegetation classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, medium, low, or none.

Figure ___



1

NOTE: If you have four or more classes or three vegetation classes and open water the rating is always "high". Use map of Cowardin vegetation classes

H 1.5. Special Habitat Features: ***(see p. 77)***

Check the habitat features that are present in the wetland. The number of checks is the number of points you put into the next column.

____Large, downed, woody debris within the wetland (>4in. diameter and 6 ft long).

____Standing snags (diameter at the bottom > 4 inches) in the wetland

____Undercut banks are present for at least 6.6 ft (2m) and/or overhanging vegetation extends at least 3.3 ft (1m) over a stream (or ditch) in, or contiguous with the unit, for at least 33 ft (10m)

____Stable steep banks of fine material that might be used by beaver or muskrat for denning (>30degree slope) OR signs of recent beaver activity are present *(cut shrubs or trees that have not yet turned grey/brown)*

____At least ¼ acre of thin-stemmed persistent vegetation or woody branches are present in areas that are permanently or seasonally inundated.*(structures for egg-laying by amphibians)*

____ Invasive plants cover less than 25% of the wetland area in each stratum of plants

NOTE: The 20% stated in early printings of the manual on page 78 is an error.

0

H 1. TOTAL Score - potential for providing habitat
Add the scores from H1.1, H1.2, H1.3, H1.4, H1.5

3

Comments

Wetland name or number Wetland 3

H 2. Does the wetland unit have the opportunity to provide habitat for many species?	
H 2.1 Buffers ***(see p. 80)*** *Choose the description that best represents condition of buffer of wetland unit. The highest scoring criterion that applies to the wetland is to be used in the rating. See text for definition of "undisturbed."* — 100 m (330ft) of relatively undisturbed vegetated areas, rocky areas, or open water >95% of circumference. No structures are within the undisturbed part of buffer**.** (relatively undisturbed also means no-grazing, no landscaping, no daily human use) **Points = 5** X — 100 m (330 ft) of relatively undisturbed vegetated areas, rocky areas, or open water > 50% circumference. **Points = 4** — 50 m (170ft) of relatively undisturbed vegetated areas, rocky areas, or open water >95% circumference. **Points = 4** — 100 m (330ft) of relatively undisturbed vegetated areas, rocky areas, or open water > 25% circumference, . **Points = 3** — 50 m (170ft) of relatively undisturbed vegetated areas, rocky areas, or open water for > 50% circumference. **Points = 3** **If buffer does not meet any of the criteria above** — No paved areas (except paved trails) or buildings within 25 m (80ft) of wetland > 95% circumference. Light to moderate grazing, or lawns are OK. **Points = 2** — No paved areas or buildings within 50m of wetland for >50% circumference. Light to moderate grazing, or lawns are OK. **Points = 2** — Heavy grazing in buffer. **Points = 1** — Vegetated buffers are <2m wide (6.6ft) for more than 95% of the circumference (e.g. tilled fields, paving, basalt bedrock extend to edge of wetland **Points = 0**. — Buffer does not meet any of the criteria above. **Points = 1** Aerial photo showing buffers	**Figure ___** 4
H 2.2 Corridors and Connections ***(see p. 81)*** H 2.2.1 Is the wetland part of a relatively undisturbed and unbroken vegetated corridor (either riparian or upland) that is at least 150 ft wide, has at least 30% cover of shrubs, forest or native undisturbed prairie, that connects to estuaries, other wetlands or undisturbed uplands that are at least 250 acres in size? (*dams in riparian corridors, heavily used gravel roads, paved roads, are considered breaks in the corridor*). YES = **4 points** (*go to H 2.3*) NO = go to H 2.2.2 H 2.2.2 Is the wetland part of a relatively undisturbed and unbroken vegetated corridor (either riparian or upland) that is at least 50ft wide, has at least 30% cover of shrubs or forest, and connects to estuaries, other wetlands or undisturbed uplands that are at least 25 acres in size? **OR** a ~~**Lake fringe**~~ wetland, if it does not have an undisturbed corridor as in the question above? YES = **2 points** (*go to H 2.3*) NO = H 2.2.3 H 2.2.3 Is the wetland: within 5 mi (8km) of a brackish or salt water estuary OR within 3 mi of a large field or pasture (>40 acres) OR within 1 mi of a lake greater than 20 acres? YES = **1 point** NO = **0 points**	2

Total for page 6

H 2.3 Near or adjacent to other priority habitats listed by WDFW ***(see new and complete descriptions of WDFW priority habitats, and the counties in which they can be found, in the PHS report http://wdfw.wa.gov/hab/phslist.htm)*** Which of the following priority habitats are within 330ft (100m) of the wetland unit? *NOTE: the connections do not have to be relatively undisturbed.* ____**Aspen Stands:** Pure or mixed stands of aspen greater than 0.4 ha (1 acre). _X_**Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report p. 152*). ____**Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock. ____**Old-growth/Mature forests:** (Old-growth west of Cascade crest) Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 20 trees/ha (8 trees/acre) > 81 cm (32 in) dbh or > 200 years of age. **(**Mature forests) Stands with average diameters exceeding 53 cm (21 in) dbh; crown cover may be less that 100%; crown cover may be less that 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80 - 200 years old west of the Cascade crest. ____**Oregon white Oak:** Woodlands Stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158*). _X_**Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. ____**Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161*). X ____**Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources. ____ **Nearshore**: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report: pp. 167-169 and glossary in Appendix A).* ____**Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human. ____**Cliffs:** Greater than 7.6 m (25 ft) high and occurring below 5000 ft. ____**Talus:** Homogenous areas of rock rubble ranging in average size 0.15 - 2.0 m (0.5 - 6.5 ft), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. _X_**Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 51 cm (20 in) in western Washington and are > 2 m (6.5 ft) in height. Priority logs are > 30 cm (12 in) in diameter at the largest end, and > 6 m (20 ft) long. If wetland has **3 or more** priority habitats **= 4 points** If wetland has **2** priority habitats = **3 points** If wetland has **1** priority habitat **= 1 point** No habitats = 0 points *Note: All vegetated wetlands are by definition a priority habitat but are not included in this list. Nearby wetlands are addressed in question H 2.4)*	4

H 2.4 Wetland Landscape *(choose the **one** description of the landscape around the wetland that best fits*) ***(see p. 84)***	
X There are at least 3 other wetlands within ½ mile, and the connections between them are relatively undisturbed (light grazing between wetlands OK, as is lake shore with some boating, but connections should NOT be bisected by paved roads, fill, fields, or other development. points = 5	
The wetland is Lake-fringe on a lake with little disturbance and there are 3 other lake-fringe wetlands within ½ mile points = 5	5
There are at least 3 other wetlands within ½ mile, BUT the connections between them are disturbed points = 3	
The wetland is Lake-fringe on a lake **with** disturbance and there are 3 other lake-fringe wetland within ½ mile points = 3	
There is at least 1 wetland within ½ mile. points = 2	
There are no wetlands within ½ mile. points = 0	
H 2. TOTAL Score - opportunity for providing habitat *Add the scores from H2.1,H2.2, H2.3, H2.4*	15
TOTAL for H 1 from page 14	3
Total Score for Habitat Functions – add the points for H 1, H 2 and record the result on p. 1	18

Wetland name or number Wetland 3

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Please determine if the wetland meets the attributes described below and circle the appropriate answers and Category.

Wetland Type *Check off any criteria that apply to the wetland. Circle the Category when the appropriate criteria are met.*	**Category**
SC 1.0 Estuarine wetlands *(see p. 86)* Does the wetland unit meet the following criteria for Estuarine wetlands? — The dominant water regime is tidal, — Vegetated, and — With a salinity greater than 0.5 ppt. YES = Go to SC 1.1 NO X	
SC 1.1 Is the wetland unit within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? YES = Category I NO go to SC 1.2	**Cat. I**
SC 1.2 Is the wetland unit at least 1 acre in size and meets at least two of the following three conditions? YES = Category I NO = Category II — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. If the non-native *Spartina* spp. are the only species that cover more than 10% of the wetland, then the wetland should be given a dual rating (I/II). The area of Spartina would be rated a Category II while the relatively undisturbed upper marsh with native species would be a Category I. Do not, however, exclude the area of Spartina in determining the size threshold of 1 acre. — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland has at least 2 of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.	**Cat. I** **Cat. II** **Dual rating** **I/II**

SC 2.0 Natural Heritage Wetlands ***(see p. 87)*** **Cat. I**

Natural Heritage wetlands have been identified by the Washington Natural Heritage Program/DNR as either high quality undisturbed wetlands or wetlands that support state Threatened, Endangered, or Sensitive plant species.

SC 2.1 Is the wetland unit being rated in a Section/Township/Range that contains a Natural Heritage wetland? *(this question is used to screen out most sites before you need to contact WNHP/DNR)*

S/T/R information from Appendix D X or accessed from WNHP/DNR web site ___

YES____ – contact WNHP/DNR (see p. 79) and go to SC 2.2 NO X

SC 2.2 Has DNR identified the wetland as a high quality undisturbed wetland or as or as a site with state threatened or endangered plant species?

YES = Category I NO ____not a Heritage Wetland

SC 3.0 Bogs ***(see p. 87)***

Does the wetland unit (**or any part of the unit**) meet both the criteria for soils and vegetation in bogs? *Use the key below to identify if the wetland is a bog.* ***If you answer yes you will still need to rate the wetland based on its functions.***

1. Does the unit have organic soil horizons (i.e. layers of organic soil), either peats or mucks, that compose 16 inches or more of the first 32 inches of the soil profile? (See Appendix B for a field key to identify organic soils)? Yes - go to Q. 3 No - go to Q. 2
2. Does the unit have organic soils, either peats or mucks that are less than 16 inches deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on a lake or pond?

   Yes - go to Q. 3 No - Is not a bog for purpose of rating
3. Does the unit have more than 70% cover of mosses at ground level, AND other plants, if present, consist of the "bog" species listed in Table 3 as a significant component of the vegetation (more than 30% of the total shrub and herbaceous cover consists of species in Table 3)?

   Yes – Is a bog for purpose of rating No - go to Q. 4

   NOTE: If you are uncertain about the extent of mosses in the understory you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16" deep. If the pH is less than 5.0 and the "bog" plant species in Table 3 are present, the wetland is a bog.

1. Is the unit forested (> 30% cover) with sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Englemann's spruce, or western white pine, WITH any of the species (or combination of species) on the bog species plant list in Table 3 as a significant component of the ground cover *(> 30% coverage of the total shrub/herbaceous cover)?*

2. YES = Category I No___ Is not a bog for purpose of rating **Cat. I**

SC 4.0 Forested Wetlands *(see p. 90)* Does the wetland unit have at least 1 acre of forest that meet one of these criteria for the Department of Fish and Wildlife's forests as priority habitats? *If you answer yes you will still need to rate the wetland based on its functions.* — **Old-growth forests**: (west of Cascade crest) Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/acre (20 trees/hectare) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 inches (81 cm) or more. NOTE: The criterion for dbh is based on measurements for upland forests. Two-hundred year old trees in wetlands will often have a smaller dbh because their growth rates are often slower. The DFW criterion is and "OR" so old-growth forests do not necessarily have to have trees of this diameter. — **Mature forests**: (west of the Cascade Crest) Stands where the largest trees are 80 – 200 years old OR have average diameters (dbh) exceeding 21 inches (53cm); crown cover may be less that 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth. YES = Category I NO X not a forested wetland with special characteristics	**Cat. I**
SC 5.0 Wetlands in Coastal Lagoons *(see p. 91)* Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? — The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the wetland is located contains surface water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon *(needs to be measured near the bottom)* YES = Go to SC 5.1 NO X not a wetland in a coastal lagoon SC 5.1 Does the wetland meets all of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of invasive plant species (see list of invasive species on p. 74). — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland is larger than 1/10 acre (4350 square feet) YES = Category I NO = Category II	**Cat. I** **Cat. II**

SC 6.0 Interdunal Wetlands ***(see p. 93)*** Is the wetland unit west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? YES - go to SC 6.1 NO X not an interdunal wetland for rating ***If you answer yes you will still need to rate the wetland based on its functions.*** In practical terms that means the following geographic areas: • Long Beach Peninsula- lands west of SR 103 • Grayland-Westport- lands west of SR 105 • Ocean Shores-Copalis- lands west of SR 115 and SR 109 SC 6.1 Is the wetland one acre or larger, or is it in a mosaic of wetlands that is once acre or larger? YES = Category II NO – go to SC 6.2 SC 6.2 Is the unit between 0.1 and 1 acre, or is it in a mosaic of wetlands that is between 0.1 and 1 acre? YES = Category III	**Cat. II** **Cat. III**
Category of wetland based on Special Characteristics *Choose the "highest" rating if wetland falls into several categories, and record on p. 1.* If you answered NO for all types enter "Not Applicable" on p.1	NA

Attachment 11 – Hazardous Materials Report

Puget Sound GATEWAY Program

509 5 167

SR 509/Clear Creek Stream Restoration

Hazardous Materials Analysis Report
Troutlodge Hatchery
4008 Pioneer Way E, Tacoma, WA 98443

October 24, 2023

Prepared for:
Washington State Department of Transportation
Megaprograms | Puget Sound Gateway Program
SR 509 Completion Project

WSDOT

Revision History

Date	Revision
09/25/2023	Revision 0 – Draft for Internal Review
10/18/2023	Revision 1 – Draft for Review
10/24/2023	Revision 2 - Final

Certification

The technical material and data contained in this document were prepared under the supervision and direction of the undersigned. Based on the judgement of INNOVEX Environmental Management, Inc. (INNOVEX), this Hazardous Materials Analysis (HMA) documents the appropriate level of investigation necessary to identify potentially contaminated sites that may affect the environment, create construction impacts, and/or incur potential cleanup liability to the department.

Prepared by Pamela M. Fleming, L.G.
Senior Geologist

Reviewed by Anna J. Jordan, LG
Supervising Geologist

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1.0 INTRODUCTION

The Washington State Department of Transportation (WSDOT) proposes to construct the SR 509/Clear Creek Restoration Project (Project) that will remove two fish-passage barriers on Clear Creek and Restore stream functions at the Project site as off-site mitigation for SR 509 and SR 167 project actions. WSDOT plans to remove two existing dams (Washington Department of Fish and Wildlife (WDFW) Site IDs 600317 and 600318) on Clear Creek, remove the existing Troutlodge (private fish farm) infrastructure; regrade the floodplain back to its historic profile; add several channel types including a main channel and side channels; add instream features including analog beaver dams, berms, and other features. The project mitigates impacts associated with leaving two existing barriers in place, WDFW Site ID 935070 at I-5/UNT to South Fork McSorley Creek and WDFW 105-R121519a at SR 167/Upper Wapato Creek. . This work was conducted under Master Subconsultant Agreement Y-12197, Task Order CZ.

INNOVEX Environmental Management, Inc. (INNOVEX) has been tasked to prepare a Hazardous Materials Analysis (HMA) for the Troutlodge Hatchery (Site) located at 4008 Pioneer Way E in Tacoma, Washington. This work was completed on behalf of WSDOT for the Project. Acronyms used in this report are presented in Appendix A. The Site location map is provided on Figure 1.

The purpose of this HMA is to evaluate the potential for the presence or likely presence of hazardous substances or petroleum products under conditions that indicate an existing release, a past release, or a material threat of a release into the structures of the property or into the ground, groundwater, or surface water of the property. These conditions are defined (from the American Society for Testing and Materials [ASTM] Standard E-1527-21, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process) below.

> **Recognized Environmental Condition (REC):** (1) The presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.
>
> For the purposes of this definition, “likely” is that which is neither certain nor proved, but can be expected or believed by a reasonable observer based on the logic and/or experience of the environmental professional, and/or available evidence, as stated in the report to support the opinions given therein.
>
> A de minimis condition is not a recognized environmental condition.

Controlled Recognized Environmental Condition (CREC): A recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity and use limitations or other property use limitations). Identification of a controlled recognized environmental condition is a multi-step process that shall be reflected in the report's Findings and Opinions section(s), including the environmental professional's rationale for concluding that a finding is a controlled recognized environmental condition:

1. When determining whether a recognized environmental condition has been "addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place," the environmental professional shall review reasonably ascertainable documentation, such as no further action letters (or similar certifications or approvals) issued by the applicable regulatory authority or authorities, or, in the case of self-directed actions, documentation and relevant data that satisfy risk-based criteria established by the applicable regulatory authority or authorities.

2. In determining whether a recognized environmental condition is "subject to implementation of required controls (for example, activity and use limitations or other property use limitations)," the environmental professional shall identify the documentation providing the control(s) that addresses the recognized environmental condition in the report's Findings and Opinions section(s).

3. When the environmental professional determines that a recognized environmental condition is "subject to implementation of required controls," this determination does not imply that the environmental professional has evaluated or confirmed the adequacy, implementation, or continued effectiveness of the control(s).

4. A past release that previously qualified as a controlled recognized environmental condition may no longer constitute a controlled recognized environmental condition at the time of the Phase I Environmental Site Assessment if new conditions or information have been identified such as, among other things, a change in regulatory criteria, a change of use at the subject property, or a subsequently identified migration pathway that was not previously known or evaluated. "

Historical Recognized Environmental Condition (HREC): A previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations).

A historical recognized environmental condition is not a recognized environmental condition.

The level of detail necessary for an HMA is based on the complexity and size of the project, severity of potential contaminants, and other project specific needs. However, the HMA must identify and evaluate know or potentially contaminated sites that may,

1. Affect the environment during construction,
2. Create significant construction impacts, and/or
3. Incur cleanup liability to the agency.

Additionally, HMAs must document conditions that may present a significant unavoidable adverse impact that cannot be reasonably mitigated for.

A risk analysis must also be performed on the sites of concern to determine the level of risk to the Project. According to WSDOT's *Guidance & Standard Methodology for WSDOT Hazardous Materials Discipline Reports* a "Risk Analysis" helps prioritize sites and determine the need for avoidance, remediation, and mitigation options. Evaluating risk entails taking site specific information, making reasonable assumptions, while considering planned project design and activities and evaluating environmental effects and associated construction schedule delays, costs and agency liability. The risk categories (Low, Moderate or High Impact) are provided below:

- **Low Impact:** This risk level identifies sites of concern where the likelihood for the site to impact the project is low because there was no evidence to suggest that groundwater from the site of concern is impacted, or the contamination from offsite migration is not expected to impact the project during construction.

- **Moderate Impact:** This risk level identifies sites of concern where the likelihood for the site to impact the project is moderate because of type or extent of contaminant, groundwater from the site of concern is impacted and has a reasonable potential to impact the project footprint from offsite migration of groundwater, but there is no conclusive evidence.

- **High Impact:** This risk level identifies sites of concern that may be substantially contaminated and will create a major liability for WSDOT either in construction liability or by virtue of acquiring all or a portion of the site. If the site has undergone a detailed investigation and a feasibility study, the impacts and remediation costs may already be predicted. Nonetheless, the site is identified as a high impact site because of its potentially substantial impact or liability.

  In general, high impact sites are properties that may have large volumes of contaminated soil, groundwater, or sediment or properties that have multiple complex types of contaminants that require special handling and disposal that is expensive to manage. High impact sites include properties where the information necessary to predict remedial costs is

lacking and/or the contaminants are persistent, or expensive to manage.

The risk evaluation should also assess the level of complexity mitigation measures will have to the project for each site.

- **Straightforward:** Sites determined to be straightforward are typically small to medium in size and the potential contaminants are not extremely toxic or difficult to treat. Examples of straightforward sites are gas stations, auto repair shops, most underground storage tanks (USTs), aboveground storage tanks (ASTs), buildings with asbestos or materials that contain lead-based paint.

- **Complicated:** Sites determined to be complicated consist of sites with widespread contamination or potential contaminants are difficult to treat. Complicated sites will typically involve additional research, investigation and possibly regulatory involvement. Examples of complicated sites are dry cleaners, wood treating operations, metal plating facilities, or other operations that use or used large amounts of hazardous materials.

1.1 Scope of Work

To assess the likelihood of unavoidable adverse impacts to the Project, the following tasks were performed.

- Review of provided information including parcel maps, property acquisition lists, and excavation estimates.
- Review federal, state, tribal, local database records pertaining to the storage, handling, discharge, and disposal of hazardous material on the property and surrounding properties.
- Review available and readily ascertainable local, state, tribal, or federal agency records on file at the respective agency.
- Review available and readily ascertainable historical records for the Project area back to its first-developed use, (e.g., aerial photographs, historic maps, current and historical tax-assessor records, and title reports).
- Review available geologic, topographic, and other physical-setting mapping.
- Complete a Site reconnaissance.
- Prepare this HMA report documenting our findings.

2.0 PROJECT DESCRIPTION

The Project is planned as off-site mitigation for SR509 and SR167 project actions. According to Preliminary Design plans (see Appendix B), the Project will remove the existing Troutlodge (private fish farm) infrastructure; regrade the floodplain back to its historic profile; add several channel types including a main channel and side channels; add instream features including analog beaver dams, berms, and other features.

Clear Creek restoration activities will include minor floodplain excavation, placement of large woody material and plantings, removal of weirs, and removal of dredged sediment. This work assumes that existing concrete structures and revetments will be removed, clean upland staging areas will be available to stockpile excavated sediment, there are no known spills at the Site, and the Site is managed as a clean space for fish hatching. It is anticipated that the maximum depth of excavation would be 15 feet.

The results of this HMA will be used to evaluate the following.

- Potential for cost impacts associated with the special handling or disposal of potentially contaminated media during construction of the Project.
- Potential for health risks to workers that would require the contractor to provide specialized training and expertise to implement construction.
- Environmental risk and liability to WSDOT.

2.1 Site Geology and Hydrogeology

The Site lies within the Puget Sound Lowland, which consists of a broad, low-lying region situated between the Cascade Range to the east and the Olympic Mountains to the west. The Lowland depression is underlain by Tertiary volcanic and sedimentary bedrock and is filled to the present-day land surface with Quaternary glacial and non-glacial sediments.

The Puget Sound Lowland's present-day geomorphic features can be attributed to the last continental glacier, the Cordilleran ice sheet, which covered the region during the Fraser Glaciation. The ice sheet advanced from British Columbia 18,000 years ago to just south of Olympia and disappeared approximately 10,000 years ago.

A review of local geologic maps from the Washington State Department of Natural Resources indicates that the northern portion of the Site and the creek bed are underlain by Pre-Vashon continental glacial drift and nonglacial deposits (map unit Qgpc) (Schuster et. al. 2015). This unit is described as a composite geologic unit that includes combinations of all of the continental glacial and nonglacial deposits. The southern portion of the Site is underlain by Vashon Drift (map unit Qgd) (Schuster et. al. 2015). The Vashon Drift is described as stratified and unstratified sand, silt, clay, and gravels deposited during glacial advance and retreat.

The Site is located in the Puyallup River Basin, approximately 4 miles southeast of Commencement Bay, at the base of a hill. The Site runs along Clear Creek which is a tributary of the Puyallup River. Clear Creek bounds the eastern side of the Site. It is located at the mouth of a small canyon with steep slopes of up to 200 feet on the east and west sides of the hatchery facility. The surface elevation is between approximately 25 and 45 feet above mean sea level. The topographic relief of the Site is approximately 20 feet from the south down towards the north.

Depth to water at the Site is assumed to be relatively shallow, less than 20 feet, based on the proximity of the Site to the surface water of Clear Creek. Groundwater beneath the Site is assumed to follow topography and the flow of Clear Creek which generally flows north to the Puyallup River and then northwest towards Commencement Bay.

2.2 Anticipated Depth of Excavations

The Project Office provided preliminary design plans and project assumptions for the restoration of the Site (see Appendix B). From the preliminary design documents, it is assumed that excavation activities may include regrading the main channel of Clear Creek and creating new side channels. Additionally, the preliminary design plans note “minor floodplain excavation” is proposed along the northern portion of Clear Creek as well as the proposed removal of dredged sediment along the southern portion of the creek. These design assumptions indicate that excavation work will generally be on the order of 5- to 10-feet in depth with a maximum depth of 15 feet possible in the vicinity of the removed dams, buildings, and other piping/conveyance structures.

2.3 Proposed Property Acquisitions

According to information provided, seven parcels (Figure 1) will be purchased in their entirety for the Project (parcels 0320133013 0320133051, 0320133053, 0320133057, 0320133060, 0320133061, and 0320242117). These parcels are all part of the Site and share the address of 4008 Pioneer Way E, except for parcel 0320242117, which is addressed at 4122 E 49th Street. These parcels are occupied by the Clear Creek Fish Hatchery which was originally developed between 1941 and 1944 (see Section 3.2). Current structures on the Site date from 1960 through 1997 (see Section 3.3).

Additionally, the following parcels will require permanent construction easements.

- 0320242141 (addressed at 4822 44th Avenue E)
- 0320133052 (addressed at 4710 44th Avenue E)
- 0320133062 (addressed at 4624 44th Avenue E)

These parcels are all occupied by single-family residences constructed between 1920 and 1980 (see Section 3.3).

2.4 Anticipated Groundwater Depth

Based on a review of nearby wells and the proximity of Clear Creek, groundwater likely occurs within 20 feet below the ground surface beneath the Site. The direction of groundwater flow, as well as the flow direction of uncontrolled surface water, is expected to follow local topography, towards the north then northwest towards Commencement Bay (as discussed in Section 2.1).

3.0 HISTORICAL RECORDS REVIEW

The following records for historical uses of the Site and vicinity were reviewed as provided by the Project Office and Environmental Data Resources, Inc. (EDR).

- Plummer Complete Atlas (Plummer), County of Pierce, Washington – 1889 (HistoricMapWorks.com).
- Metsker's Atlas of Pierce County (Metsker), – 1951 and 1965 (HistoricMapWorks.com).
- Topographic Maps – 1897, 1900, 1941, 1944, 1949, 1961, 1968, 1973, 1981, 1994, 1997, 2014, 2017, and 2020 (EDR).
- Aerial photographs – 1941, 1944, 1957, 1968, 1972, 1980, 1990, 2006, 2011, 2015, and 2019 (EDR), and 2022 (Google Earth).
- Current and historical tax-assessor records (Pierce County Assessor-Treasurer).
- Title Reports.
- Other reports and related site information

Records were also requested from the Pierce County Fire Marshall. However, records related to USTs or ASTs and hazardous materials storage or spills at the Site were not located.

3.1 Maps

To understand current and historic uses available topographic maps, Metsker Maps, and Plummer Atlas Maps were reviewed. Metsker Maps and the Plummer Atlas were reviewed online and topographic maps were provided by EDR. A copy of the EDR topographic map report is included in Appendix C.

The 1889 Plummer Atlas depicts the Site and vicinity near the Puyallup River, the main branch of Clear Creek and its tributaries, a railroad, and a road (assumably Pioneer Way E) running from north to south. Other details are not included due to the scale of the map.

Similar features are depicted on the 1897 and 1900 United States Geologic Survey (USGS) topographic maps. Clear Creek is shown situated along the northern toe edge of a steep slope, along with several other tributaries in the area. The Great Northern Railway was located north of the Project area and extends from southeast to northwest. These maps also indicate the Site was within the “Puyallup Indian Reservation”.

Topographic maps dated 1941, 1944, and 1949 show steep canyons along Clear Creek and the other nearby tributaries. Additionally, roads and residences as well as an urban area to the northwest are shown on the maps. The Site appears to have been developed with one to two structures located on the southern portion as well as several ponds. The 1949 map shows the railroad to the north had been renamed “Northern Pacific” railroad.

The 1951 Metsker Map shows the Site was owned by J.A. Bowler along with several other nearby parcels. Adjoining parcels also appear to have been owned by private parties. The 1960 and 1965 Metsker maps are similar, except that ownership for the Site is shown as C. Lathrop.

Topographic maps from 1961 to 2014 label the Site as a fish hatchery with several structures and ponds, including a large pond at the north end of the Site. Beginning in 1981, two additional structures are shown along the western portion of the Site. Additionally, a larger pond is shown on the 1994 map, where previous maps had depicted two smaller rectangular structures. These maps also depict increased urban development to the west, far north, and southeast. However, areas to the south and immediate north appear to have remained residential or rural in nature and use.

The most recent topographic maps are dated 2017 and 2020. While these maps do not have as much detail as previous maps, they appear to depict the Site and vicinity as it is today.

An attempt was made to review Sanborn Fire insurance Maps. However, coverage was not available for the Site and its vicinity. A copy of the Sanborn Map report is included in Appendix D.

3.2 Aerial Photographs

A review of historical aerial photography can indicate past activities at a property that may not be documented by other means or observed during a property visit. A copy of the EDR-generated aerial photograph report is included in Appendix E of this report.

The reviewed photographs indicate that the Site was wooded and generally undeveloped in 1941. Pioneer Way E and 44th Avenue E, as well as several rural developments and the rail line, are visible in the 1941 aerial photograph. Areas adjoining the Site appear to be rural residences or agricultural in nature with a few small orchards observed.

In the 1944 photograph, the Site appears to have been developed with several buildings and ponds. Additionally, there appears to be increased residential development on top of the hill to the west of the Site.

In the 1957 photograph, the Site appears to be developed with the existing fish hatchery, although the ponds and buildings are not in the same configuration as they are currently. One rectangular building appears in the central portion of the property with two rectangular pools situated to the north and south of the building. One oval-shaped pool is located further to the north with a road running generally north to south through the Site as it does today. There is also a second residential property adjoining the Site to the east. Increased residential development is shown along 44th Avenue E and on the hilltop to the west.

The 1968 photograph shows increased development of the hatchery facility with more ponds and buildings. The two square pools remained, however, the rectangular building between them had been removed prior to 1968. One square building (assumed to be the current two-story structure) was shown to the north of the northern square pool, and a second building was located south of the southern pool. Seven irregular shaped pools are shown in the vicinity of the previous oval-shaped pool in the northern portion of the Site. A portion of the western side of the Site appears to have been cleared for development. The development of the surrounding area appears similar to the 1957 photograph except for the addition of a possible power substation between the northeast boundary of the Site and 44th Avenue E.

Increased hatchery development at the Site is noted in the 1972 photograph. Three of the northern ponds were redeveloped into roughly square-shaped ponds (these appear to be the same as are currently present at the Site), and a third pool had been constructed between the two pre-existing square pools (these may be the same pool that are present at the Site today as well, but it is more uncertain). Several residences also are shown on the western portion of the Site. Additionally, residential development continued in the surrounding area between 1968 and 1972.

Photographs from 1980 and 1990 appear similar to the 1972 photograph. However, the 2006 through 2022 photographs depict the hatchery as it appears today with one long pool on the southern portion of the Site and a road extending south beyond the Site. Development nearby also appears similar to today and is mostly residential.

3.3 Tax-Assessor Records Review

Current and historical tax-assessor records were reviewed for the Site parcels as well as the southeast-adjoining parcels requiring an easement. Copies of reviewed records are included in Appendix F. A summary of the information is presented below.

Site

- Parcel 0320133013, addressed at 4008 Pioneer Way E – This parcel was reportedly developed in 1960 and 1965 with two unheated storage warehouses constructed with mason blocks. Tax assessor records indicate the 1960 warehouse is a two-story building with hatchery operations on the first floor and storage and offices on the second floor. The 1965 warehouse is a one-story building. Additionally, records indicate a septic system would be installed at a later date. Reviewed as-built permits were filed in 1997 for the installation of this system. Three late-1960s carports with storage, one 1968 mobile home, one 1979 mobile home, and one 1997 mobile home are also noted in the records.

- Parcels 0320133051, 0320133053, 0320133057, 0320133060, and 0320133061, addressed at 4008 Pioneer Way E – No structures have been assessed on these parcels.

- Parcels 0320242117, addressed at 4122 E 49th Street – No structures have been assessed on this parcel.

Southeast-Adjoining Parcels

- Parcel 0320242141, addressed at 4822 44th Avenue E – This parcel was developed with a single-family residence in 1920. Reportedly, this residence is a single-story, wood-framed structure, and uses electric forced-air heat.

- 0320133052, 4710 44th Avenue E – Assessor records indicate this parcel was developed with a single-family residence in 1977. Reportedly, this is a two-story, wood-framed structure with electric heating.

- 0320133062, 4624 44th Avenue E – This parcel was first developed in 1980 with a single-family residence. The residence is reportedly two-stories, wood-framed structure, and uses electric baseboard heat.

3.4 Title Records Review

Title Insurance reports for the Site as well as the three additional properties requiring easements are on file with the SR 509 Project Office and can be provided by request. Review of these records did not indicate easements for fuel pipelines, storage tanks, or other similar facilities. However, the Title report for the Site does state that it lies within the Puyallup Indian Reservation. Reports for the adjoining properties requiring easements do not indicate the properties are on tribal land.

3.5 Previous Reports Review

In July 2023, a Desktop Analysis Review Summary for Troutlodge Hatchery was prepared for the Project and is summarized below. A copy of the report is included in Appendix F.

This report indicates the Site has an Industrial National Pollutant Discharge Elimination System (NDPES) Industrial Permit (IP) and an Upland Fin-Fish Hatching and Rearing General Permit (GP). It lists several chemicals that are used onsite (see Section 4.1.3). The report states the Site uses a septic system. Additionally, the report indicates that ASTs were not identified in the reviewed aerial photographs, and the use of heating-oil was not identified in the review of assessor records. The report concluded that the Site has "minimal risk for impact to soils and/or groundwater". However, a more detailed report that includes a site visit was recommended.

3.6 Other Documents

A copy of the Fact Sheet for NPDES Permit WA0039021, Troutlodge Hatchery was provided by Ecology, see Section 5.1. The background section of this report discusses the history of the facility and is summarized below.

The hatchery was built in the 1940s and purchased in the 1960s by Troutlodge, Inc (founded in 1945). This facility serves as a brood stock farm and also handles fish for private and public stockings. It is comprised of 56 raceways and pollution abatement ponds which are gravity fed by Clear Creek. Reportedly, the company has a separate laboratory for fish pathology and genetics.

4.0 ENVIRONMENTAL DATABASE REPORT

A search of environmental databases was performed by EDR. EDR searched federal, state, local, and tribal databases. Search distances were based on ASTM-defined search distances found in ASTM E-1527-21 and WSDOT's *Hazardous Materials ERS/ECS Guidance for WSDOT Projects*. A copy of the EDR Radius Map Report is attached in Appendix G). Database dates also are identified in the EDR report.

SUMMARY OF REGULATORY AGENCY REPORTS			
Report	**Report Date**	**Search Distance**	**Sites Within the Search Distance**
National Priorities List (NPL)	04/26/23	1 Mile	0
Delisted NPL Sites (DNPL)	04/26/23	1 Mile	0
Superfund Enterprise Management System (SEMS)	04/26/23	0.5 Mile	0
SEMS-Archive (SEMS-ARCHIVE)	04/26/23	0.5 Mile	0
Resource Conservation & Recovery Act (RCRA) Generators	03/06/23	0.25 Mile	0
RCRA Treatment, Storage and Disposal Facilities (TSD)	03/06/23	0.5 Mile	0
RCRA Corrective Action Facilities (CORRACTS)	03/06/23	1 Mile	0
Federal Engineering and Institutional Control Sites Lists (US ENG / INST CONTROLS)	02/20/23	0.5 Mile	0
State Institutional / Engineering Controls Registry (WA INST CONTROL)	01/09/23	0.5 Mile	0
Emergency Response Notification System (ERNS)	03/20/23	0.125 Mile	0
Ecology Confirmed and Suspected Contaminated Sites (CSCS)	01/09/23	1 Mile	**3**
Ecology Hazardous Sites List (HSL)	02/23/23	1 Mile	0
Ecology CSCS No Further Action Sites (NFA)	04/10/23	0.5 Mile	0
Ecology Underground Storage Tank Database (UST)	02/06/23	0.25 Mile	0
Ecology's Database of Leaking Storage Tank List (LUST)	02/06/23	0.5 Mile	0
Ecology's Voluntary Cleanup Program (VCP)	01/09/23	0.5 Mile	0
Ecology's Independent Cleanup Report (ICR)	12/01/02	0.5 Mile	0
Ecology's Landfill and Solid Waste Disposal Sites (SWF/LF)	11/30/22	0.5 Mile	**1**
Federal Brownfield Sites (US BROWNFIELDS)	04/06/23	0.5 Mile	0
State Brownfield Sites (WA BROWNFIELDS)	04/10/23	0.5 Mile	0

4.1 Subject Property Listings

The EDR report indicated that parcels within the Site are listed on the following databases. Records were requested from Ecology. Ecology provided records are discussed below in Section 5.1.

4.1.1 Allsites

The ALLSITES database is a list provided by Ecology that provides information on facilities and sites of interest to Ecology. A listing is generated for any site that has an interaction with Ecology. The EDR report indicates Troutlodge (Facility Site ID 14922) has two interactions with Ecology, one in 1990 and one in 2005.

According to Ecology records, Troutlodge was issued a General Permit (GP) as an Upland Fish Hatchery that specifically discharges aquaculture wastewater to state waters in June 1990. This permit reportedly expired in 2005. In 2005, Ecology then issued an Industrial NPDES Individual Permit (IP) to the facility for industrial stormwater discharges which expired in July 2023. A third interaction is currently listed online through Ecology's Facility/Site Search database. A new Upland Fish Hatchery GP was issued in May 2023. See Section 4.1.3 below for further details. It is unlikely that this listing of the Site poses a significant potential to impact the Project.

4.1.2 Spills

According to the EDR report, an estimated one gallon of lube or motor oil was spilled on an impermeable surface at the Site in September 2019 as a result of a vehicle collision. Reviewed records indicate the collision occurred on Pioneer Way E, not at the Site. Based on the quantity of material involved and the occurrence of the spill on an impermeable surface, it is unlikely to present a potential to impact the Project.

4.1.3 NPDES

As mentioned above in Section 4.1.1, an Industrial NPDES IP was issued to Troutlodge in 2005 and the permit expired in July 2023. Ecology's Water Quality Permitting and Reporting Information System database has the most recent version of the Waste Management Plan (WMP, January 2023), Facility Sampling Plan (January 2020), Annual Disease Control and Chemical Use Report (for the calendar year 2022), and the Pollution Prevention Plan (PPP, January 2023) for the facility. These documents were also reviewed as part of the Desktop Analysis discussed in Section 3.6. Review of the documents show various chemicals used and stored on-site including Tricaine-S (MS-222), Parasite-S (Formalin), Vidalife, Defoam (FG-10), and Ovadine which are all used for maintenance of the fish and fish hatching ponds. According to the WMP, Tricaine-S, Vidalife and Defoam containers are currently disposed to dumpsters while Parasite-S and Ovadine barrels are recycled.

Gasoline is also a listed hazardous material in the PPP. Gasoline containers are not mentioned in the WMA.

4.1.4 Facility Index System

The Facility Index System (FINDS) contains both facility information and "pointers" to other sources that contain more detail. It is maintained by the United States Environmental Protection Agency (EPA). According to the EPA's Facility Registry Service, Troutlodge is listed on the FINDS database

due to the NPDES permits. It is unlikely that this listing of the Site poses a significant potential to impact the Project.

4.1.5 Enforcement and Compliance History Online

In addition to the FINDS listings, the EPA maintains the Enforcement and Compliance History Online (ECHO) database. Troutlodge was issued a Final Order for an Administrative Order in June 2023. The enforcement type is listed as a "State Clean Water Act Non-Penalty Agreed Order". However, specific details of the Order were not available.

4.2 Adjoining Property Listings

The EDR report indicated that the following adjoining property appears on reviewed database lists.

4.2.1 Lathrop Property Spill

The Lathrop Property Spill is listed at 4408 44th Avenue E, on the northeast-adjoining property (upgradient). The Lathrop Property Spill is listed on the ALLSITES, Resource Conservation and Recovery Act (RCRA) Non-Generator, FINDS, and ECHO databases. Records were requested from Ecology and are discussed below in Section 5.2.

4.3 Nearby Property Listings

The EDR report indicated that the following nearby properties appear on reviewed database lists.

4.3.1 Kurt Christiansen Property

The Kurt Christiansen Property at 4521 Pioneer Way E is located approximately 900-feet east (downgradient) of the Site. This property is listed on the ALLSITES, Confirmed and Suspected Contaminated Sites (CSCS), and SPILLS databases. Cleanup Site Details from Ecology indicate the facility is awaiting cleanup of metal, petroleum products, and polycyclic aromatic hydrocarbons (PAHs) in both soils and groundwater as of 2005. According to the EDR report, a mechanical failure led to the release of hydraulic oil to the roadway in 2016. Records were requested from Ecology and are discussed below in Section 5.3.

4.3.2 Reese and Salsheider Fill

The Reese and Salsheider Fill site at 4518 and 4520 Gay Road is located approximately 0.4-mile north-northeast (downgradient) of the Site. This site is listed on the Solid Waste Fill/Landfill database as a historic non-regulated landfill. This facility is not believed to present a potential to impact the

Project based on the location, distance, and estimated groundwater-flow direction.

4.3.3 Pioneer and Canyon Collision

Pioneer and Canyon Collision at the intersection of Pioneer Way E and Canyon Road E is located approximately 0.9-mile southeast (upgradient) of the Site. This is listed in the CSCS and ALLSITES databases. Reportedly, benzene and diesel are suspected in soil, groundwater, and surface water and awaiting cleanup. This facility is not believed to present a potential to impact the Project based on the location and distance.

4.3.4 Near Olympic Pipeline Tacoma Junction

The Olympic Pipeline Tacoma Junction Facility at 2660 Frank Alber Road E is located approximately 1-mile north-northeast of the Site and north of the Puyallup River (cross-gradient). The facility is listed on the CSCS, ALLSITES, and SPILLS databases. This facility is not believed to present a potential to impact the Project based on the location, distance, and estimated groundwater-flow direction.

5.0 REGULATORY FILE REVIEW

Available online documents from Ecology as well as records requested via Ecology's Public Records Request Center were reviewed, and pertinent information is discussed below.

5.1 Troutlodge Hatchery

Ecology provided several files related to the Site at 4008 Pioneer Way E. Individual reports are listed below with a summary of the reviewed information.

Water Quality Enforcement file, 1991

Includes Notice of Appeal to Pollution Control Hearings Board in which Troutlodge requested a reduction in testing and monitoring, the requirement of the development of a facility operating plan, the allowance of additional monitoring by administrative orders or permit modifications, limitations on suspended solids, and the restriction of therapeutic compounds and disinfectants. However, it is unknown if the appeal was granted.

ERTS Incident #693186, reported September 2019

Approximately one gallon of motor oil and possibly power-steering fluid was spilled onto the roadway (Pioneer Way E) as the result of a car accident. Reportedly, Troutlodge was advised by Ecology on how to clean up the spilled material. However, the status of the spill is not documented.

NPDES Permit No. WA00390210, Issued originally in 1990, Renewed in 2010

The facility was originally issued an Upland Finfish Hatching and Rearing NPDES GP in 1990, which was reissued through 2005. In 2010 the permit was changed to an Industrial NPDES IP to implement new recommendations for waste-load allocations. According to the Fact Sheet for this permit, the facility remained in compliance with the permit through June 2019. A Renewal Application was also submitted in October 2022. Beginning in August 2023 permit coverage was issued under the Uplands Finfish Hatching and Rearing GP and the Industrial NPDES IP was placed in inactive status then terminated.

Ecology Inspection Report, October 2012

A copy of the Ecology report generated for an October 2012 inspection of the facility. No concerns were noted during the inspection.

Ecology Inspection Report, September 2015

A copy of the Ecology report generated for an August 2015 inspection of the facility. Facility staff explained that new fencing around the facility had been installed and a landslide upstream had added sediment load to Clear Creek. Additionally, in order to assist with future landslide issues, new concrete pollution abatement ponds were planned. No concerns were noted during the inspection.

Mitigation Agreement Hydraulic Project Approval, 2017

An agreement was made between Troutlodge, Inc. and the Washington Department of Fish and Wildlife to remove gravel from the streambed immediately upstream of the hatchery and relocate it downstream of the hatchery. This relocation of gravel was performed to prevent bedload aggregation in Clear Creek upstream of the hatchery. However, this work was not completed.

Ecology Inspection Report, January 2018

No concerns were noted during a December 2017 inspection. However, it was noted that there were occasional landslides upstream and that new dual concrete pollution abatement ponds were to be engineered for the facility, as discussed during a previous inspection, but no changes were noted.

Chemical Use Reports, 2016 through 2022

Annual reports of chemicals used for disease control at the hatchery. Chemicals tracked on these reports are listed above in Section 4.1.3.

Ecology Inspection Report, October 2020

During an August 2020 inspection, the inspectors viewed the egg incubation room at the hatchery and a new chiller system installed in 2018. Additionally, due to low flow from Clear Creek, the facility operators wanted to change their water rights to use well water to augment flow and install an effluent weir to measure flow. No concerns were noted during the inspection. However, it was noted that the 2017 Mitigation Agreement was not approved and that the operators were looking for old groundwater wells to pump groundwater into the facility.

Ecology Inspection Report, October 2021

During a September 2021 inspection, inspectors viewed the egg incubation room at the hatchery, the recirculation system, the intake area, raceways, adult rearing pond, and settling ponds. No concerns were noted during the inspection. However, it was again noted that the 2017 Mitigation Agreement was not approved and that the facility was still looking for ways to protect their intake water including the potential use of groundwater wells.

5.2 Lathrop Property Spill

Ecology provided one file related to the Lathrop Property Spill at 4408 44th Avenue E. A Notification of Dangerous Waste Activities Administrative Withdrawal (1995) form was the only document included in the file. However, this form also included an attached First Notification of Dangerous Waste Activities (1989) and EPA Acknowledgement of Notification of Hazardous Waste Activity (1989). The company name on the form is WDOE-SRO Lathrop Property Spill and the waste identified on the first notification form is polychlorinated biphenyls (PCBs) from transformers. The form also indicates that the quantity and batch frequency for the waste stream is an estimated 480-pounds one-time-only. The address of this property is immediately south of a Tacoma Power substation. It is possible that, given the listed PCB waste, the spill occurred at the power substation and not on the residential parcel.

5.3 Kurt Christiansen Property

Ecology provided several files related to the Kurt Christiansen Property at 4521 Pioneer Way E. Individual reports are listed below with a summary of the reviewed information.

ERTS Incident #667874, Reported September 2016

Approximately one quart of hydraulic oil was spilled onto the road shoulder by a brush cutter. Reportedly, proper best management practices were used and the spill was cleaned up.

Toxics Cleanup File

Included an Early Notice Letter Initial Investigation Field Report dated August 2004. These documents indicated that the facility would be listed as a CSCS site due to the release of petroleum and solvent to soils at the facility during unauthorized auto wrecking and repair activities. The initial investigation began in July of 2002 and as of August 2005 cleanup work had not begun. The 2002 investigation by the Tacoma-Pierce County Health Department notes apparent solid waste violations due the presence of multiple spills on the property, illicit debris piles on a portion of the property, poor waste management practices, and possible Puget Sound Clean Air Agency (PSCAA) violations.

6.0 SITE RECONNAISSANCE

The purpose of the site visit was to look for obvious visual indications of historical or current operations that may have resulted in possible soil, groundwater, and/or soil vapor contamination. This included a review of obvious locations of past and/or present chemical storage, fuel USTs or ASTs, review areas of interest as identified in the records review, and to visually observe adjoining properties.

The Site reconnaissance was conducted at the hatchery with the Troutlodge Operations Project Manager on September 13, 2023. Photographs taken during the site reconnaissance are attached to this report. Photograph locations are shown on Figure 2.

In general, Site reconnaissance observations were consistent with information gathered. Properties east and west of the Site are generally residential with the exception of a power substation located to the northeast along 44th Avenue E. The area south of the Site along Clear Creek is undeveloped and vegetated. Pioneer Way E bounds the Site to the north, beyond which lies an active rail line. Further north is the Puyallup River.

The Troutlodge Operations Project Manager explained that because the hatchery supplies USDA quality fish and eggs, the hatchery is limited in chemical use to products that are FDA-approved only. Chemical handling at the Site of Tricaine S (MS-222) and Parasite S (Formalin) appeared to be consistent with best management practices. Chemicals were stored in their original containers, within or on secondary containment structures. Spills and/or leaks were not observed and the containers appeared to be in good condition. Parasite-S is additionally stored in a climate-controlled room to prevent degeneration of the chemical.

Gasoline and diesel fuel storage was also observed on the Site. The Troutlodge Operations Project Manager stated these petroleum products were used onsite for small equipment such as lawnmowers and one small loader. These products also were stored in five gallon or smaller containers in good condition within secondary containment in a maintenance shed.

Several new monitoring wells were noted at the Site. Troutlodge Operations Project Manager stated these had all recently been installed by WSDOT for the purpose of groundwater monitoring for the potential restoration of Clear Creek.

According to the Troutlodge Operations Project Manager, the buildings at the Site are all heated by electric forced air. He was not aware of the presence of lead pipes or large quantities of fill material used at the Site. However, he did state that sometimes a gravel topcoat is added to the Site to help with potholing. Reportedly, the structures are all connected to a septic system which pumps the effluent to a drain field up the hill on the western portion of the Site. Additionally, the Site is provided water by the local municipality.

The Troutlodge Operations Project Manager believes the Site may have originally operated as a state hatchery in the 1940s, that it was purchased by Troutlodge sometime in the 1970s, and that Hendrix-Genetics purchased the Site in 2016. This is anecdotal evidence and documentation was not provided to confirm this information. Additionally, the Troutlodge Operations Project Manager was not aware of any spills, environmental issues, or prior environmental reports related to the Site and also was not aware of any spills or issues on neighboring properties that might affect the Site.

7.0 SITES OF POTENTIAL CONCERN

Based on our review of historical documents and publicly available records (See Sections 3.0, 4.0, and 5.0), three sites of potential concern have been identified for the Project (discussed below). Possible hazardous sites are shown on Figure 3.

The other reviewed sites are not anticipated to impact the Site based on contaminants of concern, media impacted (soil or groundwater), cleanup status, and/or inferred groundwater flow direction.

7.1 Troutlodge Hatchery

The Site is listed on several of the EDR databases: ALLSITES, SPILLS, NPDES, FINDS, and ECHO. The ALLSITES and FINDS listing are administrative in nature and do not indicate the presence of contamination at the Site. Reviewed SPILLS documents indicate a spill occurred as the result of an auto accident on Pioneer Way E, immediately north of the Site. Based on the limited quantity of chemicals involved, the cleanup instructions provided by Ecology, and the location of the spill in the north-adjoining roadway, the spill has a low potential to impact the Site.

The review included Ecology-provided documents related to the Sites NPDES permit. These documents indicate the facility has been permitted to discharge water since at least 1990. Infractions and enforcement actions were minor and administrative in nature. Given the documented history of chemical use and observed handling and storage practices, these activities have a low potential to impact the Site.

7.2 Lathrop Property Spill

The Ecology-reviewed file states this northeast-adjoining property, the Lathrop Property Spill) is listed due to a spill of PCBs. The associated address for the spill is 4408 44th Avenue E. However, it is possible that this actually occurred at the power substation located immediately north of this address (the substation parcel is currently unaddressed but was formerly owned by the Lathrops). Given that PCBs adhere to soils limiting their mobility, and that there were cleanup activities that included the disposal of PCBs, this facility has a low potential to impact the Project. If mitigation were to become necessary, based on the type of contamination and media involved, it would likely be straightforward in nature.

7.3 Kurt Christiansen Property

This property is listed on the ALLSITES, CSCS, and SPILLS databases. The Ecology-provided indicates this property was listed due to the release of petroleum and solvent to soils at the property during unauthorized auto wrecking and repair activities. Reportedly, the property has not yet been cleaned up. Due to the nature of the contaminants involved as well as the inferred groundwater flow direction (away from the Site), this property has a low potential to impact the Project. However, if mitigation were to become necessary, due to the source area being located off-site, unknown extent of contamination, potential for multiple contaminants, and type of media involved, it could be complicated.

8.0 SUMMARY AND CONCLUSIONS

No adverse cumulative effects from hazardous materials are anticipated to negatively impact the Project. No significant, unavoidable adverse effects are anticipated during construction, due to the limited potential of encountering contaminated soil and/or groundwater that could be otherwise avoided by design decisions or mitigated through proper remediation.

9.0 RECOMMENDATIONS

No additional environmental investigations are warranted at this time. However, as with any redevelopment project, excavation activities may encounter contamination and/or buried debris associated with former tanks or other structures that were not identified during this HMA. These may require specific cleanup and/or disposal requirements at an additional cost. Potential impacts are summarized below.

9.1 USTs and Contaminated Soils

Reviewed historical records review and the site reconnaissance did not identify current or former USTs at the Site or properties adjacent to the Site. However, if a UST is encountered during excavation activities, it should be properly

decommissioned and removed according to local guidelines. Additionally, the presence of a leaking UST will prompt reporting requirements to regulatory agencies. If affected or otherwise contaminated soils are encountered during redevelopment, additional costs associated with the handling and disposal of these soils may be incurred, as there would likely be restrictions on the re-use of the soils.

According to WSDOT's *Table of Standard Impacts and Mitigation Measures*, General Special Provisions (GSPs) should be included in the construction contract requiring the contractor to remove any discovered USTs or contaminated soils during construction in accordance with state and local regulations. Additionally, internal WSDOT notification procedures prescribed in the *Construction Manual* SS 1-07.5) for the Environmental Compliance Assurance Procedure (ECAP) should be followed.

9.2 Asbestos

Prior to the demolition of structures or materials for Project-construction related activities, PSCAA requires an asbestos good-faith survey be performed by an Asbestos Hazard Emergency Response Act (AHERA)-certified Building Inspector. This is also required by WSDOT's *Table of Standard Impacts and Mitigation Measures*. Additionally, WSDOT requires that if asbestos-containing materials are discovered, mitigation would consist of removing these materials in compliance with regulations prior to building demolition and disposal in a legally permitted facility. The inspection report and Notice of Intent are generally required to obtain a demolition permit.

9.3 General

Section 2.3 lists property acquisitions. An amendment to this HMA is recommended if subsequent Project/Site changes (i.e., new cut and fill areas or acquisition areas) could alter the conclusions made herein. In general, hazardous material investigations older than two years should be re-examined to determine whether revisions are necessary prior to any major action, such as approval of the Design Summary, PS&E, or right-of-way purchase (WSDOT's *Environmental Manual* Chapters 447 and 620.08). The intent of these investigations is to provide the necessary level of detail to allow staff to make informed decisions and take the appropriate actions to limit/avoid excessive project delays, increase costs and cleanup liability. With respect to hazardous materials, WSDOT's primary responsibility is to prevent contamination from spreading or causing it to become worse.

10.0 LIMITATIONS

This HMA may not identify all potentially hazardous materials and/or contamination (e.g., petroleum contamination near USTs at the Site. This HMA is not comprehensive by nature and is not intended to identify all environmental problems or eliminate all risk with the Site. The completed HMA was limited to the Site as identified on Figure 1.

This HMA is based on the site conditions, data, and other information available as of the date of the HMA, and the conclusions herein are applicable only to the time frame in which the HMA was prepared. Background information used to prepare this HMA, including (but not limited to) site plans and other data, have been furnished to INNOVEX by WSDOT and its subcontractors and, as available, on Ecology's website. INNOVEX has relied on this information as furnished and is neither responsible for, nor has confirmed, the accuracy of this information.

No warranty, either express or implied, is made.

11.0 REFERENCES

American Society for Testing and Materials (ASTM), 2021, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process: West Conshohocken, Penn., American Society for Testing and Materials E 1527 21.

Environmental Data Resources, Inc., *The Certified Sanborn Map Report*; Trout Lodge – Clear Creek Project. July 5, 2023.

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Washington State Department of Transportation. *Environmental Manual.* M 31-11.26. July 2022.

Washington State Department of Transportation. *Guidance & Standard Methodology for WSDOT Hazardous Materials Discipline Reports.*

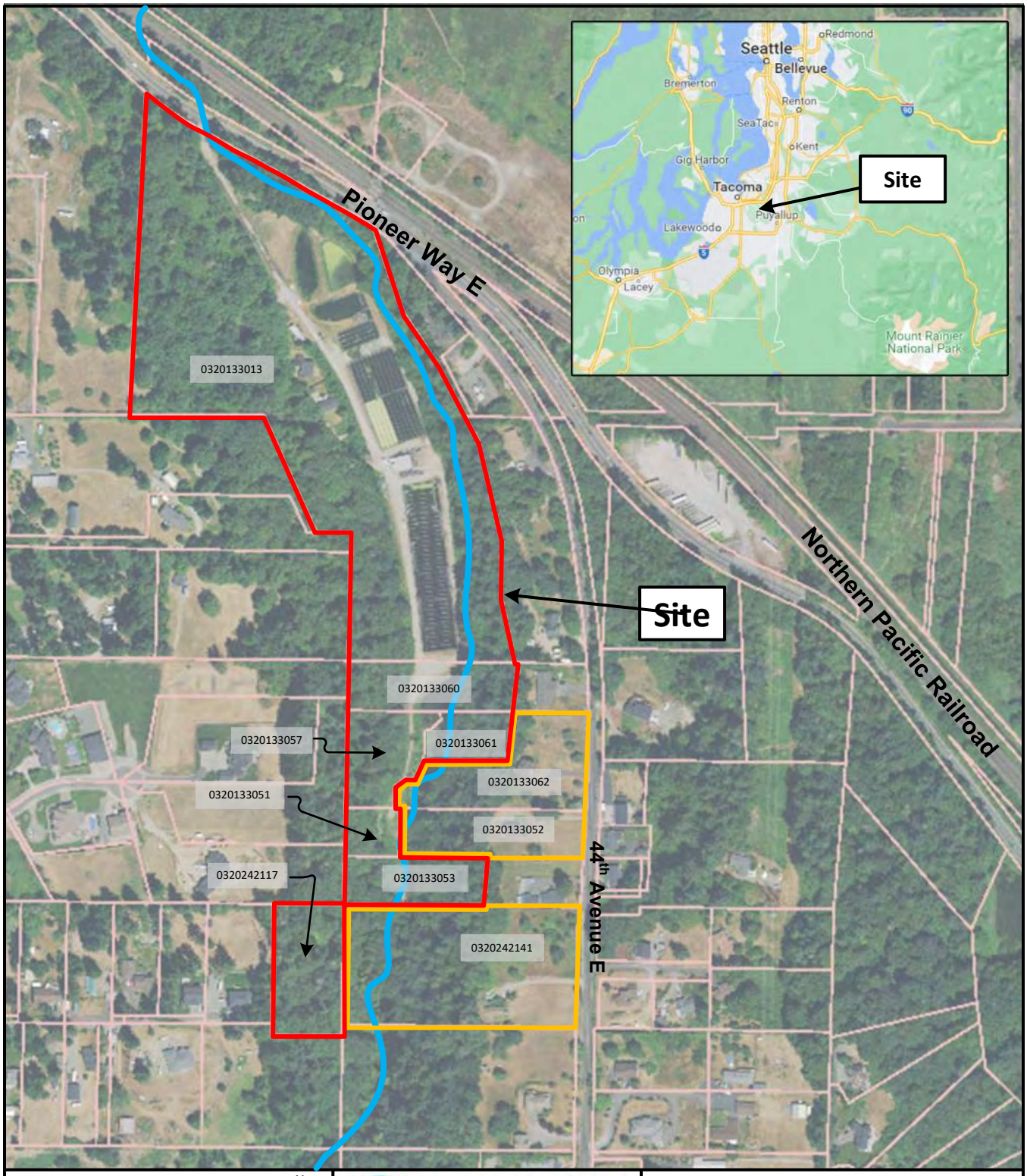
Washington State Department of Transportation. *Hazardous Materials ERS/ECS Guidance for WSDOT Projects*

Washington State Department of Transportation. *Table of Standard Impacts & Mitigation Measures*.

Other references mentioned in Sections 3.0 and 4.0 of this report.

ATTACHMENTS

FIGURES



Legend

N

- Parcels to be Purchased
- Parcels Requiring Easements
- Clear Creek
- 0320242117 Tax Parcel Number

INNOVEX ENVIRONMENTAL MANAGEMENT, INC.

16310 NE 80th St, Suite 104

Redmond, WA 98052

Drawing Date: 9/25/2023

Figure and notations are in color. Black and white copies may not be suitable for use.

Figure 1

Project Location Map

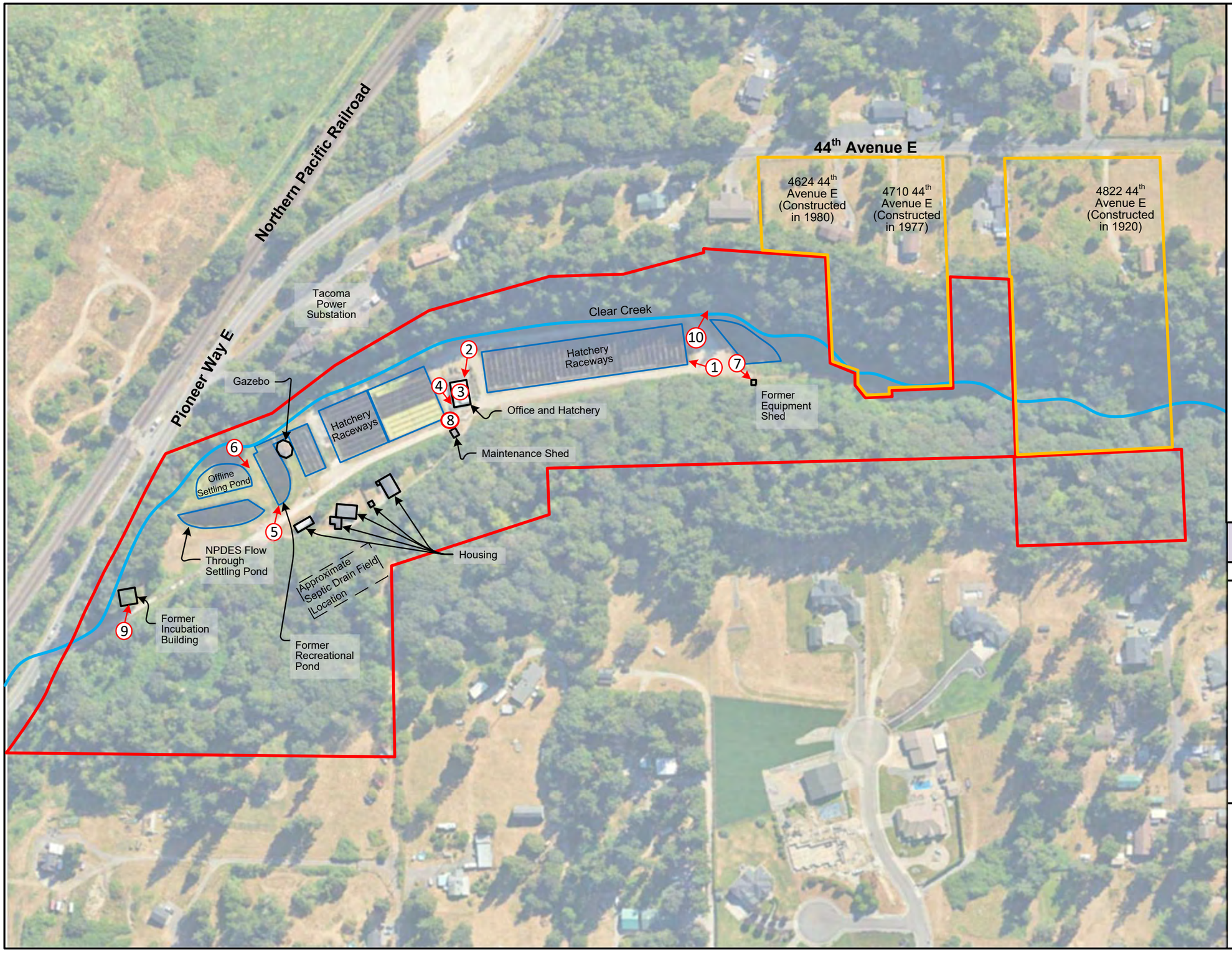
SR 509/24th Avenue S to S 188th Street – New Expressway Project – Stage 2

Hazardous Materials Analysis Report

Troutco Clear Creek Hatchery
4008 Pioneer Way E, Tacoma, WA

Drawing References: Pierce County PublicGIS, 2021 Aerial Photograph

Project No. Clear Creek Figure 1.vsdx



Legend

N

- Parcels to be Purchased
- Parcels Requiring Easements
- Clear Creek
- Building Outline
- Hatchery Pond Outline
- 1 Approximate Photograph Location and Direction

Scale: 1" = 200'

0 ft. 120 ft. 200 ft. 400 ft.

Figure and notations are in color. Black and white copies may not be suitable for use.

Drawing Date: 9/25/2023

Figure 2

Site Plan and Site Visit Photograph Locations

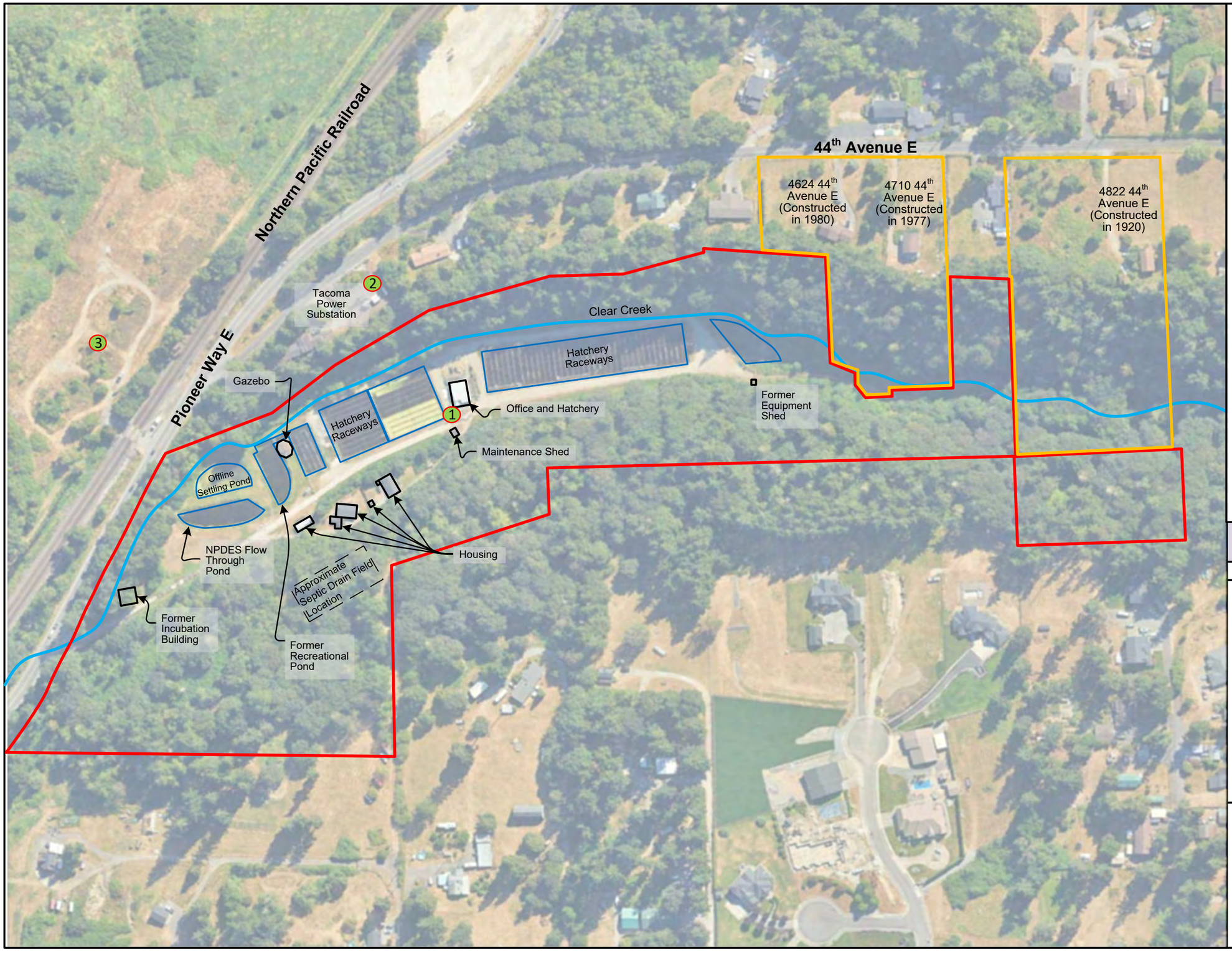
SR 509/24th Avenue S to S 188th Street – New Expressway Project – Stage 2

Hazardous Materials Analysis Report

Troutco Clear Creek Hatchery
4008 Pioneer Way E, Tacoma, WA

INNOVEX ENVIRONMENTAL MANAGEMENT, INC.
16310 NE 80th St, Suite 104
Redmond, WA 98052
(800) 988-7880

Drawing References: Pierce County PublicGIS, Google Earth Pro 2022 Aerial Photograph, INNOVEX Site Visit



Legend

N

- Parcels to be Purchased
- Parcels Requiring Easements
- Clear Creek
- Building
- Hatchery Pond
- Site of Potential Concern
  1. Clear Creek Fish Hatchery
  2. Lathrop Property Spill
  3. Kurt Christiansen Property

Scale: 1" = 200'

0 ft. 120 ft. 200 ft. 400 ft.

Figure and notations are in color. Black and white copies may not be suitable for use.

Drawing Date: 9/25/2023

Figure 3

Sites of Potential Concern

SR 509/24th Avenue S to S 188th Street – New Expressway Project – Stage 2

Hazardous Materials Analysis Report

Troutco Clear Creek Hatchery
4008 Pioneer Way E, Tacoma, WA

INNOVEX ENVIRONMENTAL MANAGEMENT, INC.

16310 NE 80th St, Suite 104
Redmond, WA 98052
(800) 988-7880

Drawing References: Pierce County PublicGIS, Google Earth Pro 2022 Aerial Photograph, INNOVEX Site Visit

PHOTOGRAPHS

INNOVEX ENVIRONMENTAL MANAGEMENT PHOTO LOG	
Client: HNTB/WSDOT	**Project:** SR 509 Stage 2
Site Name: 4008 Pioneer Way E, Tacoma, WA	**Photographer:** Pamela Fleming

PHOTO 1



Hatchery raceways located in the southern portion of the Site.

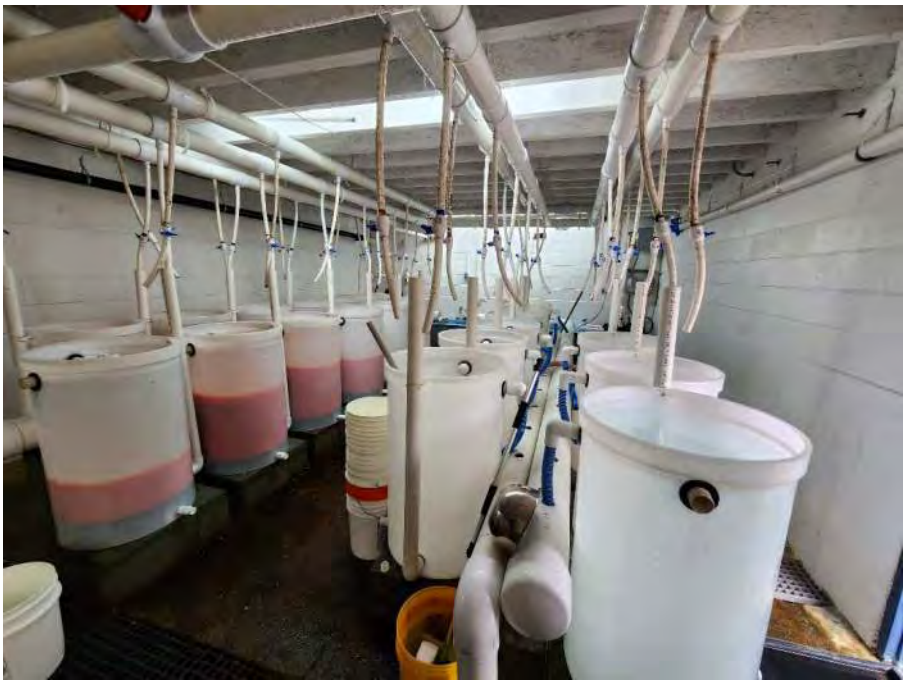
PHOTO 2



Main hatchery building, located centrally between hatchery ponds and constructed in 1960.

INNOVEX ENVIRONMENTAL MANAGEMENT PHOTO LOG	
Client: HNTB/WSDOT	**Project:** SR 509 Stage 2
Site Name: 4008 Pioneer Way E, Tacoma, WA	**Photographer:** Pamela Fleming

PHOTO 3



Fish egg incubation room in main hatchery building.

PHOTO 4



Climate-controlled storage of Parasite-S (fish parasite treatment) on secondary containment.

INNOVEX ENVIRONMENTAL MANAGEMENT PHOTO LOG	
Client: HNTB/WSDOT	**Project:** SR 509 Stage 2
Site Name: 4008 Pioneer Way E, Tacoma, WA	**Photographer:** Pamela Fleming

PHOTO 5



Former recreational fishing pond and gazebo.

PHOTO 6



Portion of former recreational fishing pond, parking areas, and residential structures.

INNOVEX ENVIRONMENTAL MANAGEMENT PHOTO LOG	
Client: HNTB/WSDOT	**Project:** SR 509 Stage 2
Site Name: 4008 Pioneer Way E, Tacoma, WA	**Photographer:** Pamela Fleming

PHOTO 7



Former equipment storage shed located on southern portion of Site.

PHOTO 8



Interior of maintenance shed with petroleum storage (less than 5 gallons) in secondary containment.

INNOVEX ENVIRONMENTAL MANAGEMENT PHOTO LOG	
Client: HNTB/WSDOT	**Project:** SR 509 Stage 2
Site Name: 4008 Pioneer Way E, Tacoma, WA	**Photographer:** Pamela Fleming

PHOTO 9



Interior of former incubation building in northern portion of Site. Taken from outside due to poor condition of building.

PHOTO 10



One of two dams to be removed as part of WSDOT Clear Creek restoration project.

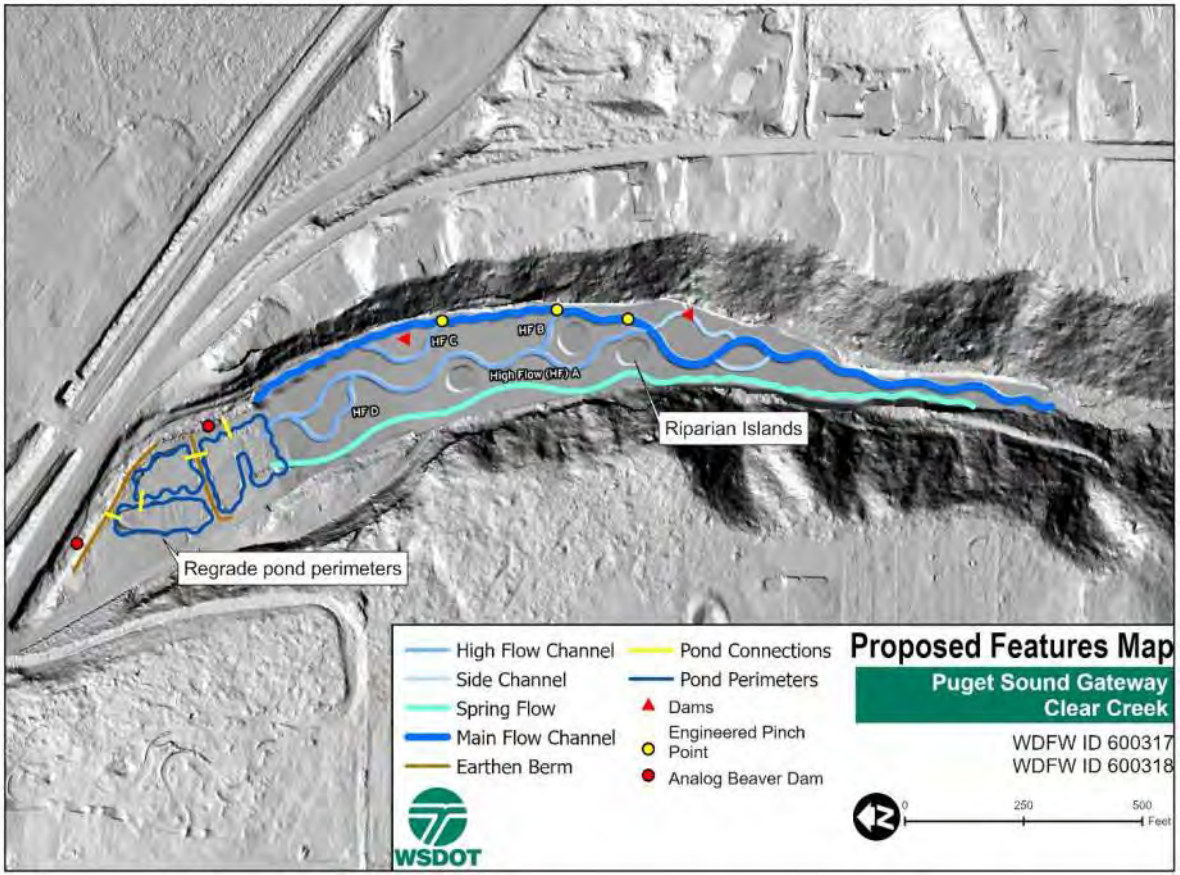
APPENDICES

APPENDIX A – ACRONYMS

AHERA – Asbestos Hazard Emergency Response Act
ASTM – American Society for Testing and Materials
CREC – Controlled Recognized Environmental Condition
CSCS – Confirmed and Suspected Contaminated Sites
ECAP – Environmental Compliance Assurance Procedure
ECHO – Enforcement and Compliance History Online
EDR – Environmental Data Resources, Inc.
EPA – Environmental Protection Agency
FINDS – Facility Index System
GP – General Permit
GSPs – General Special Provisions
HMA – Hazardous Materials Analysis
HREC – Historical Recognized Environmental Condition
IP – Individual Permit
Metsker – Metsker's Atlas of Pierce County
INNOVEX – INNOVEX Environmental Management, Inc.
NPDES – National Pollutant Discharge Elimination System
PAHs – polycyclic aromatic hydrocarbons
PCBs – polychlorinated biphenyls
RCRA – Resource Conservation and Recovery Act
REC – Recognized Environmental Condition
Site – Troutlodge Hatchery
SR – State Route
SWF/LF – Solid Waste Fill/Landfill
Plummer – Plummer Complete Atlas
PPP – Pollution Prevention Plan
Project – SR 509 Completion Project
PSCAA – Puget Sound Clean Air Agency
USGS – United States Geologic Survey
WDFD – Washington Department of Fish and Wildlife
WMP – Waste Management Plan
WSDOT – Washington State Department of Transportation

APPENDIX B – PROJECT INFORMATION

Proposed Design



Clear Creek Stream Restoration Project

Project Assumptions:

- Existing concrete structures and revetments will be removed
- Clean, upland staging areas will be available to stockpile excavated sediment
- No known spills on site
- Site is managed as a clean space for fish hatching

APPENDIX C – TOPOGRAPHIC MAP REPORT

Trout Lodge - Clear Creek Project

4008 Pioneer Way

Tacoma, WA 98443

Inquiry Number: 7382051.4

July 05, 2023

EDR Historical Topo Map Report

with QuadMatch™

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

EDR Historical Topo Map Report

07/05/23

Site Name:

Trout Lodge - Clear Creek Proj
4008 Pioneer Way
Tacoma, WA 98443
EDR Inquiry # 7382051.4

Client Name:

HNTB CORPORATION
7730 S Union Park Ave., Suite 110
Salt Lake City, UT 84047
Contact: Buffie Chournos

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by HNTB CORPORATION were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# NA

Project: Trout Lodge - Clear Creek

Coordinates:

Latitude:	47.217401 47° 13' 3" North
Longitude:	-122.373356 -122° 22' 24" West
UTM Zone:	Zone 10 North
UTM X Meters:	547447.31
UTM Y Meters:	5229513.99
Elevation:	43.23' above sea level

Maps Provided:

2020	1961
2017	1949
2014	1944
1997	1941
1994	1900
1981	1897
1973	
1968	

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2020 Source Sheets



Puyallup
2020
7.5-minute, 24000



Tacoma South
2020
7.5-minute, 24000

2017 Source Sheets



Puyallup
2017
7.5-minute, 24000



Tacoma South
2017
7.5-minute, 24000

2014 Source Sheets

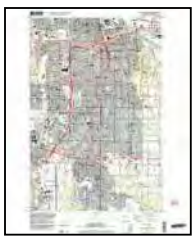


Puyallup
2014
7.5-minute, 24000

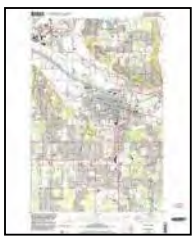


Tacoma South
2014
7.5-minute, 24000

1997 Source Sheets



Tacoma South
1997
7.5-minute, 24000
Aerial Photo Revised 1990

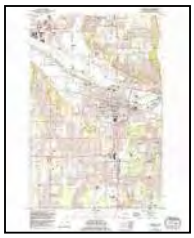


Puyallup
1997
7.5-minute, 24000
Aerial Photo Revised 1990

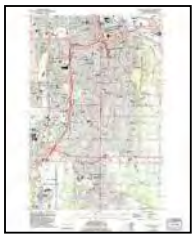
Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1994 Source Sheets



Puyallup
1994
7.5-minute, 24000
Aerial Photo Revised 1990



Tacoma South
1994
7.5-minute, 24000
Aerial Photo Revised 1990

1981 Source Sheets



Puyallup
1981
7.5-minute, 24000
Aerial Photo Revised 1978



Tacoma South
1981
7.5-minute, 24000
Aerial Photo Revised 1978

1973 Source Sheets



Puyallup
1973
7.5-minute, 24000
Aerial Photo Revised 1973



Tacoma South
1973
7.5-minute, 24000
Aerial Photo Revised 1973

1968 Source Sheets



Puyallup
1968
7.5-minute, 24000
Aerial Photo Revised 1968



Tacoma South
1968
7.5-minute, 24000
Aerial Photo Revised 1968

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1961 Source Sheets



Puyallup
1961
7.5-minute, 24000
Aerial Photo Revised 1957



Tacoma South
1961
7.5-minute, 24000
Aerial Photo Revised 1957

1949 Source Sheets



PUYALLUP
1949
7.5-minute, 25000



TACOMA SOUTH
1949
7.5-minute, 25000

1944 Source Sheets



TACOMA SOUTH
1944
15-minute, 50000

1941 Source Sheets



Tacoma South
1941
15-minute, 62500

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1900 Source Sheets



Tacoma
1900
30-minute, 125000

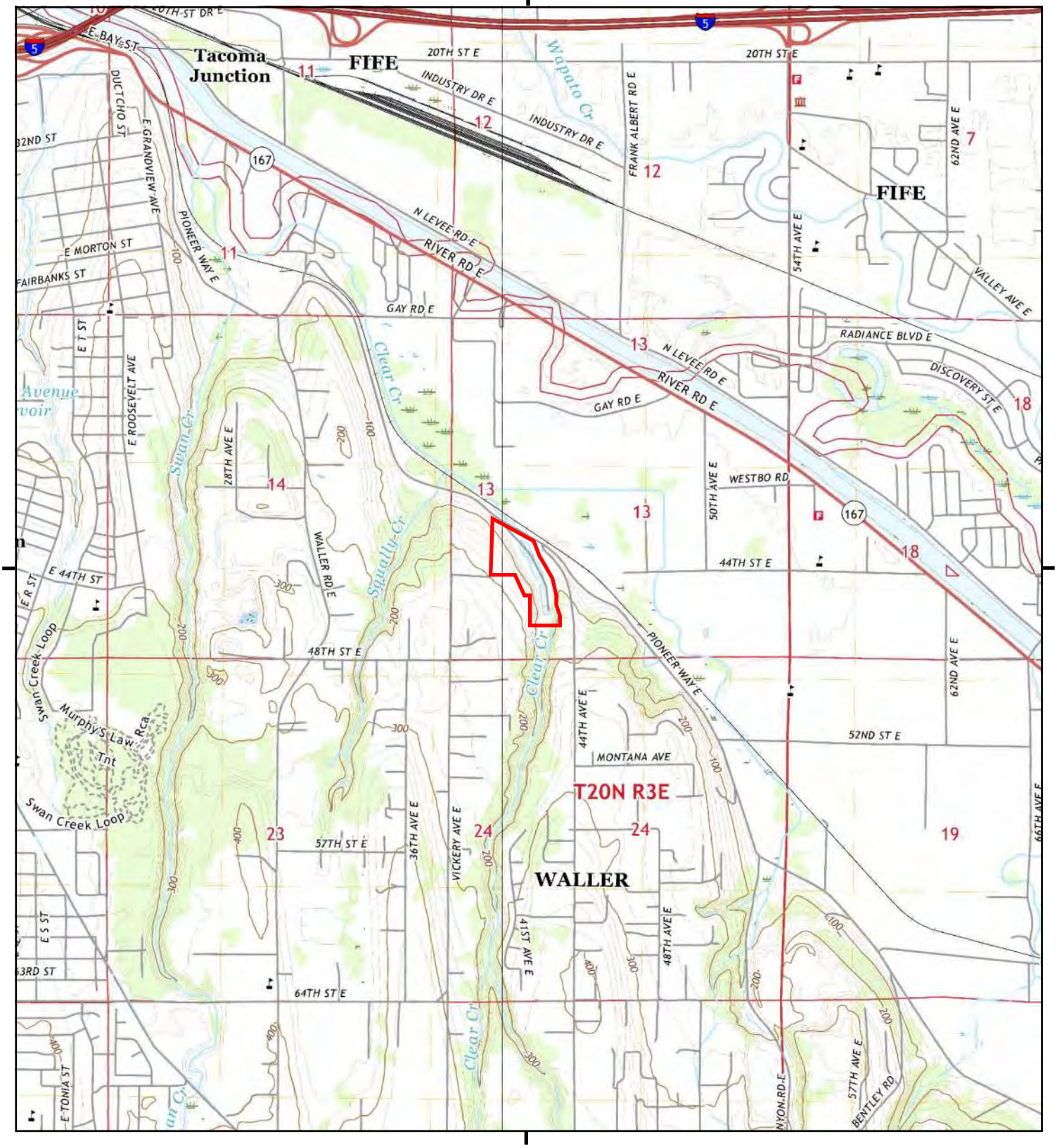
1897 Source Sheets



Tacoma
1897
30-minute, 125000

Historical Topo Map

2020



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

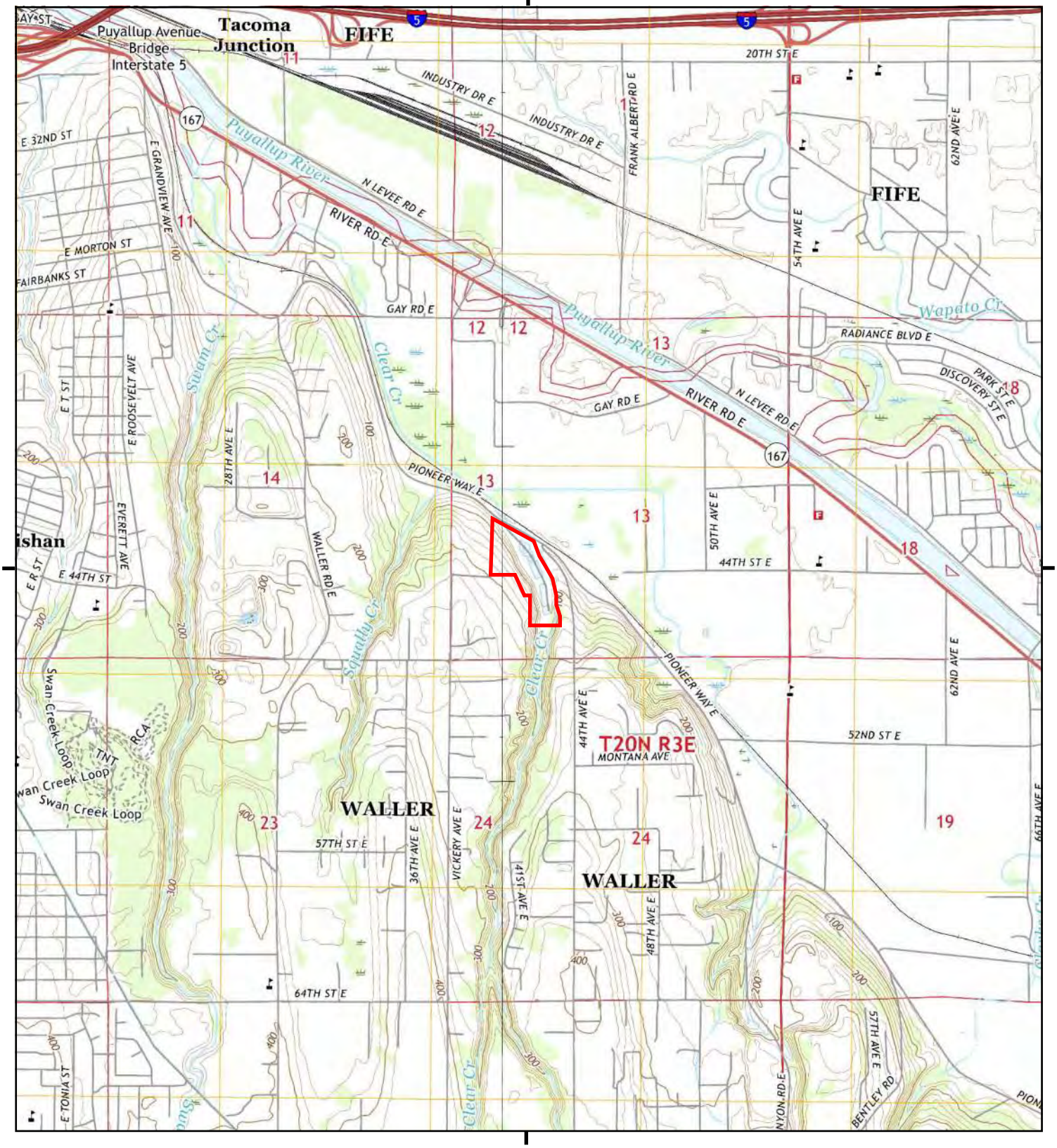
TP, Puyallup, 2020, 7.5-minute
SW, Tacoma South, 2020, 7.5-minute

SITE NAME: Trout Lodge - Clear Creek Project
ADDRESS: 4008 Pioneer Way
Tacoma, WA 98443
CLIENT: HNTB CORPORATION

N

Historical Topo Map

2017



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

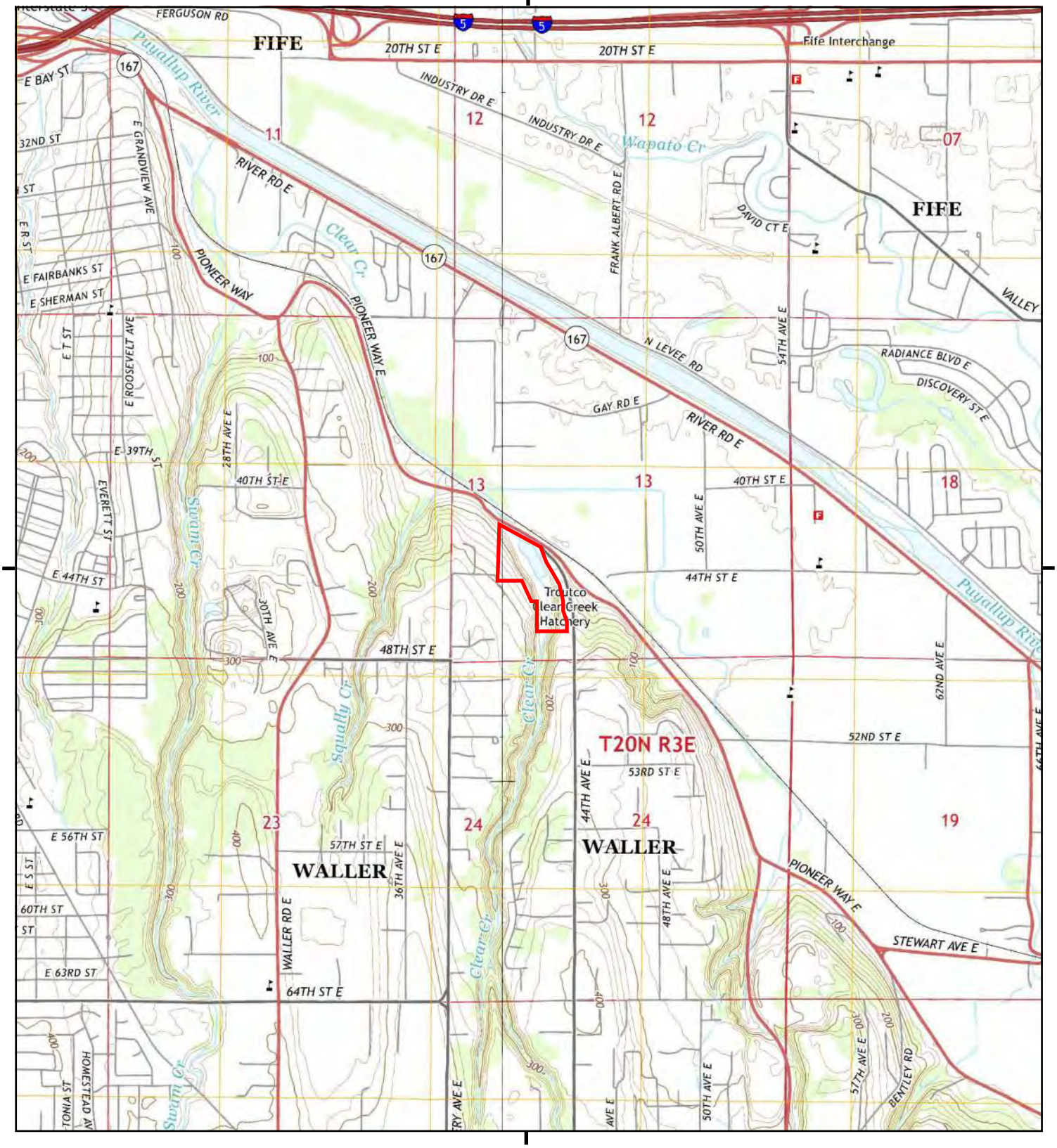
TP, Puyallup, 2017, 7.5-minute
SW, Tacoma South, 2017, 7.5-minute

SITE NAME: Trout Lodge - Clear Creek Project
ADDRESS: 4008 Pioneer Way
Tacoma, WA 98443
CLIENT: HNTB CORPORATION

N

Historical Topo Map

2014



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

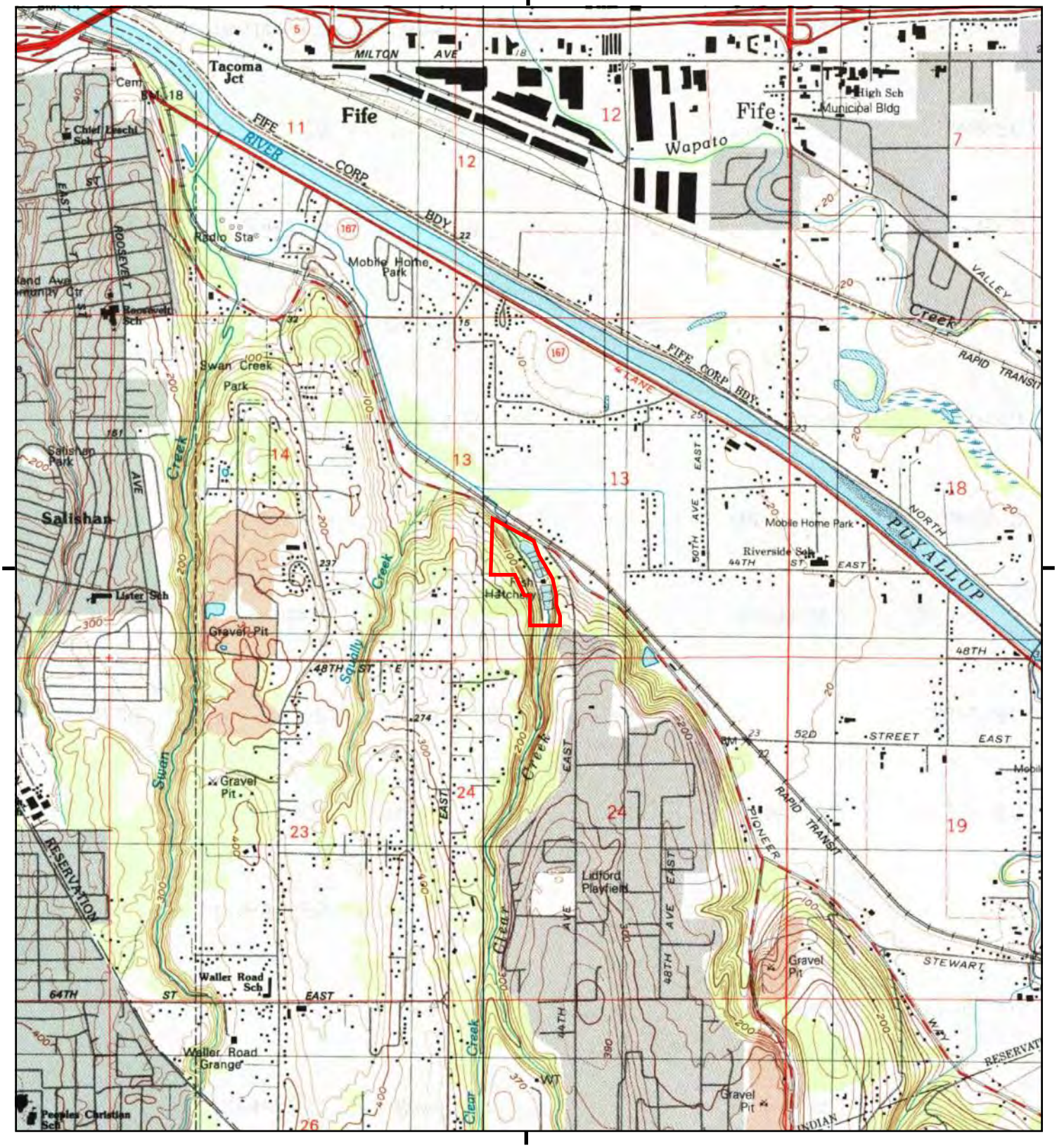
TP, Puyallup, 2014, 7.5-minute
SW, Tacoma South, 2014, 7.5-minute

SITE NAME: Trout Lodge - Clear Creek Project
ADDRESS: 4008 Pioneer Way
Tacoma, WA 98443
CLIENT: HNTB CORPORATION

N

Historical Topo Map

1997



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

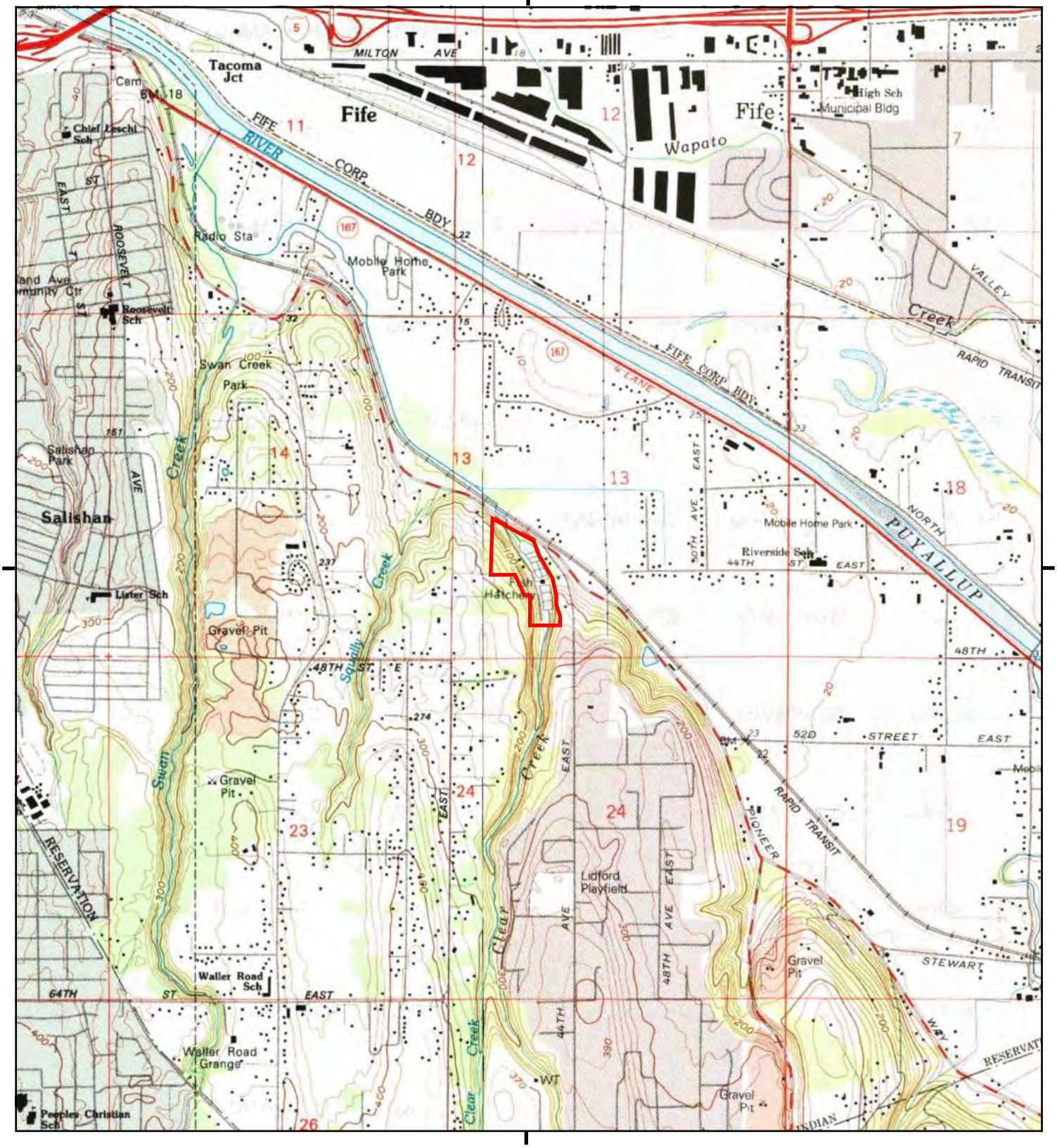
TP, Puyallup, 1997, 7.5-minute
SW, Tacoma South, 1997, 7.5-minute

SITE NAME: Trout Lodge - Clear Creek Project
ADDRESS: 4008 Pioneer Way
Tacoma, WA 98443
CLIENT: HNTB CORPORATION

N

Historical Topo Map

1994



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

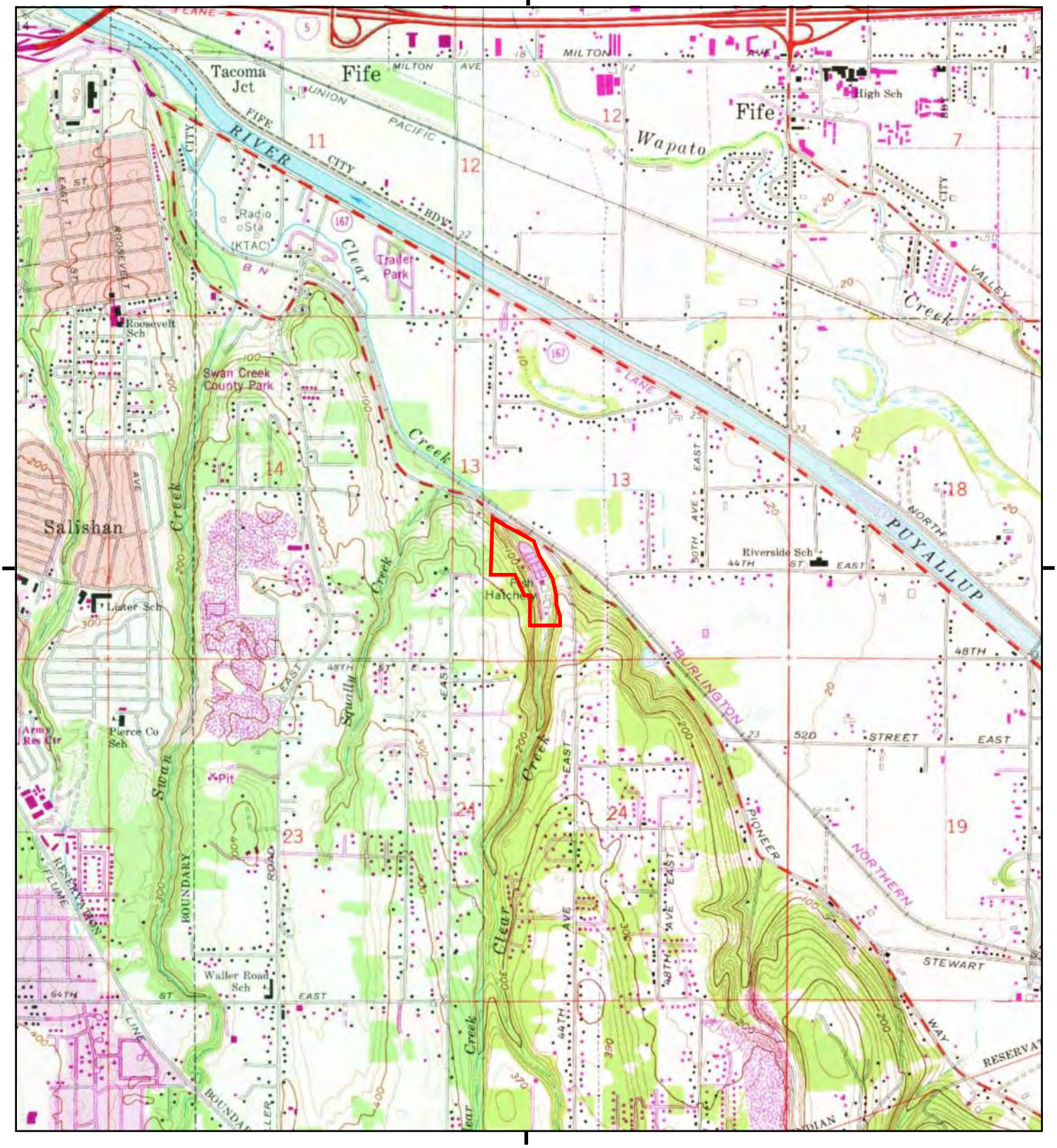
TP, Puyallup, 1994, 7.5-minute
SW, Tacoma South, 1994, 7.5-minute

SITE NAME: Trout Lodge - Clear Creek Project
ADDRESS: 4008 Pioneer Way
Tacoma, WA 98443
CLIENT: HNTB CORPORATION

N

Historical Topo Map

1981



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

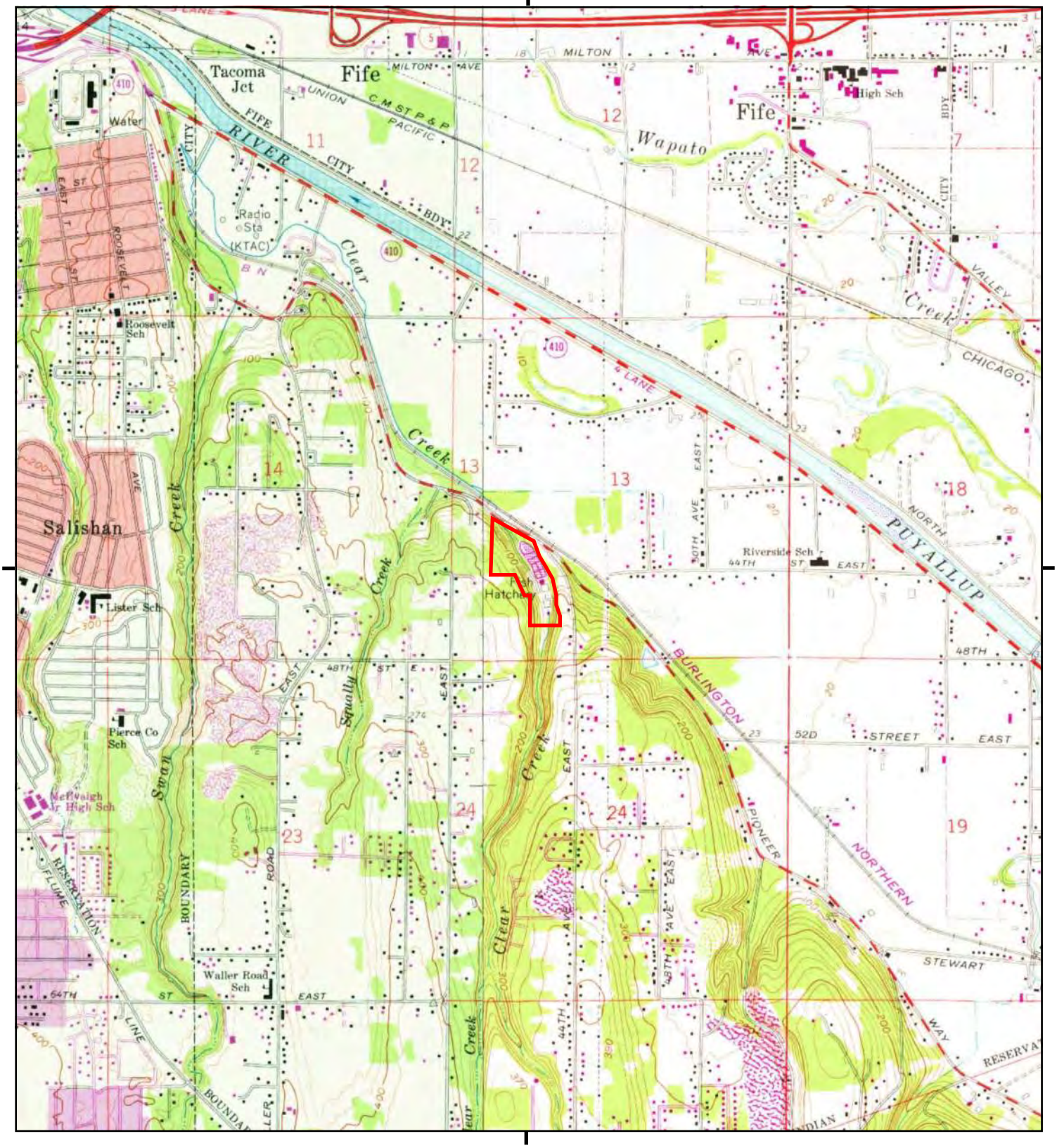
TP, Puyallup, 1981, 7.5-minute
SW, Tacoma South, 1981, 7.5-minute

SITE NAME: Trout Lodge - Clear Creek Project
ADDRESS: 4008 Pioneer Way
Tacoma, WA 98443
CLIENT: HNTB CORPORATION

N

Historical Topo Map

1973



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

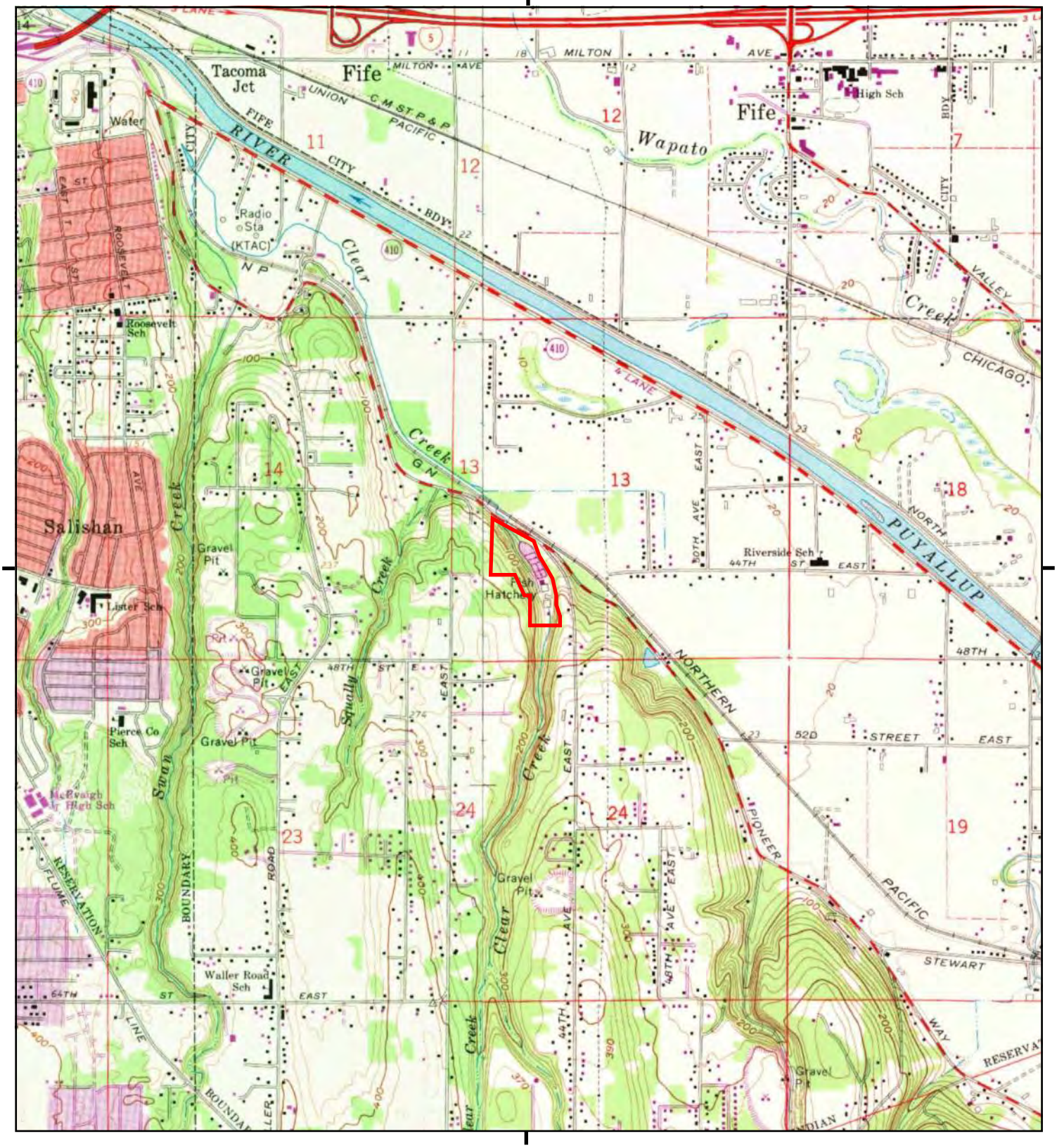
TP, Puyallup, 1973, 7.5-minute
SW, Tacoma South, 1973, 7.5-minute

SITE NAME: Trout Lodge - Clear Creek Project
ADDRESS: 4008 Pioneer Way
Tacoma, WA 98443
CLIENT: HNTB CORPORATION

N

Historical Topo Map

1968



This report includes information from the following map sheet(s).

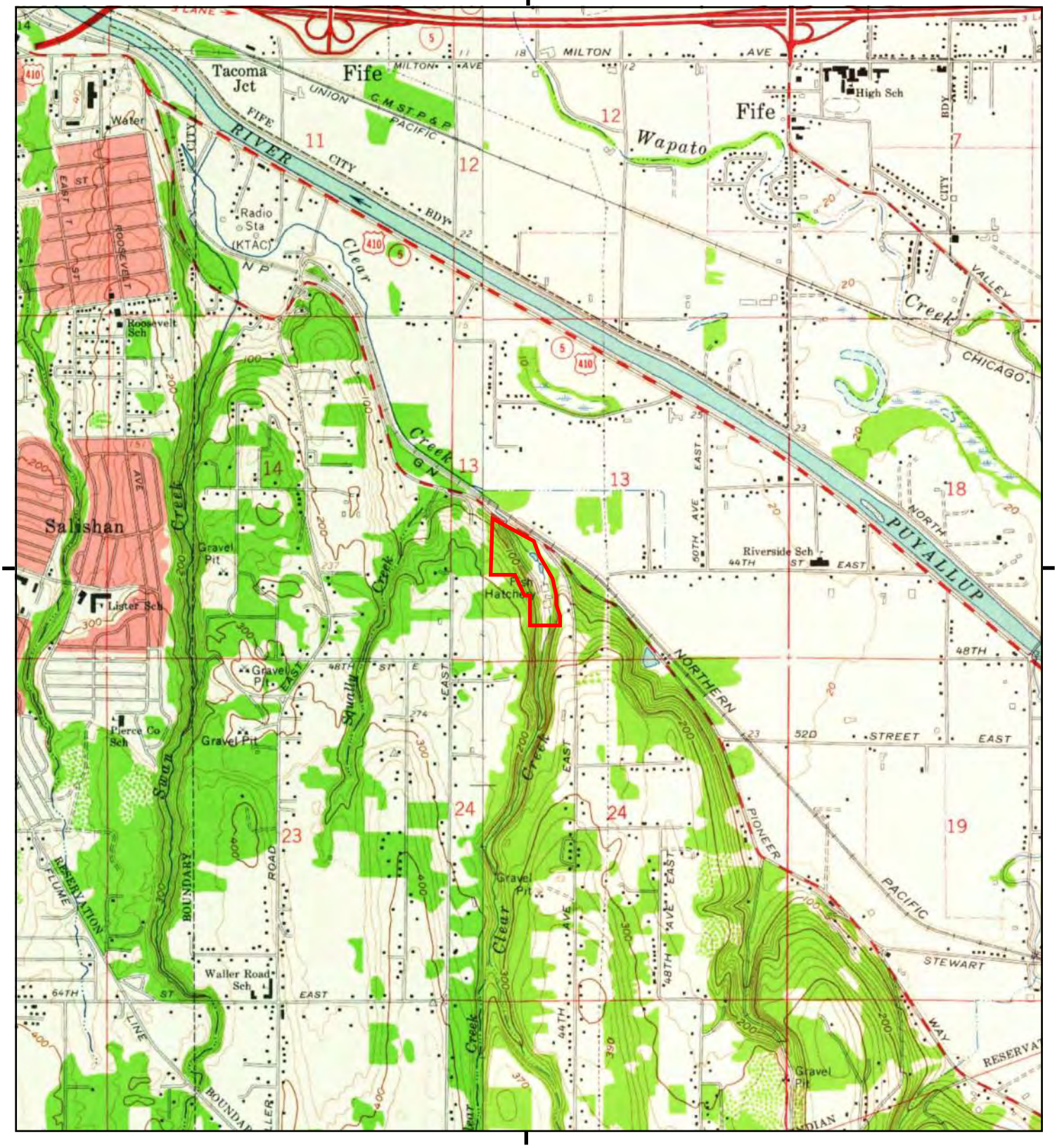
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Puyallup, 1968, 7.5-minute
SW, Tacoma South, 1968, 7.5-minute

SITE NAME: Trout Lodge - Clear Creek Project
ADDRESS: 4008 Pioneer Way
Tacoma, WA 98443
CLIENT: HNTB CORPORATION

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

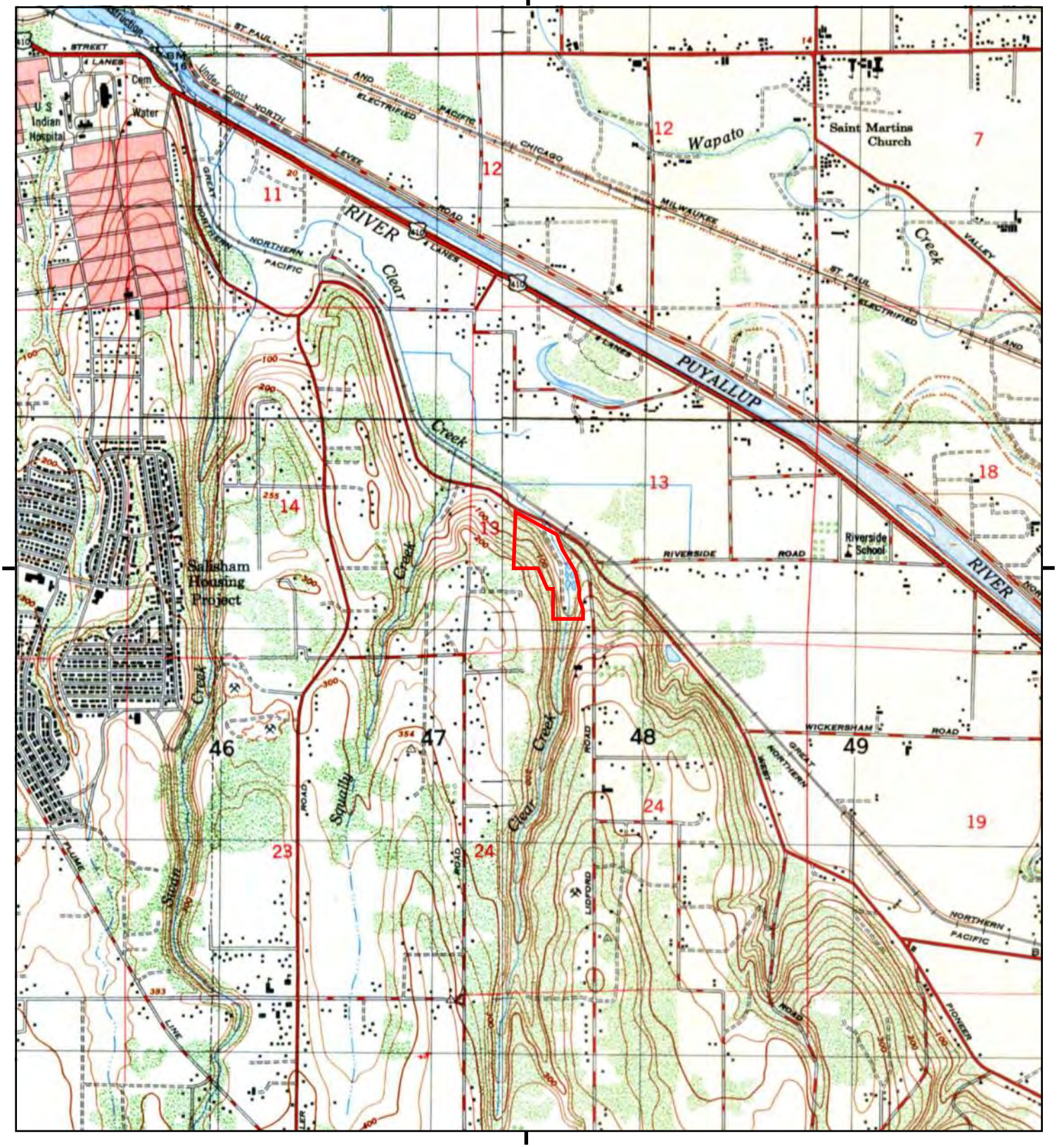
TP, Puyallup, 1961, 7.5-minute
SW, Tacoma South, 1961, 7.5-minute

SITE NAME: Trout Lodge - Clear Creek Project
ADDRESS: 4008 Pioneer Way
Tacoma, WA 98443
CLIENT: HNTB CORPORATION

N

Historical Topo Map

1949



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

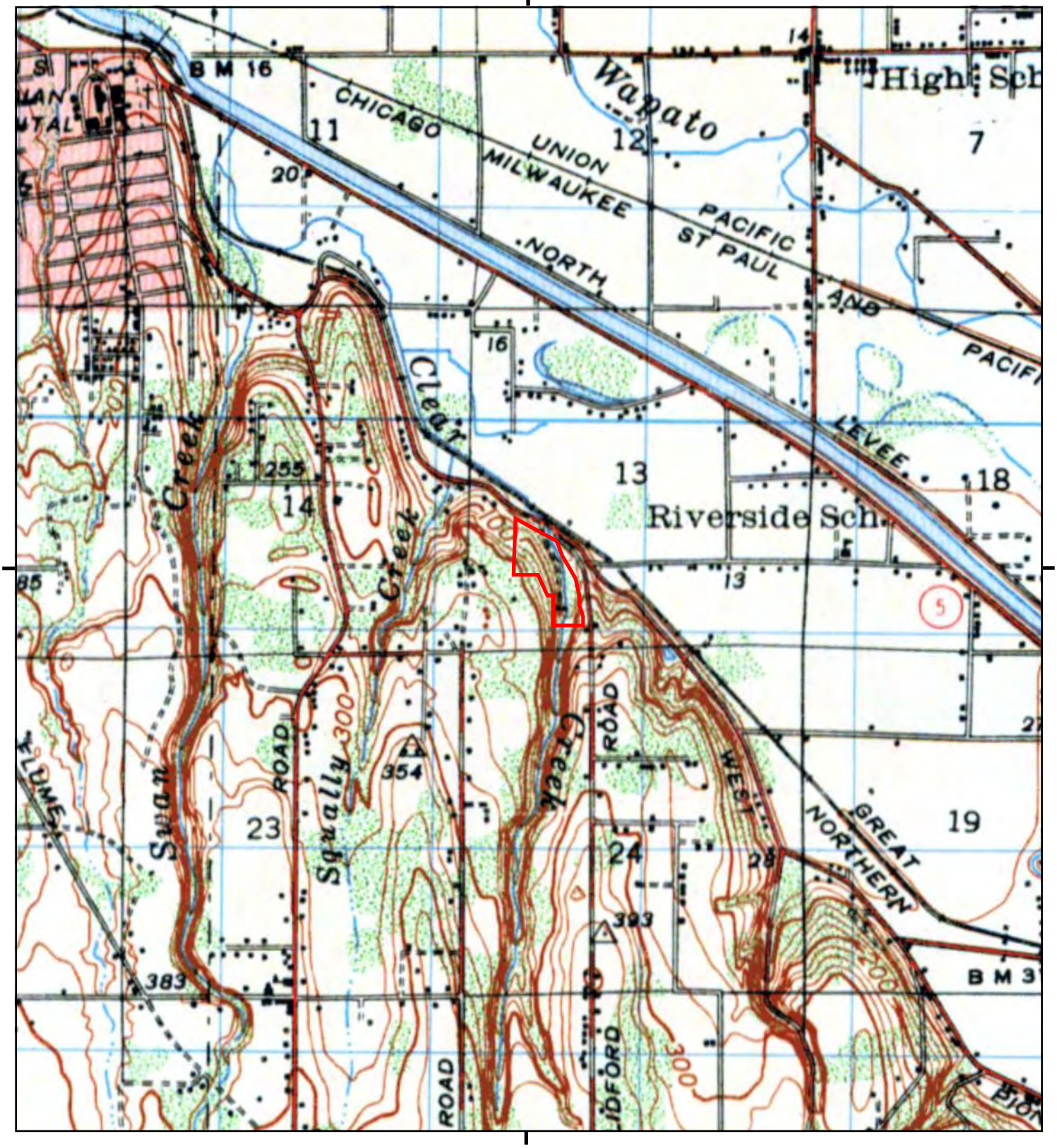
TP, PUYALLUP, 1949, 7.5-minute
SW, TACOMA SOUTH, 1949, 7.5-minute

SITE NAME: Trout Lodge - Clear Creek Project
ADDRESS: 4008 Pioneer Way
Tacoma, WA 98443
CLIENT: HNTB CORPORATION

N

Historical Topo Map

1944



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

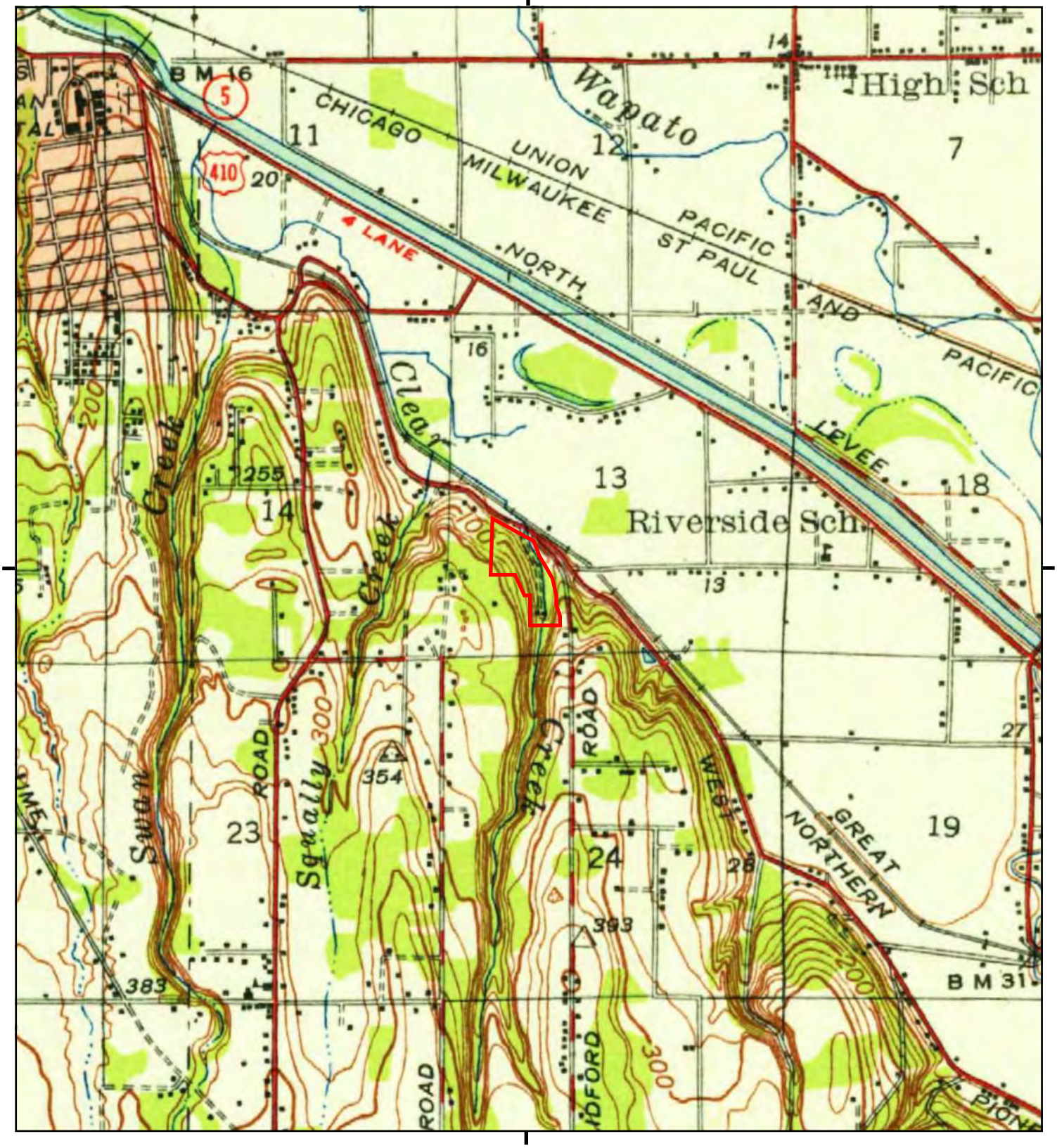
TP, TACOMA SOUTH, 1944, 15-minute

SITE NAME: Trout Lodge - Clear Creek Project
ADDRESS: 4008 Pioneer Way
Tacoma, WA 98443
CLIENT: HNTB CORPORATION

N

Historical Topo Map

1941



This report includes information from the following map sheet(s).

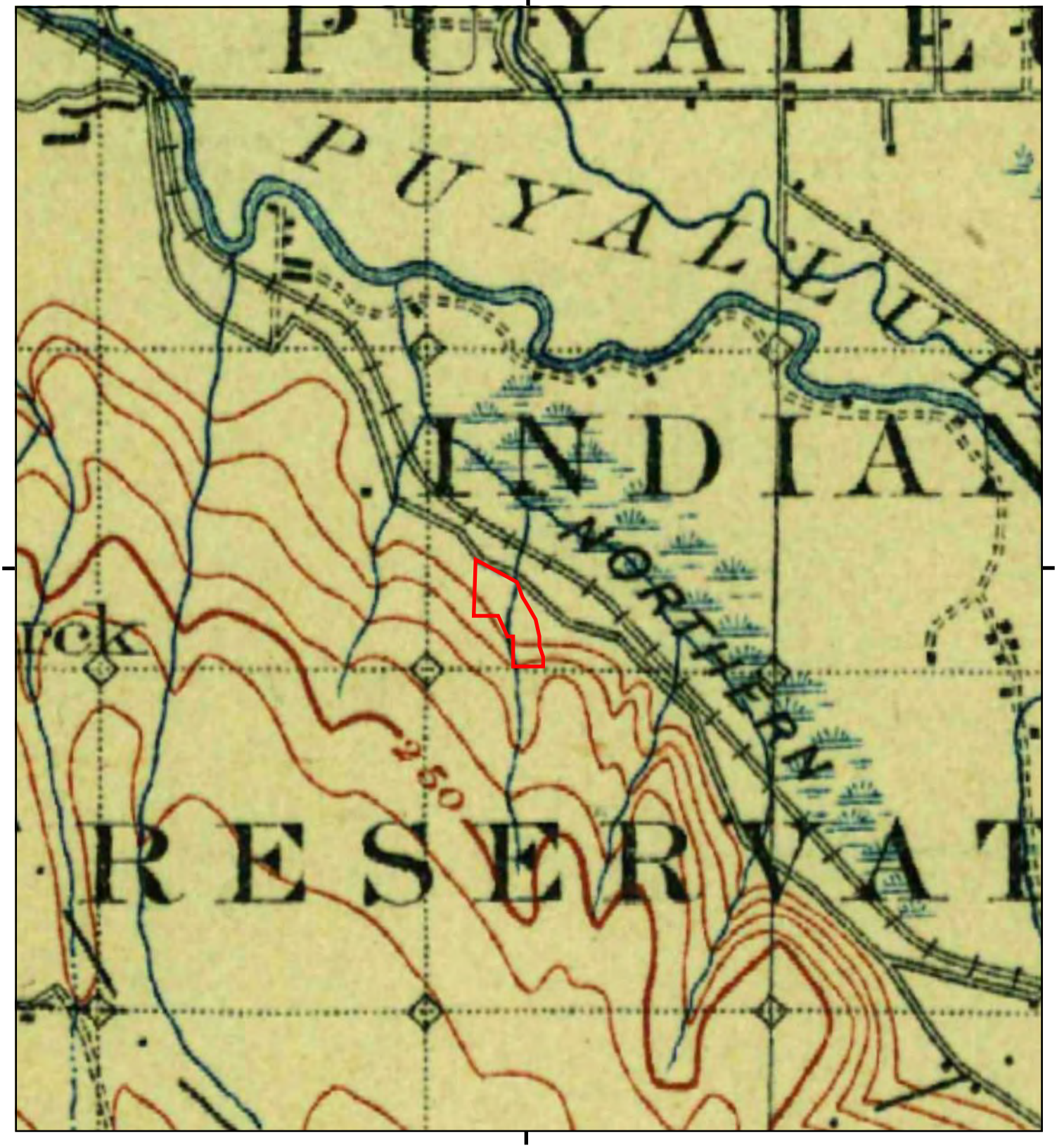
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Tacoma South, 1941, 15-minute

SITE NAME: Trout Lodge - Clear Creek Project
ADDRESS: 4008 Pioneer Way
Tacoma, WA 98443
CLIENT: HNTB CORPORATION

N



This report includes information from the following map sheet(s).

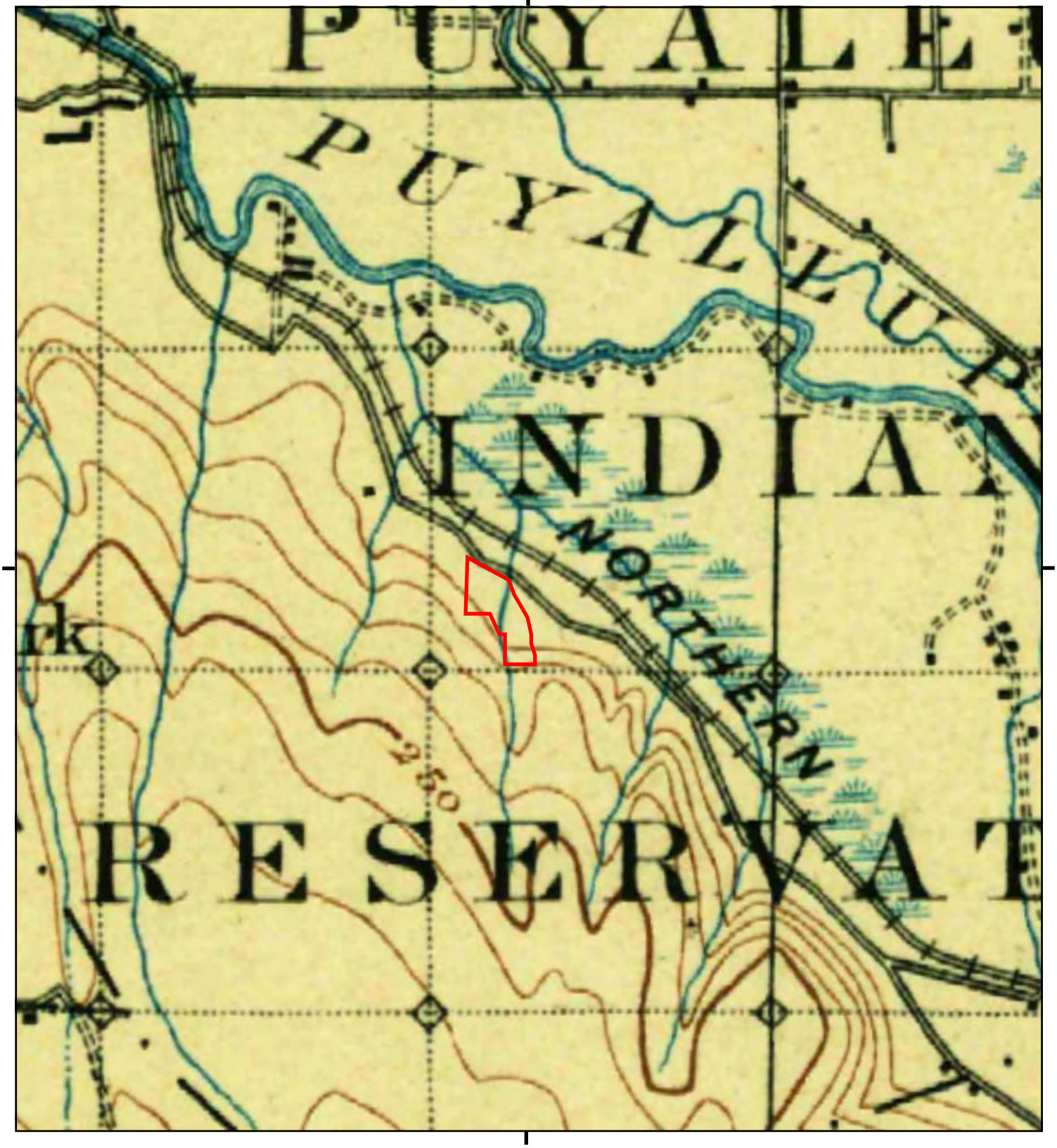
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Tacoma, 1900, 30-minute

SITE NAME: Trout Lodge - Clear Creek Project
ADDRESS: 4008 Pioneer Way
Tacoma, WA 98443
CLIENT: HNTB CORPORATION

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Tacoma, 1897, 30-minute

SITE NAME: Trout Lodge - Clear Creek Project
ADDRESS: 4008 Pioneer Way
Tacoma, WA 98443
CLIENT: HNTB CORPORATION

N

APPENDIX D – SANBORN MAP REPORT

Trout Lodge - Clear Creek Project

4008 Pioneer Way

Tacoma, WA 98443

Inquiry Number: 7382051.3

July 05, 2023

Certified Sanborn® Map Report

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

Certified Sanborn® Map Report

07/05/23

Site Name:

Trout Lodge - Clear Creek Proj
4008 Pioneer Way
Tacoma, WA 98443
EDR Inquiry # 7382051.3

Client Name:

HNTB CORPORATION
7730 S Union Park Ave., Suite 110
Salt Lake City, UT 84047
Contact: Buffie Chournos

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by HNTB CORPORATION 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 # 2171-4070-9182

PO # NA

Project Trout Lodge - Clear Creek

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 2171-4070-9182

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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APPENDIX E – AERIAL PHOTOGRAPHS

Trout Lodge - Clear Creek Project

4008 Pioneer Way

Tacoma, WA 98443

Inquiry Number: 7382051.8

July 05, 2023

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

07/05/23

Site Name:

Trout Lodge - Clear Creek Proj
4008 Pioneer Way
Tacoma, WA 98443
EDR Inquiry # 7382051.8

Client Name:

HNTB CORPORATION
7730 S Union Park Ave., Suite 110
Salt Lake City, UT 84047
Contact: Buffie Chournos

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
2019	1"=500'	Flight Year: 2019	USDA/NAIP
2015	1"=500'	Flight Year: 2015	USDA/NAIP
2011	1"=500'	Flight Year: 2011	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1990	1"=500'	Acquisition Date: July 10, 1990	USGS/DOQQ
1980	1"=500'	Flight Date: July 01, 1980	USDA
1972	1"=500'	Flight Date: September 04, 1972	USGS
1968	1"=500'	Flight Date: September 02, 1968	USGS
1957	1"=500'	Flight Date: May 28, 1957	USGS
1944	1"=500'	Flight Date: April 27, 1944	DIA
1941	1"=500'	Flight Date: July 10, 1941	USDA

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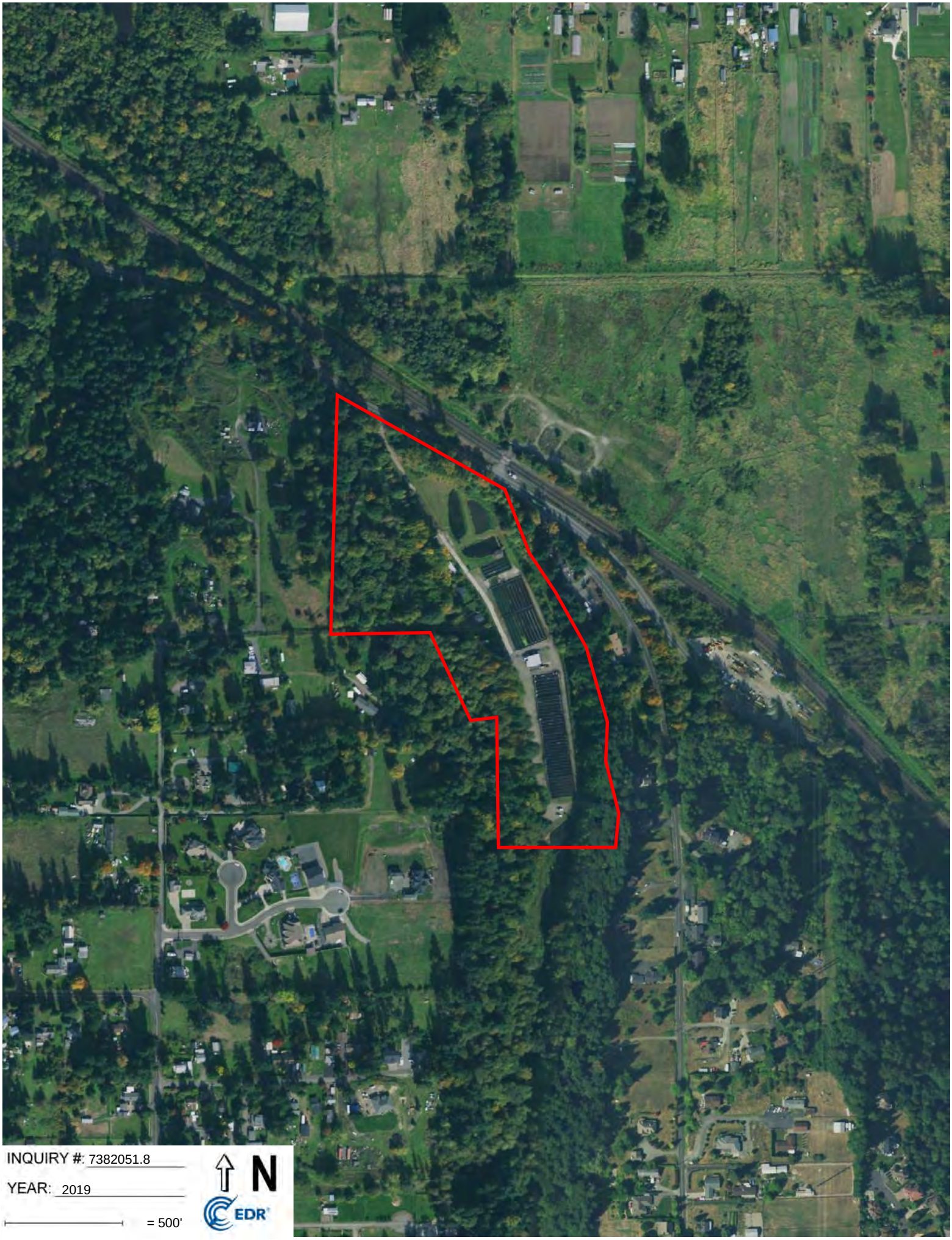
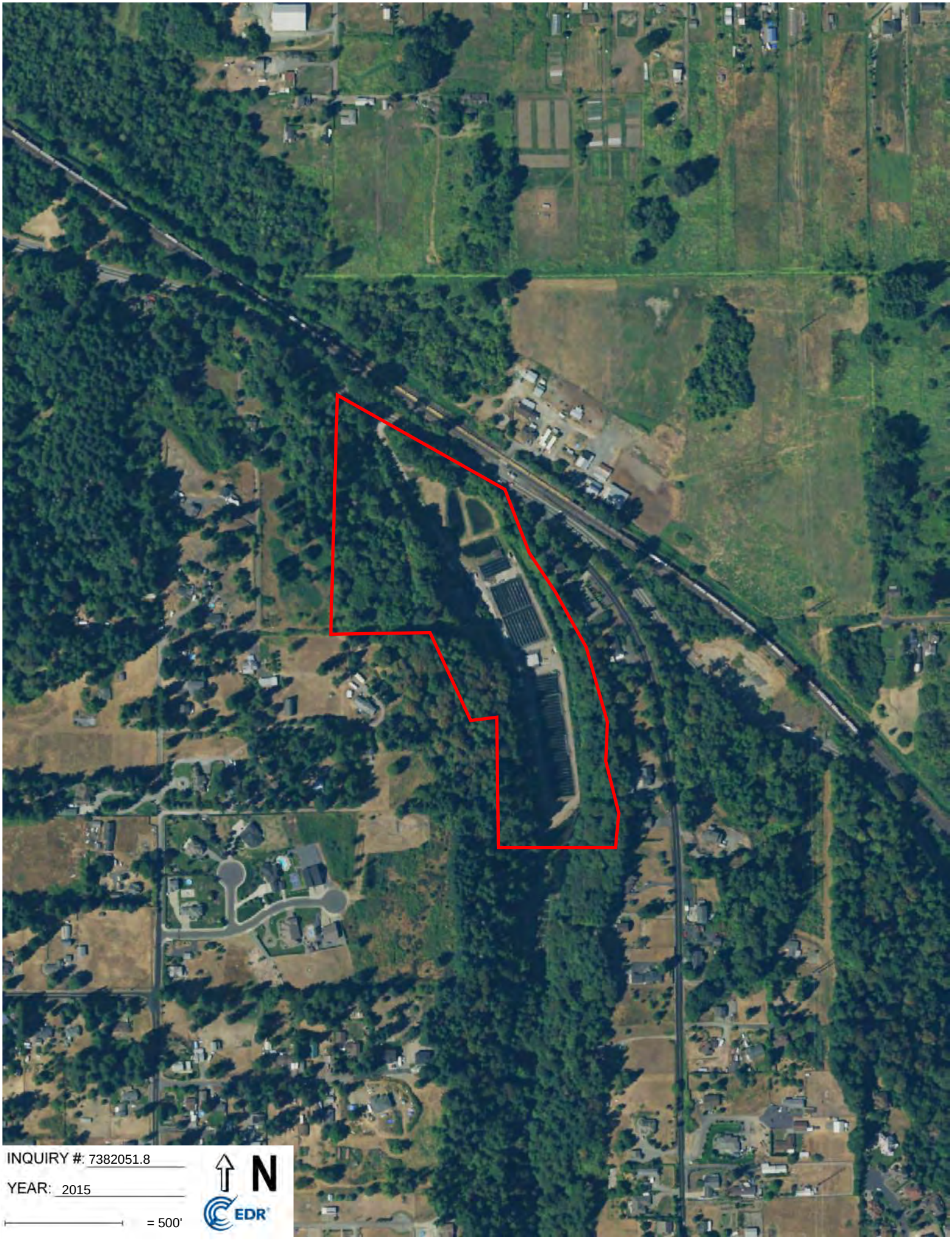
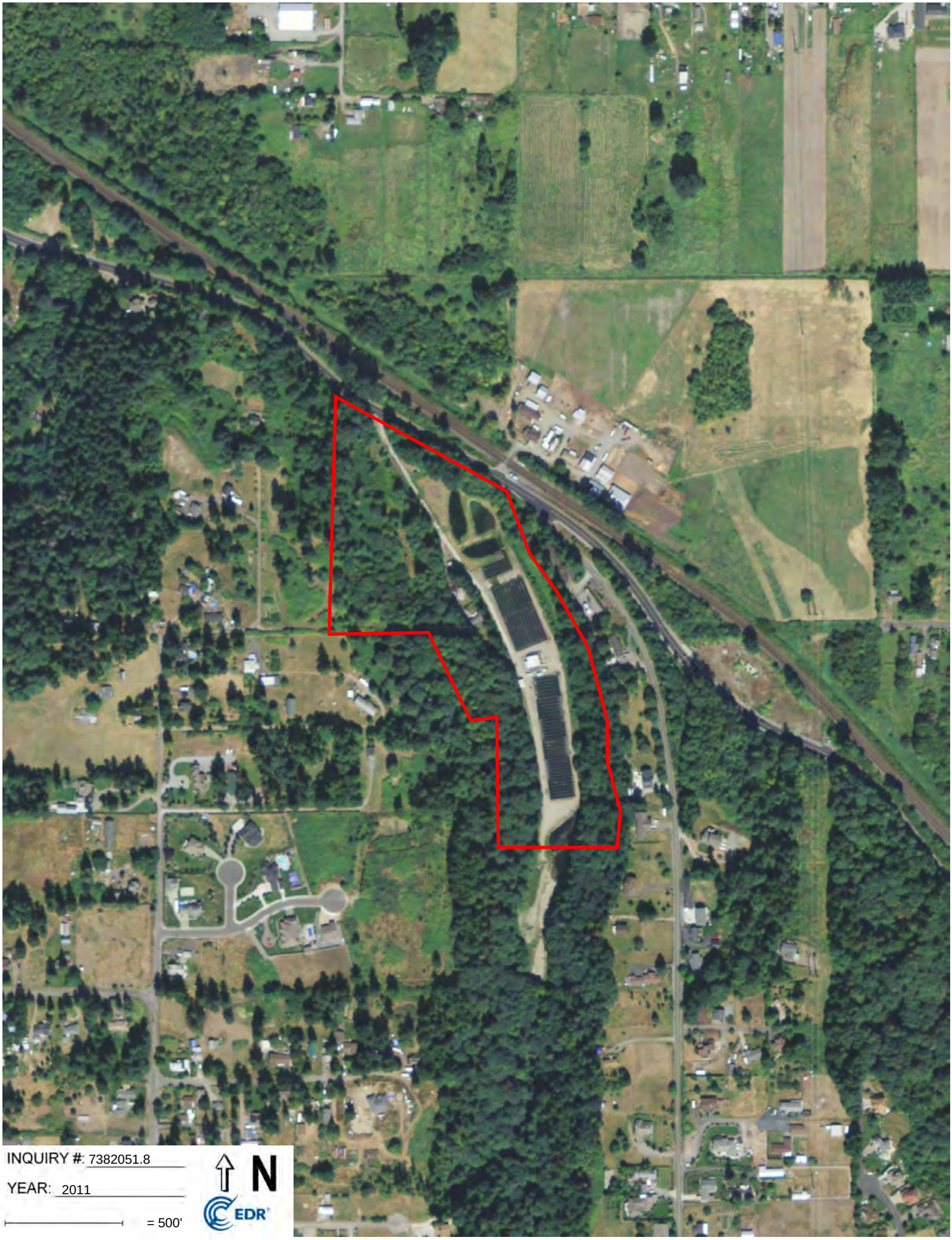
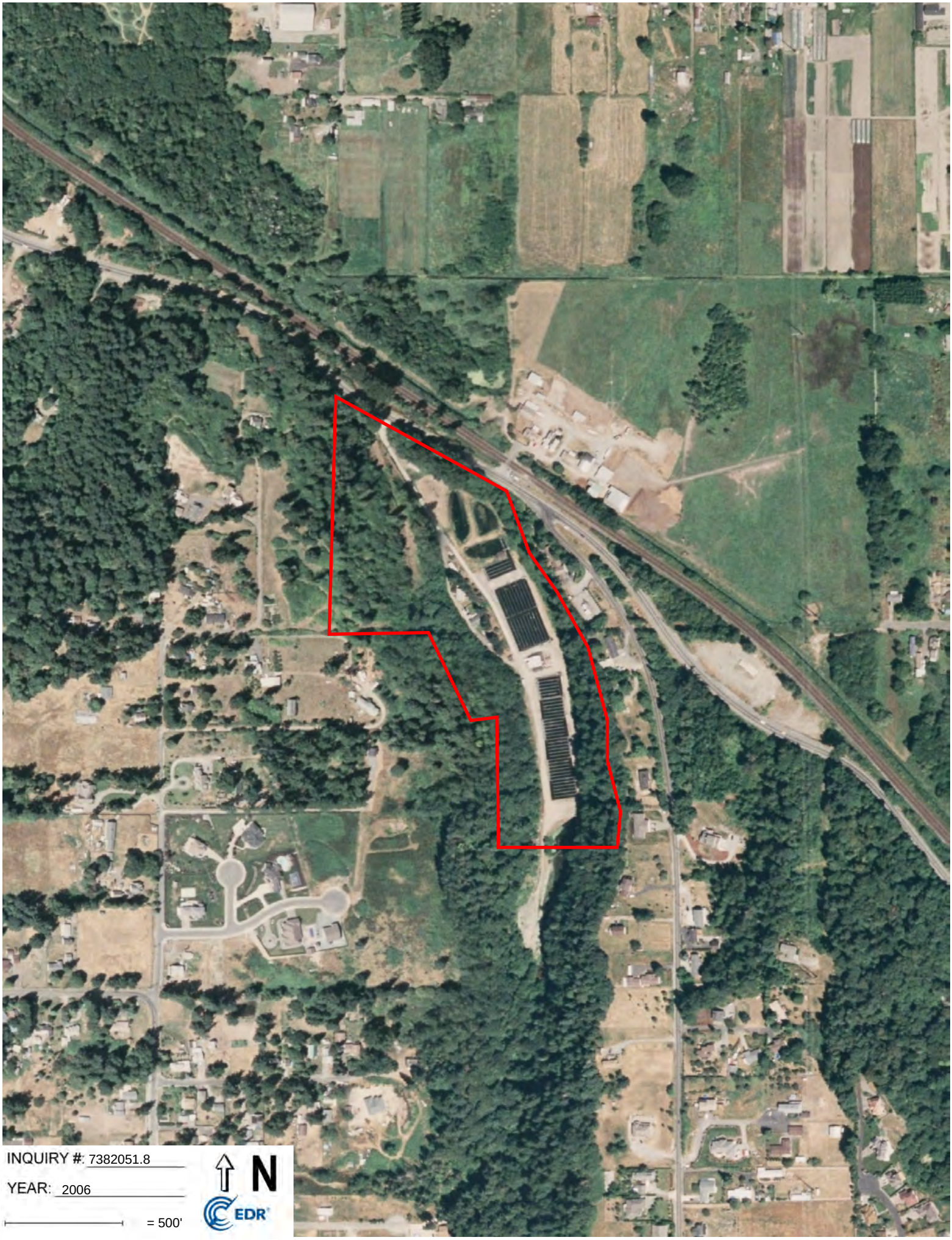

INQUIRY #: 7382051.8
YEAR: 2019
= 500'
N
EDR


INQUIRY #: 7382051.8
YEAR: 2015
= 500'
N
EDR


INQUIRY #: 7382051.8
YEAR: 2011
= 500'
N
EDR


INQUIRY #: 7382051.8
YEAR: 2006
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EDR



INQUIRY #: 7382051.8

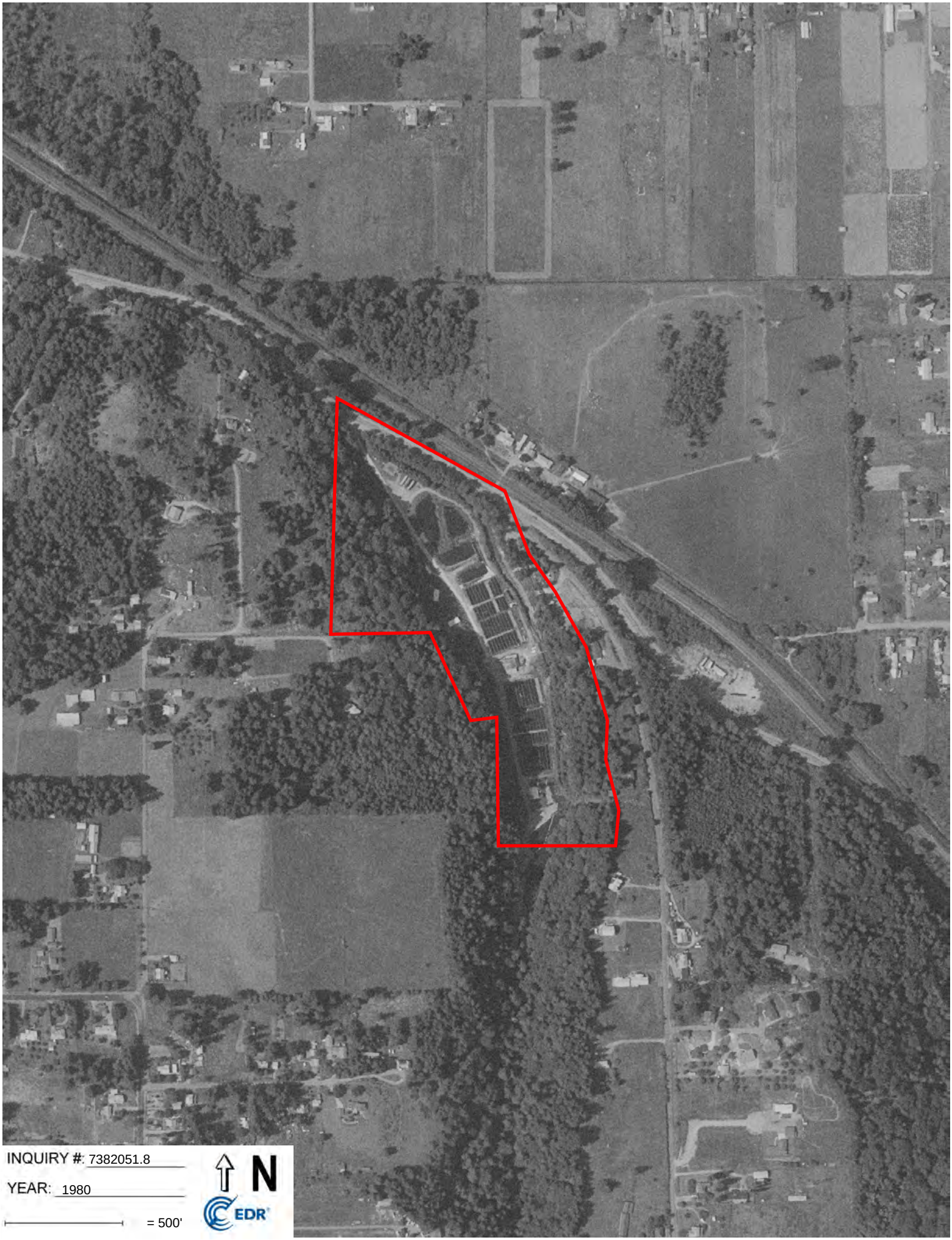
YEAR: 1990

= 500'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.


INQUIRY #: 7382051.8
YEAR: 1980
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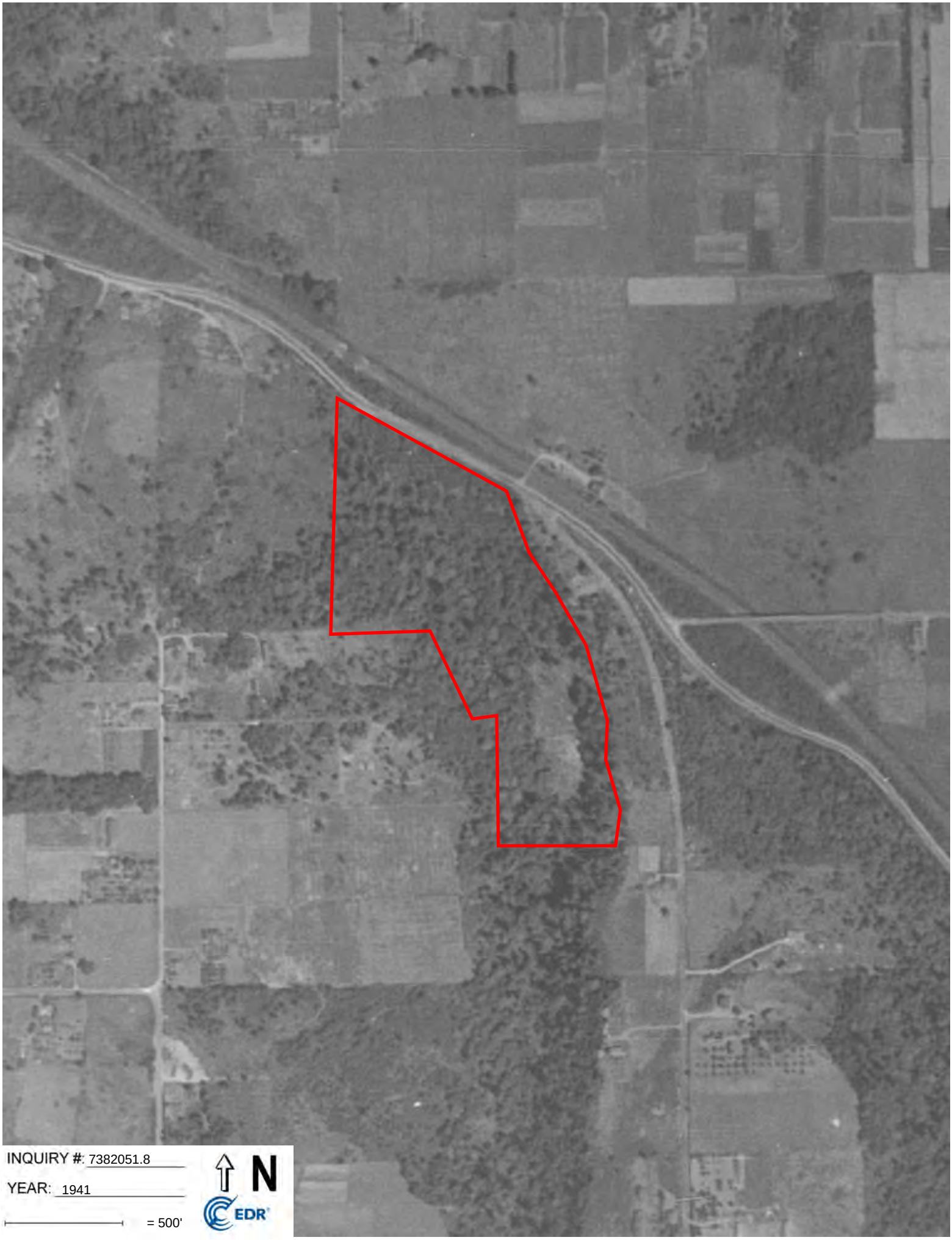
N
EDR


INQUIRY #: 7382051.8
YEAR: 1972
= 500'
N
EDR


INQUIRY #: 7382051.8
YEAR: 1968
= 500'
N
EDR


INQUIRY #: 7382051.8
YEAR: 1957
= 500'
N
EDR


INQUIRY #: 7382051.8
YEAR: 1944
= 500'
N
EDR


INQUIRY #: 7382051.8
YEAR: 1941
= 500'
N
EDR

APPENDIX F – ARCHIVED ASSESSOR RECORDS

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133013 Local #: Parcel #: 0320133013

Tax Year:	2023	Levy:	0.000000	# of Imps:	2	Created On:	
Tax Dist:	PIERCE	Map #:		LEA:	2091	Active On:	07/27/2023
PUC:		Initials:		Acct Type:	Commercial	Inactive On:	
Assign To:	Justin Williams					Last Updated:	

Owner's Name and Address

TROUTLODGE INC
PO BOX 1290
SUMNER , WA 98390-0260

Property Address

4008 PIONEER WAY E ,
PIERCE COUNTY

Sales Summary

Sale Date	Sale Price	Deed Type	Reception #	Book	Page #	Grantor

Legal

Section 13 Township 20 Range 03 Quarter 32 : BEG AT NE COR OF N 1/2 OF N 1/2 OF SW OF SW OF SEC TH ON N LI SD SUBD W 265.10 FT TH S 25 DEG 06 MIN E 366.2 FT TO S LI SD SUBD TH E 92.98 FT TO SE COR SD

Section	Township	Range	Qtr	QtrQtr	Government Lot	Government Tract
13	20	03	3	2		

Subdivision Information

Sub Name	Block	Lot	Tract

Land Valuation Summary

Land Type	Abst Cd	Value By	Net SF	Measure	# of Units	Value/Unit	Actual Val	Asmt %	Assessed Val
Commercial	8400L	MRA	808,430	Square Feet	808,430.000000	$0.91	$735,852	100.00%	$735,852
Class				Sub Class					
Land Subtotal:					18.56		$735,852		$735,852

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133013 Local #: Parcel #: 0320133013

Land Attributes

Attribute	Description	Adjustment
C ECONOMIC	INFLUENCE	0.500000
C FUNCTIONAL	FLOOD WAY	1.000000
C FUNCTIONAL	MARGINAL 60 PCT	0.680000
C FUNCTIONAL	SHAPE NEGATIVE	0.750000
C MA 9 CENTRAL	901 MIDLAND-SUMMIT	1.150000
C SITE DEVELOPMENT	TOPO	0.880000
C STREETS	ACCESS POOR	0.860000
C USE	6 RESIDENTIAL	0.690000
C UTILITIES	SEPTIC INSTALLED	1.000000

Improvement Valuation Summary

Imp #	Property Type	Abst Code	Occupancy	Class	Actual Value	Asmt %	Assessed Val*
1.00	Commercial	8400	Gen Warehouse up to 19,999 SF		$35,823	100.00%	$35,823
2.00	Commercial	8400	Gen Warehouse up to 19,999 SF		$31,162	100.00%	$31,162
Improvement Subtotal:					$66,985		$66,985

Total Property Value

Total Value:	$802,900	$802,900

*Approximate Assessed Value

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133013 Local #: Parcel #: 0320133013

Imp #:	1			Landscaping $: 0.00
Property Type:	Commercial			
Quality:	Low			
Condition:	Fair	Nbhd:	901	
Perimeter:	152	Nbhd Ext:	0	
% Complete:	100.00%	Nbhd Adj:	1.0000	

Occupancy Summary

Occupancy: Gen Warehouse up to 19,999 SF Occ %: 100%

Built As Summary

Built As:	Storage Warehouse	Year Built:	1960
Construction Type:	Masonry	Year Remodeled:	1965
HVAC:	None		
Interior Finish:		% Remodeled:	1.0000
Roof Cover:		Adj Year Blt:	1965
Built As SF:	2880	Effective Age:	
# of Baths:	0.00		
# of Bdrms:	0.00		
# of Stories:	2.00		
Story Height:	8		
Sprinkler SF:	0	Diameter:	0
Capacity:	0	Height:	8

Improvement Summary

Improvement 1	Units	Units Price	RCN	Actual Value
Add On				
Storage Area (LC)	120.0000	$40.00	$4,800.00	$1,104.00
Concrete	1860.0000	$8.44	$15,698.40	$1,883.00
Concrete	11156.0000	$8.44	$94,156.64	$11,299.00
Concrete	960.0000	$8.44	$8,102.40	$972.00
Chain Link 6 ft with top rail	1000.0000	$32.58	$32,580.00	$3,910.00

Improvements Value Summary

IMPNO: 1

RCN Cost/SF: $102.13 Design Adj: 0.0000 Func Obs %: 0.0000

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133013 Local #: Parcel #: 0320133013

Total RCN:	$294,125.00	Exterior Adj:	0.0000	Econ Obs %:	0.0000
Phys Depr %	0.8800	Interior Adj:	0.0000	Other Obs %:	0.0000
Phys Depr $:	$258,302.00	Amateur Adj:	0.0000		
RCNLD $:	$35,823.00	RCNLD Cost/$:	$12.44	Market/SF:	$9.51

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133013 Local #: Parcel #: 0320133013

Imp #:	2			Landscaping $: 0.00
Property Type:	Commercial			
Quality:	Low			
Condition:	Average	Nbhd:	901	
Perimeter:	158	Nbhd Ext:	0	
% Complete:	100.00%	Nbhd Adj:	1.0000	

Occupancy Summary

Occupancy: Gen Warehouse up to 19,999 SF Occ %: 100%

Built As Summary

Built As:	Storage Warehouse	Year Built:	1965
Construction Type:	Masonry	Year Remodeled:	0
HVAC:	None		
Interior Finish:		% Remodeled:	0.0000
Roof Cover:		Adj Year Blt:	1965
Built As SF:	1540	Effective Age:	
# of Baths:	0.00		
# of Bdrms:	0.00		
# of Stories:	1.00		
Story Height:	10		
Sprinkler SF:	0	Diameter:	0
Capacity:	0	Height:	10

Improvement Summary

Improvement 2	Units	Units Price	RCN	Actual Value
Add On				
Carport D Cls LC SF	408.0000	$12.45	$5,079.60	$1,016.00
Carport D Cls LC SF	432.0000	$12.45	$5,378.40	$1,075.00
MHPark (LC)	3.0000	$19,139.6	$57,418.92	$11,484.00

Improvements Value Summary

IMPNO: 2

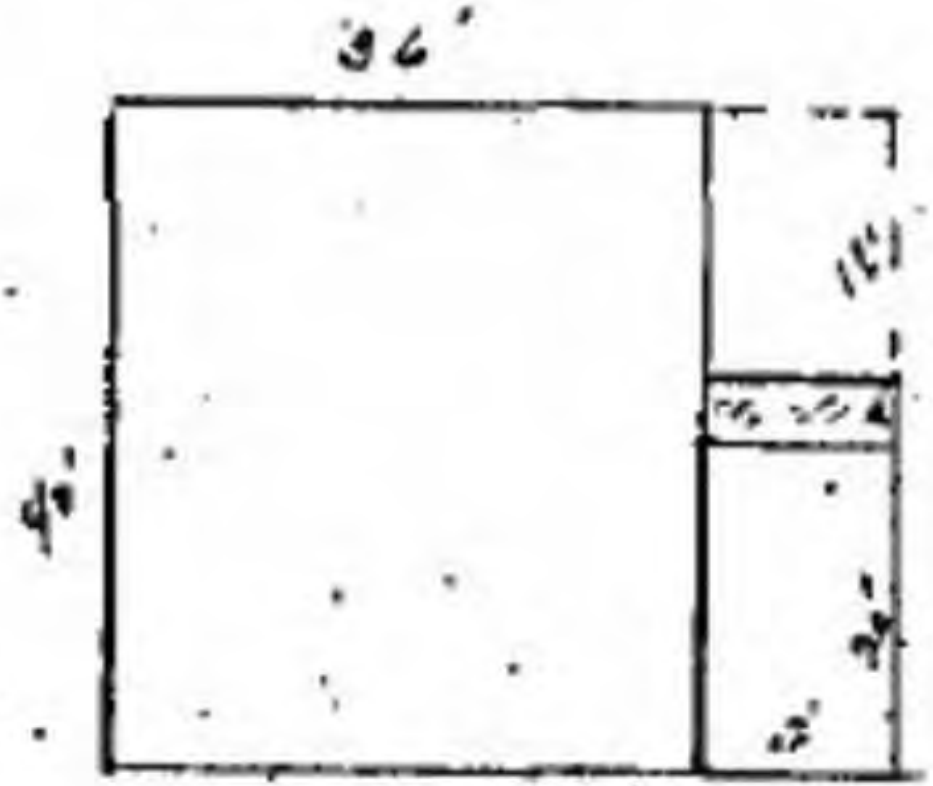
RCN Cost/SF:	$101.18	Design Adj:	0.0000	Func Obs %:	0.0000
Total RCN:	$155,811.00	Exterior Adj:	0.0000	Econ Obs %:	0.0000
Phys Depr %	0.8000	Interior Adj:	0.0000	Other Obs %:	0.0000
Phys Depr $:	$124,649.00	Amateur Adj:	0.0000		
RCNLD $:	$31,162.00	RCNLD Cost/$:	$20.24	Market/SF:	$15.21

Entry Date	Note	Category
08/02/2007	DRO 08-02-07 A Flood Way land attribute is listed on this parcel based on FEMA studies as adopted by the Pierce County Water Programs April 17th, 2007.	
01/01/2011	ECP/WCP Observed from street. Locked gate. Numerous calls to gain access were not returned. This facility is operated by Troutlodge. It is a fish hatchery. Grouped parcels 0320133013, 0320133060, 0320133061, 0320133057, 0320133051, and 0320133053. Property is 60pct marginal overall. Added .80 land influence to equalize with other large similar parcels. No changes to buildings as appraiser was unable to verify improvements. No other changes noted this inspection.	Inspection
03/02/2012	SSO 3/2/2012 In office. Door hanger was left with an employee to verify a fourth MH that was not located. Karen (863-0446) returned my phone call. Would not answer any questions about the MH. Karen will give our phone number to the owner. (I put this note on the commercial property because the MH account has been deleted and no note can be added.)	
03/14/2012	ECO 03/14/2012 In Office. Per Sheri Mapes I removed one carport and one mobile home space from bldg 2. No other changes noted.	General
03/04/2014	ECP 03/03/2014 Locked gate. Observed from street. See group account and previous notes for all parcels associated with this account. Recalculated land and improvement value. There are mobile home accounts associated with this also. Added ..45 land influence adjustment to equalize with neighboring parcels with similar zoning. No other changes noted this inspection.	Inspection
02/19/2020	ECP 02/19/2020 Verified information per visual inspection and Countyview Web. Recalculated land value. RSEP zoning. Added .5 land influence adjustment to equalize with neighboring parcels with similar zoning and appeal. No other changes noted.	General
08/23/2022	2009300000 - TROUT LODGE - 61132 - 32189 - NF;	Personal Property


KEEP
OUT


TROUT LODGE INC
NO
FISHING
HUNTING
TRESPASSING
SIGHTSEEING


Troutlodge



2 STORY CONC BLK BLDG.

(BASE) 1ST STORY MATCHERY

2ND " STORAGE.

Office 2nd floor

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133051 Local #: Parcel #: 0320133051

Tax Year:	2023	Levy:	0.000000	# of Imps:		Created On:	
Tax Dist:	PIERCE	Map #:		LEA:	2091	Active On:	07/27/2023
PUC:		Initials:		Acct Type:	Commercial	Inactive On:	
Assign To:	Justin Williams					Last Updated:	

Owner's Name and Address

TROUTLODGE INC
PO BOX 1290
SUMNER , WA 98390-
0260

Property Address

4008 PIONEER WAY E ,
PIERCE COUNTY

Sales Summary

Sale Date	Sale Price	Deed Type	Reception #	Book	Page #	Grantor

Legal

Section 13 Township 20 Range 03 Quarter 34 : W 140 FT OF N 132 FT OF S 264 FT OF SW OF SE OF SW OUT OF 03-20-13-3-044 SEG L-0083 SP ES

Section	Township	Range	Qtr	QtrQtr	Government Lot	Government Tract
13	20	03	3	4		

Subdivision Information

Sub Name	Block	Lot	Tract

Land Valuation Summary

Land Type	Abst Cd	Value By	Net SF	Measure	# of Units	Value/Unit	Actual Val	Asmt %	Assessed Val
Commercial	8400L	MRA	18,295	Square Feet	18,295.000000	$0.91	$16,653	100.00%	$16,653
Class				Sub Class					
Land Subtotal:					0.42		$16,653		$16,653

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133051 Local #: Parcel #: 0320133051

Land Attributes

Attribute	Description	Adjustment
C ECONOMIC	INFLUENCE	0.500000
C FUNCTIONAL	FLOOD WAY	1.000000
C FUNCTIONAL	MARGINAL 60 PCT	0.680000
C FUNCTIONAL	SHAPE NEGATIVE	0.750000
C MA 9 CENTRAL	901 MIDLAND-SUMMIT	1.150000
C SITE DEVELOPMENT	TOPO	0.880000
C STREETS	ACCESS POOR	0.860000
C USE	6 RESIDENTIAL	0.690000
C UTILITIES	SEPTIC INSTALLED	1.000000

Improvement Valuation Summary

Imp #	Property Type	Abst Code	Occupancy	Class	Actual Value	Asmt %	Assessed Val*
Improvement Subtotal:					$0		$0

Total Property Value

Total Value:		$16,700	$16,700

*Approximate Assessed Value

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE - ACCOUNT NOTES - ACCOUNT NOTES

Entry Date	Note	Category
08/02/2007	DRO 08-02-07 A Flood Way land attribute is listed on this parcel based on FEMA studies as adopted by the Pierce County Water Programs April 17th, 2007.	
08/29/2007	08072007 Land taken off of override. Addition of floodway attributes.	General
01/01/2008	HMM/WJ 9/27/07 Changed land rate due to error report	General
01/01/2011	ECP/WCP 12/08/2010 Observed from street. Locked gate. Numerous calls to gain access were not returned. This facility is operated by Troutlodge. It is a fish hatchery. Grouped parcels 0320133013, 0320133060, 0320133061, 0320133057, 0320133051, and 0320133053. Property is 60pct marginal overall. Added .80 land influence to equalize with other large similar parcels. No changes to buildings as appraiser was unable to verify improvements. No other changes noted this inspection.	Inspection
03/04/2014	ECP 03/03/2014 Locked gate. Observed from street. See group account and previous notes for all parcels associated with this account. Recalculated land value. There are mobile home accounts associated with this also. Added .45 land influence adjustment to equalize with neighboring parcels with similar zoning. No other changes noted this inspection.	Inspection
02/19/2020	ECP 02/19/2020 Verified information per visual inspection and Countyview Web. Recalculated land value. RSEP zoning. Added .5 land influence adjustment to equalize with neighboring parcels with similar zoning and appeal. No other changes noted.	General

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133052 Local #: Parcel #: 0320133052

Tax Year:	2023	Levy:	0.000000	# of Imps:	1	Created On:	
Tax Dist:	PIERCE	Map #:		LEA:	091501	Active On:	01/18/2023
PUC:		Initials:		Acct Type:	Residential	Inactive On:	
Assign To:	UnAssigned					Last Updated:	

Owner's Name and Address

HUANG RONG ZI & TAO GUOLI
4710 44TH AVE E
TACOMA , WA 98443-
2505

Property Address

4710 44TH AVE E, PIERCE COUNTY

Sales Summary

Sale Date	Sale Price	Deed Type	Reception #	Book	Page #	Grantor
08/27/2021	$520,000	Statutory Warranty Deed	4576174			POLARCZYK YONG IK

Legal

Section 13 Township 20 Range 03 Quarter 34 : N 132 FT OF S 264 FT OF SW OF SE OF SW EXC W 140 FT THEREOF ALSO EXC 44TH AVE E OUT OF 03-20-13-3-044 SEG L-0083 SP ES

Section	Township	Range	Qtr	QtrQtr	Government Lot	Government Tract
13	20	03	3	4		

Subdivision Information

Sub Name	Block	Lot	Tract

Land Valuation Summary

Land Type	Abst Cd	Value By	Net SF	Measure	# of Units	Value/Unit	Actual Val	Asmt %	Assessed Val
Residential	1101L	MRA	66,211	Square Feet	66,211.000000	$3.62	$239,867	100.00%	$239,867
Class				Sub Class					
Land Subtotal:					1.52		$239,867		$239,867

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133052 Local #: Parcel #: 0320133052

Land Attributes

Attribute	Description	Adjustment
R FUNCTIONAL	FLOOD WAY	1.000000
R FUNCTIONAL	MARGINAL 50 PCT	0.850000
R FUNCTIONAL	TOPO STEEP	1.000000
R FUNCTIONAL	WET	1.000000
R NEIGHBORHOOD	LAND ADJ	1.220000

Improvement Valuation Summary

Imp #	Property Type	Abst Code	Occupancy	Class	Actual Value	Asmt %	Assessed Val*
1.00	Residential	1101	Single Family Residential		$204,899	100.00%	$204,899
Improvement Subtotal:					$204,899		$204,899

Total Property Value

Total Value:	$444,800	$444,800

*Approximate Assessed Value

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133052 Local #: Parcel #: 0320133052

Imp #:	1		
Property Type:	Residential		
Quality:	Fair Plus		
Condition:	Average	Nbhd:	091501
Perimeter:	0	Nbhd Ext:	0
% Complete:	100.00%	Nbhd Adj:	1.0800

Landscaping $: 0.00

Occupancy Summary

Occupancy: Single Family Residential Occ %: 100%

Built As Summary

Built As:	2 Story	Year Built:	1977
Construction Type:	Frame Siding	Year Remodeled:	1987
HVAC:	Heat Pump		
Interior Finish:	Drywall	% Remodeled:	1.0000
Roof Cover:	Composition Shingle	Adj Year Blt:	1987
Built As SF:	1352	Effective Age:	
# of Baths:	1.50		
# of Bdrms:	2.00		
# of Stories:	2.00		
Story Height:	8		
Sprinkler SF:	0	Diameter:	
Capacity:		Height:	0

Improvement Summary

Improvement 1	Units	Units Price	RCN	Actual Value
Add On				
Carport Fair Q	312.0000	$16.67	$5,201.04	$4,490.00
Appliance				
Allowance	1.0000	$4,235.84	$4,235.84	$4,236.00
Basement				
Concrete Slab	416.0000	-$4.72	-$1,963.52	-$1,964.00
Fixture				
Bath 3 Fixture	1.0000	$0.00	$0.00	$0.00
Allowance	1.0000	$0.00	$0.00	$0.00
Bath 2 Fixture	1.0000	$0.00	$0.00	$0.00
Garage				
Built In	520.0000	$39.25	$20,410.00	$20,410.00
Porch				

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133052 Local #: Parcel #: 0320133052

Wood Deck	78.0000	$38.85	$3,030.30	$3,030.00
Open Slab	344.0000	$9.92	$3,412.48	$3,412.00
Rough In				
Laundry Facility	1.0000	$0.00	$0.00	$0.00

Improvements Value Summary

IMPNO: 1

RCN Cost/SF:	$162.55	Design Adj:	0.0000	Func Obs %:	0.0000
Total RCN:	$219,763.00	Exterior Adj:	0.0000	Econ Obs %:	0.0000
Phys Depr %	0.1367	Interior Adj:	0.0000	Other Obs %:	0.0000
Phys Depr $:	$30,042.00	Amateur Adj:	0.0000		
RCNLD $:	$204,898.68	RCNLD Cost/$:	$151.55	Market/SF:	$0.00

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE - ACCOUNT NOTES - ACCOUNT NOTES

Entry Date	Note	Category
02/15/2006	BFO 2/15/06. REPLACED OTHER COMMENT .85 WITH TOPO STEEP / MARG 40 PER COUNTYVIEW DATA.	
12/31/2006	CAB 03/19/2007 BOE 200602564 Recommend to sustain.	Board Of Equalizatn
04/24/2008	RMO/KJO 4/24/08 In office floodway project. Changed floodway sq ft to 5,458sf per GIS.	General
08/30/2011	KH 08/30/11~Sketched in apex not verified.	
02/29/2012	SSP 2/27/2012 Observed. Changed quality from avg to fair plus. No other changes noted.	
01/01/2019	PSO 8/31/18 Per the 2019 update plan for this PI area, improvements with an Adj Yr of 1984 and older were updated by 6 years. Appraisers are to review these new Adj Yrs and revise them as necessary during inspection.	
05/24/2019	CCP 05/23/2019 Observed. Per visual/site inspection and ortho photos, Marginal to 50%. Added Wet attribute.	General
01/18/2023	MZB 01/18/2023 - In Office. Validated sale. Added additional bedroom and 2 fix bath.	





RTSQ 03 - 20 - 13 - 3 - 4 ENTRY: PARCEL NO. 03-20-13-3-052 Record 1 of 1

Re Sketch by KOB Date 10 - 6 - 87 NN ASSESSED WITH

Insp. by ADP Date 12 - 28 - 92 OB-Qual to Ave YEAR BUILT 1977 REMODELED

Insp. by Date EFF YR. BLT 1977 CONDITION Ave

Insp. by Date ADDRESS 4710 44th Ave E

QUAL Fair +33% %
ROOF Comp
FL COV Cpt
PLUMB 5
HEAT Heat Pump
BLT-IN 1
FP —
F/E ADJ
% COMP
FIN B#
DAYLIGHT DOOR
OTHER FEATURES

S/W BANK:	S/W ACCESS:
HIGH	NONE
MED	LIM
LOW/NO	FULL
	RIGHTS

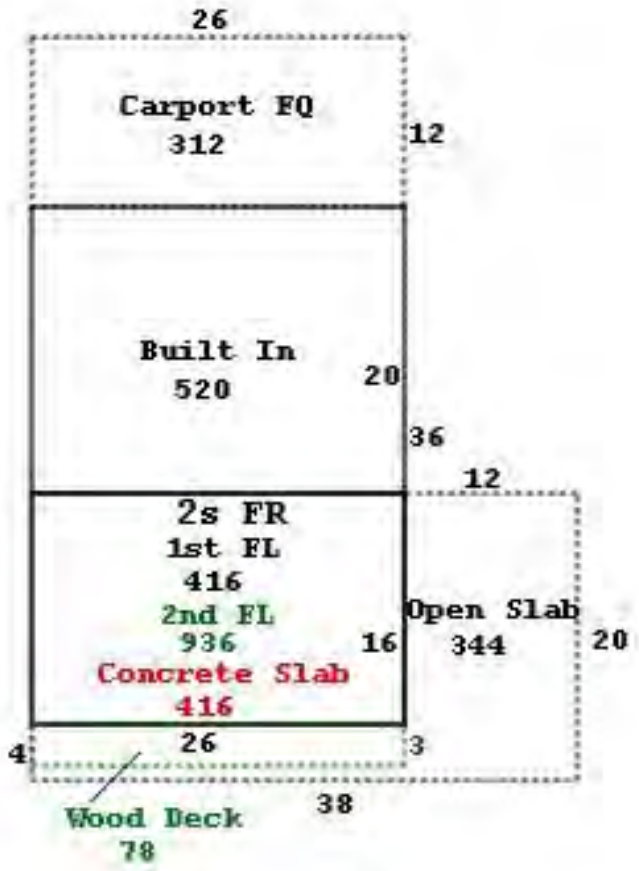
LAKE %
STREAM/RIVER %
VIEW Q %
NO PERK %
DIRT ST/POOR ACCESS — %
TOPO -15% % WET %
Pk Cond

COMMENTS 1st Flr Lacks Flr covering



COMPLETED
DATE:
BY:

0320133052



KH 08/30/11

tch by Apex Medina™

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133053 Local #: Parcel #: 0320133053

Tax Year:	2023	Levy:	0.000000	# of Imps:		Created On:	
Tax Dist:	PIERCE	Map #:		LEA:	2091	Active On:	07/27/2023
PUC:		Initials:		Acct Type:	Commercial	Inactive On:	
Assign To:	Justin Williams					Last Updated:	

Owner's Name and Address

TROUTLODGE INC
PO BOX 1290
SUMNER , WA 98390-
0260

Property Address

4008 PIONEER WAY E ,
PIERCE COUNTY

Sales Summary

Sale Date	Sale Price	Deed Type	Reception #	Book	Page #	Grantor

Legal

Section 13 Township 20 Range 03 Quarter 34 : S 132 FT OF SW OF SE OF SW EXC E 280 FT THEREOF OUT OF 3-040 SEG L-1499 DS JW

Section	Township	Range	Qtr	QtrQtr	Government Lot	Government Tract
13	20	03	3	4		

Subdivision Information

Sub Name	Block	Lot	Tract

Land Valuation Summary

Land Type	Abst Cd	Value By	Net SF	Measure	# of Units	Value/Unit	Actual Val	Asmt %	Assessed Val
Commercial	8400L	MRA	48,767	Square Feet	48,767.000000	$0.91	$44,389	100.00%	$44,389
Class				Sub Class					
Land Subtotal:					1.12		$44,389		$44,389

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133053 Local #: Parcel #: 0320133053

Land Attributes

Attribute	Description	Adjustment
C ECONOMIC	INFLUENCE	0.500000
C FUNCTIONAL	FLOOD WAY	1.000000
C FUNCTIONAL	MARGINAL 60 PCT	0.680000
C FUNCTIONAL	SHAPE NEGATIVE	0.750000
C MA 9 CENTRAL	901 MIDLAND-SUMMIT	1.150000
C SITE DEVELOPMENT	TOPO	0.880000
C STREETS	ACCESS POOR	0.860000
C USE	6 RESIDENTIAL	0.690000

Improvement Valuation Summary

Imp #	Property Type	Abst Code	Occupancy	Class	Actual Value	Asmt %	Assessed Val*
Improvement Subtotal:					$0		$0

Total Property Value

Total Value:	$44,400	$44,400

*Approximate Assessed Value

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE - ACCOUNT NOTES - ACCOUNT NOTES

Entry Date	Note	Category
08/02/2007	DRO 08-02-07 A Flood Way land attribute is listed on this parcel based on FEMA studies as adopted by the Pierce County Water Programs April 17th, 2007.	
08/29/2007	08072007 Land taken off of override. Addition of floodway attributes.	General
01/01/2008	HMM/WJ 9/27/07 Changed land rate due to error report	General
01/01/2011	ECP/WCP 12/08/2010 Observed from street. Locked gate. Numerous calls to gain access were not returned. This facility is operated by Troutlodge. It is a fish hatchery. Grouped parcels 0320133013, 0320133060, 0320133061, 0320133057, 0320133051, and 0320133053. Property is 60pct marginal overall. Added .80 land influence to equalize with other large similar parcels. No changes to buildings as appraiser was unable to verify improvements. No other changes noted this inspection.	Inspection
03/04/2014	ECP 03/03/2014 Locked gate. Observed from street. See group account and previous notes for all parcels associated with this account. Recalculated land value. There are mobile home accounts associated with this also. Added .45 land influence adjustment to equalize with neighboring parcels with similar zoning. No other changes noted this inspection.	Inspection
02/19/2020	ECP 02/19/2020 Verified information per visual inspection and Countyview Web. Recalculated land value. RSEP zoning. Added .5 land influence adjustment to equalize with neighboring parcels with similar zoning and appeal. No other changes noted.	General

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133057 Local #: Parcel #: 0320133057

Tax Year:	2023	Levy:	0.000000	# of Imps:		Created On:	
Tax Dist:	PIERCE	Map #:		LEA:	2091	Active On:	07/27/2023
PUC:		Initials:		Acct Type:	Commercial	Inactive On:	
Assign To:	Justin Williams					Last Updated:	

Owner's Name and Address

TROUTLODGE INC
PO BOX 1290
SUMNER , WA 98390-
0260

Property Address

4008 PIONEER WAY E ,
PIERCE COUNTY

Sales Summary

Sale Date	Sale Price	Deed Type	Reception #	Book	Page #	Grantor

Legal

Section 13 Township 20 Range 03 Quarter 34 : THAT POR OF FOLL DESC PROP LY W OF C/L OF STREAM AS SHOWN ON P CO SURVEY #1065 SW OF SE OF SW EXC S 264 FT & EXC N 132 FT THEREOF AKA TR A OF SD SURVEY #1

Section	Township	Range	Qtr	QtrQtr	Government Lot	Government Tract
13	20	03	3	4		

Subdivision Information

Sub Name	Block	Lot	Tract

Land Valuation Summary

Land Type	Abst Cd	Value By	Net SF	Measure	# of Units	Value/Unit	Actual Val	Asmt %	Assessed Val
Commercial	8400L	MRA	50,094	Square Feet	50,094.000000	$0.91	$45,597	100.00%	$45,597
Class				Sub Class					
Land Subtotal:					1.15		$45,597		$45,597

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133057 Local #: Parcel #: 0320133057

Land Attributes

Attribute	Description	Adjustment
C ECONOMIC	INFLUENCE	0.500000
C FUNCTIONAL	FLOOD WAY	1.000000
C FUNCTIONAL	MARGINAL 60 PCT	0.680000
C FUNCTIONAL	SHAPE NEGATIVE	0.750000
C MA 9 CENTRAL	901 MIDLAND-SUMMIT	1.150000
C SITE DEVELOPMENT	TOPO	0.880000
C STREETS	ACCESS POOR	0.860000
C USE	6 RESIDENTIAL	0.690000
C UTILITIES	SEPTIC INSTALLED	1.000000

Improvement Valuation Summary

Imp #	Property Type	Abst Code	Occupancy	Class	Actual Value	Asmt %	Assessed Val*
Improvement Subtotal:					$0		$0

Total Property Value

Total Value:		$45,600	$45,600

*Approximate Assessed Value

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE - ACCOUNT NOTES - ACCOUNT NOTES

Entry Date	Note	Category
08/02/2007	DRO 08-02-07 A Flood Way land attribute is listed on this parcel based on FEMA studies as adopted by the Pierce County Water Programs April 17th, 2007.	
08/29/2007	08072007 Land taken off of override. Addition of floodway attributes.	General
01/01/2008	HMM/WJ 9/27/07 Changed land rate due to error report	General
01/01/2011	ECP/WCP 12/08/2010 Observed from street. Locked gate. Numerous calls to gain access were not returned. This facility is operated by Troutlodge. It is a fish hatchery. Grouped parcels 0320133013, 0320133060, 0320133061, 0320133057, 0320133051, and 0320133053. Property is 60pct marginal overall. Added .80 land influence to equalize with other large similar parcels. No changes to buildings as appraiser was unable to verify improvements. No other changes noted this inspection.	Inspection
03/04/2014	ECP 03/03/2014 Locked gate. Observed from street. See group account and previous notes for all parcels associated with this account. Recalculated land value. There are mobile home accounts associated with this also. Added .45 land influence adjustment to equalize with neighboring parcels with similar zoning. No other changes noted this inspection.	Inspection
02/19/2020	ECP 02/19/2020 Verified information per visual inspection and Countyview Web. Recalculated land value. RSEP zoning. Added .5 land influence adjustment to equalize with neighboring parcels with similar zoning and appeal. No other changes noted.	General

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133060 Local #: Parcel #: 0320133060

Tax Year:	2023	Levy:	0.000000	# of Imps:		Created On:	
Tax Dist:	PIERCE	Map #:		LEA:	2091	Active On:	07/27/2023
PUC:		Initials:		Acct Type:	Commercial	Inactive On:	
Assign To:	Justin Williams					Last Updated:	

Owner's Name and Address

TROUTLODGE INC
PO BOX 1290
SUMNER , WA 98390-
0260

Property Address

4008 PIONEER WAY E ,
PIERCE COUNTY

Sales Summary

Sale Date	Sale Price	Deed Type	Reception #	Book	Page #	Grantor

Legal

Section 13 Township 20 Range 03 Quarter 34 : N 132 FT OF SW OF SE OF SW EXC 44TH AVE E ALSO EXC THAT POR THEREOF SHOWN AS TR B OF P CO SURVEY #1065 DESC AS FOLL BEG AT NE COR OF SD SUBD TH SELY ALG W

Section	Township	Range	Qtr	QtrQtr	Government Lot	Government Tract
13	20	03	3	4		

Subdivision Information

Sub Name	Block	Lot	Tract

Land Valuation Summary

Land Type	Abst Cd	Value By	Net SF	Measure	# of Units	Value/Unit	Actual Val	Asmt %	Assessed Val
Commercial	8400L	MRA	57,934	Square Feet	57,934.000000	$0.91	$52,733	100.00%	$52,733
Class				Sub Class					
Land Subtotal:					1.33		$52,733		$52,733

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133060 Local #: Parcel #: 0320133060

Land Attributes

Attribute	Description	Adjustment
C ECONOMIC	INFLUENCE	0.500000
C FUNCTIONAL	FLOOD WAY	1.000000
C FUNCTIONAL	MARGINAL 60 PCT	0.680000
C FUNCTIONAL	SHAPE NEGATIVE	0.750000
C MA 9 CENTRAL	901 MIDLAND-SUMMIT	1.150000
C SITE DEVELOPMENT	TOPO	0.880000
C STREETS	ACCESS POOR	0.860000
C USE	6 RESIDENTIAL	0.690000
C UTILITIES	SEPTIC INSTALLED	1.000000

Improvement Valuation Summary

Imp #	Property Type	Abst Code	Occupancy	Class	Actual Value	Asmt %	Assessed Val*
Improvement Subtotal:					$0		$0

Total Property Value

Total Value:		$52,700	$52,700

*Approximate Assessed Value

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE - ACCOUNT NOTES - ACCOUNT NOTES

Entry Date	Note	Category
08/02/2007	DRO 08-02-07 A Flood Way land attribute is listed on this parcel based on FEMA studies as adopted by the Pierce County Water Programs April 17th, 2007.	
08/29/2007	08072007 Land taken off of override. Addition of floodway attributes.	General
01/01/2008	HMM/WJ 9/27/07 Changed land rate due to error report	General
01/01/2011	ECP/WCP 12/08/2010 Observed from street. Locked gate. Numerous calls to gain access were not returned. This facility is operated by Troutlodge. It is a fish hatchery. Grouped parcels 0320133013, 0320133060, 0320133061, 0320133057, 0320133051, and 0320133053. Property is 60pct marginal overall. Added .80 land influence to equalize with other large similar parcels. No changes to buildings as appraiser was unable to verify improvements. No other changes noted this inspection.	Inspection
03/04/2014	ECP 03/03/2014 Locked gate. Observed from street. See group account and previous notes for all parcels associated with this account. Recalculated land value. There are mobile home accounts associated with this also. Added .45 land influence adjustment to equalize with neighboring parcels with similar zoning. No other changes noted this inspection.	Inspection
02/19/2020	ECP 02/19/2020 Verified information per visual inspection and Countyview Web. Recalculated land value. RSEP zoning. Added .5 land influence adjustment to equalize with neighboring parcels with similar zoning and appeal. No other changes noted.	General

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133061 Local #: Parcel #: 0320133061

Tax Year:	2023	Levy:	0.000000	# of Imps:		Created On:	
Tax Dist:	PIERCE	Map #:		LEA:	2091	Active On:	07/27/2023
PUC:		Initials:		Acct Type:	Commercial	Inactive On:	
Assign To:	Justin Williams					Last Updated:	

Owner's Name and Address

TROUTLODGE INC
PO BOX 1290
SUMNER , WA 98390-
0260

Property Address

4008 PIONEER WAY E ,
PIERCE COUNTY

Sales Summary

Sale Date	Sale Price	Deed Type	Reception #	Book	Page #	Grantor

Legal

Section 13 Township 20 Range 03 Quarter 34 : COM NE COR SW OF SE OF SW TH S 89 DEG 46 MIN 38 SEC W ALG N LI 218.46 FT TO NW COR TR "B" TH S 08 DEG 52 MIN 55 SEC W ALG W LI SD TR "B" 133.68 FT TO SW C

Section	Township	Range	Qtr	QtrQtr	Government Lot	Government Tract
13	20	03	3	4		

Subdivision Information

Sub Name	Block	Lot	Tract

Land Valuation Summary

Land Type	Abst Cd	Value By	Net SF	Measure	# of Units	Value/Unit	Actual Val	Asmt %	Assessed Val
Commercial	8400L	MRA	26,136	Square Feet	26,136.000000	$0.91	$23,790	100.00%	$23,790
Class				Sub Class					
Land Subtotal:					0.60		$23,790		$23,790

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133061 Local #: Parcel #: 0320133061

Land Attributes

Attribute	Description	Adjustment
C ECONOMIC	INFLUENCE	0.500000
C FUNCTIONAL	FLOOD WAY	1.000000
C FUNCTIONAL	MARGINAL 60 PCT	0.680000
C FUNCTIONAL	SHAPE NEGATIVE	0.750000
C MA 9 CENTRAL	901 MIDLAND-SUMMIT	1.150000
C SITE DEVELOPMENT	TOPO	0.880000
C STREETS	ACCESS POOR	0.860000
C USE	6 RESIDENTIAL	0.690000
C UTILITIES	SEPTIC INSTALLED	1.000000

Improvement Valuation Summary

Imp #	Property Type	Abst Code	Occupancy	Class	Actual Value	Asmt %	Assessed Val*
Improvement Subtotal:					$0		$0

Total Property Value

Total Value:		$23,800	$23,800

*Approximate Assessed Value

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE - ACCOUNT NOTES - ACCOUNT NOTES

Entry Date	Note	Category
04/30/2004	Quality control of parcel only as part of a list that I was assigned to. As per Epip and RPCU, value is in land only w/no value attributable to the improvements since 1999. Full revaluation and physical inspection may be needed in the future to confirm characteristics listed in Realware.	General
08/29/2007	DRO 08-02-07 A Flood Way land attribute is listed on this parcel based on FEMA studies as adopted by the Pierce County Water Programs April 17th, 2007.	General
08/29/2007	08302007 FBO TOOK LAND OFF OF O/R due to addition of floodway attributes.	General
01/01/2008	HMM/WJ 9/27/07 Changed land rate due to error report	General
01/01/2011	ECP/WCP 12/08/2010 Observed. Removed bldg already assessed on account 0320133013. Observed from street. Locked gate. Numerous calls to gain access were not returned. This facility is operated by Troutlodge. It is a fish hatchery. Grouped parcels 0320133013, 0320133060, 0320133061, 0320133057, 0320133051, and 0320133053. Property is 60pct marginal overall. Added .80 land influence to equalize with other large similar parcels. No changes to buildings as appraiser was unable to verify improvements. No other changes noted this inspection.	Inspection
03/04/2014	ECP 03/03/2014 Locked gate. Observed from street. See group account and previous notes for all parcels associated with this account. Recalculated land value. There are mobile home accounts associated with this also. Added .45 land influence adjustment to equalize with neighboring parcels with similar zoning. No other changes noted this inspection.	Inspection
02/19/2020	ECP 02/19/2020 Verified information per visual inspection and Countyview Web. Recalculated land value. RSEP zoning. Added .5 land influence adjustment to equalize with neighboring parcels with similar zoning and appeal. No other changes noted.	General

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133062 Local #: Parcel #: 0320133062

Tax Year:	2023	Levy:	0.000000	# of Imps:	1	Created On:	
Tax Dist:	PIERCE	Map #:		LEA:	091501	Active On:	02/24/2021
PUC:		Initials:		Acct Type:	Residential	Inactive On:	
Assign To:	UnAssigned					Last Updated:	

Owner's Name and Address

HOSKINS-HINCHEY KYMBERLEE & COFFEY JESSICA
4624 44TH AVE E
TACOMA , WA 98443

Property Address

4624 44TH AVE E, PIERCE COUNTY

Sales Summary

Sale Date	Sale Price	Deed Type	Reception #	Book	Page #	Grantor
11/18/2021	$640,000	Statutory Warranty Deed	4585394			TATE MARJORIE E
07/29/2003	$0	Personal Representative Deed	4011663			PARADISE MARILYN J ESTATE
01/01/1997	$165,000	Statutory Warranty Deed	0930239			MIYAO MICHAEL R

Legal

Section 13 Township 20 Range 03 Quarter 34 : FOLL DESC PROP LY E OF C/L STREAM SHOWN ON P CO SURVEY #1065 SW OF SE OF SW EXC S 264 FT & EXC N 132 FT ALSO EXC COM NE COR SW OF SE OF SW TH S 89 DEG 46

Section	Township	Range	Qtr	QtrQtr	Government Lot	Government Tract
13	20	03	3	4		

Subdivision Information

Sub Name	Block	Lot	Tract

Land Valuation Summary

Land Type	Abst Cd	Value By	Net SF	Measure	# of Units	Value/Unit	Actual Val	Asmt %	Assessed Val
Residential	1101L	MRA	96,268	Square Feet	96,267.600000	$2.92	$281,301	100.00%	$281,301
Class				Sub Class					
Land Subtotal:					2.21		$281,301		$281,301

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133062 Local #: Parcel #: 0320133062

Land Attributes

Attribute	Description	Adjustment
R FUNCTIONAL	FLOOD WAY	1.000000
R FUNCTIONAL	MARGINAL 40 PCT	0.900000
R FUNCTIONAL	TOPO STEEP	1.000000
R FUNCTIONAL	WET	1.000000
R NEIGHBORHOOD	LAND ADJ	1.220000

Improvement Valuation Summary

Imp #	Property Type	Abst Code	Occupancy	Class	Actual Value	Asmt %	Assessed Val*
1.00	Residential	1101	Single Family Residential		$366,265	100.00%	$366,265
Improvement Subtotal:					$366,265		$366,265

Total Property Value

Total Value:	$647,600	$647,600

*Approximate Assessed Value

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133062 Local #: Parcel #: 0320133062

Imp #:	1		Landscaping $: 0.00
Property Type:	Residential		
Quality:	Average		
Condition:	Average	Nbhd:	091501
Perimeter:	0	Nbhd Ext:	0
% Complete:	100.00%	Nbhd Adj:	1.0800

Occupancy Summary

Occupancy: Single Family Residential Occ %: 100%

Built As Summary

Built As:	2 Story	Year Built:	1980
Construction Type:	Frame Siding	Year Remodeled:	1988
HVAC:	Electric Baseboard		
Interior Finish:	Drywall	% Remodeled:	1.0000
Roof Cover:	Composition Shingle	Adj Year Blt:	1988
Built As SF:	1910	Effective Age:	
# of Baths:	2.75		
# of Bdrms:	4.00		
# of Stories:	2.00		
Story Height:	8		
Sprinkler SF:	0	Diameter:	0
Capacity:	0	Height:	0

Improvement Summary

Improvement 1	Units	Units Price	RCN	Actual Value
Appliance				
Allowance	1.0000	$5,294.80	$5,294.80	$5,295.00
Basement				
Outside Entrance	1.0000	$2,768.42	$2,768.42	$2,768.00
Finished	1134.0000	$43.93	$49,816.62	$49,817.00
Bsmnt Conc 8 ft	1134.0000	$34.22	$38,805.48	$38,805.00
Fixture				
Allowance	1.0000	$0.00	$0.00	$0.00
Bath 4 Fixture	1.0000	$0.00	$0.00	$0.00
Bath 2 Fixture	1.0000	$0.00	$0.00	$0.00
Bath 3 Fixture	1.0000	$0.00	$0.00	$0.00
Garage				

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320133062 Local #: Parcel #: 0320133062

Detached	484.0000	$52.36	$25,342.24	$21,964.00
Porch				
Wood Deck	72.0000	$42.89	$3,088.08	$3,088.00
Wood Deck	152.0000	$30.72	$4,669.44	$4,669.00
Wood Deck	214.0000	$26.32	$5,632.48	$5,632.00
Rough In				
Laundry Facility	1.0000	$0.00	$0.00	$0.00
User				
Flood Zone Restrictions	1.0000	$0.00	$0.00	$0.00

Improvements Value Summary

IMPNO: 1

RCN Cost/SF:	$204.87	Design Adj:	0.0000	Func Obs %:	0.0000
Total RCN:	$391,293.00	Exterior Adj:	0.0000	Econ Obs %:	0.0000
Phys Depr %	0.1333	Interior Adj:	0.0000	Other Obs %:	0.0000
Phys Depr $:	$52,159.00	Amateur Adj:	0.0000		
RCNLD $:	$366,264.72	RCNLD Cost/$:	$191.76	Market/SF:	$0.00

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE - ACCOUNT NOTES - ACCOUNT NOTES

Entry Date	Note	Category
02/15/2006	BFO 2/15/06. REPLACED LAND COND COMMENT .85 WITH TOPO STEEP / MARG 30 PER COUNTYVIEW DATA.	
04/24/2008	RMO/KJO 4/24/08 In office floodway project. Changed floodway sq ft to 7,397sf per GIS.	General
08/30/2011	KH 08/30/11~Sketched in apex not verified.	
02/28/2012	SSP 2/27/2012 Not home. Measured and edited Apex sketch. Changed the carport to det garage. P/U deck. Building permit restrictions if building site is in affected area.	
06/02/2016	NJR/MRR May 2016 applied missing Floor Cover Allowance.	
01/01/2019	PSO 8/31/18 Per the 2019 update plan for this PI area, improvements with an Adj Yr of 1984 and older were updated by 6 years. Appraisers are to review these new Adj Yrs and revise them as necessary during inspection.	
05/24/2019	CCP 05/23/2019 Observed. Per visual/site inspection and ortho photos, Marginal to 40%. Added Wet attribute.	General
11/23/2022	MZB 11/23/22 - In Office. Validated Sale. Changed one 3 fix to 4 fix and one 3 fix to a 2 fix.	




12
4624







RTSQ 03 - 20 - 13 - 3

PARCEL NO. 03-20-13-3-062 Record 1 of 1

re Sketched by RMF Date 7 29 82, (Entered)

Insp. by MSP Date 03 04 83, * ✓

YR. Built 1950 Remodeled

Insp. by HJB ADP Date 10 6 84, * Sen (Sketched) SERIES

Insp. by UAS GBP-UAP 12/08/98-OB - No Change Date 01 05 98, * @ ST. FENCED - COULD NOT GET IN - 300.5

ADDRESS 462[illegible] - [illegible] Pac E

% Comp. * 100%

QUAL [illegible] Ave -33%

ROOF [illegible]

PLUMB 8

FP

HEAT EBS

OF 0

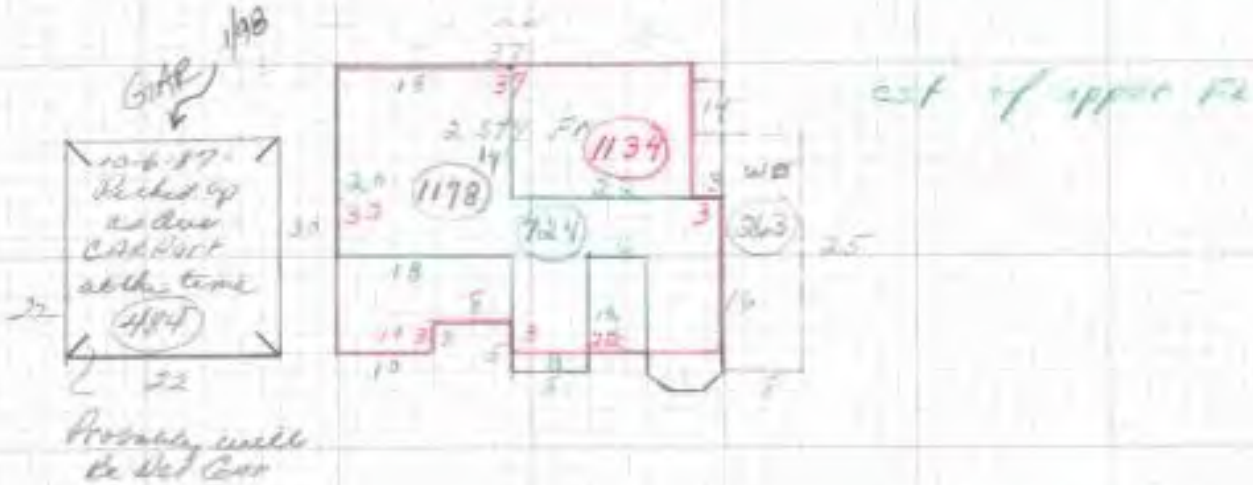
BLT-IN 0

OB 1-3 Pts

REMARKS: (See Reverse)

No work done still 70% Complete which I shifted from Item 85 to Item 78 [illegible] Check on next regular Physiospec 03-04-83 MSP

10-6-87 - Moved item 26 to -25% - Still needs work Not Complete yet



COMPLETED

DATE:

BY:

NOTES TO NEXT APPRAISER:

Z 11/86 * ✓ Check If Talked To Owner At Door But Did Not Enter.

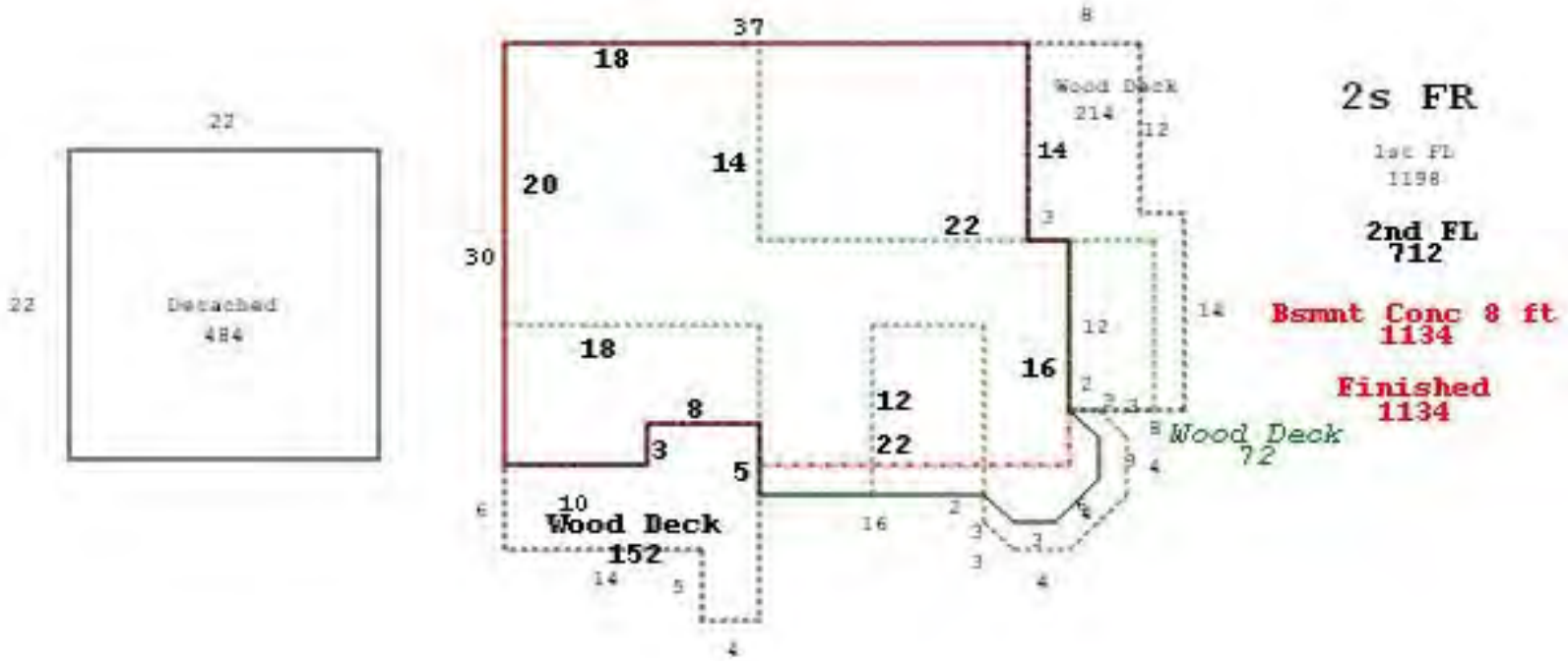
COMMENTS (Reviews, B. of E., etc.): B of E 92-752 I re-sketched the house and I corrected the square footage. I also gave the land an additional 10% functional adj for the low unusable back property

STRIKE-OFF/SUPPLEMENT (Date, Reason):

SALES (Enter only if needed for clarification of above.):

Z-[illegible]

0320133062



SS 2/27/2012

KH 08/30/11

tch by Apex Medina™

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320242117 Local #: Parcel #: 0320242117

Tax Year:	2023	Levy:	0.000000	# of Imps:		Created On:	
Tax Dist:	PIERCE	Map #:		LEA:	091501	Active On:	05/20/2022
PUC:		Initials:		Acct Type:	Residential	Inactive On:	
Assign To:	UnAssigned					Last Updated:	

Owner's Name and Address

TROUTLODGE INC
PO BOX 1290
SUMNER , WA 98390-
0260

Property Address

4122 E 49TH ST ,
PIERCE COUNTY

Sales Summary

Sale Date	Sale Price	Deed Type	Reception #	Book	Page #	Grantor
05/01/2001	$6,000	Quit Claim Deed	1062734			MCLEARY ED & LOIS M

Legal

Section 24 Township 20 Range 03 Quarter 22 : BEG AT NW COR OF NE OF NW OF SEC 24 TH S 89 DEG 19 MIN 55 SEC W 198 FT TH S 00 DEG 18 MIN 45 SEC W 362 FT TH N 89 DEG 19 MIN 55 SEC E 198 FT TH N 00 DEG 1

Section	Township	Range	Qtr	QtrQtr	Government Lot	Government Tract
24	20	03	2	2		

Subdivision Information

Sub Name	Block	Lot	Tract

Land Valuation Summary

Land Type	Abst Cd	Value By	Net SF	Measure	# of Units	Value/Unit	Actual Val	Asmt %	Assessed Val
Residential	9166L	MRA	71,676	Square Feet	71,676.000000	$0.65	$46,327	100.00%	$46,327
Class				Sub Class					
Land Subtotal:					1.65		$46,327		$46,327

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320242117 Local #: Parcel #: 0320242117

Land Attributes

Attribute	Description	Adjustment
R FUNCTIONAL	MARGINAL 100 PCT	0.600000
R FUNCTIONAL	TOPO STEEP	1.000000
R FUNCTIONAL	WET	1.000000
R NEIGHBORHOOD	LAND ADJ	1.220000
R SITE DEVELOPMENT	EXTENSIVE	0.500000
R STREETS	STREET NO ROAD	0.700000
R UTILITIES	POWER AVAILABLE	1.000000
R UTILITIES	SEWER/SEPTIC NO	0.900000
R UTILITIES	WATER NO	0.850000

Improvement Valuation Summary

Imp #	Property Type	Abst Code	Occupancy	Class	Actual Value	Asmt %	Assessed Val*
Improvement Subtotal:					$0		$0

Total Property Value

Total Value:	$46,300	$46,300

*Approximate Assessed Value

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE - ACCOUNT NOTES - ACCOUNT NOTES

Entry Date	Note	Category
03/22/2006	BFO 3/21/06. REVIEWED LAND ATTRIBUTES - REMOVED UNWARRANTED ATTRIBUTES; ADDED MARG 100 / TOPO STTEP AND ADDED SITE DEVEL EXT .50. NEW ASSESSMENT REFLECTS APPROXIMATE CONTRIBUTORY VALUE TO AN ADJOINING ACCOUNT.	
01/01/2012	BFO 10/25/11 TY 2012 Data Clean Up - removed access poor (street no adj includes substandard access).	
03/16/2012	SSP 3/13/2012 Observed. Changed from power no to power available (less than 200' to the west). No other changes noted.	
05/24/2019	CCP 05/23/2019 Observed. Per visual/site inspection and ortho photos, added Wet Attribute.	General

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320242141 Local #: Parcel #: 0320242141

Tax Year:	2023	Levy:	0.000000	# of Imps:	1	Created On:	
Tax Dist:	PIERCE	Map #:		LEA:	091501	Active On:	02/24/2021
PUC:		Initials:		Acct Type:	Residential	Inactive On:	
Assign To:	UnAssigned					Last Updated:	

Owner's Name and Address

SHIMOMURA JASON A
4822 44TH AVE E
TACOMA, WA 98443-2507

Property Address

4822 44TH AVE E, PIERCE COUNTY

Sales Summary

Sale Date	Sale Price	Deed Type	Reception #	Book	Page #	Grantor
03/11/2016	$246,050	Statutory Warranty Deed	4392552			PLETCHER PHILIP
07/01/2002	$215,000	Statutory Warranty Deed	1099573			SCHATZ ROBERT A & JULIA

Legal

Section 24 Township 20 Range 03 Quarter 21 : L 1 OF L L 91-07-11-0386 EXC POR TO P CO FOR RD PER ETN 786235 OUT OF 2-132 SEG C1728LK 3/4/92BO

Section	Township	Range	Qtr	QtrQtr	Government Lot	Government Tract
24	20	03	2	1		

Subdivision Information

Sub Name	Block	Lot	Tract

Land Valuation Summary

Land Type	Abst Cd	Value By	Net SF	Measure	# of Units	Value/Unit	Actual Val	Asmt %	Assessed Val
Residential	1101L	MRA	211,527	Square Feet	211,527.360000	$1.58	$334,794	100.00%	$334,794
Class				Sub Class					
Land Subtotal:					4.86		$334,794		$334,794

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320242141 Local #: Parcel #: 0320242141

Land Attributes

Attribute	Description	Adjustment
R FUNCTIONAL	FLOOD WAY	1.000000
R FUNCTIONAL	MARGINAL 60 PCT	0.800000
R FUNCTIONAL	TOPO STEEP	1.000000
R FUNCTIONAL	WET	1.000000
R NEIGHBORHOOD	LAND ADJ	1.220000
R VIEW	TERRITORIAL 2 LIM	1.080000

Improvement Valuation Summary

Imp #	Property Type	Abst Code	Occupancy	Class	Actual Value	Asmt %	Assessed Val*
1.00	Residential	1101	Single Family Residential		$144,716	100.00%	$144,716
Improvement Subtotal:					$144,716		$144,716

Total Property Value

Total Value:	$479,500	$479,500

*Approximate Assessed Value

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320242141 Local #: Parcel #: 0320242141

Imp #:	1			Landscaping $: 0.00
Property Type:	Residential			
Quality:	Fair			
Condition:	Average	Nbhd:	091501	
Perimeter:	0	Nbhd Ext:	0	
% Complete:	100.00%	Nbhd Adj:	1.0800	

Occupancy Summary

Occupancy: Single Family Residential Occ %: 100%

Built As Summary

Built As:	1 Story	Year Built:	1920
Construction Type:	Frame Siding	Year Remodeled:	1958
HVAC:	Forced Air		
Interior Finish:	Drywall	% Remodeled:	1.0000
Roof Cover:	Composition Shingle	Adj Year Blt:	1958
Built As SF:	1035	Effective Age:	
# of Baths:	1.00		
# of Bdrms:	2.00		
# of Stories:	1.00		
Story Height:	8		
Sprinkler SF:	0	Diameter:	
Capacity:		Height:	0

Improvement Summary

Improvement 1	Units	Units Price	RCN	Actual Value
Add On				
Other Imps Misc	1.0000	$1.00	$1.00	$1,000.00
Appliance				
Allowance	1.0000	$3,176.88	$3,176.88	$3,177.00
Basement				
Bsmnt Conc 8 ft	851.0000	$34.43	$29,299.93	$29,300.00
Fixture				
Bath 3 Fixture	1.0000	$0.00	$0.00	$0.00
Allowance	1.0000	$0.00	$0.00	$0.00
Porch				
Cvrd Wood Deck	60.0000	$70.99	$4,259.40	$4,259.00
Rough In				
Laundry Facility	1.0000	$0.00	$0.00	$0.00

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE

Account #: 0320242141 Local #: Parcel #: 0320242141

User				
Flood Zone Restrictions	1.0000	$0.00	$0.00	$0.00

Improvements Value Summary

IMPNO: 1

RCN Cost/SF:	$168.57	Design Adj:	0.0000	Func Obs %:	0.0000
Total RCN:	$174,465.00	Exterior Adj:	0.0000	Econ Obs %:	0.0000
Phys Depr %:	0.2333	Interior Adj:	0.0000	Other Obs %:	0.0000
Phys Depr $:	$40,469.00	Amateur Adj:	0.0000		
RCNLD $:	$144,715.68	RCNLD Cost/$:	$139.82	Market/SF:	$0.00

PIERCE COUNTY ASSESSOR
PROPERTY PROFILE - ACCOUNT NOTES - ACCOUNT NOTES

Entry Date	Note	Category
06/14/2006	CDP 02-23-06 DECLINE- CHANGED TOPO ADJ FROM .75 TO .85 PCT AND 60 PCT MARGINAL AND VIEW FROM 1.0 TO 1.15 PCT, PER BENCHMARK BOOK. BSMT APPEARS TO STILL BE UNFIN.	
04/24/2008	RMO/KJO 4/24/08 In office floodway project. Changed floodway sq ft to 11,080sf per GIS. Removed wet attribute.	General
03/14/2012	SSP 3/13/2012 Observed. Building permit restrictions if building site is in affected area. Changed the PIF garage from $1,200 to $1,000. The det garage roof has reached the end of its physical life, there is a tarp over a large portion of the roof.	
01/01/2019	PSO 8/31/18 Per the 2019 update plan for this PI area, improvements with an Adj Yr of 1984 and older were updated by 6 years. Appraisers are to review these new Adj Yrs and revise them as necessary during inspection.	
05/24/2019	CCP 05/23/2019 Observed. Per visual/site inspection and ortho photos, added Wet attribute.	General









Status: Sold

Built: 1920

Overview | Property Details | Tour Insights | Redfin Estimate | Property History | Public Facts | Schools



Listing provided courtesy of RE/MAX Professionals. Sold by RE/MAX Professionals.

Track this

PARTN









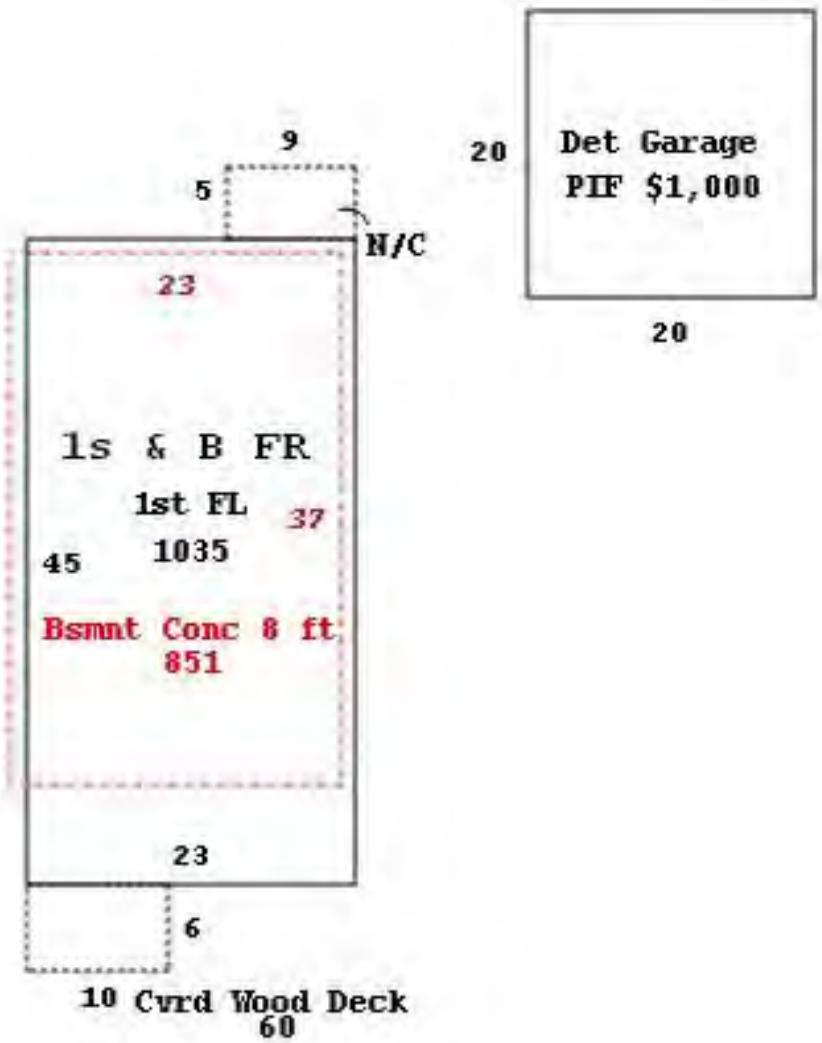








0320242141



tch by Apex Medina™

Pierce County
Office of the Assessor-Treasurer

2401 South 35th Street, Room 142
Tacoma, Washington 98409-7498
(253) 798-6111 Fax (253) 798-3142
ATLAS (253) 798-3333
www.co.pierce.wa.us/atr

KEN MADSEN
ASSESSOR-TREASURER

4-18@1

PIERCE COUNTY ASSESSOR-TREASURER'S
Response to the Appeal
Of a Residential Property
To The
Pierce County Board of Equalization

March 19, 2007

POLARCZYK WERNER H

APPELLANT

vs.

PIERCE COUNTY ASSESSOR-TREASURER
RESPONDENT

Parcel Number: 0320133052
Appeal Number: 200602564
Assessment Year: 2006
Taxes Payable: 2007

Assessor's Value Recommendation

	Assessor's Original Value
Land Value	$145,900
Improvement Value	$112,900
Total Assessed Value	$258,800

Ken Madsen

Ken Madsen
Pierce County Assessor-Treasurer
"Not a Penny More, But Not a Penny Less, Only What's Fair"

General Description of Subject Site and Improvements

Location:

4710 44TH AV E

Legal description of the property:

Section 13 Township 20 Range 03 Quarter 34 : N 132 FT OF S 264 FT OF SW OF SE OF SW EXC W 140 FT THEREOF ALSO EXC 44TH AVE E OUT OF 03-20-13-3-044 SEG L-0083 SP ES

General Description of the Subject Property:

The site is 66,211 Square Feet. The residence is a Frame Siding house constructed in 1977. It has 1352 square feet of finished living area. The Assessor has classified the structure as a 2 Story home of Average quality.



Pierce County Assessor-Treasurer's Response

The Pierce County Assessor-Treasurer is responsible for establishing the fair market value of all real property in Pierce County in an equitable manner using mass appraisal techniques.

Attached is a description of the Assessment process as well as the Appeal process used in determining the assessed value and fair market value of the subject property. Percent or dollar amount of change from the previous assessed value may not be relevant or sufficient evidence to prove market value. The assessed value of the subject property is based on either a recent physical inspection and/or statistical analysis of residential real estate sale transactions that took place within the subject property's neighborhood and/or comparable neighborhoods within the preceding year. Assessed values were updated based upon the analysis of these sales. Copies of the statistical analysis of sales are available for your review at the Assessor-Treasurer's office and at the Board of Equalization (RCW 84.48.150).

State law mandates that the valuation placed on a property by the Assessor is *presumed to be correct* and can only be overcome by the presentation of clear, cogent and convincing evidence that the value is erroneous. In our opinion, no such evidence has been presented in this case. All valuation issues, documentation, and statements presented by the appellant have been specifically reviewed and have been taken into consideration in the Assessor-Treasurer's recommendation.

State law mandates that the valuation placed on a property by the Assessor is presumed to be correct and can only be overcome by the presentation of clear, cogent and convincing evidence that the value is erroneous (RCW 84.40.0301). No such evidence has been presented.

In accordance with the provisions of RCW 84.48, the Pierce County Assessor-Treasurer respectfully recommends that the Pierce County Board of Equalization **sustain the original assessed value** of the subject property as shown on the assessment rolls of Pierce County.

	Assessor's Original Value
Land Value	$145,900
Improvement Value	$112,900
Total Assessed Value	$258,800

Statement of the Assessor-Treasurer

Assessment Process

According to state law, the Pierce County Assessor-Treasurer is **required to value all taxable property at 100% of its true and fair market value** taking into consideration the highest and best use of the property (RCW 84.40.030). This valuation is done in an equitable manner using mass appraisal techniques. *Market Value* is the amount of money a buyer of a property, willing but not obligated to buy, would pay a seller of property, willing but not obligated, to sell, taking into consideration all uses to which the property is adapted and might in reason be applied. *True and fair value* is the same as market value or fair market value (WAC 458-14-005(15)). *Highest and Best Use* is the most profitable, likely use to which a property can be put. It is the use that will yield the highest return on the owner's investment. Any reasonable use to which the property may be put may be taken into consideration and if it is peculiarly adapted to some particular use, that fact may be taken into consideration. Uses that are within the realm of possibility, but not reasonably probably of occurrence, shall not be considered in valuing property at its highest and best use." (WAC 458-07-030).

Revaluation of Real Property is performed on an annual basis in Pierce County using current market value trends. All property is physically inspected at least once every six years (RCW 84.41.030 and 84.41.041). Mass appraisal is the process of valuing a universe of properties as of a given date utilizing standard methodology, employing common data, and allowing for statistical testing. Assessed value is based on either a recent physical inspection and/or statistical analysis of recorded residential real estate transactions that occurred within Pierce County in the preceding year. The sales in the subject neighborhoods or comparable neighborhoods are then analyzed and assessed values are updated based upon the analysis of these sales.

Real Property Assessment: Pierce County appraisers take into consideration a wide range of factors to ensure accuracy and equity when estimating the assessed value of all types of property. Three approaches to value are used depending on the type of property being appraised, each approach has a distinctive method to measure and understand the motives of the buyers, sellers, investors, developers, and financiers in the current market place.

The most commonly used valuation methods for residential property in Pierce County are the market and market adjusted cost approaches. Sales and statistical analysis are used to calibrate these approaches. Sales within your appraisal area and neighborhood are given the most weight.

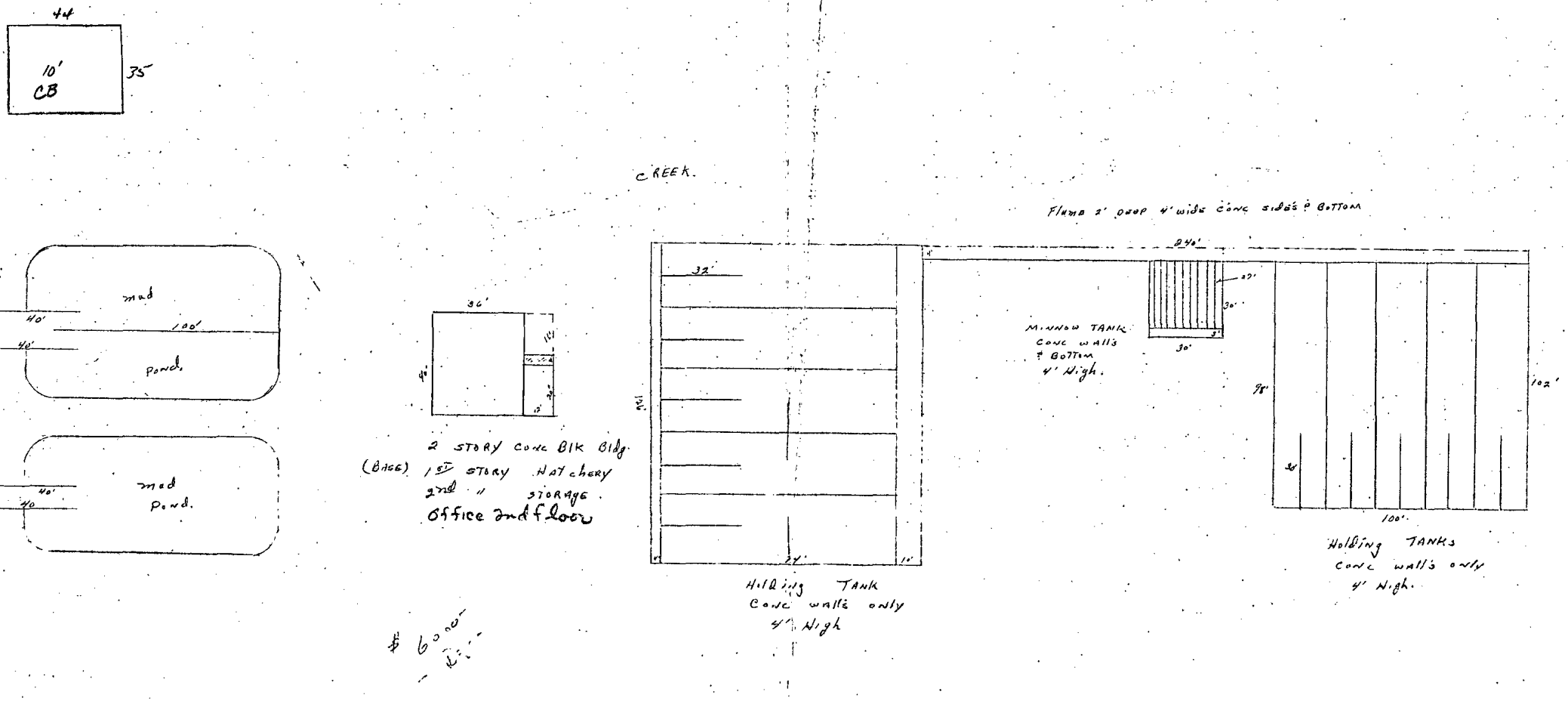
Appeal Process

The Valuation determined by the Assessor is presumed correct. "The valuation placed on a property by the Assessor is presumed to be correct and can only be overcome by the presentation of clear, cogent and convincing evidence that the value is erroneous (RCW 84.40.0301; Weyerhaeuser Co. v Easter, 126 Wn.2d 370, 894 P.2d 1290 (1995)). "Clear, cogent and convincing" evidence means a quantum of proof that is less than "beyond a reasonable doubt" but more than a mere "preponderance of the evidence." It is the quantum of evidence necessary to convince the trier of fact that the ultimate fact in issue is highly probable" In re Sego, 82 Wn.2d 736, 513 P.2d 831 (1973) .

The Assessor determines the *total value* for the property appraised. "When valuing improved property, evidence that considers market value from a total property value stand point is preferred. This Board will consider the valuation of both land and improvements in determining a total value for the property and will require evidence and testimony supporting the total valuation" *(Washington State Board of Tax Appeals*, Docket No. 48202, Rankin v. King Co. Assessor, (1996): in part).

AVERAGE QUALITY HOMES SALES ON 1 TO 2 ACRE PARCELS IN NEIGHBORHOOD 091501

ACCTNO	STREETNO	ADDRESS	LEA	BLTASOCC	GROSSSF	YRBLT	ADJYRBLT	QUALITY	SALEDT	ADJSALEP
0320243049	6215	44TH AV	091501	1 Story	43,560	1958	1985	Average	2/9/2005	$310,000
0320252040	7003	44TH AV	091501	1 Story	54,450	1948	1966	Average	6/20/2005	$225,000
0320251181	6703	48TH AV	091501	2 Story	74,340	1988	1988	Average	7/26/2005	$335,000
0320141046	3818	WALLER RD	091501	1½ Story Fin	75,359	1924	1954	Average	8/2/2005	$350,000
0320242060	5019	VICKERY AV	091501	1 Story	84,071	1969	1979	Average	9/2/2005	$309,600
0320141023	3418	PIONEER WY	091501	Double Wide	51,300	1993	1993	Average	9/29/2005	$160,500
0320141062	3215	35TH STCT	091501	2 Story	63,598	1995	1995	Average	12/8/2005	$496,500
0320234139	6109	WALLER RD	091501	1½ Story Fin	52,708	1950	1967	Average	1/4/2006	$428,000


44
10'
CB
35
mud
40'
100'
40'
Pond.
mud
40'
40
Pond.
36'
40'
2 STORY CONC BLK Bldg.
(BASE) 1ST STORY HATCHERY
2nd " STORAGE.
Office 2nd floor
CREEK.
32'
24'
10'
Holding TANK
Conc walls only
4' High
Flume 2' deep 4' wide conc sides & Bottom
240'
27'
30'
30'
MINNOW TANK
Conc walls
& Bottom
4' High.
98'
102'
30'
100'
Holding TANKS
Conc walls only
4' High.

$ 6000

Permit No. C-3870 R 350 Date of Application 8-9-65 Application No. A 4793

Construction Address 4008 Pioneer Way - Tacoma Sec. 13 T. 20 R. 3 Dia. No. 3 - 13

Lot ____ Block ____ Addition NE¼ SE¼ SW¼ Size of Property 20 Acres

FOR OFFICE USE ONLY. DO NOT WRITE IN THIS BLOCK.
Zone G Setbacks 35' front; 8' sides; 30' rear

Owner Name and Address Edward McLeary Route 1 Soap Lake, Wn. Phone CH6-3590

Contractor and Address Same Local phone Phone WA2-5241

BUILDING DESCRIPTION	WORK DESCRIPTION	INSPECTIONS	DATE	INITIAL
Residence or Other Fish Hatchery	& Storage Bldg. - Farm	SETBACKS	16 8-9	208
Stories 2	950 2nd rental 1965 Bldg	FOOTINGS		
Exterior Finish Concrete Block	Will septic tank be installed? If yes, health approval required YES or NO yes	FORMS		
Interior Finish "	Health Dept. Approval Date ____ By ____	FRAME (After Plumbing)		
Heat None	Install or add to plumbing or gas piping yes or no ____	CHIMNEY AND FIREPLACE		
Number of Flues	Permit Numbers Plumbing ____ Gas ____ Heat ____			
Bedrooms 0	I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT AND THAT THE APPLICABLE LAWS OR CODE RELATING TO THE WORK DESCRIBED WILL BE MET.			
Baths 1	Applicant Edward McLeary			
Other Rooms	Building Permit Application Checked and Permit Fee of 30			
Basement Area Sq. Ft.	Received by			
First Floor Area 1440 Hatchery Sq. Ft.	REMARKS OR DIRECTIONS:			
Other Floor Area 1440 Storage Sq. Ft.	$20 - 57 Trautco Inc. Bill Townsend 4008 Pioneer Way			
Attached Garage Area Sq. Ft.				
Detached Garage or Carport Area Sq. Ft.				
Estimated Cost $9500.00		FINAL		

PERSONNEL ONLY

BUILDING PERMIT APPLICATION

PIERCE COUNTY BUILDING DEPARTMENT
ROOM 1033 COUNTY - CITY BLDG.
FU. 3-3311 EXT. 741

03-20-13-3013

Edward McLeary
4008 Pioneer Way.
(Roll 350) 36

Troutco Inc.
Sec. 13-20-3E
Dia 3 13

(R3)

(Page 153) Hatchery Bldg.

	+	−		
Base	6 58			
Basement	2 30			
Roof Gabled	08			
Conc. Blk exterior	09			
Ceiling S.R	22			
Elec outlets	11			
	9 38			
1440 # @ 9.38			13505	
98% good				$13235
(Page 227) 4' conc. walls of tanks. 2789 L.F @ 5 80			16175	
2' conc. wall of flume 480 L.F @ 4 35			2085	
Conc. Slab 1860 # @ 38			705	
			$18965	
50% good,				9480
				$23,715
25% A.U.				$56.80
Addn 1966				
Roof 12x40 = 480 #	72			
Roll Comp	13			
50% ceiling @ 22	11			
Light	30			
Conc floor 50% @ 55	27			
480 # @	1 53		735	
walls 44 L/F @ 6 88			300	
			$1035	
98%			$1015	
25% A.U.				250
				$5930

03-20-13-3-013

195

ANTHONIZED PERSONNEL ONLY

RTSQ 03 - 20 - 13 - 3 - 2 ENTRY: PARCEL NO. 03-20-13-3-013 Record ____ of ____

Sketch by KOB Date 10-6-87 ____ ASSESSED WITH ____

Insp. by ADP Date 01-04-95 STREET YEAR BUILT 1968? REMODELED ____

Insp. by ____ Date ____ ____ EFF YR. BLT 1968? CONDITION Fair

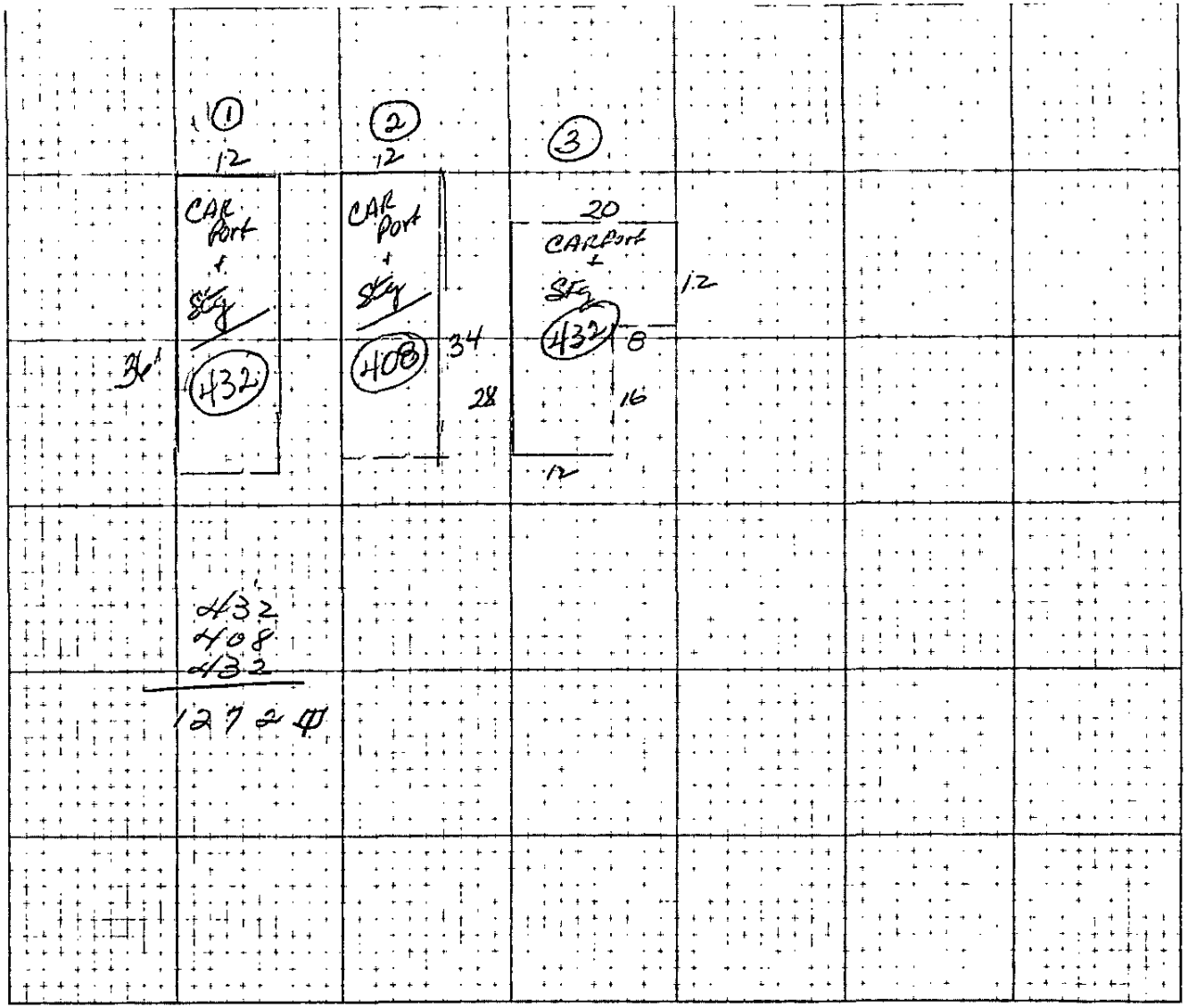
Insp. by ____ Date ____ ____ ADDRESS 4008 Pronto Way

QUAL Low Quality %
ROOF ____
FL COV ____
PLUMB ____
HEAT ____
BLT-IN ____
FP ____
F/E ADJ ____
% COMP ____
FIN B# ____
DAYLIGHT ____ DOOR ____
OTHER FEATURES ____

S/W BANK: S/W ACCESS:
HIGH ____ NONE ____
MED ____ LIM ____
LOW/NO ____ FULL ____
RIGHTS ____

LAKE ____ %
STREAM/RIVER ____ %
VIEW ____ Q ____ ____ %
NO PERK ____ %
DIRT ST/POOR ACCESS ____ %
TOPO ____ % WET ____ %

COMMENTS ____



Z-1519a

COMMENTS (Reviews, B. of E., etc.): _____

STRIKE-OFF/SUPPLEMENT (Date, Reason): _____

SALES (Enter only if needed for clarification of above.): _____

MOBILE HOME PARCEL NO. 40720-80000 Record _____ of _____

Sketch by KDB DATE 10-6-87 LOCATION: 4008 Pioneer Way RP# 03-20-13-3-013 DATE: _____

Insp. by ADP DATE 01-04-95 STREET LOCATION: _____ RP# _____ DATE: _____

Insp. by _____ DATE __-__-__ LOCATION: _____ RP# _____ DATE: _____

Insp. by _____ DATE __-__-__ LOCATION: _____ RP# _____ DATE: _____

LOCATION: _____ RP# _____ DATE: _____

MOBILE HOME DATA:

MAKE: Centl Sup Great Northern Heritage House

MODEL: Great Northern

YEAR: 1979? ✓

SERIAL # 10621

LENGTH: 50 WIDTH: 12

QUAL _____ %

ROOF Mtl

FL COV tile

PLUMB 5

HEAT FA

BLT-IN 1

FP _____

F/E ADJ _____

% COMP _____

FIN B # _____

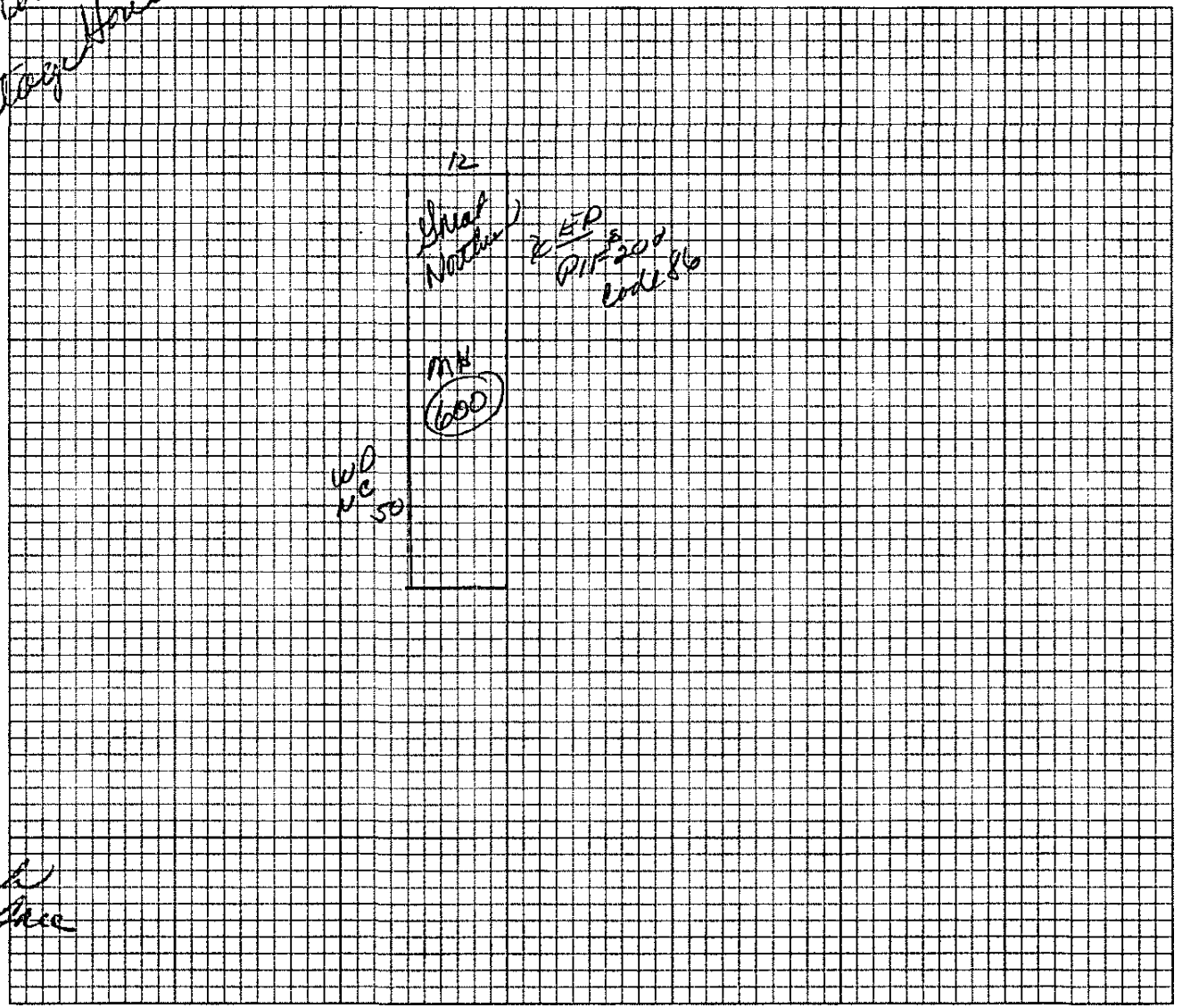
DAYLIGHT _____ DOOR _____

OTHER FEATURES EP @ $200

N.C. In Shutting

COMMENTS

Assume that they work for Trout Lodge & Rest Free Lease M. Home Card.



COMMENTS (Reviews, B. of E., etc.): _____

STRIKE-OFF/SUPPLEMENT (Date, Reason): _____

SALES (Enter only if needed for clarification of above.): _____

Entrance -

MOBILE HOME PARCEL NO. 42930-44600 Record _____ of _____

Sketch by KO DATE 10-6-87 (01 04 95 STREET) LOCATION: 4008 PIONEER WAY TACOMA RP# 03-20-13-3-013 DATE: 05/16/86

Insp. by ADP DATE __-__-__ LOCATION: Trout Lodge RP# _____ DATE: _____

Insp. by _____ DATE __-__-__ LOCATION: _____ RP# _____ DATE: _____

Insp. by _____ DATE __-__-__ LOCATION: _____ RP# _____ DATE: _____

LOCATION: _____ RP# _____ DATE: _____

MOBILE HOME DATA:

MAKE: NASHUA

MODEL: ZIMME

YEAR: 1968

SERIAL # 6900300001298

LENGTH: ~~45~~ 42 WIDTH: 20

QUAL Low %

ROOF Mtl

FL COV tile

PLUMB 5

HEAT F.A

BLT-IN 1

FP 1 w/stove

F/E ADJ _____

% COMP _____

FIN B # _____

DAYLIGHT _____ DOOR _____

OTHER FEATURES No change for Skirting -

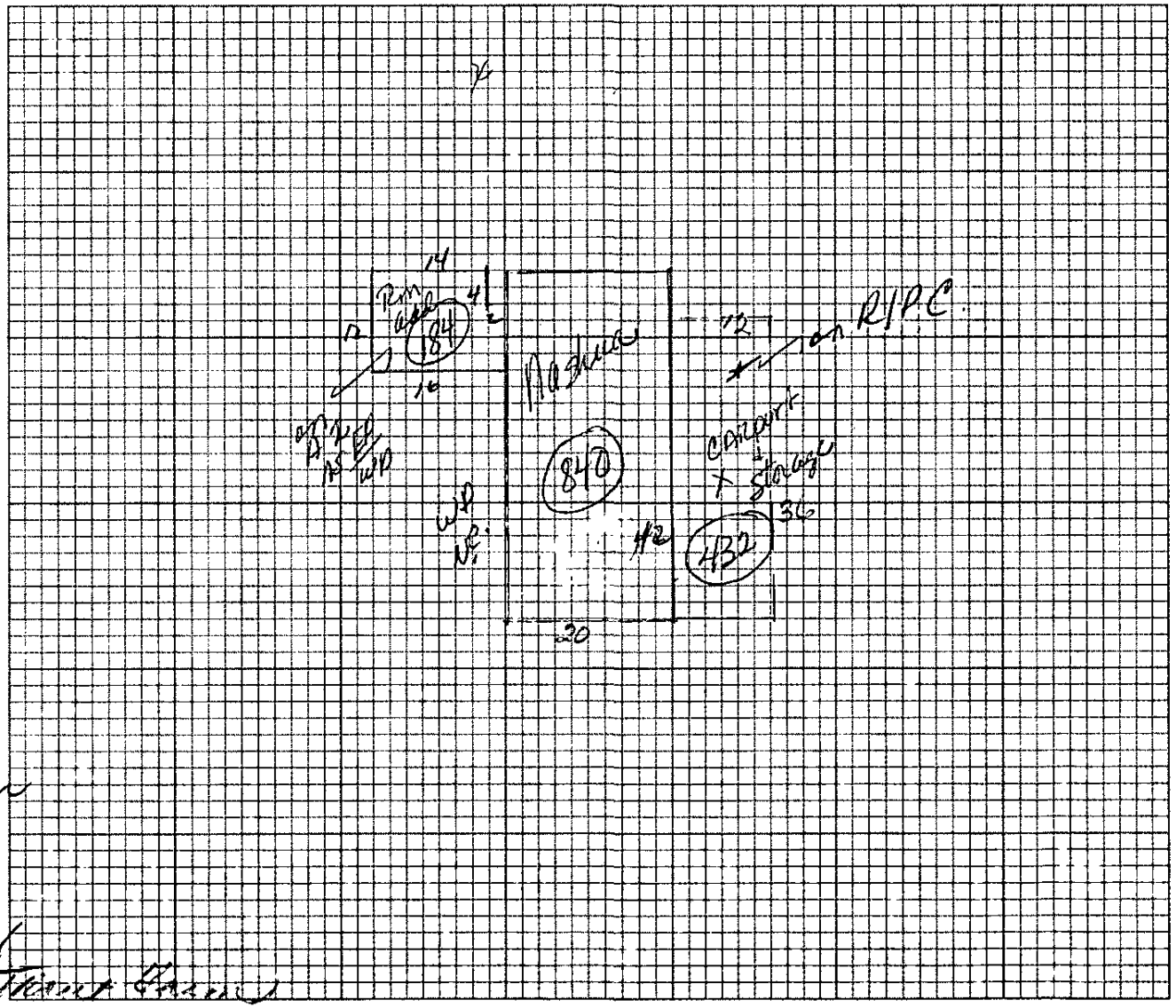
COMMENTS

Left M.H card -

People that live in M.H

Free Rent for Worker @ Trout Farm

Knew nothing about M.H



COMMENTS (Reviews, B. of E., etc.): _____

STRIKE-OFF/SUPPLEMENT (Date, Reason): _____

SALES (Enter only if needed for clarification of above.): _____

MOBILE HOME PARCEL NO. 50000-34965 Record _____ of _____

Sketch by KO DATE 10 - 6 - 87 LOCATION: 4008 Pioneer Way RP# 03-20-13-3-013 DATE: 10-6-87

Insp. by ADP DATE 01 - 04 - 95 STREET LOCATION: _____ RP# _____ DATE: _____

Insp. by _____ DATE ___-___-___ LOCATION: _____ RP# _____ DATE: _____

Insp. by _____ DATE ___-___-___ LOCATION: _____ RP# _____ DATE: _____

LOCATION: _____ RP# _____ DATE: _____

MOBILE HOME DATA:

MAKE: Nashua

MODEL: ?

YEAR: ? 1968

SERIAL # ? 13774

LENGTH: 42 WIDTH: 20

QUAL _____ %

ROOF Mtl

FL COV tile

PLUMB 5

HEAT FA

BLT-IN 1

FP _____

F/E ADJ _____

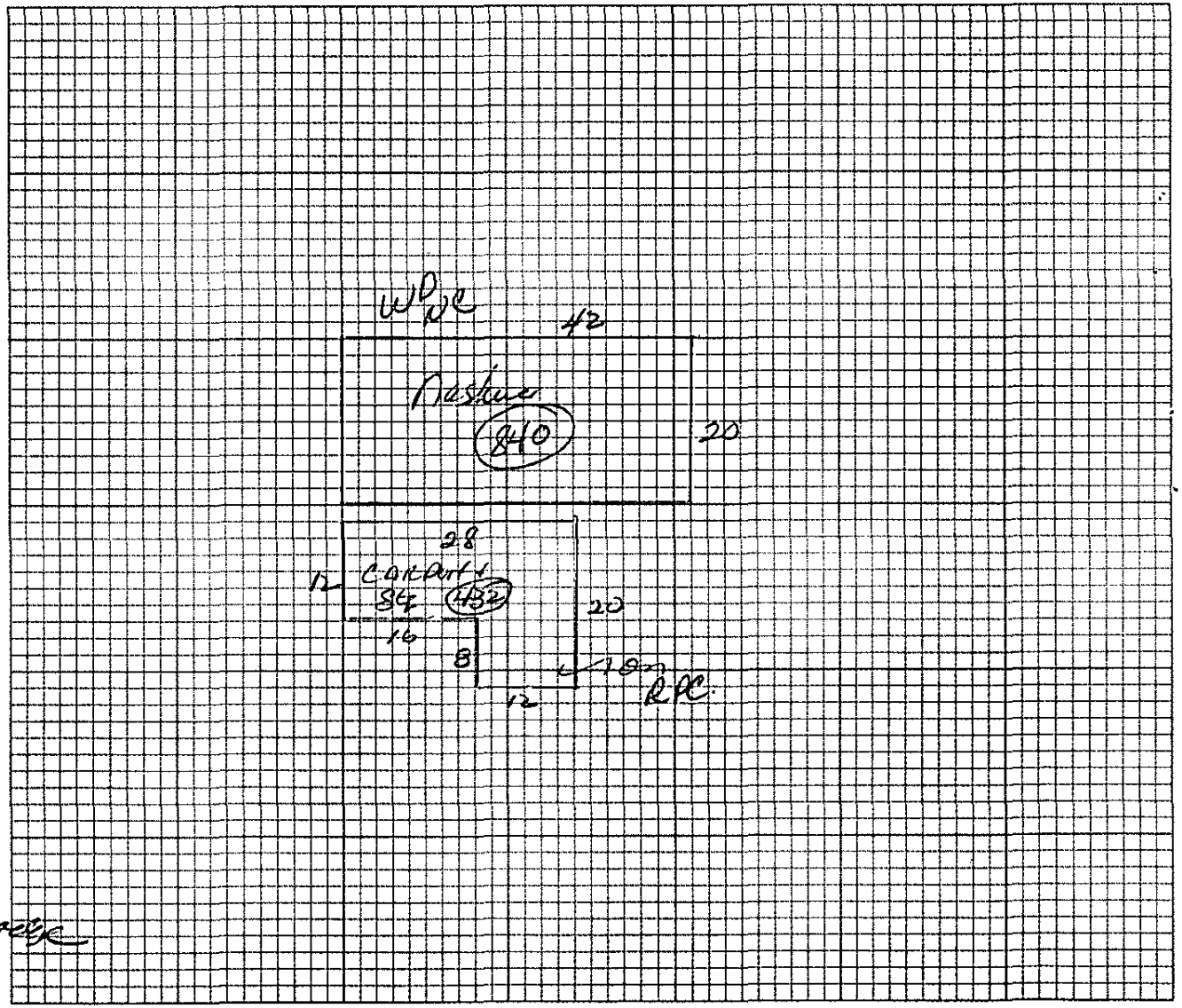
% COMP _____

FIN B # _____

DAYLIGHT _____ DOOR _____

OTHER FEATURES No Charge for Shorting —

COMMENTS Parents visiting Soon who works at Thaw Lodge Rent Free —



COMMENTS (Reviews, B. of E., etc.):

STRIKE-OFF/SUPPLEMENT (Date, Reason):

SALES (Enter only if needed for clarification of above.):

MOBILE HOME PARCEL NO. 55555-10593

MOBILE HOME DATA:

MAKE: Liberty

MODEL: Oakhurst

YR: 1997 LENGTH 44 WIDTH 27

SERIAL #:

LOCATION: 4008 Pioneer Way RP# 03-20-13-3-013

LOCATION: RP#

LOCATION: RP#

LOCATION: RP#

LOCATION: RP#

INSPECTION DATA:

ENTRY: E (NH) RE DE AD

BY DATE

ENTRY: E NH RE DE AD

BY DATE

ENTRY: E NH RE DE AD

BY DATE

ENTRY: E NH RE DE AD

BY DATE

1. WD. PORCH, COVER X SF $

2. WD, PORCH, COVER X SF $

3. WD, PORCH, COVER X SF $

4. WD, PORCH, COVER X SF $

5. WD, PORCH, COVER X SF $

(USE ONLY IF ADDS VALUE)

CIRCLE APPLICABLE ITEMS:

QUALITY: L (F) A G VG EX

ROOF: (COMP) MTL WS WSHK

SIDING: RIB LAP (WOOD)

FL COV: HW TILE (CARPET)

PLUMB: 2 FULL ¾ ½

TOTAL FIX. 8

HEAT: N/C F/W (FA) BB HP

BLT-IN: (R&O) (H&F) (DW) MICR

FP: SING DBL WOOD STV

COND: 1 2 3 (4) 5 6 7 8 9

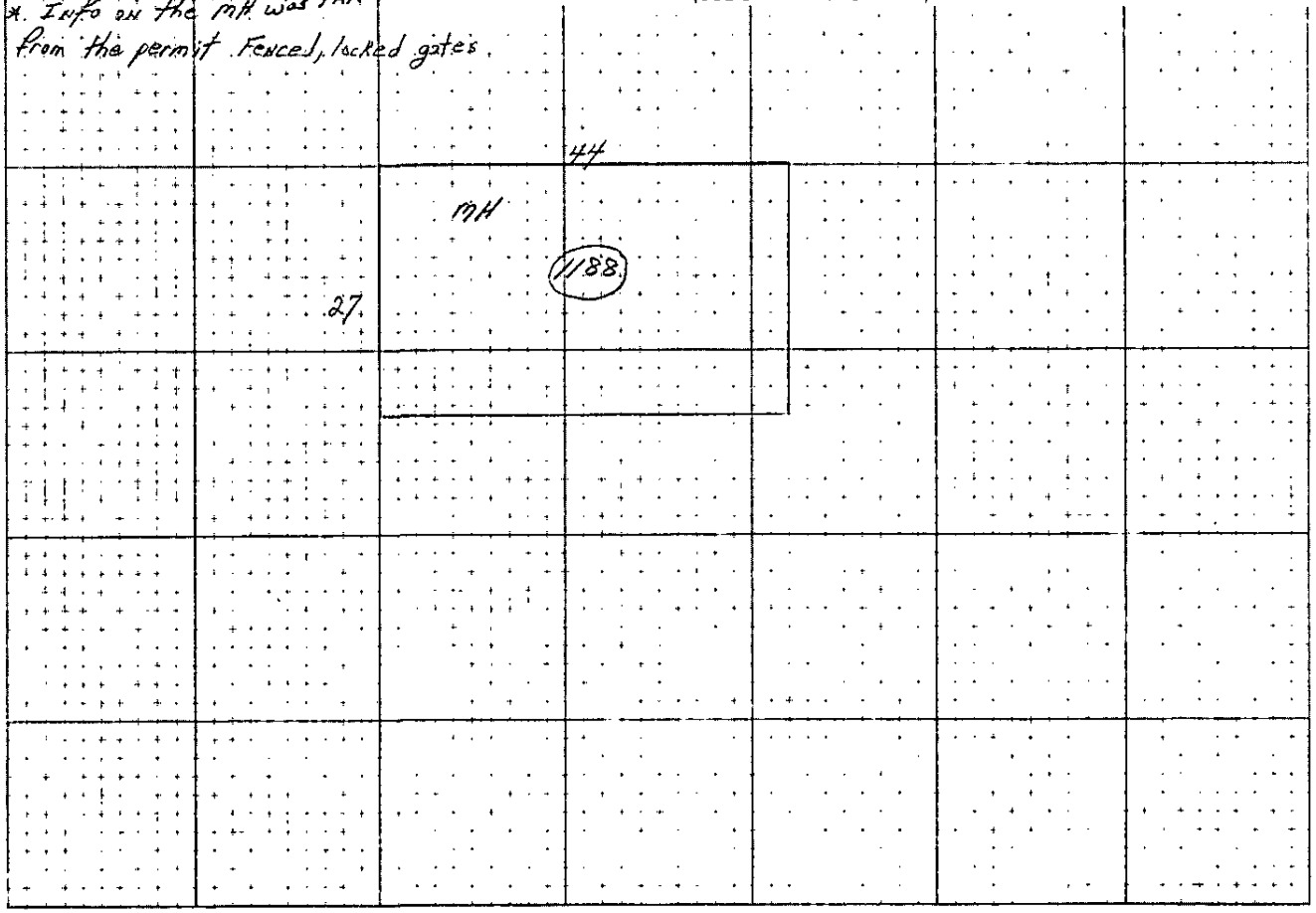
F/E ADJ: % COMP. 100%

FIN B#:

DAYLIGHT: DOOR

OTHER FEATURES:

A. Info on the MH was taken from the permit. Fenced, locked gates.



Z-2845a

SEE BACK FOR COMMENTS

COMMENTS (Reviews, B. of E., etc.): _____

STRIKE-OFF/SUPPLEMENT (Date, Reason): _____

SALES (Enter only if needed for clarification of above.): _____

CONSTRUCTION SPECIFICATIONS AND BUILDING RECORD

OCCUPANCY: 1 VAC. LOT | (2) DWELLING | 3 OTHER

BASEMENT: 1 NONE | 2 CRAWL | 3 PART | 4 HALF | (5) FULL — SIZE

HEATING: 1 NONE | (2) BASIC | 3 EXTRA

WARM AIR—F OR G		/
ELEC.—RADIANT OR BASEBOARD		
HOT WATER OR STEAM		
HOT WATER OR STEAM RADIANT		
HEAT PUMP		
UNIT HEATERS		

PLUMBING

PLUMBING POINTS [+] —

STANDARD		/
BATHROOM		
HALF BATH		
OTHER		
NO PLUMBING		

ATTIC: (1) NONE | 2 UNFIN. | 3 PART | 4 FULL

WALLS

FRAME/STUCCO	
CONCRETE BLOCK	/
BRICK/STONE	
PLATE GLASS FRONT	

ROOF

SHINGLE—ASPH./ASB./WOOD	/
SLATE/TILE/METAL	
COMP ON WOOD FRAME	
COMP ON STEEL FRAME	

FLOORS

	B	1	2	3
CONCRETE	/			
WOOD		/		
TILE				
WD/STL. FRAME				
REIN. CONCRETE				

INTERIOR FINISH

	B	1	2	3
PLASTER/DRYWALL				
WOOD PANELING		/		
FIBERBOARD	/			
UNFINISHED				

NUMBER OF ROOMS

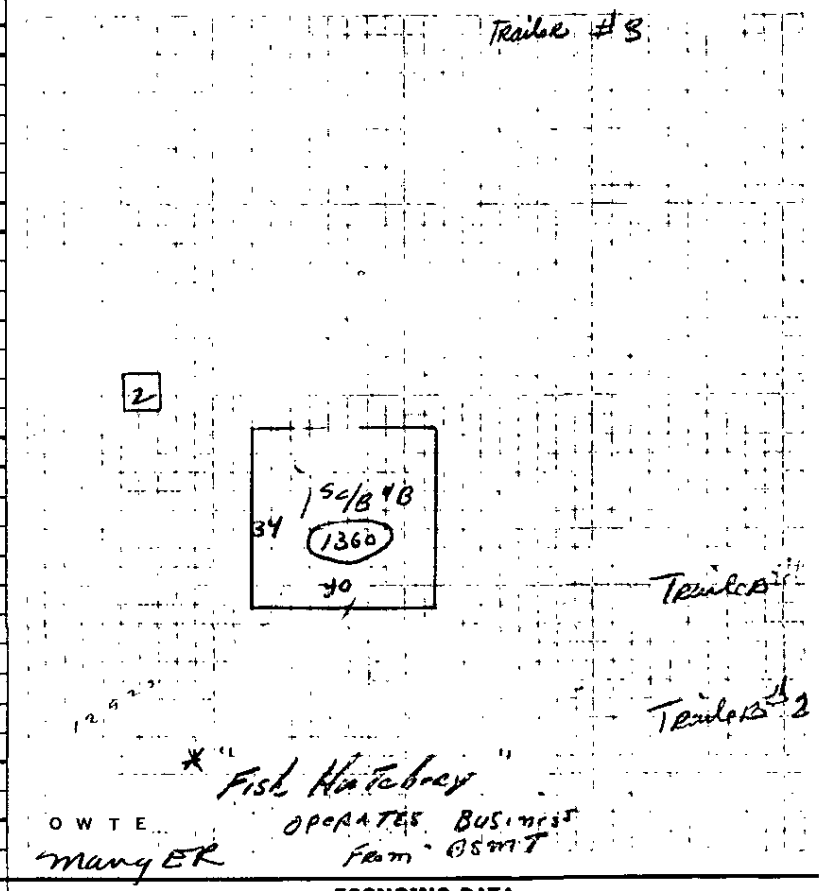
1ST	2ND	3RD
BEDROOMS	FAMILY ROOM	

OTHER FEATURES

FINISHED BASEMENT				
FIREPLACE				
AIR CONDITIONING				
DAYLIGHT BSMT.				

COMMERCIAL COMPUTATIONS

WL. HT.			
	BSMT.		
	1ST FLOOR		
	2ND FLOOR		
	3RD FLOOR		
BASE PRICE			
ADJUST %			
FRONT			
HTG/AIRCON			
LIGHTING			
PARTITIONS			
PLUMBING			
ELEVATOR			
SPRINKLER			
S.F. PRICE			
SQUARE FEET			
SUBTOTAL			
ADDITIONS			
TOTAL BASE			
GRADE	%	%	
REPL. VALUE			
DEPRECIATION			
TRUE VALUE	%	%	



ECONOMIC DATA

SALES DATA	MO. YR. AMOUNT	1 BUYER 2 SELLER	3 FEE 4 AGENT	1 YES 2 NO
ERECTED/REMODELED	/		/	
AGE/CDU RATING	1967 / F		/	

DWELLING COMPUTATIONS

1.0 STORY F		___ STORY ___	
1360 S.F.		___ S.F.	
BASEMENT		BASEMENT	
HEATING		HEATING	
PLUMBING		PLUMBING	
ATTIC		ATTIC	
ADDNS. & PCHS. —		ADDNS. & PCHS. ___	
TOTAL		TOTAL	
GRADE D [+] —		GRADE [ ] ___	
TOTAL		TOTAL	
O.F. POINTS [+] —		O.F. POINTS [ ] ___	
TOTAL		TOTAL	
C. & D. FACT % [+] —		C. & D. FACT.% [ ] ___	
REPL. VALUE	14520	REPL. VALUE	
DEPR. 10%		DEPR ___ %	
TRUE VALUE	13070	TRUE VALUE	

SUMMARY OF OTHER BUILDINGS

TYPE	NO.	CONSTRUCTION	SIZE	RATE	GRADE	ERECTED	CDU	REPL VALUE	DEPR	TRUE VALUE
GARAGE	—									
Storage	2	FR 10 X 12				1960±				150
3 Sets Cbl								3000	30	2100.
C/P (3)		FB 12 x 28	@ 670	ea				2010	30	1410
Fencing Beds							VP	So	—	4000
LISTED		DATE 3-16	TOTAL TRUE VALUE OTHER BUILDINGS							7660
SKETCHED 60			TOTAL TRUE VALUE ALL BUILDINGS							20730

GRADE DENOTES QUALITY OF CONSTRUCTION: A—EXCELLENT; B—GOOD; C—AVERAGE; D—CHEAP; E—VERY CHEAP
CDU FACTOR REFERS TO CONDITION, DESIRABILITY AND USEFULNESS OF THE BUILDING

COLE · LAYER · TRUMBLE CO./APPRAISERS ©1969

OWNERSHIP

MC LEARY EDWARD JOHN

RT 1 BOX 206
SOAP LAKE WASH 98851

ADDRESS OF PROPERTY PIONEER

PARCEL NUMBER 03-20-13-3-013

DESCRIPTION

19.54 AC. 13-20-03E 3/013
BEG AT NE COR OF N 1/2 OF N 1/2 OF
SW OF SW OF SEC TH ON N LI SD SUBD
W 265.10 FT TH S 25 DEG 06 MIN E
366.2 FT TO S LI SD SUBD TH E
92.98 FT TO SE COR SD SUBD TH N
1967 3,830 5,930 9,760

AREA CODE	USE CODE	CARD NO.
250	8400 05	1 OF 1

90

RECORD OF OWNERSHIP	DATE	PRICE

ASSESSED VALUE RECORD

YEAR	LAND	% COMPL.	BUILDINGS	TOTAL	POSTED

MEMORANDA

Mobile homes & comm.

PERMIT RECORD

DATE	NUMBER	AMOUNT	COMPLETE	PURPOSE

PROPERTY FACTORS

TOPOGRAPHY		IMPROVEMENTS		STREET OR ROAD		DISTRICT	
LEVEL		ALL UTILITIES		PAVED		STATIC	
HIGH		WATER		SEMI-IMPROVED		IMPROVING	
LOW		SEWER		DIRT		DECLINING	
ROLLING		GAS		PROPOSED		BLIGHTED AREA	
SWAMP				SIDEWALK			
VIEW							

1 LOT (2) GROSS 3 NONE

LAND DATA COMPUTATIONS

FRONTAGE	DEPTH	UNIT VALUE	DEPTH FACTOR	ACTUAL VALUE	CLASSIFICATION	NO. OF ACRES	RATE	TRUE VALUE	ASSESSED VALUE	TRUE VALUE	ASSESSED VALUE
					VIEW ACREAGE						
Primary 4/5	3.00 Ac @	3000						9000			
	16.54 Ac @	2000						33080			
LOT DEPRECIATION				___ %	TOTAL						
CORNER INFLUENCE											
			TOTAL VALUE LAND (GROSS)					42080	21040		
			TOTAL VALUE BUILDINGS					20730	10370		
			TOTAL VALUE LAND & BUILDINGS					62810	31410		

RESIDENTIAL
11—1 family
12—2-4 family
13—5-19 family
14—20+ family
15—group quarters
16—residential hotel
17—mobile home park
18—transient lodging
19—other residential

MANUFACTURING
21—food & kindred
22—textile mill
23—apparel & similar
24—lumber & wood
25—furniture & fixtures
26—paper & allied
27—printing & allied
28—chemical & allied
29—petrol. refin. & rel.
31—rubber & plastic
32—stone, clay & glass
33—primary metal
34—fabricated metal
35—prof. & scien. instr.
39—misc. mfg.

TRANSP., COMM. & UTIL.
41—rail transit
42—motor vehicles
43—aircraft
44—marine craft
45—street R.O.W.
46—auto parking
47—communication
48—utilities
49—other T.,C.&U.

TRADE
51—wholesale
52—retail-bldg. mtls., hdwr. & farm equip.
53—retail-gen. mdse.
54—retail-food
55—retail-auto, boat & air
56—retail-apparel & acc.
57—retail-home furn.
58—retail-eat & drink
59—other retail

SERVICES
61—finan., ins. & R.E.
62—personal
63—business
64—repair
65—professional
66—contract constr.
67—governmental
68—educational
69—misc. services

RECREATIONAL
71—culture or nat. exhib.
72—public assembly
73—amusements
74—rec. activities
75—resorts & camps
76—parks
79—other C.,E.&R.

RESOURCE
81—agriculture
82—agr. related
83—forestry & related
84—fishing & related
85—mining & related
89—other resource

UNDEVELOPED L & W
91—unused land
92—non com'l forest
93—water areas
94—vacant floor area
95—under constr.
99—other undev. L & W

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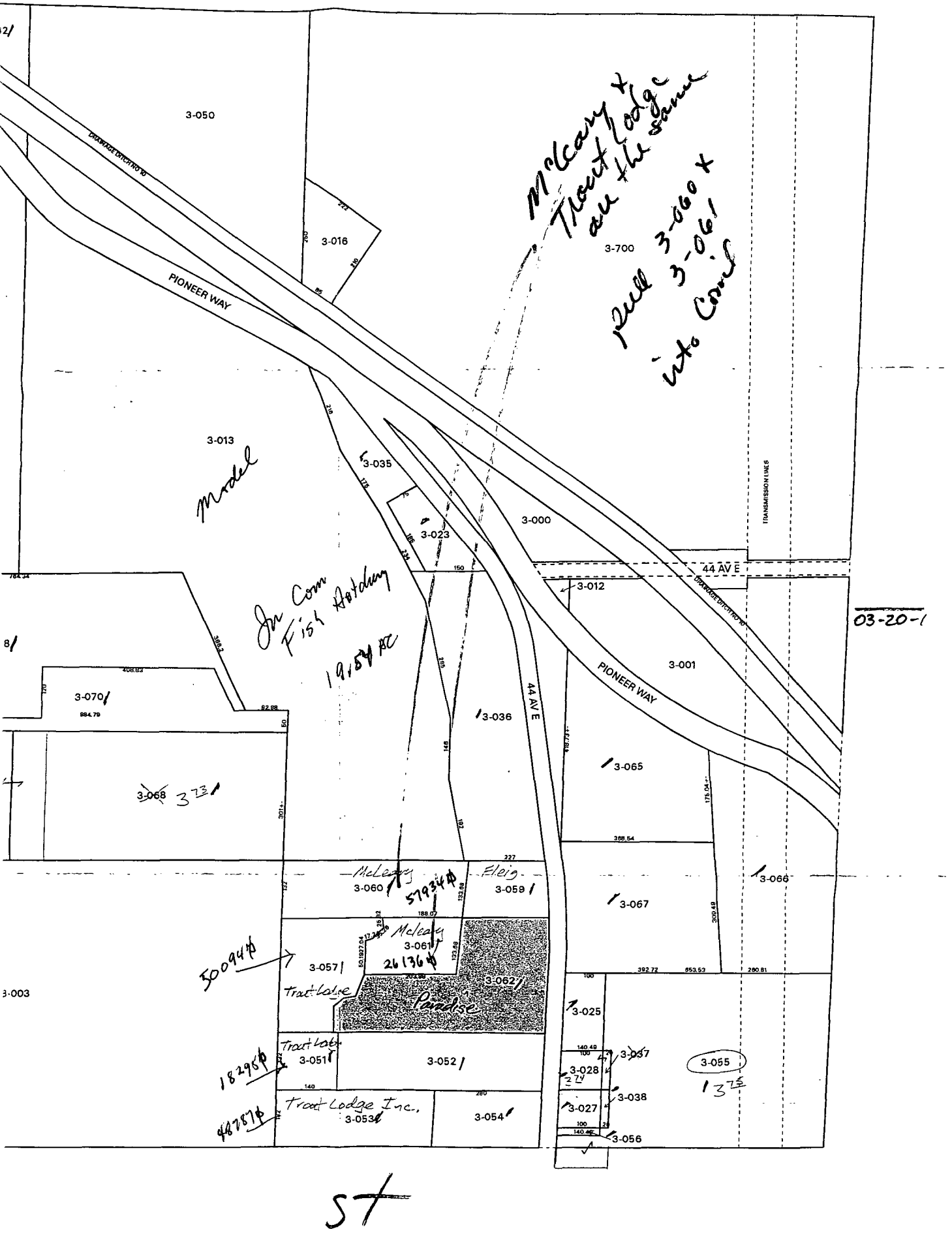
REVALUATION OF PIERCE COUNTY, WASHINGTON L. W. CRAIG, ASSESSOR

B4

12-29-98



ST

Map scale 1 : 200
Map last updated May 28, 1996

Legend
- Commercial property
- 97-98 Residential sales (unimproved)
- 97-98 Residential sales (improved)

SW13-20-03

TO: Pierce COUNTY BOARD OF EQUALIZATION

- ASSESSOR'S ANSWER TO REAL PROPERTY PETITION NO. 820795

In accordance with the provisions of RCW 84.48, I, Sheldon Cook, Pierce County Assessor, do hereby respectfully petition the County Board of Equalization to sustain the true and fair value of the following described property as shown on the tax rolls for the year 19 82, at that amount shown in Item No. Two (2) of this form.

1. LEGAL DESCRIPTION OF PROPERTY: Parcel No. 03-20-13-3-013

TOWN _____ LOT _____ BLOCK _____ ADDITION _____
SECTION SW 13 TWP. 20 RGE. 03E TAX LOT NO. Des 3-013

2. ASSESSOR'S FULL CURRENT MARKET VALUE:

		Recommendation:	
LAND	165,399	Land: 83,673	Total
IMPROVEMENTS	202,813	Imps: 71,625	$163,298
TIMBER & MINERALS			
TOTAL	367,798	Total $155,298	
		+ 8,000 Mobile Home on Real	

3. GENERAL DESCRIPTION OF PROPERTY: (Land area, type bldgs., use, etc.)

18.559 Acres of land zoned for general use and currently used as a Commercial fish hatchery for sport trout and steelhead. Approximately 5 Acres actually being used for commercial purposes. There are Two Buildings and 4 Mobile homes on the 5 Acres VARIOUS Topography. Physically reviewed and discovered several errors*

4. SELLING PRICE OF PROPERTY $_____
DATE OF SALE _____ TERMS _____

5. HAS PROPERTY BEEN OFFERED FOR SALE? _____ WHEN & HOW LONG? _____
HOW OFFERED? _____ ASKING PRICE$$ _____

6. HAS PROPERTY BEEN APPRAISED BY OTHER THAN THE COUNTY ASSESSOR? _____
WHEN? _____ BY WHOM? _____
PURPOSE OF APPRAISAL _____ APPRAISAL VALUE $ _____

(If needed, attach separate sheet for further evidence.)

7. IF INCOME PROPERTY, SUCH AS HOTEL, MOTEL, COMMERCIAL RENTAL, SERVICE STATION, LEASED OR RENTED FARM, ATTACH STATEMENT OF INCOME AND EXPENSE FOR PAST TWO YEARS, AND COPY OF LEASE OR RENTAL AGREEMENT.

8. COMPARABLE SALES OF SIMILAR PROPERTY:

A. Recent similar bare land sales in the area are as follows:

	LEGAL DESCRIPTION	AREA	SALE AMOUNT	DATE OF SALE
1.		N/A		
2.				
3.	Recommendation to Board of Equalization:			

* Method of Land appraisal 40% useable and 60% marginal due to topography and flood zone. $1.50 per SQ. FT. Prime Commercial rate with following adjustments allowing depreciation to take into account the specific parcel of land compared to other properties: -60% [illegible] -35% Top soil -5% undeveloped; -25% location [illegible] Acre overall.

500-BE-55
(5/73)

8. COMPARABLE SALES OF SIMILAR PROPERTY: (Continued)

B. Recent sales of similar property including building improvements are as follows:

	LEGAL DESCRIPTION	AREA	SALE AMOUNT	DATE OF SALE
1.				
2.	— None available			
3.				

9. Attached are the following maps, pictures, letters, appraisals or other data to substantiate the present full market value of the property.

1. Copy of Appraisal worksheet (C-2)
2. Copy of Appraisal Batch Sheet for Commercial (R-2)
3. Copy of Petition # 820795
4. Copy of Commercial land map-Exerpt
5. Copy of Thomas Bro. General area maps.

I hereby certify that to the best of my knowledge and belief the information entered on this petition is a true and fair presentation of the facts relating to this appeal.

Signed This 24th Day of August, 1982.

Signature:
S/s Sheldon Cook
(Assessor)
Bill Graham
(Deputy)

COMMENTS: $4500 per ft General benchmark starting point for residential properties in the general area.
Mr. McLeary notified of this recommendation by telephone 8/24/82 BG.
note:
3 mobile Home sites
1 mobile Home + site prep as Real @ $8000

ASSESSOR'S RECOMMENDATION

Land Value	83673	.10/SF or 4500 Per A.
Improvement Value	71625	
Total Value	155298	

C1 (01) (02) ABG

PARCEL NO. 03-20-13-3-013 Rec 01 of 02 Account No. ____

Area Code (05) 0195 Zoning (06) R_____ Use Code (07) 8490

Transaction C2 Address (09) 4008 PIONEER WAY

ACD ___ Desc. (10) FISH HATCH

S.D. 003

T1 DELETE PARCEL

T2 WORK Release Request

T3 C2 PRINT REQ.

Last Trans. S

J Date 82235

ACD ABG

RECORD STATUS C

SALES DATA

C4

1. Date (mo/yr.) __ / __
   Adj Amount $ __,___,___
   Sale Amount $ __,___,___
   Sale I.D. _____
   Validation Code __
   Percent of Sale to Record __

2. Date (mo/yr) __ / __
   Adj Amount $ __,___,___
   Sale Amount $ __,___,___
   Sale I.D. _____
   Validation Code __
   Percent of Sale to Record __

BLDG PERMITS

C5

1. Date (mo/yr) __ / __
   Permit No. _____
   Use Code ____
   Permit Amount $ __,___,___
   Percent Complete ___ %

2. Date (mo/yr) __ / __
   Permit No. _____
   Use Code ____
   Permit Amount $ __,___,___
   Percent Complete ___ %

HEATING

None	00	B	31,036.00	B	31,036.00
Space	01	A	39,468.00	B	40,023.00
F/A-Elct Pnl	02	T	28,817.00	T	3,758.00
Ht Wtr Bsb	03	T	1,094.00	T	15,205.00
Radiant	04	T	1,308.00	T	1,451.00
Stm W Boil	05				
Stm W/O Boil	06				
W/Flr Furn	07				
Vent.	08				
Pack Sys	09				
Ht & Ch Wtr	10				
W & C Air	11				
Heat Pum	12				

COOLING

None	0
Cent Ref	1
Cent Ev	2

BEG AT NE COR OF N 1/2 OF N 1/2 OF SW OF SW OF SEC TH ON N LI SD SUBD

71625
83673
155298

PHYSICAL CONDITION

Excellent	1
Good	2
Average	3
Fair	4
Poor	5

LAND CALCULATION

C6

ACD ABG J Date 82235

UNIT 2 (31) VALUATION (32) SIZE

Frnt Ft	1	$_,___.__	___.__ FF
Sq. Ft	2	$0,001.50	_,___,___ SF } only
Acre	3	$___,___	018.559 "A" } one
Unit	4	$___,___	___ unit
Site	5	$___,___	

USEABLE LAND ADJ. (33)

Functional Utility Adj.	020 %	Eff. Rate
Functional Amenity Adj.	100 %	
Economic Adj.	075 %	
Useable Land Value	$ 72,759	

EXCESS LAND ADJ. (34)

Area % Adj.	000 %	Eff. Rate
Functional Adj.	___ %	
Excess Land Value	$ .00	

MARGINAL LAND ADJ. (35)

Area % Adj.	060 %	Eff. Rate
Functional Adj.	#10 %	
Marginal Land Value	$ 10,914	

DEMOLISH COST (36) $_,___,___

LAND TO RECORD (37) 100 %

INCOME DATA

C7

ACD J Date

PHYSICAL DATA (39)

Total Rentable Area ___,___

No. of Rental Units ___

RENTAL INFORMATION

		(40) BASE		(41) MODIFIER
Type of Rent		_		
Sq. Ft.	1			
Unit	2			
Base Rent		$.___	±	.___
Vacancy & Coll.		.__	±	.__
Expenses		.__	±	.__
Future Econ Life		__ yrs	±	__

RATES (42)

Tax Rate	.___
Interest Return	.___

INCOME VALUE INDICATORS (43)

Gross Rent Multiplier	.__
$	00
Overall Rate	.__
$	00

TRANSACTIONS

T1	Deletion
T2	Work Req
T3	Print
T4	Undefined
T5	Final
T6	Full Data
T7	Item Chng.
T8	Undefined
T9	Full Data New Record

FINAL DATA

T5

ACD ABG J Date 82235

NC & I $ __,___,_00 For Year 19 __

FINAL LAND VALUE $0,083,673

FINAL IMPROVEMENT VALUATION

1. Cost 2. Income 3. Other

1 $00,051,636

Perm Rev.: None 0/0, 1, 2

Batch Code: None 1/0, Reval 1, Maint 2

COMPUTED VALUES

LAND VALUE TO RECORD $ 83,67?

IMPROVEMENT VALUES

COST $ 51,67?

INCOME $ -

23/82235 (03) (04) FORM C2 (6/79) JF

RTSQ1/16 03-20-13-3-2 Loc ____ YB NEW CODE _____

Appr. Type (08) 1 1 Com 2 Ind Insp Acd. AGM Date 04/02/80 Desc _____60

COST CALC. DATA

C8-13 ACD ABG

J Date 82235

INDEX YR. 80

BUILDING TYPE

C8 (45) 424 (57) ___ C9 cont

3 CLASS _

1	A	A	1
2	B	B	2
3	C	C	3
4	D	D	4

(46) 4 QUALITY (58) _

1	Excellent	1
2	Good	2
3	Average	3
4	Low Cost	4

± 25 ADJ. ± __

(47) 00 HEAT (59) __

0 COOLING _

(48) BASEMENTS (60)

Finished Area

000000 ______

Unfinished Area

000000 ______

000000 Parking

(49) MEZZANINE (61)

Finished Area

00000 _____

Storage Area

00000 _____

TOTAL FLOOR AREA

(Excluding Basement & Mezzanine)

(50) (62)

002680 ______

(51) (63)

02 No. Stories __

08 ft Av. Sty. Ht. __ ft

MAIN STRUCTURE DEPRECIATION

(52) (64)

40 yr Life Expectancy __ yr

19 65 Effective Yr Blt 19 __

4 Condition _

1	Excellent	1
2	Good	2
3	Average	3
4	Fair	4
5	Poor	5

SIZE ADJUSTMENT FACTORS

(53) 000 No. Units (65) ___

Total Avr. Perimeter

(55) 0152

Avr. Floor Area

C9 (56) 001440

C10 NO. MOTEL KITCH. (68) __

APT. FIREPLACES (69)

No. of Chimneys ___

No. of F/P Opening ___

FIRE SPRINKLERS (70) _

No	0
Yes	1

EXTERNAL STAIRS (71)

Stair Type

Wood	1
Concrete	2
Concrete/steel	3

1 Wood

No. of Flights 01

ELEVATORS (72) C 10 cont

Type _

Selective Collective	1
Selective Automatic	2
Freight	3

Speed _

1 low 2 med 3 high

Capacity _

Pass		Frt	
1K		2K	1
2K		4K	2
3K		6K	3
4K		8K	4
5K		10K	5

No. of Shafts __

No. of Stops ___

ESCALATORS (73)

No. of Escalators __

LOADING DOCKS (74)

Loading Dock Area _____

Covered Area _____

No. Auto Dock Lev. _

MISC. AREAS (75)

Deck/Balcony Area _____

Breezeway Area _____

METAL BUILDING (77)

Height __

Width ___

Area _____

(78)

Heat Type __

Cooling _

Quality _

1 Ex 2 Good 3 Av 4 L/C

Dep. (79)

Life Expectancy __ yr

Eff Yr Blt 19 __

Condition _

C11 PERIPHERAL IMP.

SWIM POOLS (81)

Pool Type _

Fl-Pl	1
Gunite	2
Re-Conc	3

No. Motel Pools __

Perimeter ___

Heat 0 No 1 Yes _

Comm Pool S.F. _____

Tiled Area _____

Quality 1 Good 2 Av 3 L/C _

PAVING (82)

Paving Type

Asph	1
Conc	2

Area _____ 00

Parking Bump _____ lf

Quality, 1 Good 2 Av 3 L/C _

LIGHTING (83)

No. 12 ft. Poles 00

No. 24 ft. Poles 04

No. Light Fixtures 005

Type Fixture 2

1 Round 2 Mx... 3 Flood

Quality ... d

FENCES (84) C11 cont

Fence Type 1

chain link	1
Wood	2
Other	3

Length 01000 lf

Rate/ft. 08.25

PERIPHERAL DEP. (85)

Life Expectancy 20 yr

Eff. Yr. Blt 19 65

Condition #3

FUNCT/ECON ADJ (87)

Functional Adj. 100

Economic Adj. 100

C12 MISC—IMP. (88)

Type Imp _

Gas Station	1
M/H Park	2
Marina	3
Drive-In Theater	4
Parking Struct	5

No. Spaces/Area ____

Covered Area ____

Rate Adj. ___

Quality ##_

1 Ex 2 Gd 3 Av 4 L/C

MISC. DEP. (89)

Life Expectancy __ yr

Eff. Yr Blt 19 __

Condition _

OTHER IMPROVEMENTS

(91)

1. Type Code 102

Unit (Space/Area) 00120

Rate $ 000009.21

Life Expectancy 40 yr

Eff Yr Blt 19 79

Condition 3

(92)

2. Type Code 800

Unit (Space/Area) 11156

Rate $ 000002.90

Life Expectancy 30 yr

Eff Yr Blt 19 60

Condition 3

(93)

C13 3. Type Code 800

Unit (Space/Area) 00960

Rate $ 000002.90

Life Expectancy 30 yr

Eff Yr Blt 19 60

Condition 3

(94)

4. Type Code ___

Unit (Space/Area) _____

Rate $ _____.__

Life Expectancy __ yr

Eff Yr Blt 19 __

Condition

5. Type Code 205

Unit (Space/Area) 21960

Rate $ 00001.50

Life Expectancy 25 yr

Eff Yr Blt 19 80

Condition 2

H/R Apt	
Hm Eld	
Hotel	1
Dorm	
Cty Club	
Mort.	1
Rectory	1
Fratern.	
Ctry Club	1
Club Hs.	1
Gdn Apt	2
Motel	
Restaur	
Dr-In R	
Dept Str	
Retail	3
Disc Str	
Market	
Bowling	
Laund	
Barber	
Indust B	
Lofts	
Warehs	
Mini Wh	
Tr Wh	
Ser Gar	4
Str Gar	
Pk Gar	
Show Rm	
Hangar	
T-Hngr	
Armory	
Post Off.	4
Comp Ctr	
TV St	
Lab	4
Off Bld	
Med Bld	
Bank	
Vet Hosp	5
Disp	
Hosp	
Conv Hosp	
Libr	
Jail	
Gov Bld	5
Fire St	5
Schools	
Sch Bld	
Gym	
Cls Rm	5
Church	
Auditor	
Theater	
Fratern Bld	
Dairy Brn	
Creamry	
Dairy Sales	
Barns	7
Stables	
Poultry	7
Utility	
Material St	
Equip Sh	7
Shed	7
V. Lmb St	7
H. Lmb St	7
	7
	7

C1 (01) (02) ABG 0

PARCEL NO. 03-20-13-3-013 Rec 02 of 02 Account No. ____

Area Code (05) 0195 Zoning (06) S_____ Use Code (07) 8490

Transaction C2 Address (09) 4008 PIONEER WAY

ACD ___ Desc. (10) FISH HATCHERY

S.D. 003

T1 DELETE PARCEL

T2 WORK Release Request

T3 C2 PRINT REQ.

Last Trans. 6
J Date 82235
ACD ABG
RECORD STATUS 0

HEATING

None	00
Space	01
F/A-Elct Pnl	02
Ht Wtr Bsb	03
Radiant	04
Stm W Boil	05
Stm W/O Boil	06
W/Flr Furn	07
Vent.	08
Pack Sys	09
Ht & Ch Wtr	10
W & C Air	11
Heat Pum	12

COOLING

None	0
Cent Ref	1
Cent Ev	2

PHYSICAL CONDITION

Excellent	1
Good	2
Average	3
Fair	4
Poor	5

B	15,658.00 B	15,658.00
A	19,719.00 B	19,719.00
T	15,775.00 T	4,217.00

BEG AT NE COR OF N 1/2 OF N 1/2 OF SW OF SW OF SEC TH ON N LI SD SUBD

C4 SALES DATA

1. Date (mo/yr.) __ / __
   Adj Amount - $ __,___,___
   Sale Amount $ __,___,___
   Sale I.D. _____
   Validation Code __
   Percent of Sale to Record __

2. Date (mo/yr) __ / __
   Adj Amount $ __,___,___
   Sale Amount $ __,___,___
   Sale I.D. _____
   Validation Code __
   Percent of Sale to Record __

C5 BLDG PERMITS

1. Date (mo/yr) __ / __
   Permit No. _____
   Use Code ____
   Permit Amount $ __,___,___
   Percent Complete ___ %

2. Date (mo/yr) __ / __
   Permit No. _____
   Use Code ____
   Permit Amount $ __,___,___
   Percent Complete ___ %

C6 LAND CALCULATION

ACD J Date

UNIT		(31) VALUATION	(32) SIZE	
Frnt Ft	1	$_,___.__	___.__	FF
Sq. Ft	2	$_,___.__	_,___,___	SF } only
Acre	3	$___,___	___.___	"A" } one
Unit	4	$___,___	___	unit
Site	5	$___,___		

USEABLE LAND ADJ. (33)
Functional Utility Adj. ___ % Eff. Rate
Functional Amenity Adj. ___ %
Economic Adj. ___ %
Useable Land Value $ 00

EXCESS LAND ADJ. (34)
Area % Adj. ___ % Eff. Rate
Functional Adj. ___ %
Excess Land Value $ 00

MARGINAL LAND ADJ. (35)
Area % Adj. ___ % Eff. Rate
Functional Adj. ___ %
Marginal Land Value $ 00

DEMOLISH COST (36) $_,___,___

LAND TO RECORD (37) ___ %

C7 INCOME DATA

ACD J Date

PHYSICAL DATA (39)
Total Rentable Area ___,___
No. of Rental Units ___

RENTAL INFORMATION

		(40) BASE		(41) MODIFIER
Type of Rent		_		
Sq. Ft.	1			
Unit	2			
Base Rent		$ ___	±	.___
Vacancy & Coll.		.__	±	.__
Expenses		.__	±	.__
Future Econ Life		__ yrs	±	__

RATES (42)
Tax Rate .___
Interest Return .___

INCOME VALUE INDICATORS (43)
Gross Rent Multiplier .__
$ 00
Overall Rate .___
$ 00

TRANSACTIONS

T1	Deletion
T2	Work Req
T3	Print
T4	Undefined
T5	Final
T6	Full Data
T7	Item Chng.
T8	Undefined
T9	Full Data New Record

T5 FINAL DATA

ACD BZZ J Date 81311

NC & I $ __,___,__00 For Year 19 __

FINAL LAND VALUE $0,000,000

FINAL IMPROVEMENT VALUATION

1. Cost 2. Income 3. Other

1 $00,019,992

Perm Rev. 0
None 0
1
2

Batch Code 1
None 0
Reval 1
Maint 2

COMPUTED VALUES

LAND VALUE TO RECORD $ 00

IMPROVEMENT VALUES

COST $ 19,992

INCOME $ 00

/23/82235 (03) (04) FORM C2 (6/79) JF

RTSQ/16 03-20-13-3-2 Loc ____ YR NEED COLOR _____

Appr. Type (08) 1 1 Com 2 Ind Insp Acd. AGM Date 04/02/80 Desc _____65

COST CALC. DATA

C8-13 ACD RKH

J Date 81075

INDEX YR. 80

BUILDING TYPE

C8 (45) 424 (57) ___ C9 cont

3 CLASS _

1	A	A	1
2	B	B	2
3	C	C	3
4	D	D	4

(46) 4 QUALITY (58) _

1	Excellent	1
2	Good	2
3	Average	3
4	Low Cost	4

± 00 ADJ. ± __

(47) 00 HEAT (59) __

0 COOLING _

(48) BASEMENTS (60)

Finished Area

000000 _____

Unfinished Area

000000 _____

000000 Parking

(49) MEZZANINE (61)

Finished Area

00000 _____

Storage Area

00000 _____

TOTAL FLOOR AREA

(Excluding Basement & Mezzanine)

(50) (62)

001540 _____

(51) (63)

01 No. Stories __

10 ft Av. Sty. Ht. __ ft

MAIN STRUCTURE

DEPRECIATION

(52) (64)

40 yr Life Expectancy __ yr

19 65 Effective Yr Blt 19 __

3 Condition _

1	Excellent	1
2	Good	2
3	Average	3
4	Fair	4
5	Poor	5

SIZE ADJUSTMENT FACTORS

(53) 000 No. Units (65) ___

Total Avr. Perimeter

(55) 0158

Avr. Floor Area

C9 (56) 001540

C10 NO. MOTEL KITCH. (68) __

APT. FIREPLACES (69)

No. of Chimneys ___

No. of F/P Opening ___

FIRE SPRINKLERS (70) _

No	0
Yes	1

EXTERNAL STAIRS (71)

Stair Type

Wood	1
Concrete	2
Concrete/steel	3

No. of Flights __

ELEVATORS (72) C 10 cont

Type _

Selective Collective	1
Selective Automatic	2
Freight	3

Speed _

1 low 2 med 3 high

Capacity _

Pass		Frt	
1K		2K	1
2K		4K	2
3K		6K	3
4K		8K	4
5K		10K	5

No. of Shafts __

No. of Stops ___

ESCALATORS (73)

No. of Escalators __

LOADING DOCKS (74)

Loading Dock Area ____

Covered Area ____

No. Auto Dock Lev. _

MISC. AREAS (75)

Deck/Balcony Area _____

Breezeway Area ____

METAL BUILDING (77)

Height __

Width ___

Area _____

(78)

Heat Type __

Cooling _

Quality _

1 Ex 2 Good 3 Av 4 L/C

Dep. (79)

Life Expectancy __ yr

Eff Yr Blt 19 __

Condition _

C11 PERIPHERAL IMP.

SWIM POOLS (81)

Pool Type _

Fl-Pl	1
Gunite	2
Re-Conc	3

No. Motel Pools __

Perimeter ___

Heat (0 No 1 Yes) _

Comm Pool S.F. ____

Tiled Area ____

Quality (1 Good 2 Av 3 L/C) _

PAVING (82)

Paving Type

Asph	1
Conc	2

Area _____ 00

Parking Bump _____ lf

Quality (1 Good 2 Av 3 L/C) _

LIGHTING (83)

No. 12 ft. Poles __

No. 24 ft. Poles __

No. Light Fixtures ___

Type Fixture _

1 Incand 2 M.V. 3 Flour

Quality (1 Good 2 Av 3 L/C) #

FENCES (84) C11 cont

Fence Type _

chain link	1
Wood	2
Other	3

Length _____ lf

Rate/ft. __.__

PERIPHERAL DEP. (85)

Life Expectancy ___ yr

Eff. Yr. Blt 19 __

Condition # _

FUNCT/ECON ADJ (87)

Functional Adj. 100

Economic Adj. 100

C12 MISC—IMP. (88)

Type Imp _

Gas Station	1
M/H Park	2
Marina	3
Drive-In Theater	4
Parking Struct	5

No. Spaces/Area ____

Covered Area ____

Rate Adj. ___

Quality ## _

1 Ex 2 Gd 3 Av 4 L/C

MISC. DEP. (89)

Life Expectancy __ yr

Eff. Yr Blt 19 __

Condition _

OTHER IMPROVEMENTS

(91)

1. Type Code 639

Unit (Space/Area) 00003

Rate $ 001980.00

Life Expectancy 25 yr

Eff Yr Blt 19 70

Condition 3

(92)

2. Type Code ___

Unit (Space/Area) _____

Rate $ _____.__

Life Expectancy __ yr

Eff Yr Blt 19 __

Condition _

C13 (93)

3. Type Code ___

Unit (Space/Area) _____

Rate $ _____.__

Life Expectancy __ yr

Eff Yr Blt 19 __

Condition _

(94)

4. Type Code ___

Unit (Space/Area) _____

Rate $ _____.__

Life Expectancy __ yr

Eff Yr Blt 19 __

Condition _

(95)

5. Type Code ___

Unit (Space/Area) _____

Rate $ _____.__

Life Expectancy __ yr

Eff Yr Blt 19 __

Condition _

H/R Apt	101
Hm Eld	102
Hotel	103
Dorm	104
Cty Club	105
Mort.	106
Rectory	107
Fratern.	108
Ctry Club	109
Club Hs.	110
Grd Apt	211
Motel	212
Restaur	313
Dr-In R	314
Dept Str	315
Retail	316
Disc Str	317
Market	318
Bowling	319
Laund	320
Barber	321
Indust B	422
Lofts	423
Warehs	424
Mini Wh	425
Tr Wh	426
Ser Gar	427
Str Gar	428
Pk Gar	429
Show Rm	430
Hangar	431
T-Hngr	432
Armory	433
Post Off.	434
Comp Ctr	435
TV St	436
Lab	437
Off Bld	538
Med Bld	539
Bank	540
Vet Hosp	541
Disp	542
Hosp	543
Conv Hosp	544
Libr	545
Jail	546
Gov Bld	547
Fire St	548
Schools	549
Sch Bld	550
Gym	551
Cls Rm	552
Church	653
Auditor	654
Theater	655
Fratern Bld	656
Dairy Brn	757
Creamry	758
Dairy Sales	759
Barns	760
Stables	761
Poultry	762
Utility	763
Material St	764
Equip Sh	765
Shed	766
V. Lmb St	767
H. Lmb St	768
	769
	770

02 02

PARCEL H 03-20-13-3-013 REC 05 OF 05 RTSQ 1/16 (01) 03 20 13 3 D LOC

AREA CD (02) 0195 NGBD (03) 02999 8421 ZONE (04) G____ USE (05) 1151

OCCUPANCY (08) 2 1 VACANT 2 RESIDENCE 3 COMMERCIAL 4 INDUSTRIAL 5 OTHER

R2 REQ RECORD STATUS 0 07/24/82

3 PUY

BEG AT NE COR OF N 1/2 OF N 1/2 OF SW OF SW OF SEC TH ON N LI SD SUBD

BG

BLDG TYPE (37) 08

NONE	00	PREFAB	05
CONV	01	LC COT	06
MOD	02	A FRAME	07
RUST	03	MOB HM	08
TWNH	04	OTHER	—

BLDG CONF (38) _

1 SS 2 S 3 AS

CONST (39) _ PRI (40) _ SEC

1 STY	1	1
1.5 UA	2	2
1 5 FA	3	3
SPLIT	4	4
2+	5	5

WALLS (41)_ (42) _

STUCCO	1	1
SID-SHI	2	2
BRK VEN	3	3
COM BRK	4	4
STONE	5	5
CON BLK	6	6

ROOF (43)_ (44)_

COMP/ROLL	1	1
BLT UP	2	2
WD SHI	3	3
WD SHAKE	4	4
TILE	5	5

ZNCONF (09)

SS	1
S	2
AS	3

LANDCONF (10)

SS	1
S	2
AS	3

ELECTRIC (11)

NONE	0
UNDG	1
POLE	2

WATER (12)

NONE	0
DIST	1
WELL	2

SEWER (13)

NONE	0
SEPT	1
DIST	2
NO PERK	3

SIDEWALK (14)

NONE	0
YES	1

STREET (15)

NONE	0
PAVE	1
O-M	2
DIRT	3

TRAFFIC (16)

NONE	0
LOW	1
MED	2
HIGH	3

NOISE (17)

NONE	0
LOW	1
MED	2
HIGH	3

LOTTYP (18)

ACRE	0
STD	1
CNR	2
REAR	3
END	4

SHAPE (19)

RECT	1
IREG	2
TR-BF	3
TR-BR	4

HEIGHT (20)

VLOW	1
LOW	2
STD	3
HIGH	4
VHI	5

FRNTG (33) ____•__

DEPTH (34) ___

DEPTH FACTOR ___

WIDTH FACTOR __

$/FRNT FOOT ___

SQ FT (34) _____

$/SQ FT ___•__

WFRNT (21)

NONE	0
STRM	1
LAKE	2
SALT	3

WF-ACC (22)

NONE	0
ACC RT	1
LIM	2
FULL	3

UTILITY (23)

NONE	0
SS	1
STD	2
AS	3

LD-COND (24)

STD	0
WET	1
SWAMP	2
OTHER	3

TOPO (25)

LEVEL	0
ROLL	1
SLOPE	2
OTHER	3

ACCESS (26)

NONE	0
POOR	1
STD	2
AS	3

SITE (34)

SQ FT _____

SITE VAL _____

ACRES (34) ___•__

$/ACRE _____

VIEW (27)

NONE	0
MTN	1
VLY	2
CITY	3
WTR	4

VIEW Q (28)

NONE	0
SS	1
STD	2
AS	3

AGRI (29)

NONE	0
GRASS	1
TILL	2
WOOD	3

ECOL BAN DEPR (30) __ %

PLAT DEV DEPR (31) __ %

UNIT (32)

NONE	0
FF	1
SQ FT	2
SITE	3
ACRE	4

FUNC ADJ (35) ___ %

ECON ADJ (36) ___ %

LAND

COMPUTED 0

APPRAISED 0

R2 (1/78)

ADDR (06) MH ON REAL PROP #42930-44600 H

ACD (07) LOC DATE 05-07-80 ENTRY 4 1 ENTERED 2 NOT HOME 3 REFUSED 4 DECLINED

FLOOR 1ST. (45) _ **UPR (46)** _

SLAB	1	1
SUB	2	2
WOOD	3	3

FLOOR COVER

	(47) _	(48) _
NONE	0	0
TILE	1	1
CRPT	2	2

INTERIOR (49)

FINISHED	1
UNFINISHED	2

ROOMS (50)

KITCHEN
DINING
COM KIT-DIN
COM DIN-LIV
BEDROOM
FAMILY ROOM
UTILITY
OTHER

BA _ F _ ¾ _ H

PLUMBING (51)

FIXTURES __
ROUGH IN _

BUILT-INS (52)

DROP-IN RO
BUILT-IN RO
EX-HD & FN
DISHWASHER
GARB DISPO
INTERCOM
VACUUM

FIREPLACES (53)

	1STY	2STY
SINGLE	_	_
DOUBLE	_	_

HEATING (54) _

NONE/CIRC	1
FLOOR-WALL	2
FORCED AIR	3
ELECTRIC BB	4
HOT WTR BB	5
HEAT PUMP	6

BASEMENT (55)

DAYLIGHT _
GARAGE _
SINGLE 1
DOUBLE 2
FIN AREA ____
UF AREA ____

FIN ATTIC (56)

AREA ____

	PRIM	SECN
FIRST FLOOR AREA (57)	____	____
UPPER FLOOR AREA (58)	____	____

PORCH

	(59)	(60)	(61)	(62)
FLOOR				
CONC	1	1	1	1
WOOD	2	2	2	2
COVER				
OPEN	0	0	0	0
ROOF	1	1	1	1
RF&C	2	2	2	2
ENCL	3	3	3	3
AREA	___	___	___	___

DECK (63) ____ **COV** ____

ATTGARAGE (64) _

STUCCO	1
SI. SHI	2
BR VEN	3
COM BR	4
STONE	5
CON BLK	6
AREA ____	
CWLF __	

DETGARAGE (65) _

	1
	2
	3
	4
	5
	6
AREA ____	
QUALITY	
LOW	1
FAIR	2
AVG	3
GOOD	4
VG	5

PATIO (66) _

CONCRETE	1
EXPOS AG	2
FLAGSTONE	3
BRICK	4
TILE	5
AREA ____	

COVER (67) _

FRG/ALU	1
MTL/ENA	2
AREA ____	

CARPORT (68)

AREA ____
QUALITY

LOW	1
FAIR	2
AVG	3
GOOD	4
VG	5

POOL (69) _

FI PL	1
GUNITE	2
REN CONC	3
POOL QUAL	
FAIR	1
AVG	2
GOOD	3

DIV BDS
HEATER _
CHLORINATOR _
PERIM ___

P DECK (70) _

CON/WOOD	1
EXP AGRI	2
FLAG	3
BRICK	4
TILE	5
AREA ____	

POOL & DK (71)
DEPR __%

OTR FEA (72)
TL PTS ___

OUT BLD (73)
NUMBER 1
TL PTS 0080

RENTALS (74)
UNITS __
AV RENT ___

(75)
YR BUILT 68
YR REMD __
EFF AGE 12

QUALITY (79) 3

LOW	1
FAIR	2
AVG	3
GOOD	4
VG	5
QUAL ADJ	100%

PHYSICAL CONDITION (76)

ROOF	4	EXW	4	INT	4	FF	4
EXCEL	1		1		1		1
V GOOD	2		2		2		2
GOOD	3		3		3		3
AVG	4		4		4		4
POOR	5		5		5		5
V POOR	6		6		6		6

ECONOMIC (77) 0

NOISE	1
ACT OF GOD	2
ARTERIAL	3
NEIGHBORHOOD	4
INFILTRATION	5
ODOR	6
OVER IMPROVED	7
UNDER IMPROVED	8
OTHER	9
ADJ	100%

FUNC (78) 0

FLR-PLN	1
ARCHITC	2
MOD-FAC	3
OTHER	4
ADJ	100%

DEPR TO. IMP FROM LAND (80) 00%

INDEX YR (81) 80
COMPLETE (82) 100%
N C & I (83) $ 000067 00
FOR YEAR FOR 1980

SALE DATA

DATE __-__-__ A SALE _____
EXN _____ T SALE _____
VALCD __ TO REC __ __ %
TYPE SALE _ TYPE INSTRUMENT _

PERMIT DATA

DATE __-__
NUMBER _____
AMNT _____
COMPLETED _

IMPROVEMENT

COMP ~~8,000~~
APPR ~~8,044~~ 8,000

Com

LTR 4 RCD ~~VTW~~ BCD 1
JDATE 81342 PERM REVIEW _

0 NON 1 REVAL 2 MAINT
2REV 3B/E 4LND 5BLD
6SEG 7N/C B____ 9EX

PARCEL H 03-20-13-3-013 REC 01 OF 02 RTSQ 1/16 (01) 03 20 13 3 2 LOC

AREA CD (02) G195 NGBD (03) 02999 8421 ZONE (04) G____ USE (05) 8490

OCCUPANCY (08) 3 1 VACANT 2 RESIDENCE 3 COMMERCIAL 4 INDUSTRIAL 5 OTHER

RT REQ RECORD STATUS 0 07/24/82

3 PUY

BEG AT NE COR OF N 1/2 OF N 1/2 OF SW OF SW OF SEC TH ON N LI SD SUBD

B6

BLDG TYPE (37) 99

NONE	00	PREFAB	05
CONV	01	LC COT	06
MOD	02	A FRAME	07
RUST	03	MOB HM	08
TWNH	04	OTHER	—

BLDG CONF (38) _

1 SS 2 S 3 AS

CONST (39) _ PRI (40) _ SEC

	PRI	SEC
1 STY	1	1
1.5 UA	2	2
1.5 FA	3	3
SPLIT	4	4
2+	5	5

WALLS (41)_ (42) _

STUCCO	1	1
SID-SHI	2	2
BRK VEN	3	3
COM BRK	4	4
STONE	5	5
CON BLK	6	6

ROOF (43)_ (44)_

COMP/ROLL	1	1
BLT UP	2	2
WD SHI	3	3
WD SHAKE	4	4
TILE	5	5

ZNCONF (09) 2

SS 1 S 2 AS 3

LANDCONF (10) 2

SS 1 S 2 AS 3

ELECTRIC (11) 2

NONE 0 UNDG 1 POLE 2

WATER (12) 1

NONE 0 DIST 1 WELL 2

SEWER (13) 1

NONE 0 SEPT 1 DIST 2 NO PERK 3

SIDEWALK (14) 0

NONE 0 YES 1

STREET (15) 0

NONE 0 PAVE 1 0-M 2 DIRT 3

TRAFFIC (16) 0

NONE 0 LOW 1 MED 2 HIGH 3

NOISE (17) 0

NONE 0 LOW 1 MED 2 HIGH 3

LOTTYP (18) 0

ACRE 0 STD 1 CNR 2 REAR 3 END 4

SHAPE (19) 2

RECT 1 IREG 2 TR-BF 3 TR-BR 4

HEIGHT (20) 3

VLOW 1 LOW 2 STD 3 HIGH 4 VHI 5

FRNTG (33) ___.__

DEPTH (34) ___

DEPTH FACTOR ___

WIDTH FACTOR __

$/FRNT FOOT ___

SQ FT (34) _____

$/SQ FT ___.__

WFRNT (21) 0

NONE 0 STRM 1 LAKE 2 SALT 3

WF-ACC (22) 0

NONE 0 ACC RT 1 LIM 2 FULL 3

UTILITY (23) 2

NONE 0 SS 1 STD 2 AS 3

LD-COND (24) 0

STD 0 WET 1 SWAMP 2 OTHER 3

TOPO (25) 0

LEVEL 0 ROLL 1 SLOPE 2 OTHER 3

ACCESS (26) 1

NONE 0 FOOR 1 STD 2 AS 3

SITE (34)

SQ FT _____

SITE VAL _____

ACRES (34) 019.54

$/ACRE 005250

VIEW (27) 0

NONE 0 MTN 1 VLY 2 CITY 3 WTR 4

VIEW Q (28) 0

NONE 0 SS 1 STD 2 AS 3

AGRI (29) 0

NONE 0 GRASS 1 TILL 2 WOOD 3

ECOL DEPR (30) 00 %

PLAT DEV DEPR (31) 00 %

UNIT (32) 4

NONE 0 FF 1 SQ FT 2 SITE 3 ACRE 4

FUNC ADJ (35) 075%

ECON ADJ (36) 100%

LAND

COMPUTED 0

APPRAISED ~~165,399~~ 83,673

R2 (1/78)

ADDR (06) 4008 PIONEER WAY H

ACD (07) AGM DATE 04-02-80 ENTRY 4 1 ENTERED 2 NOT HOME 3 REFUSED 4 DECLINED

FLOOR 1ST (45) / UPR (46)

	1ST	UPR
SLAB	1	1
SUB	2	2
WOOD	3	3

FLOOR COVER (47) / (48)

NONE	0	0
TILE	1	1
CRPT	2	2

INTERIOR (49)

FINISHED	1
UNFINISHED	2

ROOMS (50)

KITCHEN
DINING
COM KIT-DIN
COM DIN-LIV
BEDROOM
FAMILY ROOM
UTILITY
OTHER

BA _ F _ ¾ _ H

PLUMBING (51)

FIXTURES __
ROUGH IN _

BUILT-INS (52)

DROP-IN RO
BUILT-IN RO
EX-HD & FN
DISHWASHER
GARB DISPO
INTERCOM
VACUUM

FIREPLACES (53)

	1STY	2STY
SINGLE	_	_
DOUBLE	_	_

HEATING (54) _

NONE/CIRC	1
FLOOR-WALL	2
FORCED AIR	3
ELECTRIC BB	4
HOT WTR BB	5
HEAT PUMP	6

BASEMENT (55)

DAYLIGHT _
GARAGE _
SINGLE 1
DOUBLE 2

FIN AREA ____
UF AREA ____

FIN ATTIC (56)

AREA ____

	PRIM	SECN
FIRST FLOOR AREA (57)	____	____
UPPER FLOOR AREA (58)	____	____

PORCH (59) (60) (61) (62)

	(59)	(60)	(61)	(62)
FLOOR				
CONC	1	1	1	1
WOOD	2	2	2	2
COVER				
OPEN	0	0	0	0
ROOF	1	1	1	1
RF&C	2	2	2	2
ENCL	3	3	3	3
AREA	___	___	___	___

DECK (63) ____ COV ____

ATTGARAGE (64)

STUCCO	1
SI. SHI	2
BR VEN	3
COM BR	4
STONE	5
CON BLK	6

AREA ____
CWLF __

DETGARAGE (65)

	1
	2
	3
	4
	5
	6

AREA ____

QUALITY

LOW	1
FAIR	2
AVG	3
GOOD	4
VG	5

PATIO (66) _

CONCRETE	1
EXPOS AG	2
FLAGSTONE	3
BRICK	4
TILE	5

AREA ____

COVER (67) _

FRG/ALU	1
MTL/ENA	2

AREA ____

CARPORT (68)

AREA ____

QUALITY

LOW	1
FAIR	2
AVG	3
GOOD	4
VG	5

POOL (69) _

FI PL	1
GUNITE	2
REN CONC	3

POOL QUAL _

FAIR	1
AVG	2
GOOD	3

DIV BDS _
HEATER _
CHLORINATOR _

PERIM ___

P DECK (70) _

CON/WOOD	1
EXP AGRI	2
FLAG	3
BRICK	4
TILE	5

AREA ____

POOL & DK (71)

DEPR __ %

OTR FEA (72)

TL PTS ___

OUT BLD (73)

NUMBER _
TL PTS ____

RENTALS (74)

UNITS __
AV RENT ___

(75)

YR BUILT __
YR REMD __
EFF AGE __

QUALITY (79)

LOW	1
FAIR	2
AVG	3
GOOD	4
VG	5

QUAL ADJ ___ %

PHYSICAL CONDITION (76)

	ROOF	EXW	INT	FF
EXCEL	1	1	1	1
V GOOD	2	2	2	2
GOOD	3	3	3	3
AVG	4	4	4	4
POOR	5	5	5	5
V POOR	6	6	6	6

ECONOMIC (77) _

NOISE	1
ACT OF GOD	2
ARTERIAL	3
NEIGHBORHOOD	4
INFILTRATION	5
ODOR	6
OVER IMPROVED	7
UNDER IMPROVED	8
OTHER	9

ADJ ___ %

FUNC (78) _

FLR-PLN	1
ARCHITC	2
MOD-FAC	3
OTHER	4

ADJ ___ %

DEPR TO IMP FROM LAND (80) __ %

INDEX YR (81) __
COMPLETE (82) ___ %
N C & I (83)$ _____ 00
FOR YEAR __

SALE DATA

DATE __-__-__ A SALE _____
EXN _____ T SALE _____
VALCD __ TO REC __ __ %
TYPE SALE _ TYPE INSTRUMENT _

PERMIT DATA

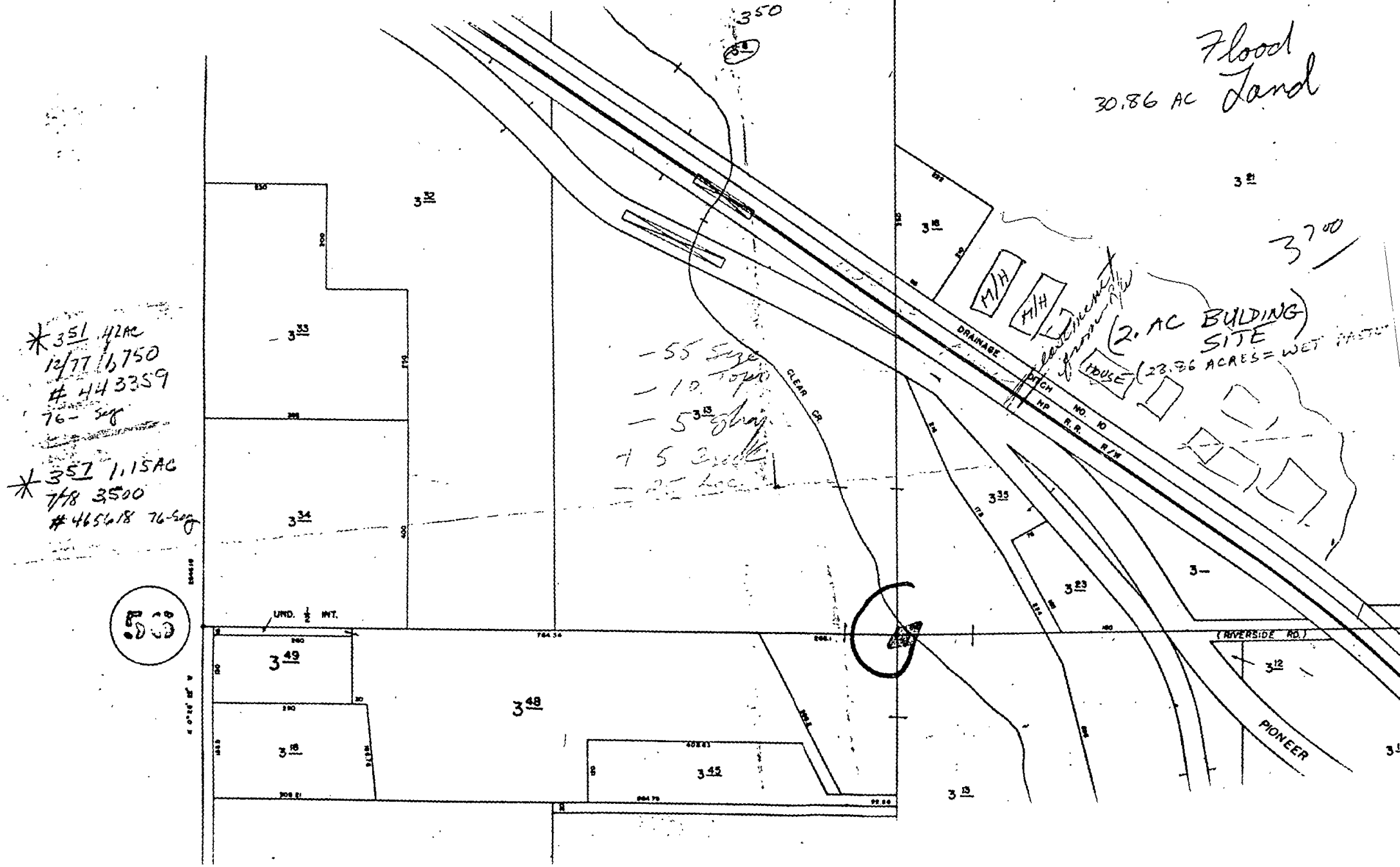
DATE __-__
NUMBER _____
AMNT _____
COMPLETED _

IMPROVEMENT

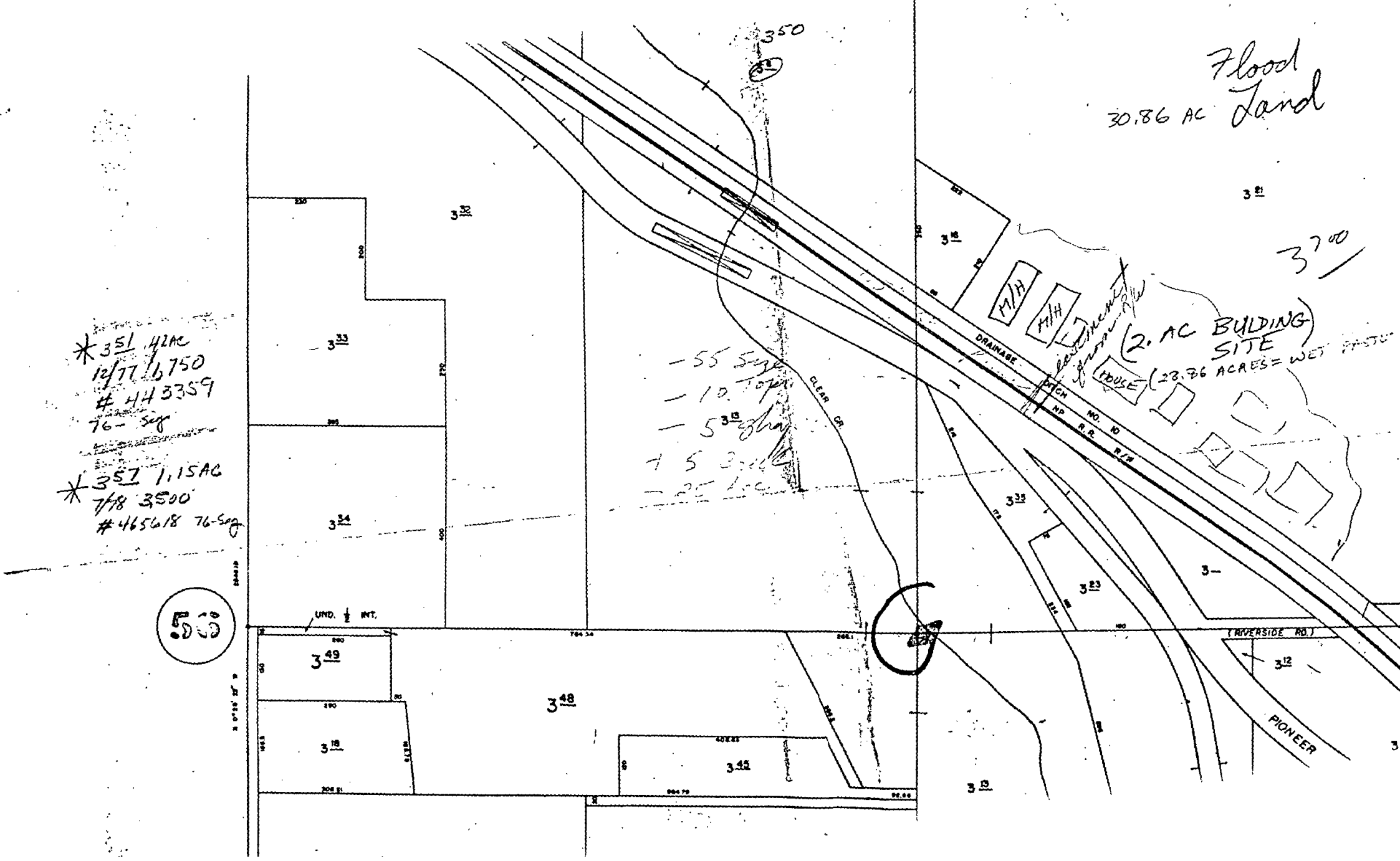
COMP 0
APPR ~~152,219~~ 71,625

LTR 4 RCD ~~COM~~ Com BCD 1
JDATE 81342 PERM REVIEW 2

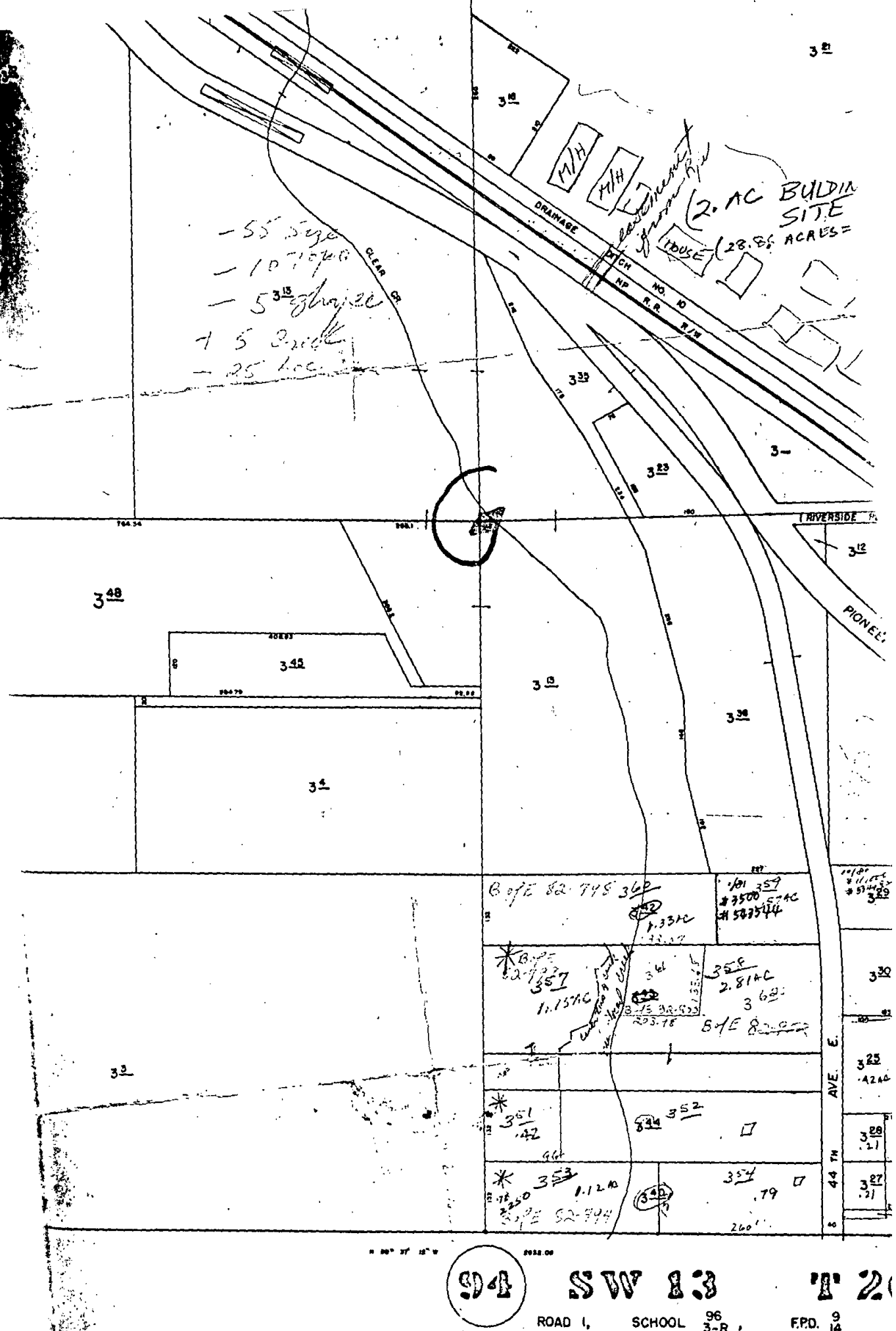
0 NONE (REVAL) 2 MAINT
2REV 3B/E 4LND 5BLD
6SEG 7N/C 8 ____ 9EX



Flood Land
30.86 AC
3700
(2. AC BUILDING SITE)
(23.86 ACRES = WET PASTE
M/H
M/H
HOUSE
DRAINAGE DITCH NO. 10
HP R.R. R/W
CLEAR CR.
(RIVERSIDE RD.)
PIONEER
UND. 1/2 INT.
3 32
3 33
3 34
3 49
3 48
3 45
3 13
3 35
3 23
3 12
3 21
3 18
3 13
3 50
-55 Size
-10 Topo
-5 Shrub
+5 Creek
-25 Loc
*351 .42AC
12/77 1,750
443359
76- Seg
*357 1.15AC
7/78 3500
465618 76-Seg

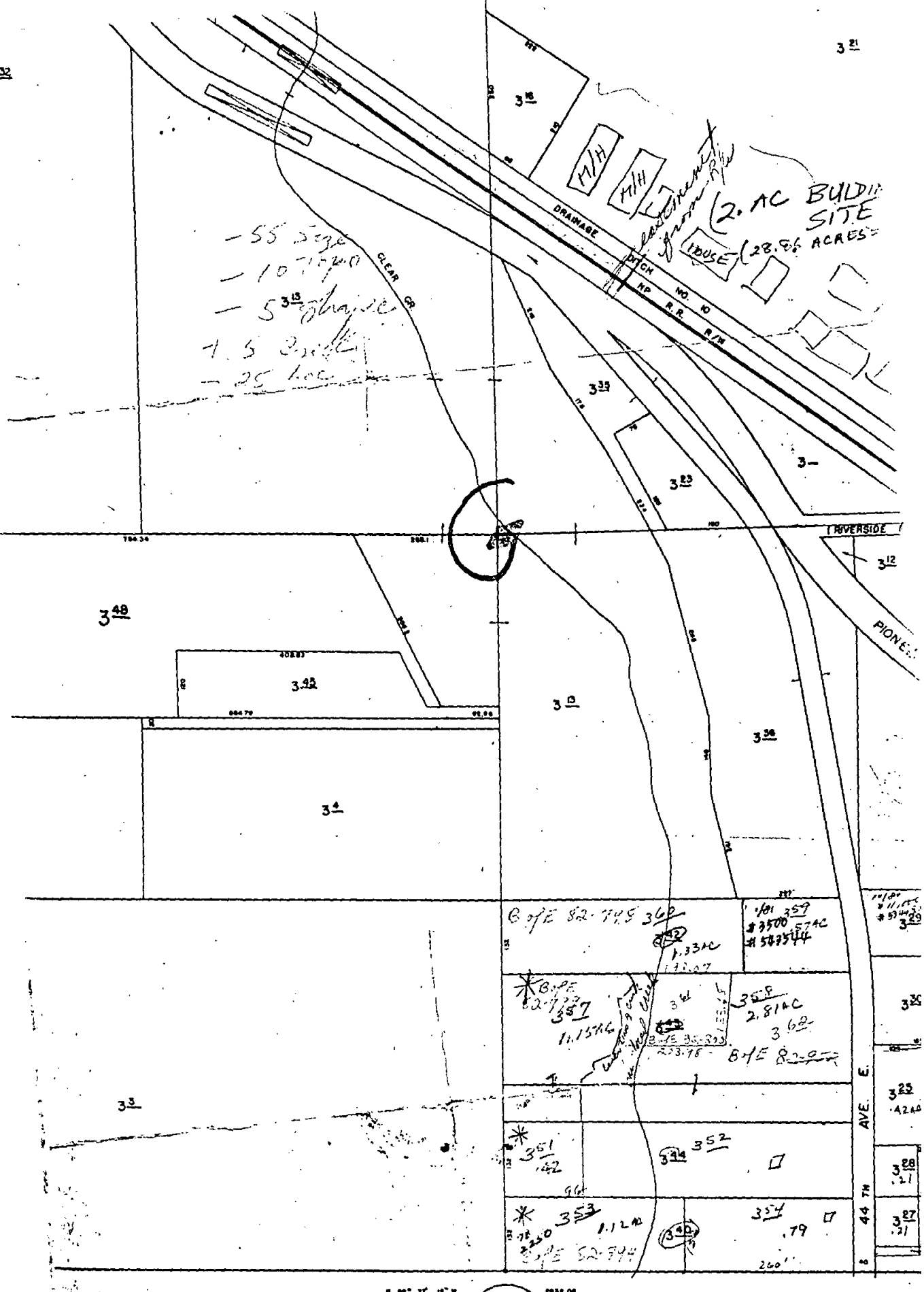


Flood Land
30.86 AC
3700
(2. AC BUILDING SITE)
(28.86 ACRES = WET PASTU
M/H
M/H
HOUSE
DRAINAGE DITCH NO. 10
NP R.R. R/W
CLEAR CR.
(RIVERSIDE RD.)
PIONEER
UND. ½ INT.
3 32
3 33
3 34
3 49
3 48
3 18
3 45
3 13
3 16
3 21
3 35
3 23
3 12
3 13
3 50
-55 Size
-10 Topo
-5 Shape
+5 Bldg
-25 Loc
*3 51 .42AC
12/77 6750
443359
76- Seg
*3 57 1.15AC
7/78 3500
#465618 76-Seg
56



94 SW 13 T 2

ROAD 1, SCHOOL 96 3-R, F.P.D. 9 14



94 SW 13 T 2

ROAD 1, SCHOOL 96 3-R, F.P.D. 9 14

Schedule after 8/16

– REAL PROPERTY PETITION TO THE PIERCE COUNTY BOARD OF EQUALIZATION –

FOR TRUE AND FAIR ASSESSED VALUE

B 67

Due Date: Must be filed on or before July 15th.

RECEIVED JUL 7 1982

PETITION NUMBER 820795

In accordance with the provisions of Chapter 84.48 Revised Code of Washington, I, Edward McLeary do hereby respectfully petition the County Board of Equalization to change the true and fair value of the following described property as shown on the assessment rolls for the year 19 82, to that amount shown in Item No. Eleven (11) of this form.

NOTE: If appealing the current use assessed value, use FORM REV 64 0065.

1. PARCEL NUMBER OR LEGAL DESCRIPTION OF PROPERTY: 03-20-13-3-013

2. ASSESSOR-TREASURER'S ASSESSED VALUE BEING CHALLENGED:

LAND 165,399

BUILDINGS 202,813 00

TOTAL 165,399

3. GENERAL DESCRIPTION OF PROPERTY: (Land area, type buildings, use, etc.)

A. Address or Location: 4008 Pioneer Way - Tacoma - WA.

B. Land Size: Approx 20 Acres

C. Zonings and Use: Farming - Fish Hatchery

D. Brief Description of Buildings: 4 Trailers & Hatchery Building

4. PURCHASE PRICE OF PROPERTY: $ 16,000 00

DATE OF PURCHASE 1962 TERMS Cash.

5. HAS PROPERTY BEEN OFFERED FOR SALE? NO WHEN AND HOW LONG? _____

LISTED WITH BROKER? _____ ASKING PRICE $ _____

6. HAS PROPERTY BEEN APPRAISED BY OTHER THAN THE COUNTY ASSESSOR? NO

WHEN? _____ BY WHOM? _____

PURPOSE OF APPRAISAL _____ APPRAISAL VALUE? _____

(If needed, attach separate sheet for further evidence.)

7. IF THE APPEAL CONCERNS INCOME PROPERTY YOU MUST ATTACH A STATEMENT OF INCOME AND EXPENSE FOR PAST TWO YEARS, AND COPY OF LEASE OR RENTAL AGREEMENT.

8. RECENT SALES OF COMPARABLE OR SIMILAR PROPERTY:

	PARCEL NUMBER	SALE PRICE	DATE OF SALE	RECORDING NO.
1.				

Description of Property: _____

2. _____ _____ _____ _____

Description of Property: _____

3. _____ _____ _____ _____

Description of Property: _____

Z-1669a

9. Specific reasons why assessor's valuation of property or denial of senior citizen exemption is being challenged:

1. Only 5 Acres in vicinity of Canyon usable Area
2. Stream Flooding uses about 1 Acre of above for Flooding & Flood Control.
3. All of useful Area subject to flooding & Flood Control Expense
4. Use of Land Threatened by County caused pollution & Failure to Activate Flood Control
5. Property values are descending - NOT RISING
6. Comparable Sales NOT a good Criteria - Market is too thin.

10. Attached are the following maps, pictures, letters, appraisals or other data to substantiate the present full market value of the property as stated in Item 11.

Exhibit No.	Brief Description of Exhibit
	Pictures & Data will be furnished @ Time of hearing.

"The true and fair value of the property in money for property tax valuation purposes is its 'market value' or amount of money a buyer willing but not obligated to buy would pay for it to a seller willing but not obligated to sell. (In arriving at a determination of such value the assessing officer can consider only those factors which can within reason be said to affect the price in negotiations between a willing purchaser and a willing seller, and he must consider all of such factors)."

11. On the basis of the foregoing facts, it is my opinion that the true and fair value of this property for the current year should be fixed as follows:

LAND 5 Acres @ 8000.00 = 40,000.00
~~5 Acres @ 2000 = 30,000.00~~

BUILDINGS 158,362

TOTAL 228,362

I hereby certify that to the best of my knowledge and belief the information entered on this petition is a true and fair presentation of the facts relating to this appeal.

Signed this 7th day of July, 1987.

Signature:

Edward McSorley
(Owner)

(Agent)

Business Phone: 922-6298

Home Phone: 922-1918

4008 Pioneer Way
(Address) Tacoma WA. 98443

Power of Attorney:

If power of attorney to act in the above matter has been delegated, the petitioner must so indicate by signing the statement appearing below.

The person or persons whose signature appears above has full authority to act in my behalf on all matters pertaining to this petition for a change in valuation of the above described property now before the County Board of Equalization.

(Signature of Property Owner)

Have you appealed the value of this property to the County Board of Equalization or the State Board of Tax Appeals within the last two years? _____ If yes, please indicate County Board Petition No. _____ State Board Docket No. _____.

9. Specific reasons why assessor's valuation of property or denial of senior citizen exemption is being challenged:

1. Only 5 Acres in vicinity of Canyon usable Area
2. Stream Flooding uses about 1 Acre of above for Flooding & Flood Control.
3. All of useful Area subject to flooding & Flood Control Expense
4. Use of Land Threatened by County caused pollution & Failure to Activate Flood Control
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11. On the basis of the foregoing facts, it is my opinion that the true and fair value of this property for the current year should be fixed as follows:

LAND 5 Acres @ 8000.00 = 40,000.00
~~17 Acres @ 2000 = 30,000.00~~

BUILDINGS 158,362

TOTAL 228,362

I hereby certify that to the best of my knowledge and belief the information entered on this petition is a true and fair presentation of the facts relating to this appeal.

Signed this 7th day of July, 1982.

Signature:

(Owner) Edward McSorley

(Agent)

Business Phone: 922-6298

Home Phone: 922-1918

(Address) 4008 Pioneer Way Tacoma WA. 98443

Power of Attorney:

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Pierce County

Board of Equalization

2401 South 35th Street
Tacoma, Washington 98409
Tel. (253)798-7415
FAX (253)798-2745

ORDER OF THE PIERCE COUNTY BOARD OF EQUALIZATION

Taxpayer: POLARCZYK WERNER H
4710 44TH AVE E
TACOMA, WA 98443-2505

RE: Parcel Number: 0320133052
Petition Number: 200602564

Assessment Year 2006
for Taxes Payable 2007

Having considered the evidence before them, the Board hereby sustains the original determination of the Assessor.

Assessor's Original Value		Board's Value Determination	
Building:	$112,900	Building:	$112,900
Land:	$145,900	Land:	$145,900
Total:	$258,800	Total:	$258,800

No evidence was presented to indicate the assessed value is incorrect. The Board sustains the original assessed value as recommended by the Assessor.

Dated Thursday, April 19, 2007

Cindy Morrison
Chairperson

Clerk

NOTICE

This order can be appealed to the State Board of Tax Appeals by filing a notice of appeal with them at PO Box 40915, Olympia, WA 98504-0915, within thirty days of the date of mailing of the order. The Notice of Appeal form is available from the county board at (253) 798-7415, or the State Board at (360) 753-5446. These forms may also be downloaded from the State Board Internet site at http://bta.state.wa.us.

To inquire about the availability of this document in an alternate format for the visually impaired or a language other than English, please call (360) 753-3217. Teletype (TTY) users may call (800) 451-7985. You may also access tax information on the Dept. of Revenue Internet home page at http://www.wa.gov/dor/wador.htm.

90 DAYS BEFORE Oct 1. 2006

Office Use Only
2006- 2364

R PETITION TO THE PIERCE COUNTY BOARD OF EQUALIZATION FOR REVIEW OF *REAL PROPERTY* VALUATION DETERMINATION

This petition must be filed or postmarked by July 1 of the current assessment year or 30 days after the date of mailing of the change of value or other determination notice (up to 60 days in those counties that the Legislative Authority has extended the deadline). ***If filing after July 1, a copy of the Assessor's determination notice must be attached to this petition.***

The undersigned petitions the Board of Equalization to change the valuation of the property described below as shown on the Assessment Roll for 2006 for taxes payable in 2007 to the amount shown in Item No. 3(b) on this form.

PLEASE COMPLETE ALL ITEMS (Please Print) **This petition and all documentation is required to be FILED IN DUPLICATE**

1. **Account/Parcel Number:** 0320133052
2. **Owner:** WERNER H. POLARCZYK

Mailing Address for All Correspondence Relating to Appeal:

RECEIVED
SEP 14 2006
BY

Street Address: 4710 - 44TH AVE E.
City, State, Zip Code: TACOMA, WA. 98443-2505
May we contact you by email? ☐ Yes ☒ No **E-mail address:**
Daytime Phone No: (253) 922-0368 **Fax No:**
Name of Petitioner or Authorized Agent:

3. **(a)** Assessor's determination of true and fair value:
   Land ..... $ 145,900 A RAISE OF 68.8% OF LAST YEAR
   Improvement/Bldgs.. $ 112,900
   TOTAL ..... $ 258,800

   (b) Your estimate of true and fair value:
   Land ..... $ 45,000 5,000 FOR USELESS LAND
   Improvement/Bldgs..... $ 112,900
   TOTAL ..... $ 157,900
   + 5,000
   TOTAL = 162,900

   Date the Assessor's "Change of Value Notice" or other determination notice was mailed:
   I request the information the Assessor used in valuing my property. ☒ Yes ☐ No

4. **Specific reasons why you believe the assessor's value does not reflect the true and fair market value.**

120' HAY FIELD RAISIN GOOSE AND CHICKEN
120' HOUSE IS ON, (164' STEEP 40° DEGREE DOWNHILL WOOD AND BRUSHES)
VALUE MADE $5000.00

NOTE: Under Washington law, you must prove that the assessor's value is not the true and fair market value (RCW 84.40.0301). Assessments of other properties, the percentage of assessment increase, personal hardship, the amount of tax, and other matters unrelated to the market value may not be relevant or sufficient evidence to prove market value. If this petition concerns income property, please attach a statement of income and expenses for the past two years and copies of leases or rental agreements.

Other issues relevant to your case. **Use additional paper to complete section 4, when necessary.**
(original photos in BOE)

5. **Power of Attorney:** If power of attorney has been given, the taxpayer must so indicate by signing the statement below or attaching a signed power of attorney.

   The person whose name appears as authorized agent has full authority to act on my behalf on all matter pertaining to this appeal.

   Signature of Petitioner (Taxpayer)

I hereby certify I have read this Petition and that it is true and correct to the best of my knowledge.

Signed this 10 day of AUGUST, 2006 (year).

Werner H. Polarczyk
Signature of Taxpayer or Agent

REV 64 0075-1 (10/20/03)

This petition and all documentation is required to be **FILED IN DUPLICATE**

6. The property which is the subject of this petition is (check all which apply):

- [X] Farm/Agricultural Land
- [X] Residential Land
- [ ] Commercial Land
- [ ] Industrial Land
- [X] Designated Forest Land
- [ ] Open Space/Current Use Land
- [ ] Residential Building
- [ ] Commercial Building
- [ ] Industrial Building
- [ ] Mobile Home
- [ ] Other _____

7. **General description of property:**

a. Address/location: 4710 - 44TH AVE E. TACOMA, WA. 98443-2505

b. Lot size (acres): N132FT ~ SW 404FT

c. Zoning or permitted use: _____

d. Description of building: 2 STORY 2 BEDROOM, 1 BATH,

e. View? [X] Yes [ ] No f. Waterfront? [ ] Yes [X] No

8. **Purchase price of property:** _____ (If purchased within last 5 years)
Date of purchase: _____

9. **Remodeled or improved since purchase?** [ ] Yes [X] No Cost $ _____

10. **Has the property been appraised by other than the County Assessor?** [ ] Yes [X] No
If yes, appraisal date: _____ By whom? _____
Appraised value: $ _____ Purpose of appraisal: _____

Please complete all of the above items (if applicable). Information in boxes 1 – 5 must be provided to be considered a complete petition.

You may submit additional information, either with this Petition or prior to seven business days before the hearing, to support your claim. The area below may be used for this purpose.

11. **Check the following statement that applies.**

- [ ] I intend to submit additional documentary evidence to the Board of Equalization and the assessor **no later** than seven business days prior to my scheduled hearing.
- [ ] My petition is complete. I have provided all the documentary evidence that I intend to submit and I request a hearing before the Board of Equalization as soon as possible.

DOCUMENTARY EVIDENCE WORKSHEET

Most recent sales of comparable property (within the past 5 years):

	Parcel No.	Address	Land Size	Sale Price	Date of Sale
a.					
b.	2	4606 - 44TH AVE E. TAC. ~~SAME~~ LITTLE CLES THEN MY TOP LOT		$35,000.00	YEAR 1998 ?
c.					
d.					

Information regarding sales of comparable properties may be obtained through personal research, local realtors, appraisers, or at the county assessor's office.



164 FT STEEP 40° DOWN HILL BRUSHES

Werner Polarczyk
4710 44th Ave. E.
Tacoma, WA 98443



120 FT HAY FIELD RAISING GOOSE AND CHICKEN

Werner Polarczyk
4710 44th Ave. E.
Tacoma, WA 98443



164 FT STEEP 40° DOWN HILL

Werner Polarczyk
4710 44th Ave. E.
Tacoma, WA 98443

Pierce County

Board of Equalization

2401 South 35th Street
Tacoma, Washington 98409
Tel. (253)798-7415
FAX (253)798-2745

NOTICE OF DENIAL TO HEAR PROPERTY TAX APPEAL

POLARCZYK WERNER H
4710 44TH AVE E
TACOMA, WA 98443-2505

RE: Parcel Number: 0320133052 Assessment Year 2006
Petition Number: 200602564 for Taxes Payable 2007

Dear Taxpayer:

The Pierce County Board of Equalization has received your petition for review of the property value. We regret that your appeal cannot be set for hearing.

Reasons:

Your petition for assessment year 2006 for taxes payable in 2007, is denied because it is untimely. (Please see attached form, regarding RCW 84.40.038). By law, a petition must be filed or postmarked 60 days after the date of mailing. Your notice was mailed 6/12/2006, which makes the filing deadline 8/11/2006. Your appeal was postmarked 9/13/2006. A petition may be filed after 1/1/2007 and by 7/1/2007, for the assessment year of 2007, taxes payable in 2008.

If you believe that the Board has jurisdiction to hear this matter, you must file a request for reconsideration within 20 days from the date of this letter. If a reconsideration request is filed, the full Board will review the issue. If no request for reconsideration is filed, this decision will be final.

Together with this letter is a copy of the Washington Administrative Code (WAC) 458-14-127. This cites the limited situations when a reconvening of the Board can be allowed. If you feel that you meet the criteria for reconvening, please contact this office for a reconvening form.

Clerk, Pierce County Board of Equalization

Date of Mailing: Wednesday, October 04, 2006

WERNER H. POLARCZYK
4710 - 44TH AVE E.
TACOMA, WA 98443
PARCEL: 0320133052

10-23-2006

DEAR BOARD

I WAS TOLD AT THE ASSESORD OFFICE I HAVE 90 DAYS TO APPEAL NOT 60 DAYS IGNOR THE 60 DAYS WHATS WRITTEN ON REAL PROPERTY VALUE CHANGE NOTICE. THE DAY I WENT WAS 8-9-06 THE NEXT DAY I WENT FOR SURGERY AND I MANAGED TO SEND A APPEAL WHITHIN 90 DAYS PLUS PICTURES OF MY 1/2 OF PROPERTY WHAT IS A DANGEROUSE 40° DOWN HILL PLEASE GIVE ME A CHANCE TO EXPLAIN MY 68.8% RAISE ON MY USELESS PROPERTY

RECEIVED
OCT 23 2006
BOARD OF EQUALIZATION

Thank you

Werner H. Polarczyk

Pierce County
Board of Equalization

2401 South 35th Street
Tacoma, Washington 98409
Tel.(253)798-7415
FAX (253)798-2745

October 25, 2006

WERNER POLARCZYK
4710 44TH AVE E
TACOMA WA 98443

Re: Request for Reconsideration
Taxpayer Petition Number 2006-2564 -- Parcel Number 0320133052

Dear Taxpayer:

The Board of Equalization has reconsidered, and has reinstated your petition. You will be notified at a later date of a hearing before the Board.

Respectfully,

Sherry Markholt
Clerk for the Board of Equalization

Pierce County

Board of Equalization

2401 South 35th Street
Tacoma, Washington 98409
Tel. (253)798-7415
FAX (253)798-2745

Mail Date: No later than January 24, 2007

POLARCZYK WERNER H
4710 44TH AVE E
TACOMA, WA 98443-2505

RE: Parcel Number: 0320133052 Assessment Year 2006
Petition Number: 200602564 for Taxes Payable 2007

Appellant:

This is official notice that your petition to the Pierce County Board of Equalization (BOE) will be heard following this 30 day or more notification period.

If you wish to attend your hearing, you must select from the dates below. Please call or e-mail to schedule your hearing day and a time. It is *your* responsibility to notify the Board with your choice of hearing dates. Respond early to secure the date and time of your choice.

Available Hearing Dates: Tuesday, April 17, 2007, or Wednesday, April 18, 2007, or Thursday, April 19, 2007.

Your hearing will take place at the following location:

Pierce County Public Services Building (formerly ANNEX)
2401 South 35th Street
Tacoma, Washington
Board of Equalization, Room #176

If you choose not to attend or if you fail to select your hearing date or do not respond to this notice by February 07, 2007, your petition and the Assessor's response to your petition will be reviewed and heard at the Board's convenience on an administration day of their choice. This letter will be our only notice to you concerning your hearing dates.

The Board of Equalization will make a determination of your property's value at the hearing. The decision will be based upon the evidence you submitted and upon the Assessor's response to your appeal, which will be provided to you and the Board **from** the Assessor.

If you wish to provide additional information to the Board and the Assessor, it must be **received at least seven business days**, excluding weekends and legal holidays, in **advance** of your scheduled hearing. It must be **delivered separately** to the Assessor-Treasurer's office and the BOE office.

The BOE ***will not*** forward your additional information to the Assessor. It is our recommendation that any information which you feel may affect the assessed value of your property be submitted as far in advance of the hearing date as possible. **The Board will not consider additional information you fail to submit in a timely manner. (WAC 458-14-066(4) & (5A, B).**

Please label all additional information that you send to the BOE and the Assessor's office with your petition number, the owner's name and the date and time of the hearing. Materials submitted are not returned.

Whether you choose to attend your hearing or not, the hearing will take place as scheduled and will be recorded. The tape and hearing file will be made a part of the public record. Following the hearing, the determination of value will be stated in an Order of the Pierce County Board of Equalization, which you will receive within 30 days following the hearing.

If you do not agree with the determination made by the Pierce County BOE you may appeal to the State Board of Tax Appeals. Instructions for doing this will be part of your decision mailing.

To choose your hearing date and time or to notify us of your plans to not attend, please use one of the following methods:

1. E-MAIL: smarkho@co.pierce.wa.us and cc: dstallm@co.pierce.wa.us

2. PHONE: (253) 798-7415

Office Hours: 8 AM – 12 PM and 12:30 PM – 3:30 PM.

If I or my staff may be of further assistance, please feel free to call at (253) 798-7415.

Sherry Markholt,
Clerk of the Board

APPENDIX G – PREVIOUS PROJECT REPORTS

Clear Creek Mitigation and Stream Restoration

Troutlodge - WDFW IDs 900317 & 900318

Alex Strom, Henry Hu, Alex Roberts, Leo Fouts, Jessie Delight
PS Gateway Program
September 14, 2023

State Road (SR) 509 Stream Team

- Henry Hu
  - Subject Matter Expert
- Alex Strom
  - Stream Design Engineer
- Jessie Delight
  - Project Geomorphologist
- Leo Fouts
  - Project Engineer (Sediment Transport)
- Alex Roberts
  - Project Engineer (Hydraulics Modeling)

Agenda

- Introductions
- Project Background
- Current Site Conditions
- Full Acquisition Concept
- Hydraulics Results
- Sediment Transport Results

Unnamed Tributary to South Fork McSorley Creek

- Upstream gain: 144m
- SR 509 Stage 2 project activity at this location is roadway widening for auxiliary traffic lane.
- WSDOT is proposing to leave this crossing as a hydraulic crossing and proposes off-site mitigation for the permanent loss of upstream habitat at the Clear Creek site per PTOI's request

Upstream near inlet



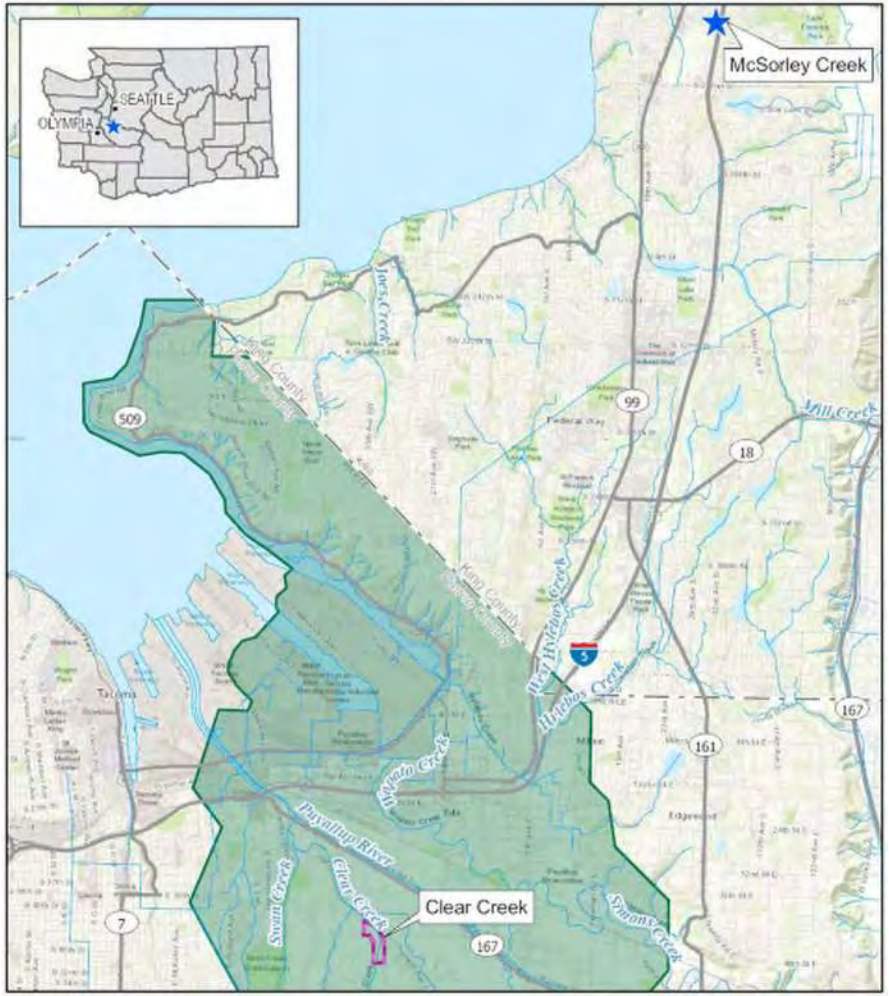
Downstream of outlet





Clear Creek Background

- WSDOT Olympic Region - Unincorporated Pierce County
- WRIA 10 – Puyallup/White Watershed
- Lower Puyallup River – Historic floodplain
- Drainage Area: 1,990 Acres – East Fork and West Fork
- Active Trout Hatchery (Trout Lodge) located in the Clear Creek Valley



Existing Conditions: General

Sediment detention, weirs and basins:

- Prevent downstream sediment transfer
- caused aggradation and channel widening upstream that lead to **revetments**.

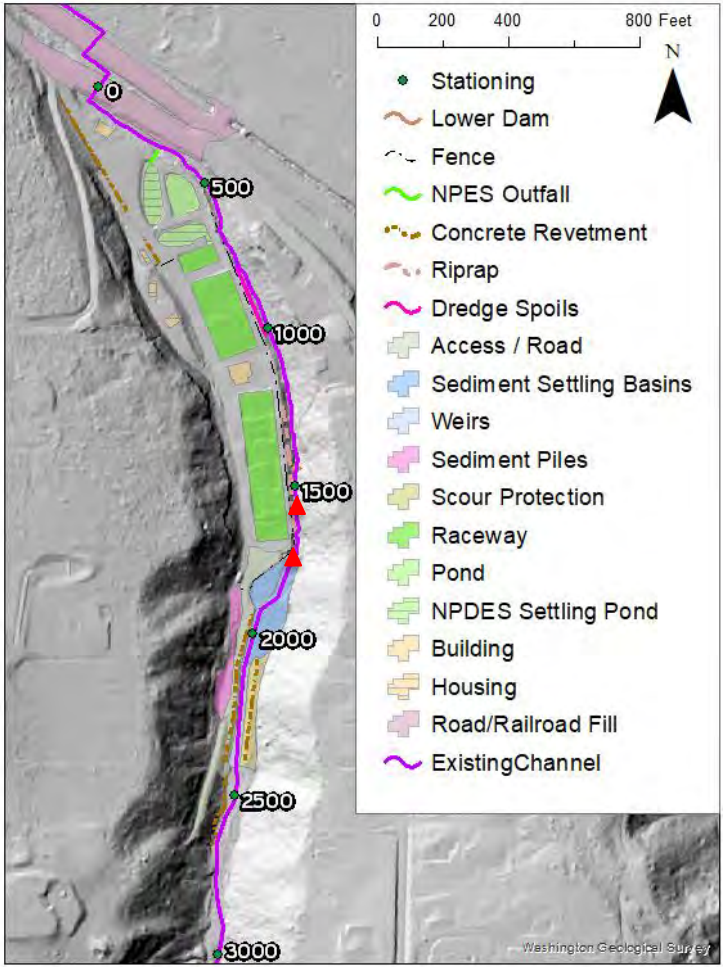
Dams and Armoring along downstream banks

- channel incision and prevented channel widening (i.e., channel evolution)
- channel bed sediments became coarser due to increased hydraulic capacity.

Ditching and flood control:

- caused incision and floodplain disconnection

Facility Operation limits riparian cover / buffer on left bank



Existing Barriers







Upper Dam


Weirs to capture gravels and cobbles
Sedimentation Pond
Upper Dam
WDFW ID: 600317
Intake System

Existing Conditions: Upstream

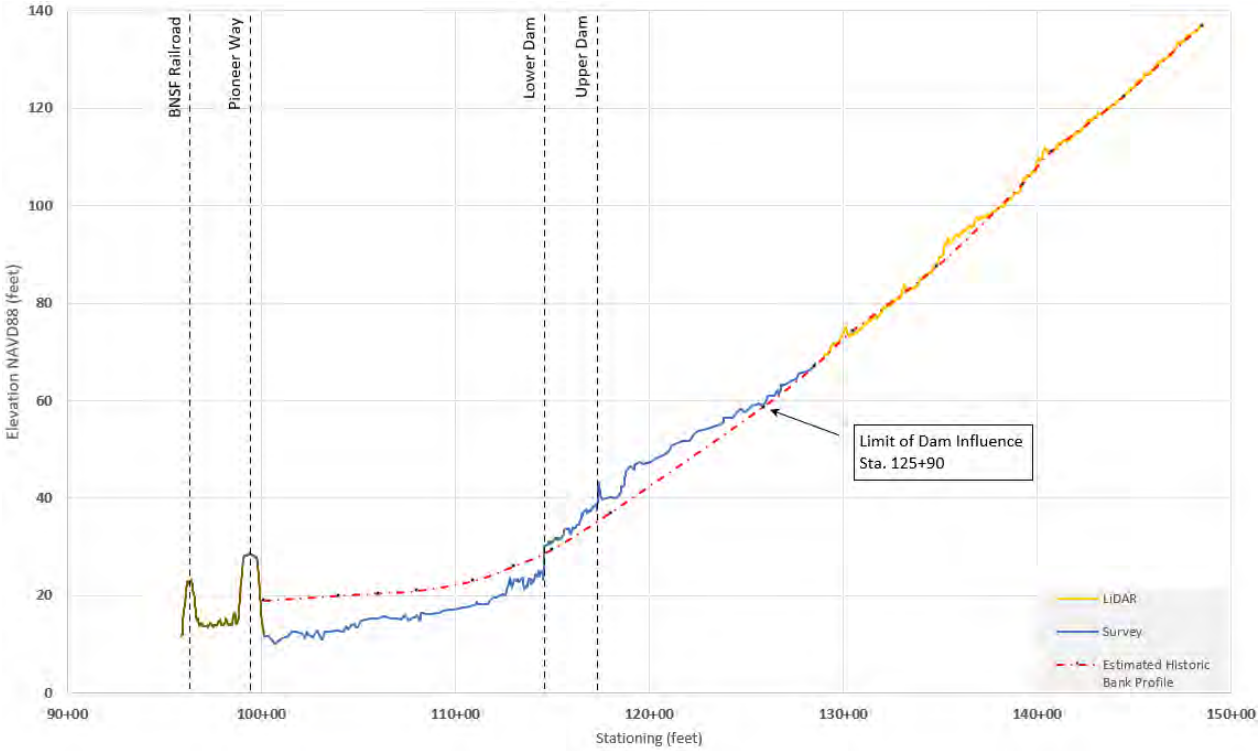
Good Habitat for Coho

- Little impact to natural channel processes.
- Single channel, 3-5 percent slopes in a confined canyon composed of gravel, cobble rich erodible sediments
- Natural level of LDW and Cover
- No large holding pools
- Transport capacity = sediment supply
- Reach Type: Sediment Supply Reach

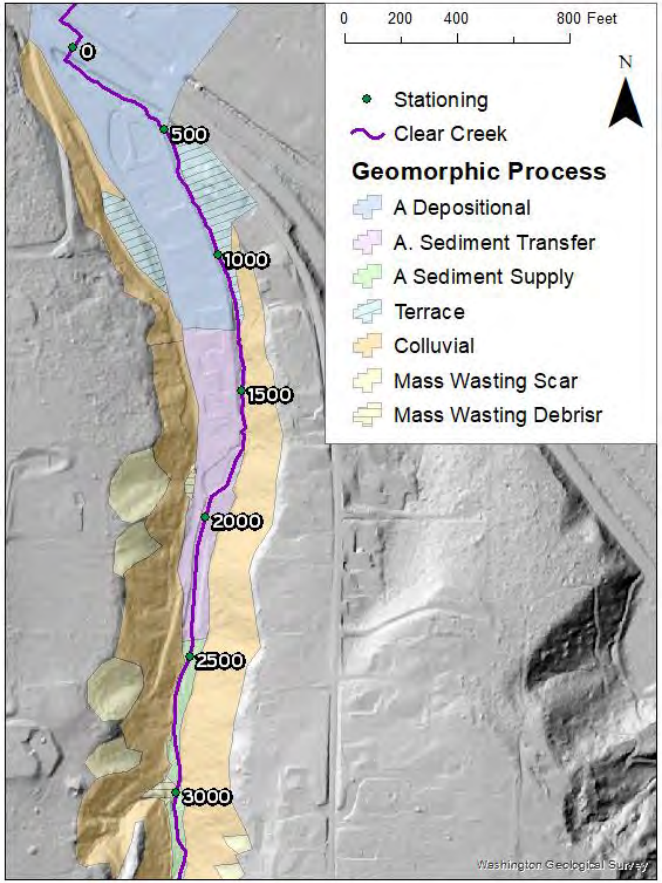


Profiles: Channel and Estimated Historic Bank Profile

- Dam 2 decreased gradient to as low as 2% -> aggradation and channel instability
- Incision downstream of Dam 1
- Ditching in floodplain, caused channel incision upstream,
- Post 1940 culverts at pioneer way and BNSF were placed within these excavated channels.



Historic Geomorphic Setting and Fish usage



Sediment Supply Reach:

- Slope 3-4% and wood forced pools
- Potential Coho Spawning and Rearing

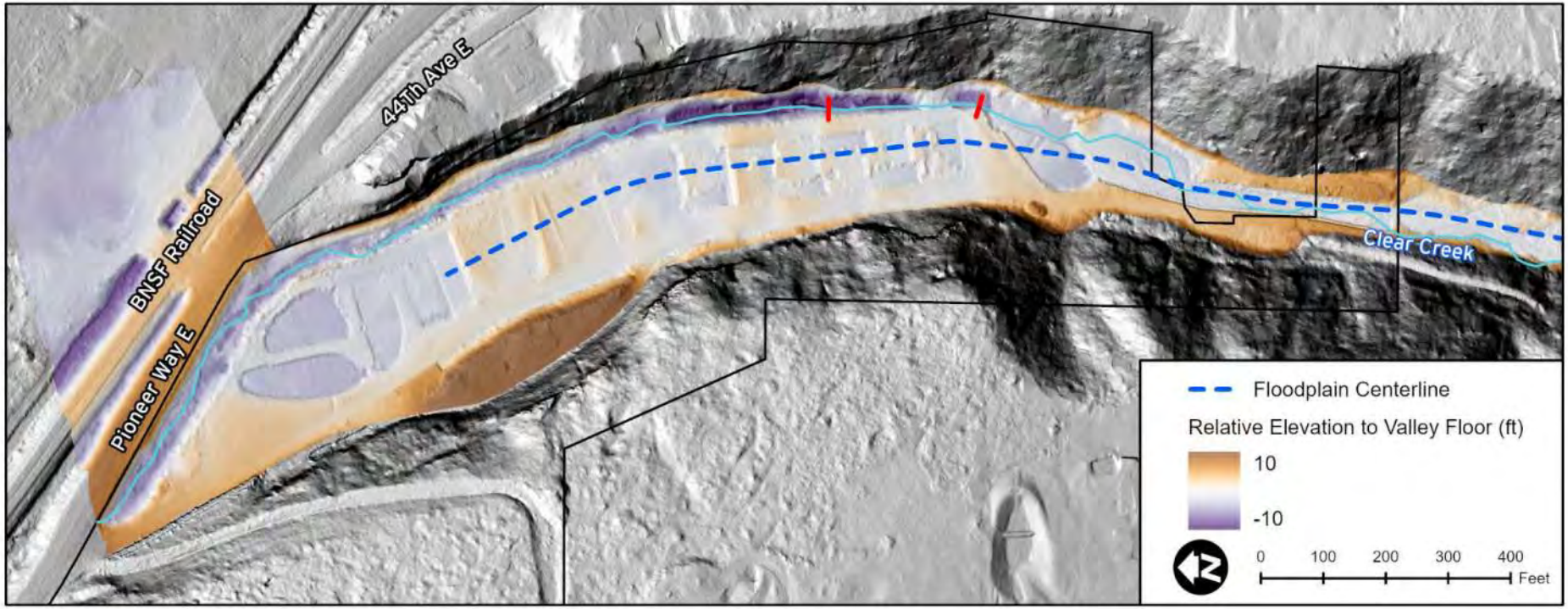
Sediment Transfer Reach:

- Slope 1-3%,
- Pool and riffle with wood
- Steelhead and Coho Spawning and Rearing, Bull Trout Foraging

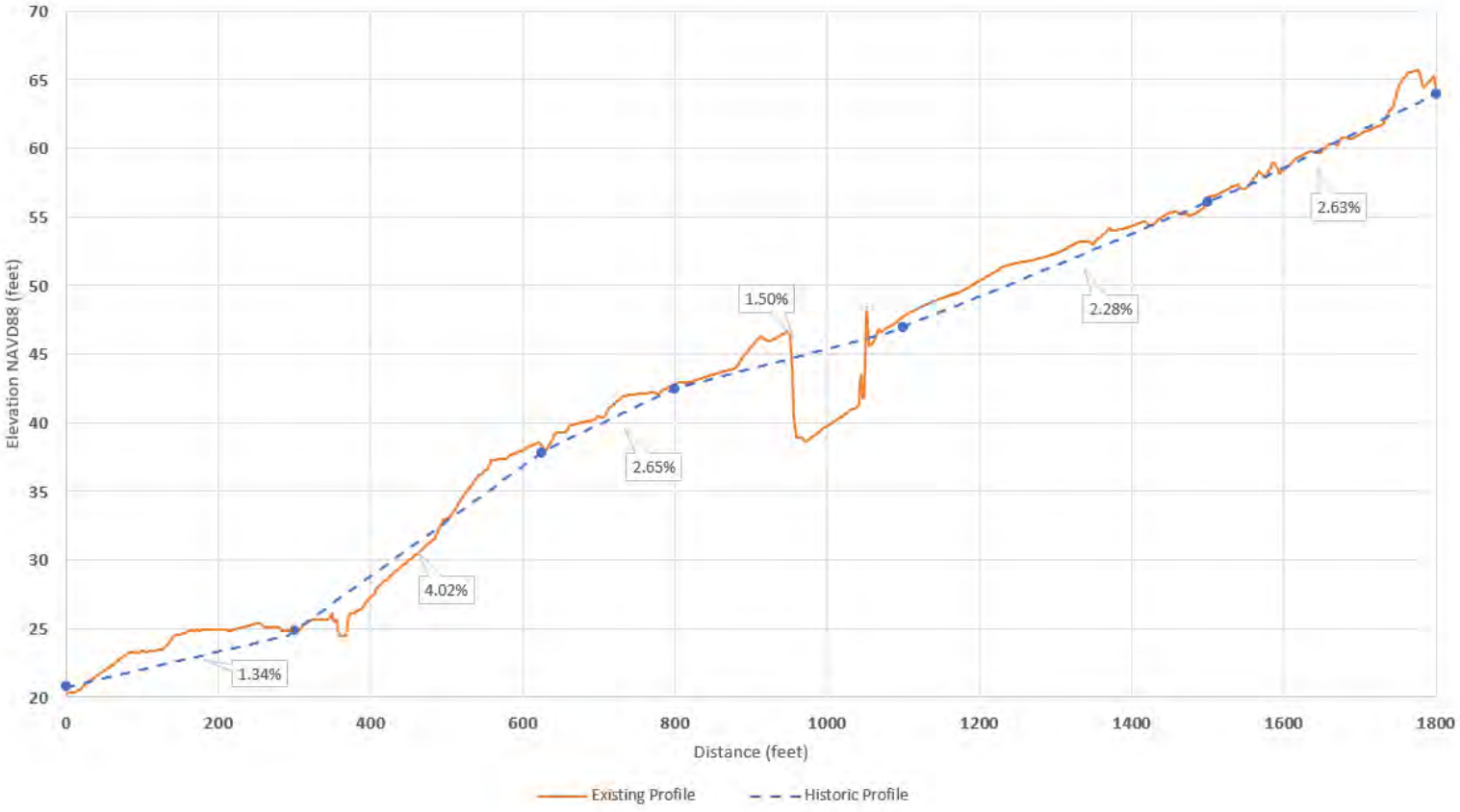
Depositional Reach:

- Slopes below 1%, anabranching with frequent floodplain connectivity.
- Main channel: spawning, holding and foraging
- Off channel: rearing

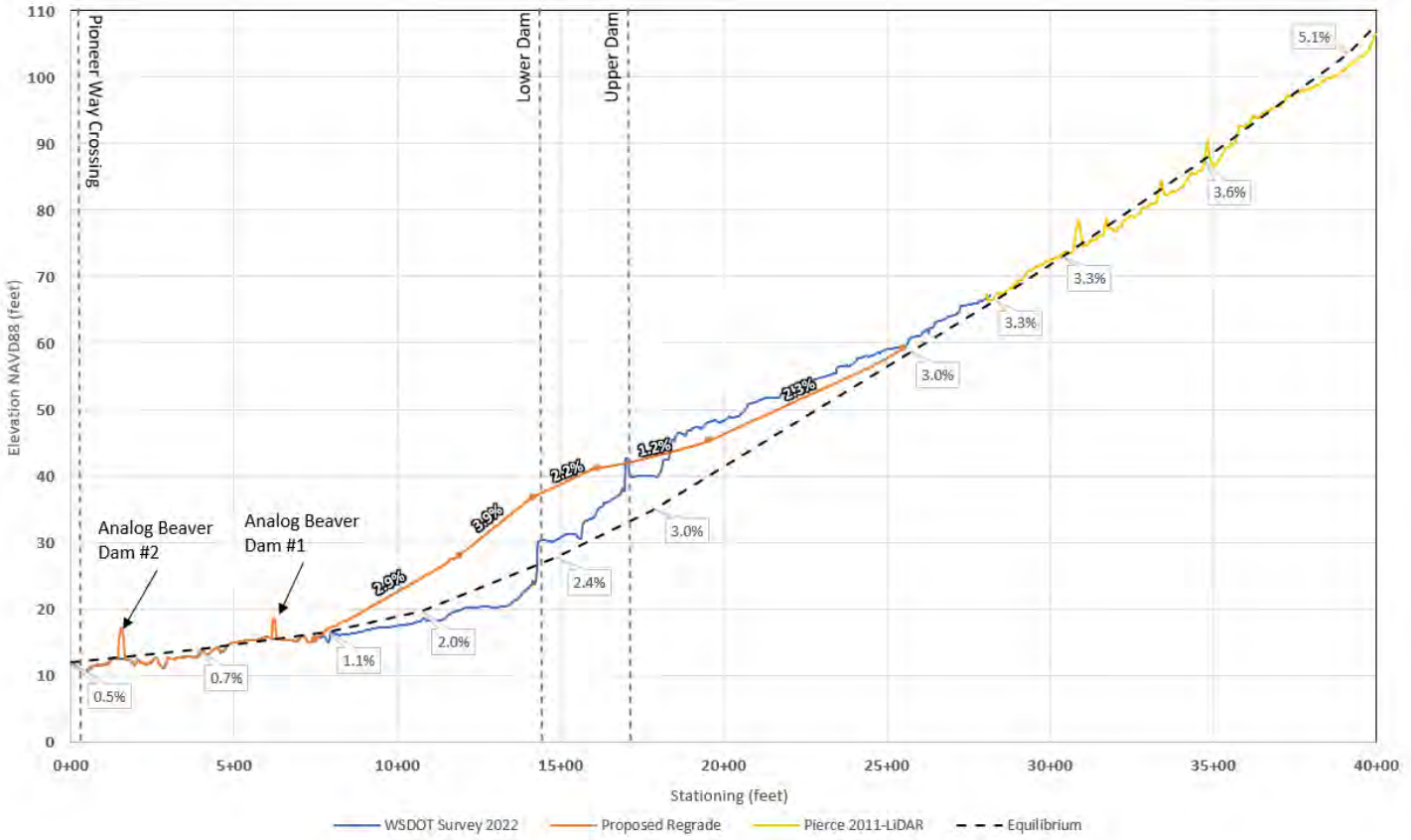
Relative Elevation Model



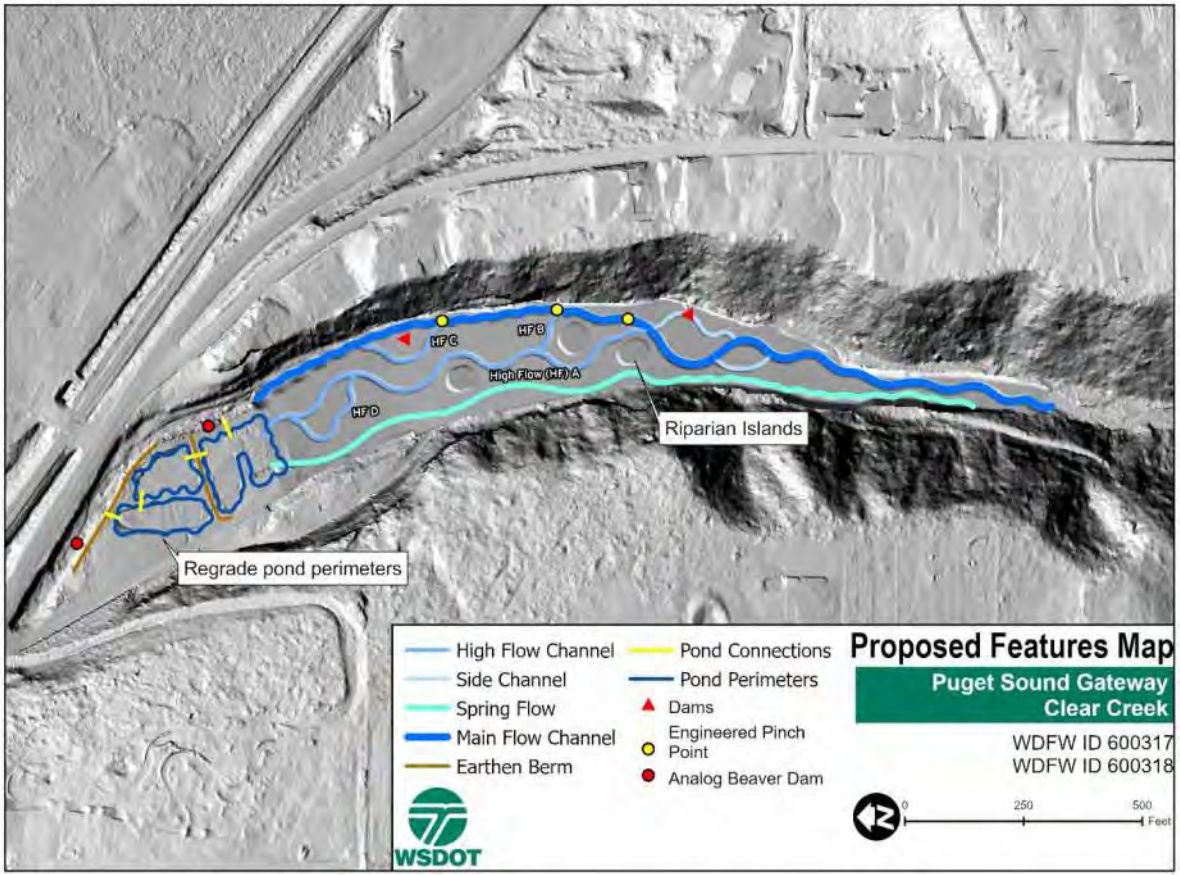
Proposed Floodplain Profile



Proposed Channel Profile

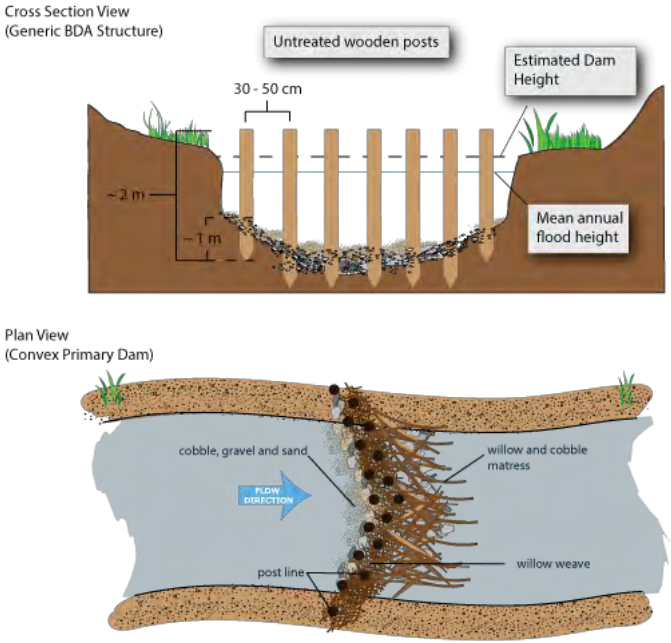


Proposed Design

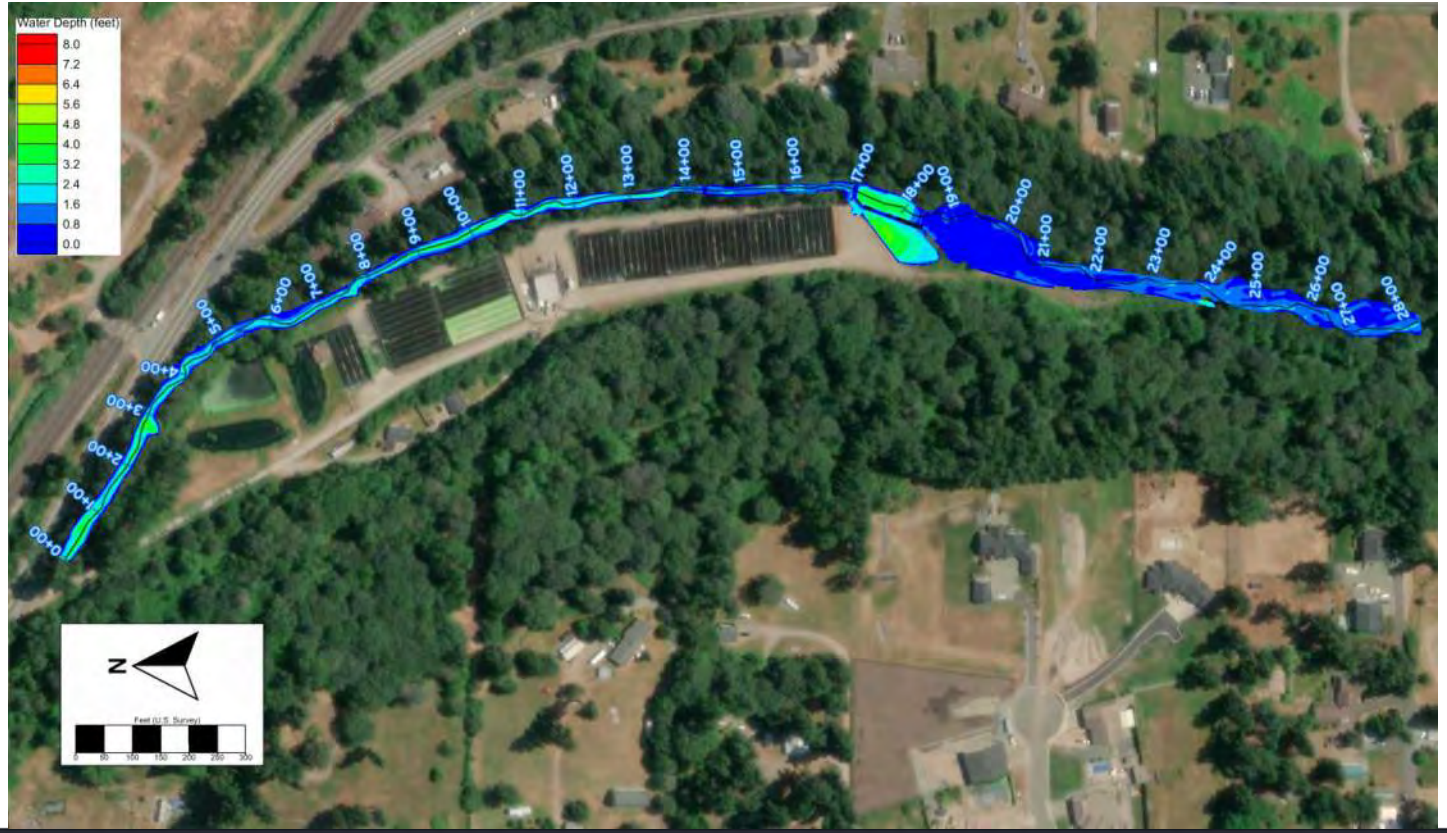


Engineered Pinch Points + Analog Beaver Dams

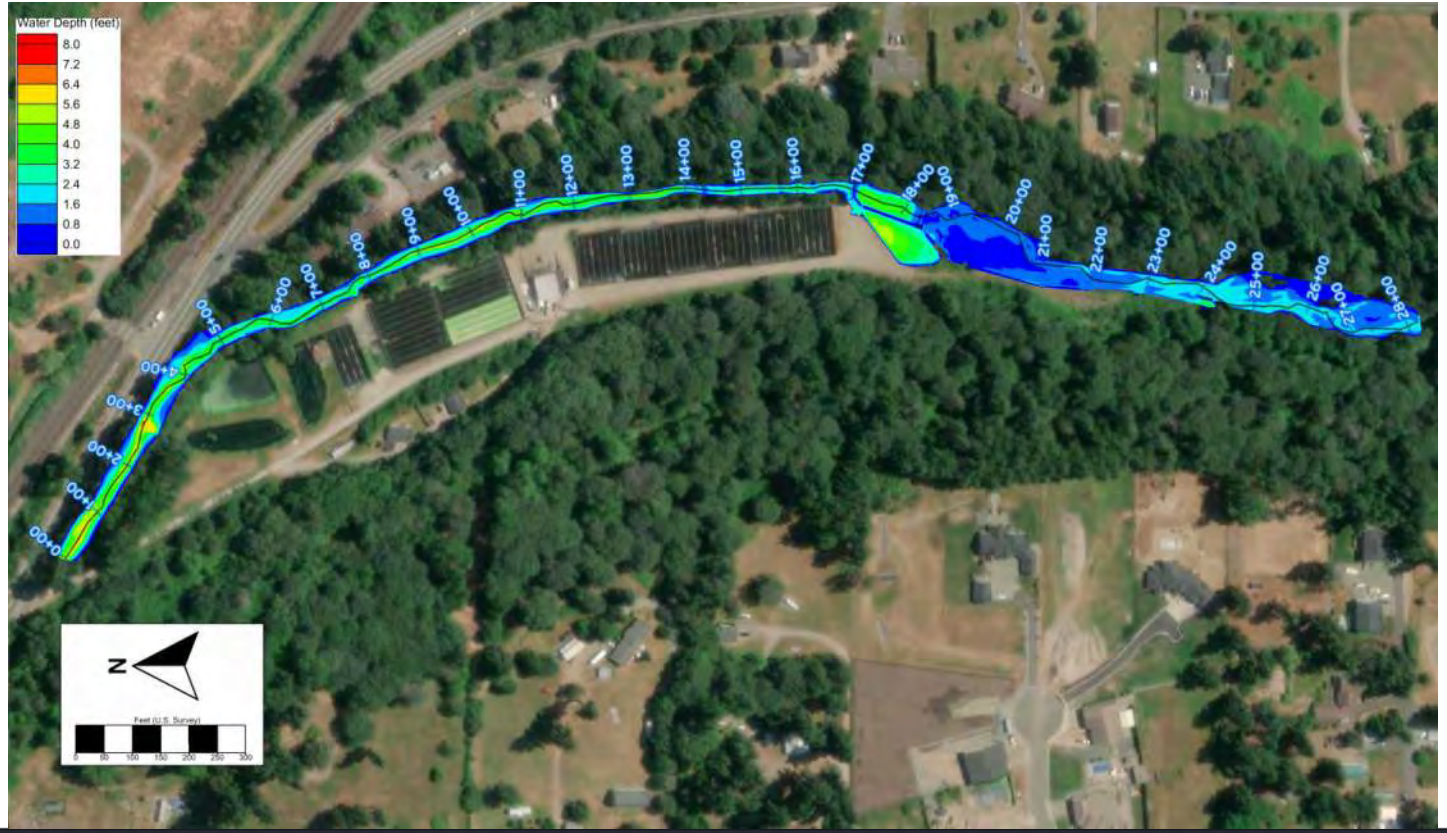




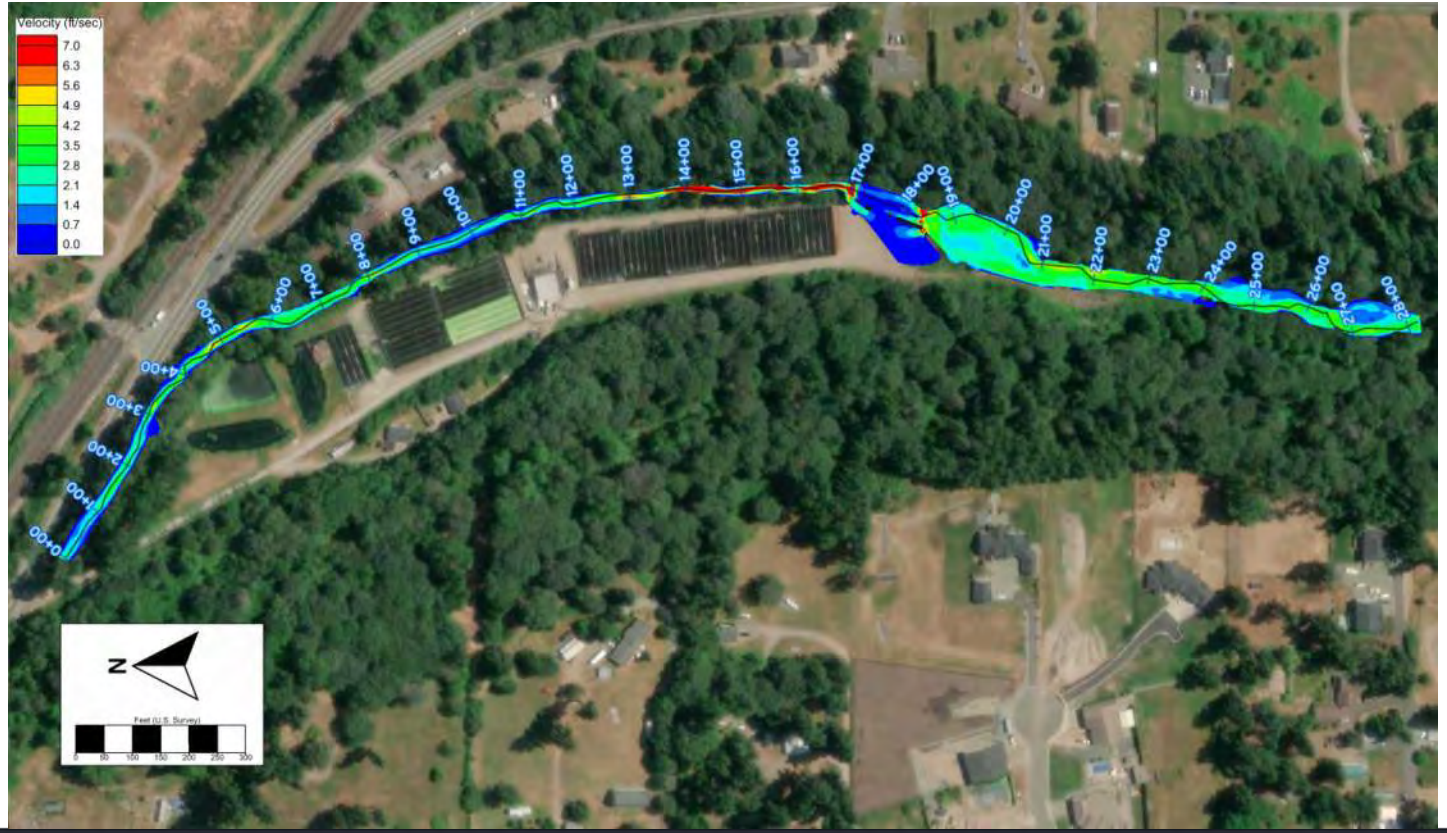
Existing 2-year Depth



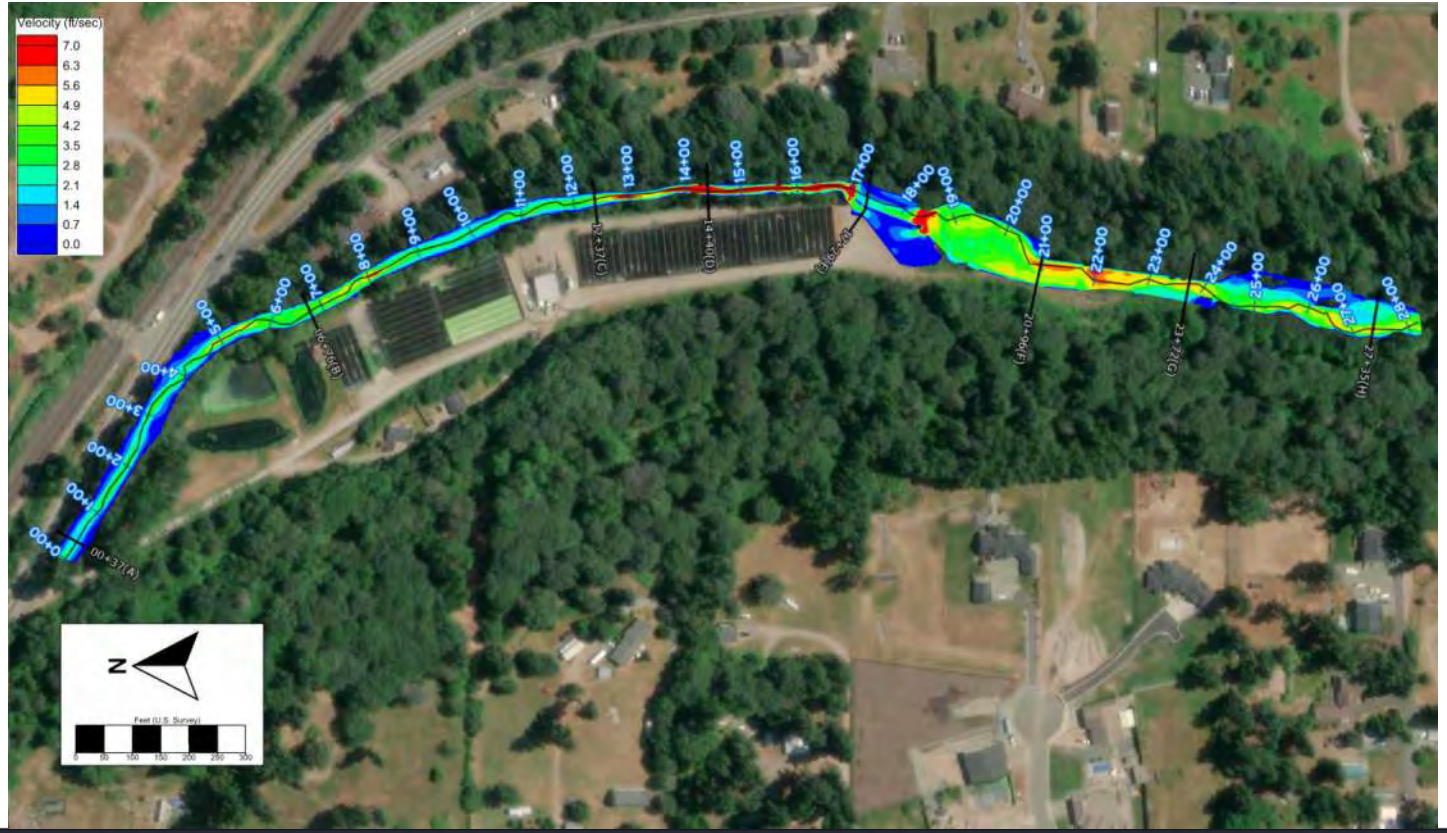
Existing 100-year Depth



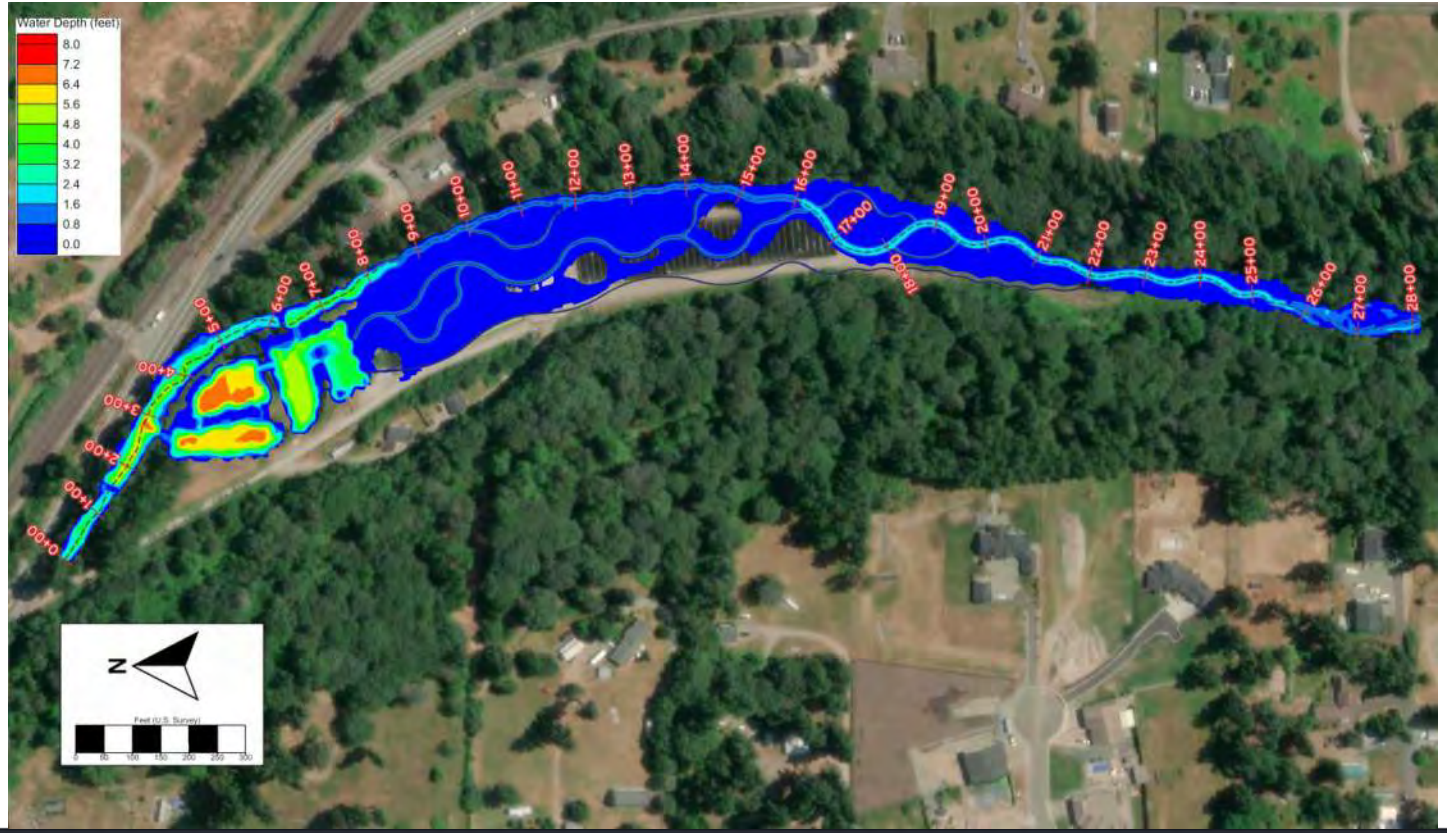
Existing 2-year Velocity



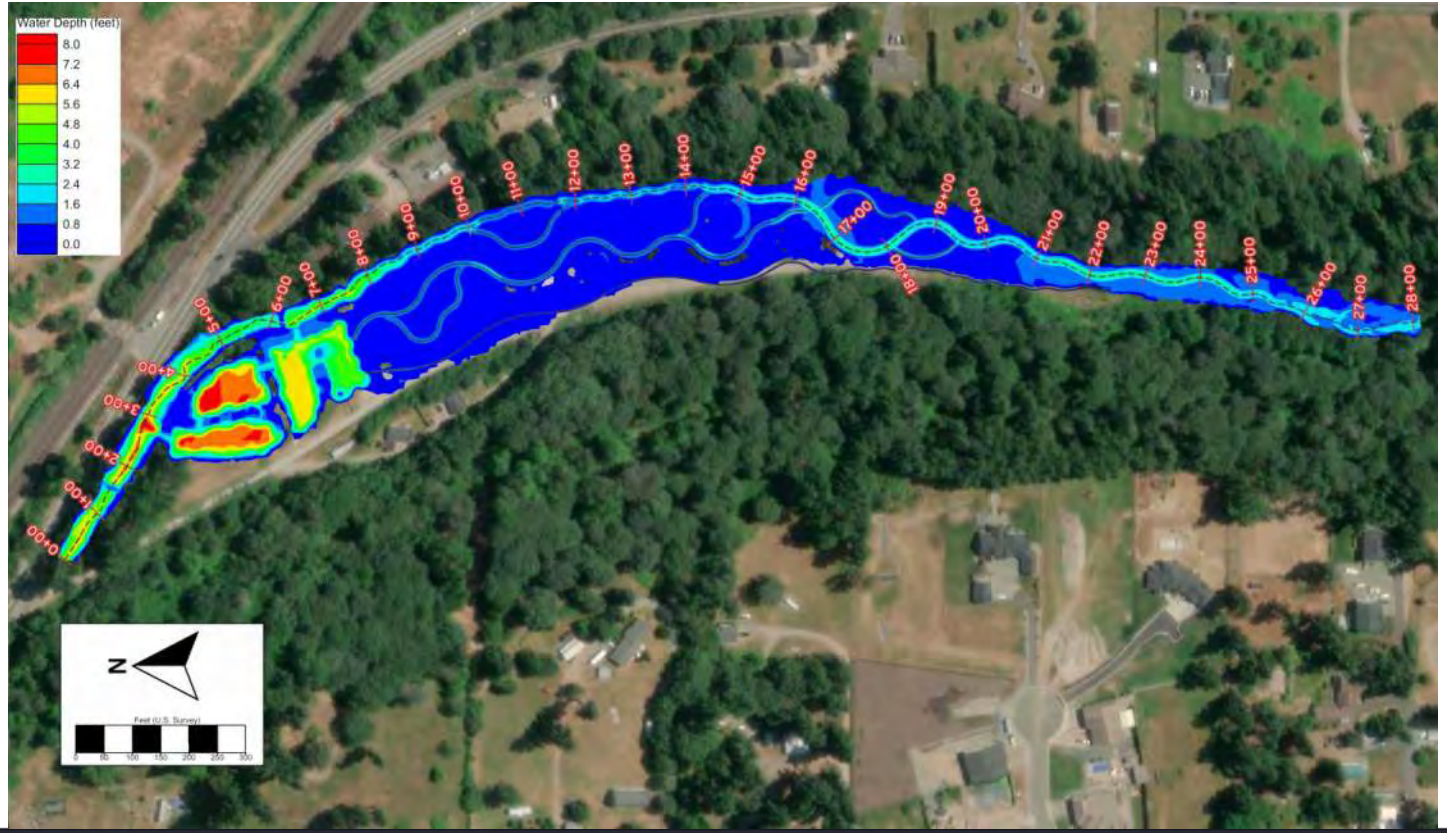
Existing 100-year Velocity



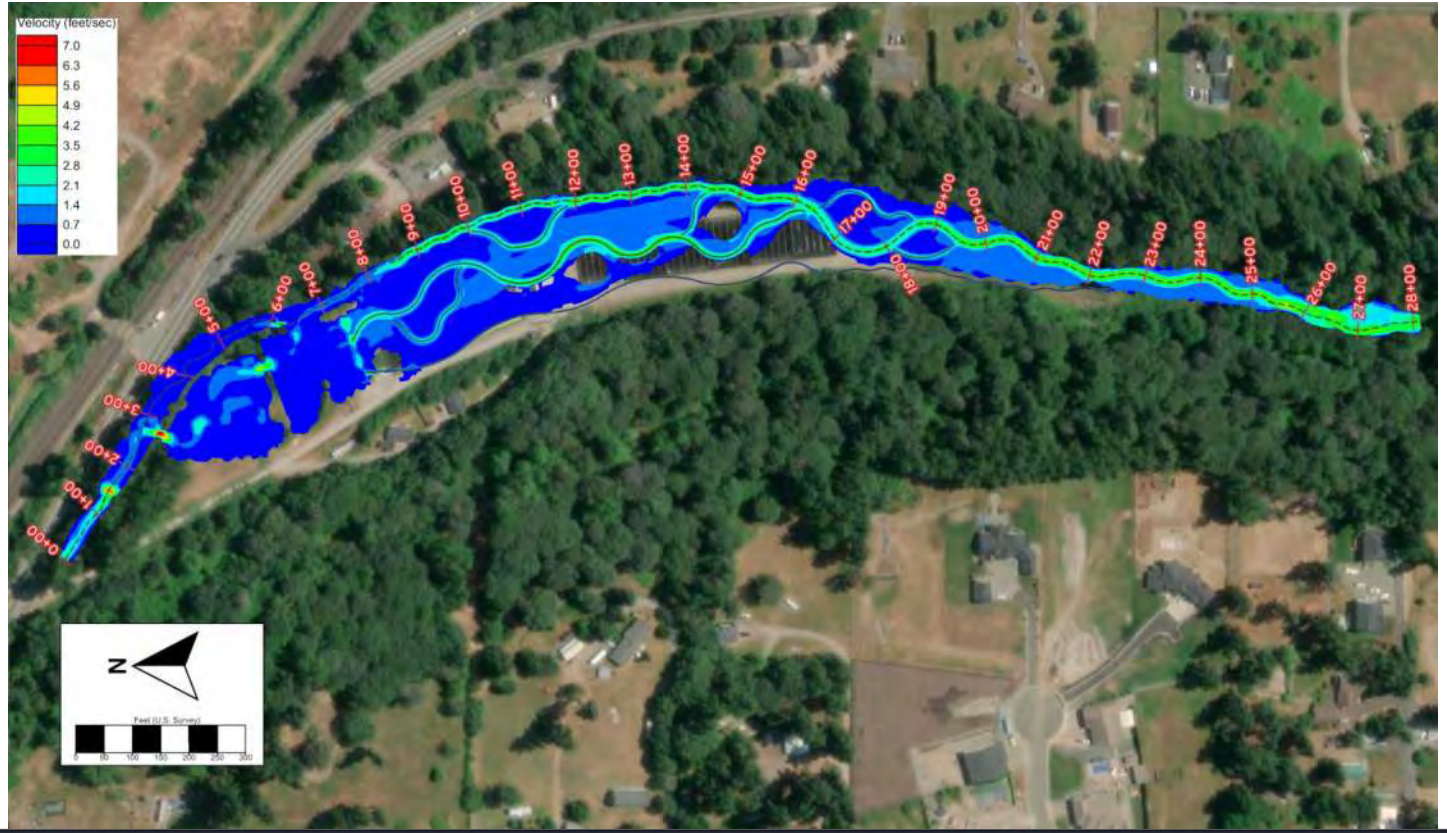
Proposed 2-year Depth



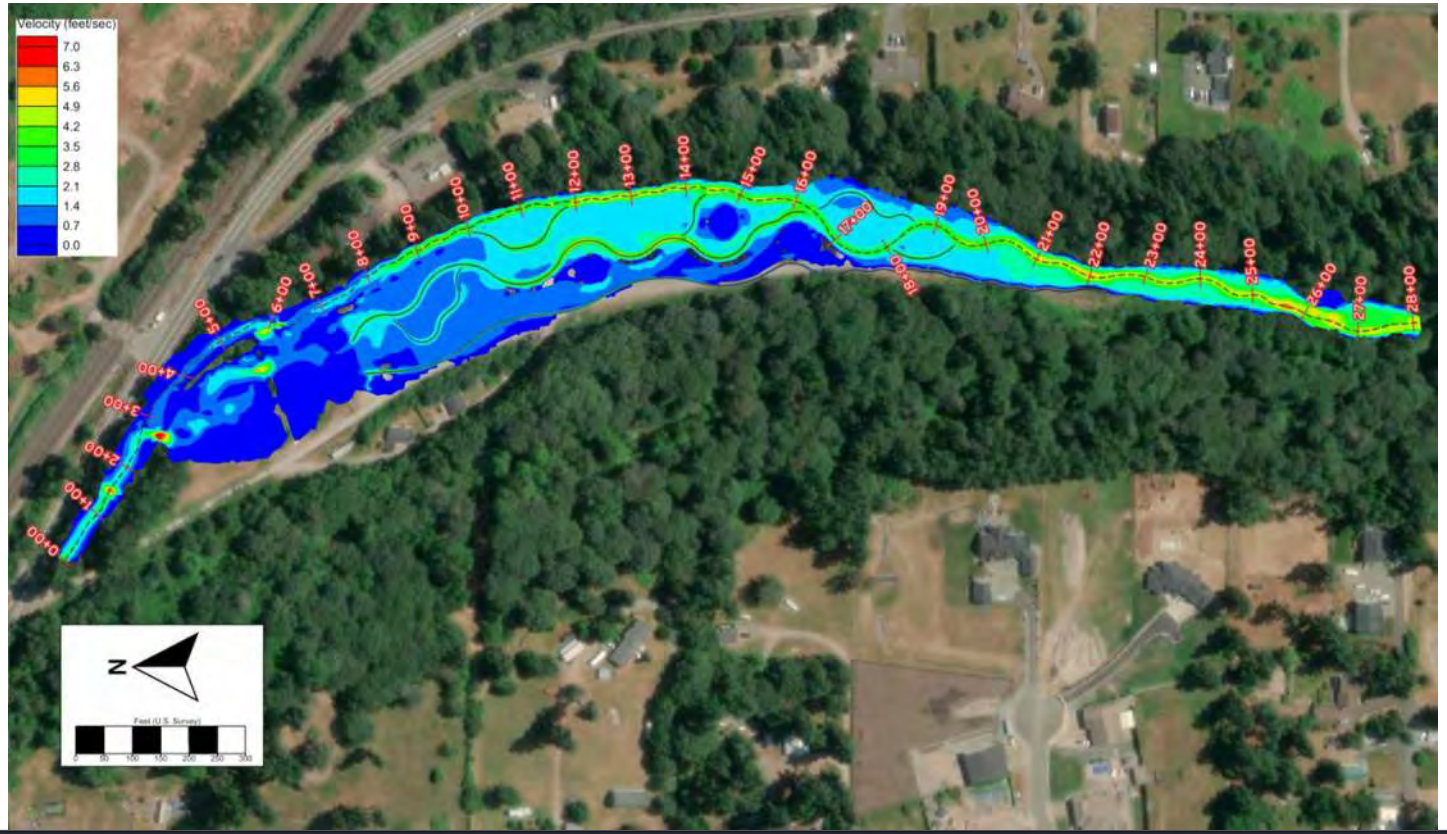
Proposed 100-year Depth



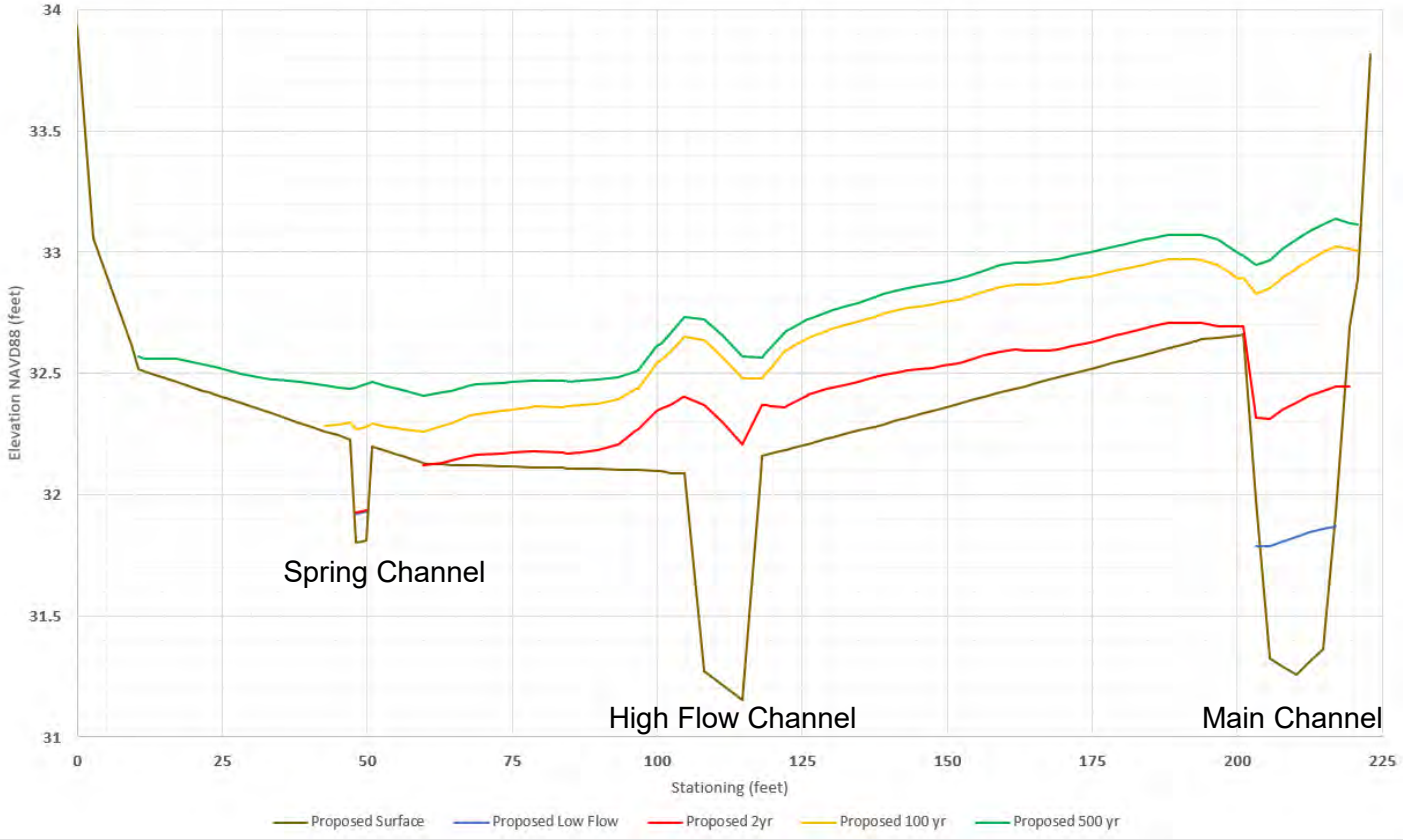
Proposed 2-year Velocity



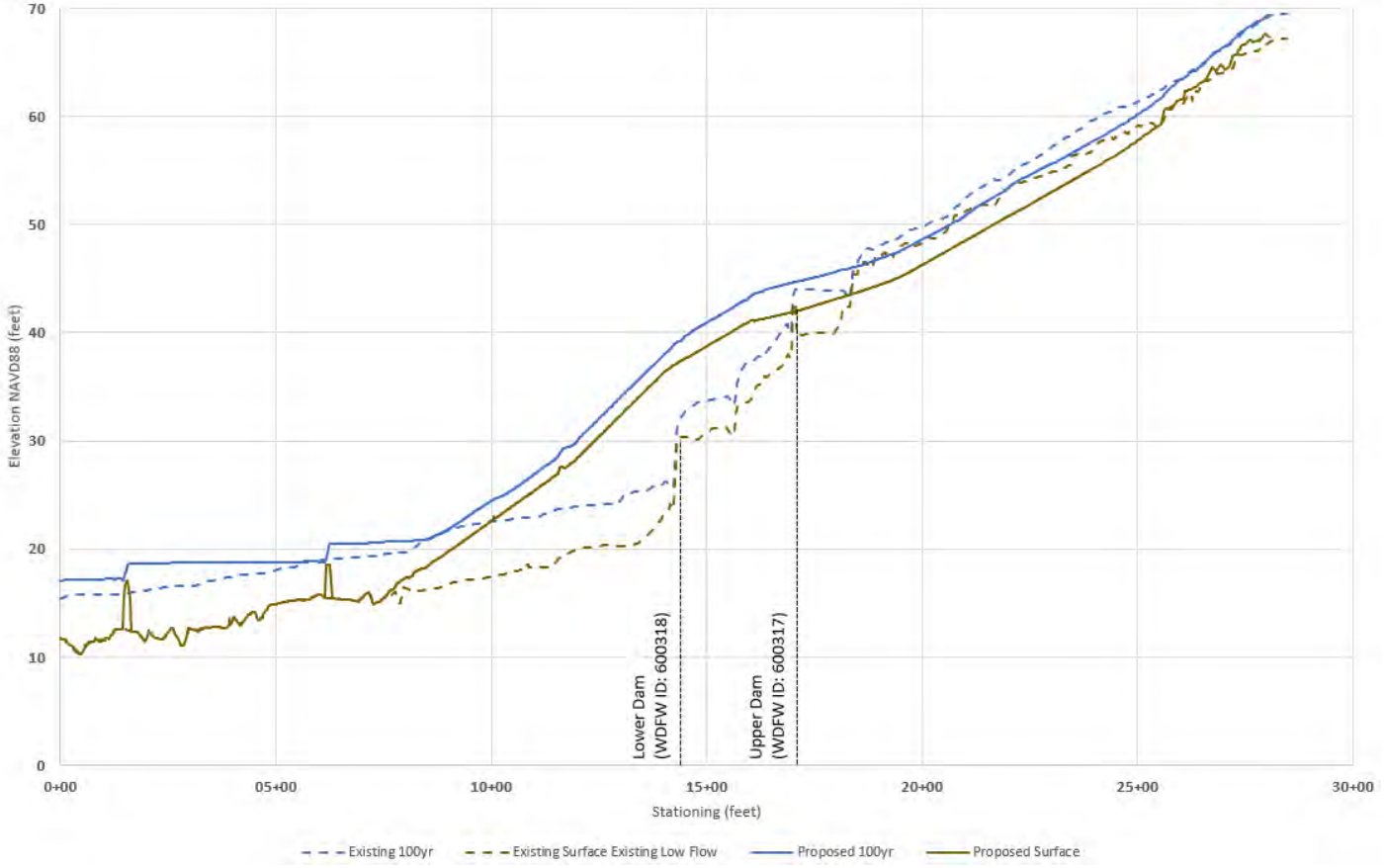
Proposed 100-year Velocity



Proposed Floodplain XS



Proposed vs Existing Surface

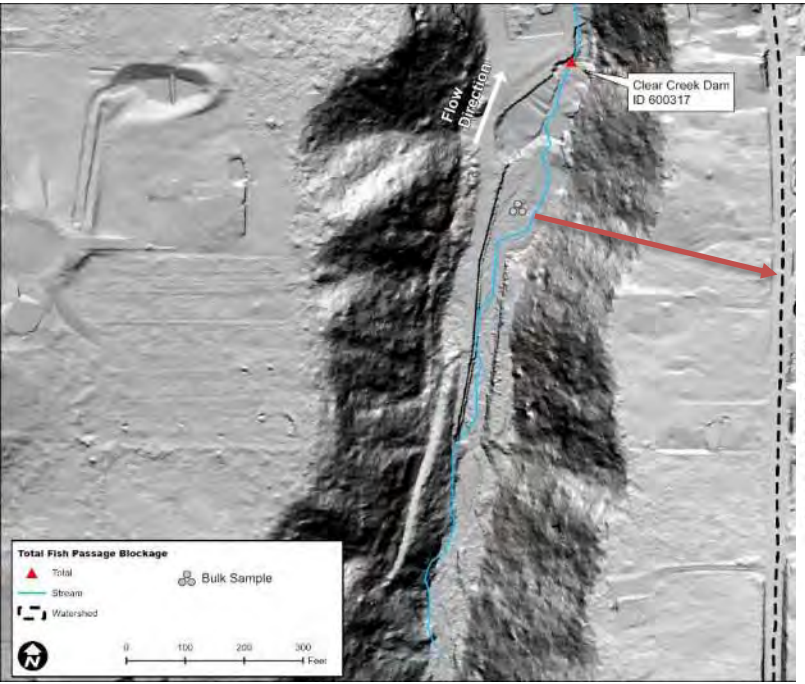


Sediment Transport Model

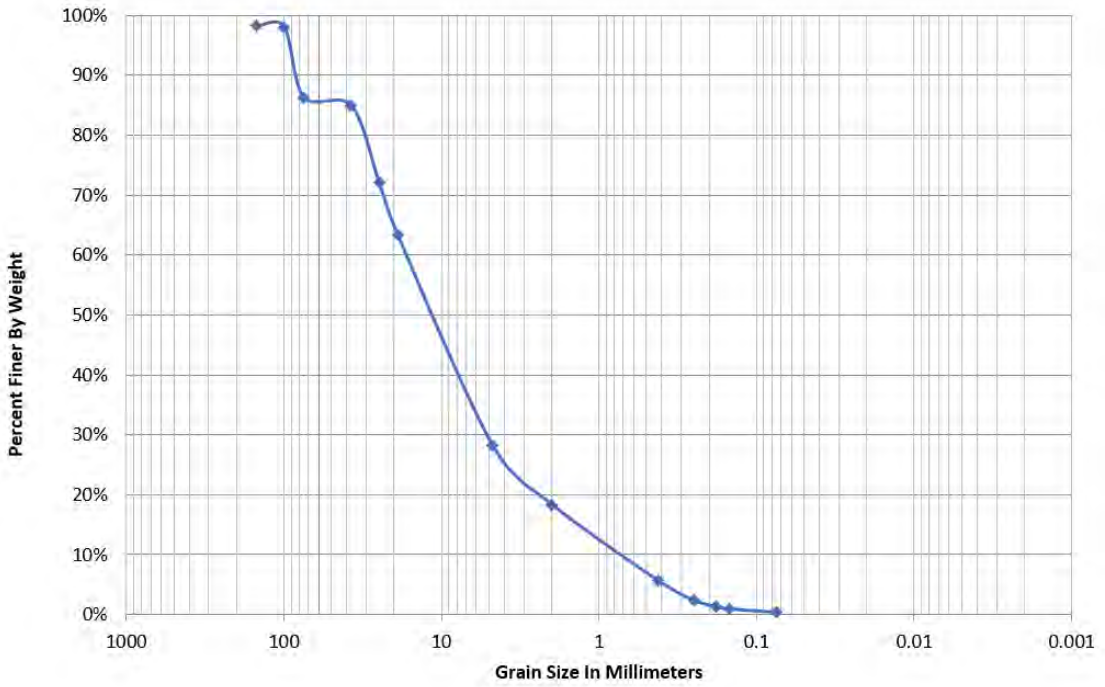
- Why is it needed?
  - As an alluvial fan, Clear Creek goes from 3% gradient to flat
    - Without dams and sedimentation basins to act as storage ***where will upstream mobilized sediments be stored***
  - **To determine whether coarse material will be transported downstream impacting downstream and understand deposition pattern**
  - Sediment transport model can help predict these things



Bulk Sediment Sample



1238.15 lbs of sediment collected



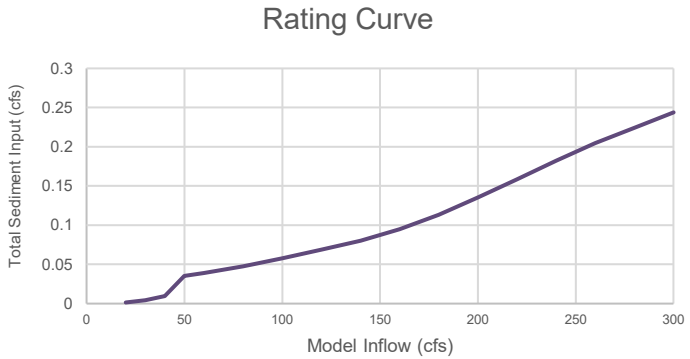
Existing Conditions: Model Validation

- Choose sediment transport equation and sediment input volume that can best represent conditions at Clear Creek
  - SRH-2D gives the option to choose from six sediment capacity equations
    - *Meyer-Peter-Mueller (1948)*
    - *Parker (1990)*
    - *Wu et. al (2000)*
    - *Yang (1979)*
    - *Wilcock and Crowe (2003)*
    - *Trinity River modification of W & C (2009)*
  - Estimated annual sediment load is 1170 CY/year +/- 554 CY

		Annual Sediment Discharge					
	Watershed	Mean	N	StdDev	Range	High	Low
	acres	*Cubic yards per year*					
Swan (2002-2022)	2429	2160	10	676	1900	3000	1100
Swan Normalized (82%)	1990	1770	NA	554	1557	2548	991
Clear Creek (2017-2022)	1990	1062	2	NC	237	1178	947

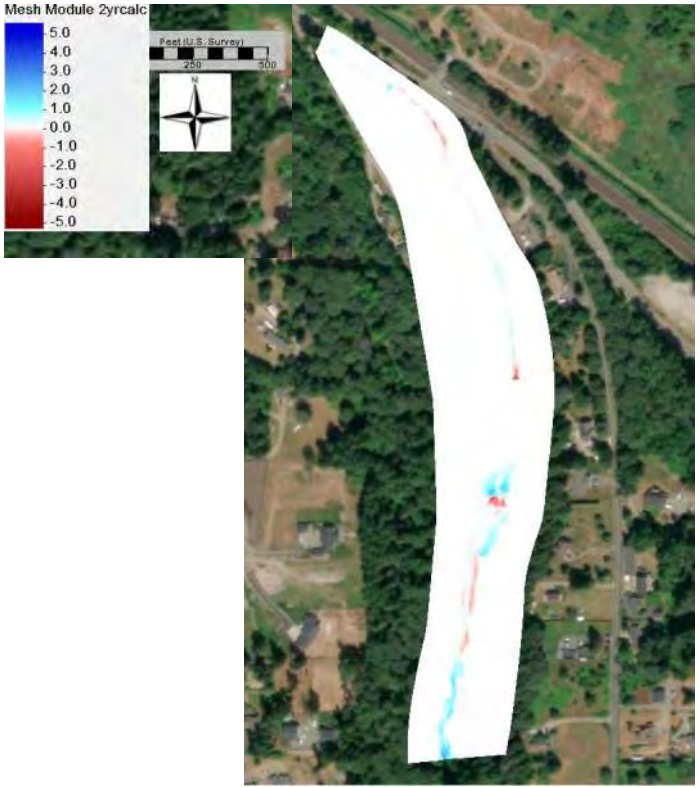
Existing Conditions Model Validation

- Sediment input volume:
  - Used a flow duration curve and annual load estimate to generate the rating curve below for sediment input and model inflow

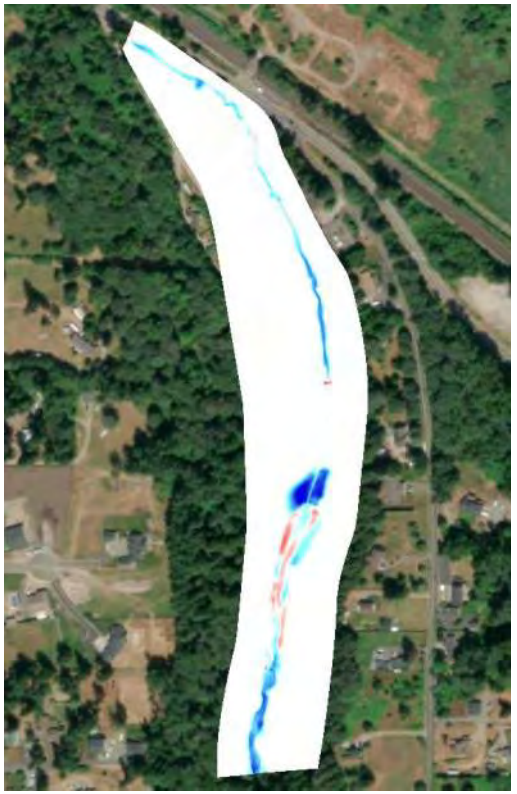


- Sediment transport equation
  - Of six equations Wilcock and Crowe (2003) determined most appropriate to use going forward based on qualitative analysis of results

Existing Conditions Model Validation: Results



2-year Flood

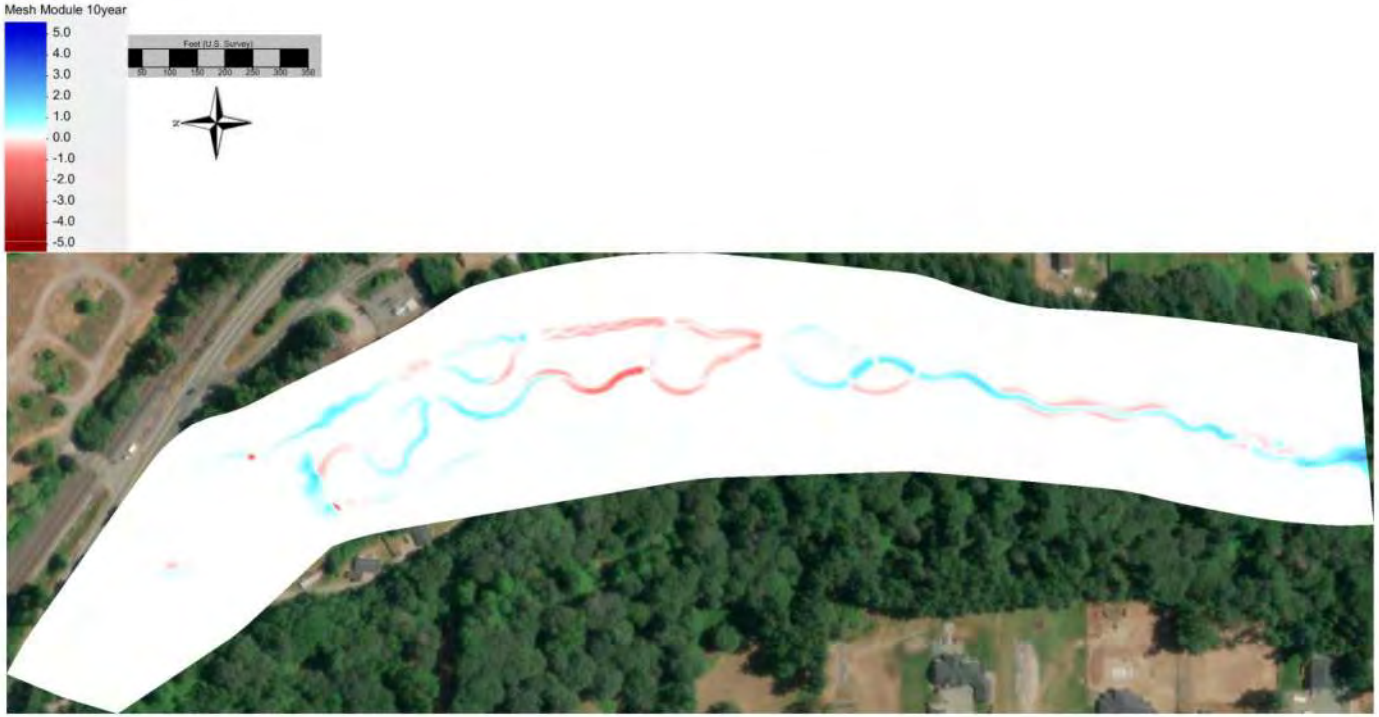


100-year Flood

Proposed Conditions Results: 2-year Flood



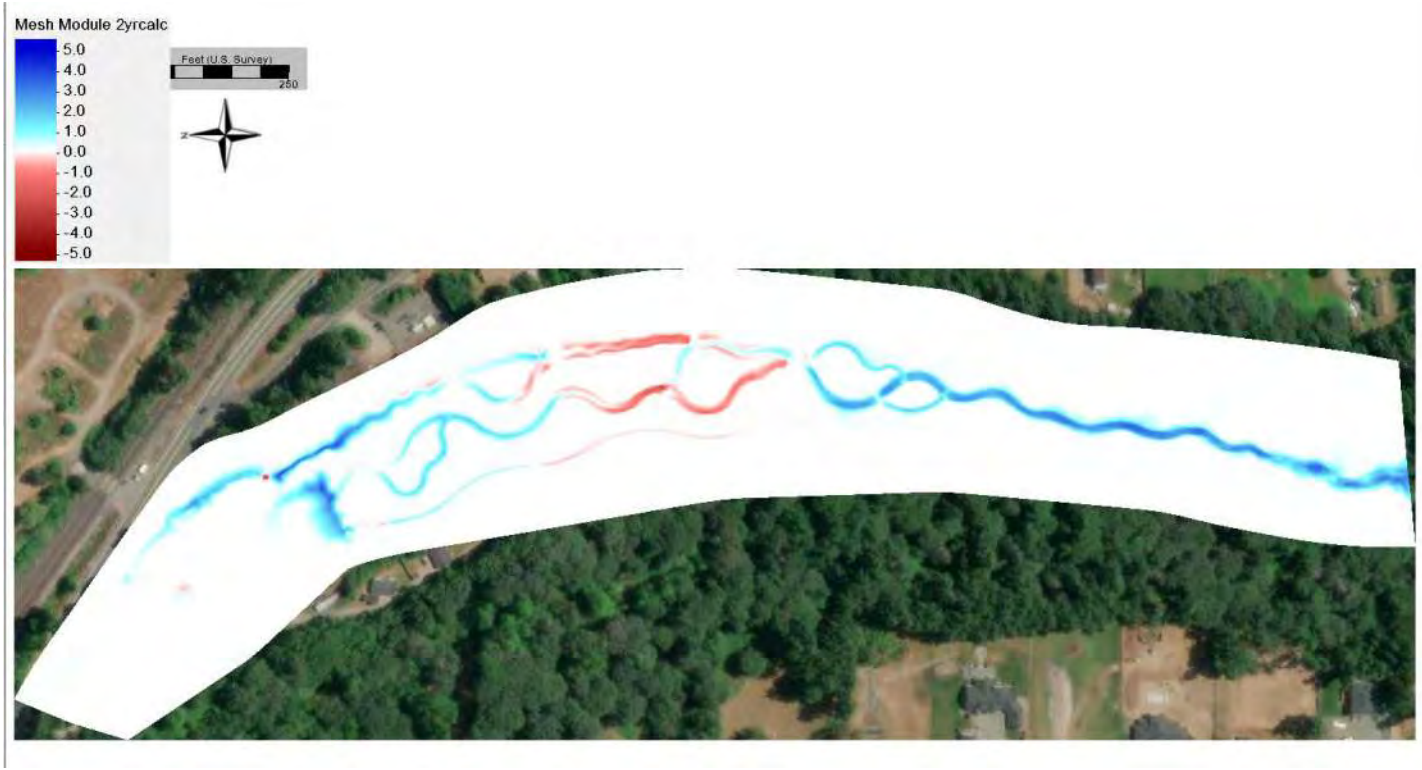
Proposed Conditions Results: 10-year Flood



Proposed Conditions Results: 20-year Flood



Proposed Conditions Results: 50-year Flood



Proposed Conditions Results: 100-year Flood (Results Pending) – sensitivity results shown below



50% input

200% input

Proposed Conditions: Sensitivity Analysis – (2 year)



50% input

100% input

200% input

Sediment Transport Modeling Conclusions/Next steps

- Sediment transport model shows that upstream sediments in proposed conditions model are deposited at analog beaver dam backwater and downstream ponds (results for 100 & 500 years pending)
- Sediment transport model confirms all coarse material will be deposited in project area, not transported downstream
- Fine tune model surface for FHD to lessen scour downstream of high flow channel pinch point if that is a concern
- Run continuous model to determine how fast the downstream ponds fill with sediment

APPENDIX H – ENVIRONMENTAL DATABASE REPORT

Trout Lodge - Clear Creek Project
4008 Pioneer Way
Tacoma, WA 98443

Inquiry Number: 7382051.2s
July 05, 2023

The EDR Radius Map™ Report with GeoCheck®

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

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Detail Map	3
Map Findings Summary	4
Map Findings	8
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Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

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Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-21
Physical Setting Source Map Findings	A-23
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

4008 PIONEER WAY
TACOMA, WA 98443

COORDINATES

Latitude (North):	47.2174010 - 47° 13' 2.64''
Longitude (West):	122.3733560 - 122° 22' 24.08''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	547448.8
UTM Y (Meters):	5229295.5
Elevation:	43 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	14742704 PUYALLUP, WA
Version Date:	2020
Southwest Map:	14742728 TACOMA SOUTH, WA
Version Date:	2020

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20150807
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
4008 PIONEER WAY
TACOMA, WA 98443

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	TROUTCO CLEAR CREEK	4008 PIONEER WAY E	ALLSITES, SPILLS, NPDES		TP
A2	TROUTCO CLEAR CREEK	4008 PIONEER WAY EAS	FINDS, ECHO		TP
Reg	PUYALLUP RESERVATION		INDIAN RESERV	Same	1 ft.
3	LATHROP PROPERTY SPI	4408 44TH AVE E	ALLSITES, RCRA NonGen / NLR, FINDS, ECHO	Higher	111, 0.021, ESE
4	KURT CHRISTIANSEN PR	4521 PIONEER WAY E	CSCSL, ALLSITES, SPILLS	Lower	911, 0.173, East
5	REESE AND SALSHEIDER	4518 AND 4520 GAY RD	SWF/LF	Lower	2315, 0.438, NNE
6	PIONEER & CANYON COL		CSCSL, ALLSITES	Higher	4779, 0.905, SE
7	NEAR OLYMPIC PIPLE L	2660 FRANK ALBERT RD	CSCSL, ALLSITES, SPILLS, ASBESTOS	Lower	5102, 0.966, NNE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
TROUTCO CLEAR CREEK 4008 PIONEER WAY E TACOMA, WA 98443	ALLSITES Facility Id: 14922 SPILLS Database: SPILLS, Date of Government Version: 02/27/2023 Database: SPILLS ERTS, Date of Government Version: 03/13/2023 Facility ID: 108278 NPDES Permit ID: WA0039021	N/A
TROUTCO CLEAR CREEK 4008 PIONEER WAY EAS TACOMA, WA 98443	FINDS Registry ID:: 110009766404 ECHO Registry ID: 110009766404	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

EXECUTIVE SUMMARY

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ---- RCRA - Large Quantity Generators
RCRA-SQG ---- RCRA - Small Quantity Generators
RCRA-VSQG ---- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---- Land Use Control Information System
US ENG CONTROLS ---- Engineering Controls Sites List
US INST CONTROLS ---- Institutional Controls Sites List

Federal ERNS list

ERNS ---- Emergency Response Notification System

Lists of state- and tribal (Superfund) equivalent sites

HSL ---- Hazardous Sites List

Lists of state and tribal leaking storage tanks

LUST ---- Leaking Underground Storage Tanks Site List
INDIAN LUST ---- Leaking Underground Storage Tanks on Indian Land

Lists of state and tribal registered storage tanks

FEMA UST ---- Underground Storage Tank Listing
UST ---- Underground Storage Tank Database
AST ---- Aboveground Storage Tank Locations
INDIAN UST ---- Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

INST CONTROL ---- Institutional Control Site List

Lists of state and tribal voluntary cleanup sites

INDIAN VCP ---- Voluntary Cleanup Priority Listing
VCP ---- Voluntary Cleanup Program Sites
ICR ---- Independent Cleanup Reports
PTAP ---- PTAP Site Listing

Lists of state and tribal brownfield sites

BROWNFIELDS ---- Brownfields Sites Listing

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY ..... Recycling Facility List
SWTIRE ..... Solid Waste Tire Facilities
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
ODI ..... Open Dump Inventory
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register
CDL ..... Clandestine Drug Lab Contaminated Site List
HIST CDL ..... List of Sites Contaminated by Clandestine Drug Labs
CSCSL NFA ..... Confirmed & Contaminated Sites - No Further Action
US CDL ..... National Clandestine Laboratory Register

Local Land Records

LIENS 2 ..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS ..... Formerly Used Defense Sites
DOD ..... Department of Defense Sites
SCRD DRYCLEANERS ..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ..... Financial Assurance Information
EPA WATCH LIST ..... EPA WATCH LIST
2020 COR ACTION ..... 2020 Corrective Action Program List
TSCA ..... Toxic Substances Control Act
TRIS ..... Toxic Chemical Release Inventory System
SSTS ..... Section 7 Tracking Systems
ROD ..... Records Of Decision
RMP ..... Risk Management Plans
RAATS ..... RCRA Administrative Action Tracking System
PRP ..... Potentially Responsible Parties
PADS ..... PCB Activity Database System
ICIS ..... Integrated Compliance Information System
FTTS ..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ..... Material Licensing Tracking System
COAL ASH DOE ..... Steam-Electric Plant Operation Data

COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
UXO	Unexploded Ordnance Sites
DOCKET HWC	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM	EPA Fuels Program Registered Listing
PFAS NPL	Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES	Federal Sites PFAS Information
PFAS TSCA	PFAS Manufacture and Imports Information
PFAS RCRA MANIFEST	PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR	PFAS Contamination Site Location Listing
PFAS WQP	Ambient Environmental Sampling for PFAS
PFAS NPDES	Clean Water Act Discharge Monitoring Information
PFAS ECHO	Facilities in Industries that May Be Handling PFAS Listing
PFAS ECHO FIRE TRAINING	Facilities in Industries that May Be Handling PFAS Listing
PFAS PART 139 AIRPORT	All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC	Aqueous Foam Related Incidents Listing
PFAS	PFAS Contamination Site Location Listing
AQUEOUS FOAM	Firefighting Foam Incidents
AIRS	Washington Emissions Data System
ASBESTOS	ASBESTOS
COAL ASH	Coal Ash Disposal Site Listing
DRYCLEANERS	Drycleaner List
Financial Assurance	Financial Assurance Information Listing
Inactive Drycleaners	Inactive Drycleaners
MANIFEST	Hazardous Waste Manifest Data
UIC	Underground Injection Wells Listing
PFAS TRIS	List of PFAS Added to the TRI
MINES MRDS	Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS	Recovered Government Archive State Hazardous Waste Facilities List
RGA LF	Recovered Government Archive Solid Waste Facilities List

EXECUTIVE SUMMARY

RGA LUST ---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of state- and tribal hazardous waste facilities

CSCSL: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Ecology's Confirmed & Suspected Contaminated Sites List.

A review of the CSCSL list, as provided by EDR, and dated 01/09/2023 has revealed that there are 3 CSCSL sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PIONEER & CANYON COL		***SE 1/2 - 1 (0.905 mi.)***	***6***	***18***
Site Status: Awaiting Cleanup Clean Up Siteid: 14913 Facility ID: 71608 Soil: Suspected Ground Water: Suspected Contaminant Name: Benzene Contaminant Name: Petroleum-Diesel Surface Water: Suspected				

Lower Elevation	Address	Direction / Distance	Map ID	Page
KURT CHRISTIANSEN PR	***4521 PIONEER WAY E***	***E 1/8 - 1/4 (0.173 mi.)***	***4***	***15***
Site Status: Awaiting Cleanup Clean Up Siteid: 3844 Facility ID: 3993371 Soil: Suspected Soil: Confirmed Above Cleanup Levels Ground Water: Suspected Contaminant Name: Metals Priority Pollutants Contaminant Name: Petroleum Products-Unspecified Contaminant Name: Polycyclic Aromatic Hydrocarbons				
NEAR OLYMPIC PIPLE L	***2660 FRANK ALBERT RD***	***NNE 1/2 - 1 (0.966 mi.)***	***7***	***20***

Site Status: Cleanup Started
Clean Up Siteid: 12943
Facility ID: 24529
Soil: Remediated-Above
Ground Water: Confirmed Above Cleanup Levels
Contaminant Name: Benzene
Contaminant Name: Non-Halogenated Solvents
Contaminant Name: Other Non-Halogenated Organics
Contaminant Name: Petroleum-Diesel
Contaminant Name: Petroleum-Gasoline
**Additional key fields are available in the Map Findings section*

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Department of Ecology's Solid Waste Facilities Handbook.

A review of the SWF/LF list, as provided by EDR, has revealed that there is 1 SWF/LF site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
REESE AND SALSHEIDER	4518 AND 4520 GAY RD	NNE 1/4 - 1/2 (0.438 mi.)	5	18
Database: SWF/LF, Date of Government Version: 11/30/2022 Facility Type: Historic Landfill (non-regulated) Facility ID: 2458				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

ALLSITES: Information on facilities and sites of interest to the Department of Ecology.

A review of the ALLSITES list, as provided by EDR, and dated 01/23/2023 has revealed that there are 2 ALLSITES sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LATHROP PROPERTY SPI Facility Id: 85757214	***4408 44TH AVE E***	***ESE 0 - 1/8 (0.021 mi.)***	***3***	***10***

Lower Elevation	Address	Direction / Distance	Map ID	Page
KURT CHRISTIANSEN PR Facility Id: 3993371	***4521 PIONEER WAY E***	***E 1/8 - 1/4 (0.173 mi.)***	***4***	***15***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/06/2023 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LATHROP PROPERTY SPI EPA ID:: WAD988468492	***4408 44TH AVE E***	***ESE 0 - 1/8 (0.021 mi.)***	***3***	***10***

INDIAN RESERV: This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

A review of the INDIAN RESERV list, as provided by EDR, and dated 12/31/2014 has revealed that there is 1 INDIAN RESERV site within approximately 1 mile of the target property.

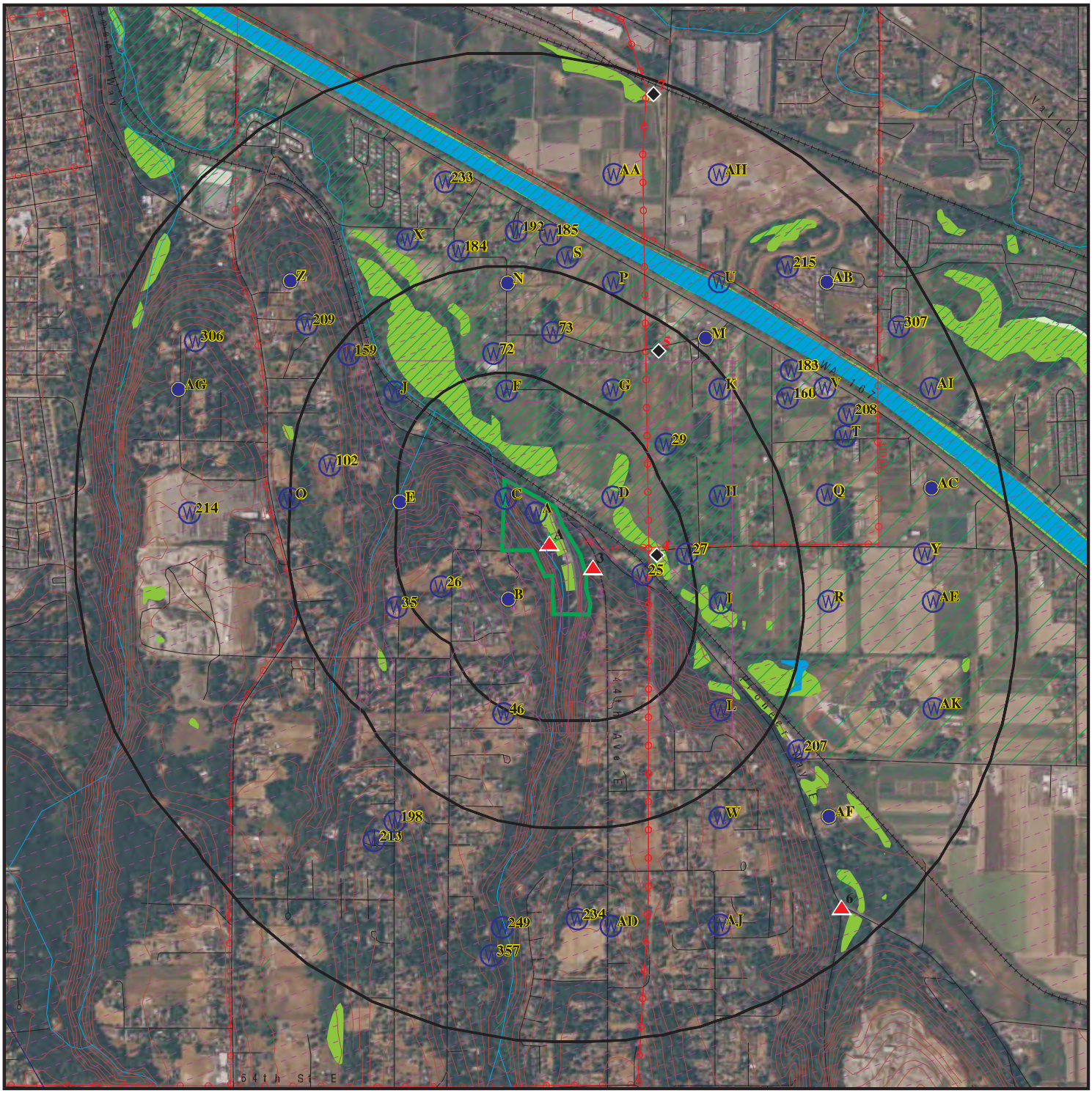
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PUYALLUP RESERVATION		0 - 1/8 (0.000 mi.)	0	10

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

Site Name	Database(s)
GEORGE LEINGANG DUMP	SWF/LF
CANYON SAND & GRAVEL	SWF/LF
FRED MASELLA & WALTER MIKESKI DUMP	SWF/LF

OVERVIEW MAP - 7382051.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Trout Lodge - Clear Creek Project	CLIENT:	HNTB CORPORATION
ADDRESS:	4008 Pioneer Way Tacoma WA 98443	CONTACT:	Buffie Chournos
LAT/LONG:	47.217401 / 122.373356	INQUIRY #:	7382051.2s
		DATE:	July 05, 2023 4:38 pm

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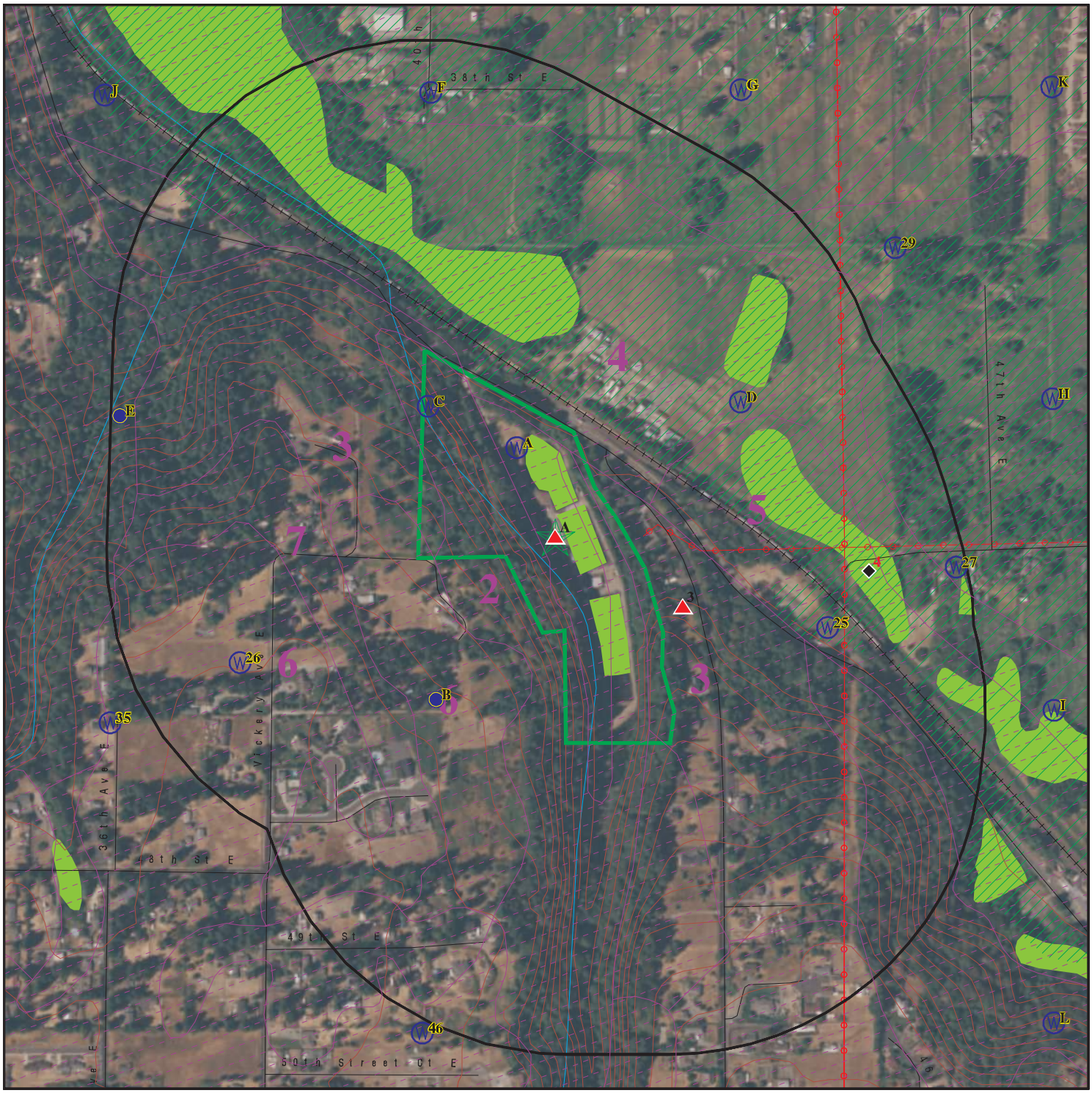
DETAIL MAP - 7382051.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Trout Lodge - Clear Creek Project	CLIENT:	HNTB CORPORATION
ADDRESS:	4008 Pioneer Way Tacoma WA 98443	CONTACT:	Buffie Chournos
LAT/LONG:	47.217401 / 122.373356	INQUIRY #:	7382051.2s
		DATE:	July 05, 2023 4:40 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
HSL	1.000		0	0	0	0	NR	0
Lists of state- and tribal hazardous waste facilities								
CSCSL	1.000		0	1	0	2	NR	3
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		0	0	1	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
INST CONTROL	0.500		0	0	0	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
ICR	0.500		0	0	0	NR	NR	0
PTAP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
SWRCY	0.500		0	0	0	NR	NR	0
SWTIRE	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
ALLSITES	0.500	1	1	1	0	NR	NR	3
CDL	0.001		0	NR	NR	NR	NR	0
HIST CDL	0.001		0	NR	NR	NR	NR	0
CSCSL NFA	0.500		0	0	0	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	0.001		0	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SPILLS	0.001	1	0	NR	NR	NR	NR	1
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	0	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		1	0	0	0	NR	1
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001	1	0	NR	NR	NR	NR	1
ECHO	0.001	1	0	NR	NR	NR	NR	1
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO FIRE TRAINING	0.250		0	0	NR	NR	NR	0
PFAS PART 139 AIRPORT	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
PFAS	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM	0.250		0	0	NR	NR	NR	0
AIRS	0.001		0	NR	NR	NR	NR	0
ASBESTOS	0.001		0	NR	NR	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
Inactive Drycleaners	0.250		0	0	NR	NR	NR	0
MANIFEST	0.250		0	0	NR	NR	NR	0
NPDES	0.001	1	0	NR	NR	NR	NR	1
UIC	0.001		0	NR	NR	NR	NR	0
PFAS TRIS	0.250		0	0	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA HWS	0.001		0	NR	NR	NR	NR	0
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		5	3	2	1	2	0	13

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **TROUTCO CLEAR CREEK** **ALLSITES** **S110486393**
Target **4008 PIONEER WAY E** **SPILLS** **N/A**
Property **TACOMA, WA 98443** **NPDES**

Site 1 of 2 in cluster A

Actual:
43 ft.

ALLSITES:

Name:	TROUTCO CLEAR CREEK
Facility Id:	14922
Interaction:	92797
Interaction 1:	A
Interaction 2:	INDNPDESIP
Ecology Program:	WATQUAL
Program Data:	PARIS
Facility Alt.:	Troutco Clear Creek
Program ID:	WA0039021
Date Interaction:	11/01/2005
Date Interaction 3:	Industrial NPDES IP
Latitude:	47.217765534
Longitude:	-122.37362903
Interaction:	92798
Interaction 1:	I
Interaction 2:	FISHGP
Ecology Program:	WATQUAL
Program Data:	PARIS
Facility Alt.:	Troutco Clear Creek
Program ID:	WAG131004
Date Interaction:	06/29/1990
Date Interaction 3:	Upland Fish Hatchery GP
Latitude:	47.217765534
Longitude:	-122.37362903

SPILLS:

Name:	Not reported
Address:	4008 PIONEER WAY E
City,State,Zip:	TACOMA, WA 98443
Facility ID:	108278
Medium:	Roadway - Paved
Material Desc:	LUBE OIL/MOTOR OIL
Material Qty:	1
Material Units:	Gals
Incident Date:	09/18/2019
Incident Category Type:	Oil Spill
Incident Category:	Oil Spill
Latitude:	47.21819
Longitude:	-122.37464
Source Type:	Vehicle
Source:	Non-commercial vehicle
Vessel Facility Name2:	Not reported
Recovered Quantity:	1
Resp Party Contact:	Austin Franklin
Cause:	Troutlodge Vehicle Accident Cleanup 9-18-19
Cause Type:	Not reported
Resp Party Name:	Trout Lodge
Medium Type:	Impermeable surface

TROUTCO CLEAR CREEK (Continued) **S110486393**

Contributing Factors: LACK OF SITUATIONAL AWARENESS

SPILLS ERTS:

Facility Site ID:	Not reported
Name:	Not reported
Address:	4008 PIONEER WAY E
City,State,Zip:	TACOMA, WA 98443
Program Name:	Spill Prevention, Preparedness & Response
Incident ID:	693186
Incident Status:	Follow-up assigned
Incident Date:	09/18/2019
Initial Report Activity Name:	Not reported
Initial Report Cause Category:	Accident
Initial Report Cause Name:	Collision
Initial Report Medium Name:	Roadway-paved
Initial Report Medium Category:	Impermeable surface
Initial Report Source Name:	Non-commercial vehicle
Initial Report Source Category:	Vehicle
Initial Report Substance Name:	Lube oil/Motor oil
Initial Report Substance Category:	Oil
Initial Report Substance Quantity:	1
Initial Report Substance Unit Of Measure:	U.S. gallons
Potentially Responsible Party First Name:	Not reported
Potentially Responsible Party Last Name:	Not reported
Potentially Responsible Party Organization	Not reported
External Reference Number:	Not reported
Latitude:	47.21819
Longitude:	-122.37464

NPDES:

Name:	TROUTCO CLEAR CREEK
Address:	4008 PIONEER WAY E
City,State,Zip:	TACOMA, WA 98443
Facility Status:	Not reported
Facility Type:	Industrial NPDES IP
Admin Region:	Southwest
Date Issued:	01/24/2020
Latitude:	Not reported
Longitude:	Not reported
Permit ID:	WA0039021
Permit Version:	Not reported
Permit Status:	Active
Permit SubStatus:	Not reported
Ecology Contact:	Not reported
WRIA:	Not reported
Permit Expiration Date:	01/31/2025
Effective Date:	02/01/2020
Days to Expiration:	-752

A2
Target
Property

TROUTCO CLEAR CREEK
4008 PIONEER WAY EAST
TACOMA, WA 98443

FINDS **1005529371**
ECHO **N/A**

Site 2 of 2 in cluster A

Actual:
43 ft.

FINDS:
Registry ID: 110009766404

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.
US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1005529371
Registry ID: 110009766404
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110009766404
Name: TROUTCO CLEAR CREEK
Address: 4008 PIONEER WAY EAST
City,State,Zip: TACOMA, WA 98443

IND RES
Region

PUYALLUP RESERVATION

INDIAN RESERV **CIND200146**
N/A

, WA

< 1/8
1 ft.

INDIAN RESERV:
Feature: Indian Reservation
Name: Puyallup Reservation
Agency: BIA

3
ESE
< 1/8
0.021 mi.
111 ft.

LATHROP PROPERTY SPILL
4408 44TH AVE E
TACOMA, WA 98433

ALLSITES **1001490512**
RCRA NonGen / NLR **WAD988468492**
FINDS
ECHO

Relative:
Higher

Actual:
63 ft.

ALLSITES:
Name: LATHROP PROPERTY SPILL
Facility Id: 85757214

LATHROP PROPERTY SPILL (Continued) **1001490512**

Interaction:	68708
Interaction 1:	I
Interaction 2:	HWG
Ecology Program:	HAZWASTE
Program Data:	TURBOWASTE
Facility Alt.:	Not reported
Program ID:	WAD988468492
Date Interaction:	10/13/1989
Date Interaction 3:	Hazardous Waste Generator
Latitude:	47.216484407
Longitude:	-122.37108519

RCRA Listings:

Date Form Received by Agency:	19950417
Handler Name:	Lathrop Property Spill
Handler Address:	4408 44TH AVE E
Handler City,State,Zip:	TACOMA, WA 98433
EPA ID:	WAD988468492
Contact Name:	WA ECY WA ECY
Contact Address:	PO BOX 42589
Contact City,State,Zip:	OLYMPIA, WA 98504
Contact Telephone:	000-000-0000
Contact Fax:	000-000-0000
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	10
Land Type:	Private
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Wa
State District:	SWRO
Mailing Address:	PO BOX 42589
Mailing City,State,Zip:	OLYMPIA, WA 98504
Owner Name:	Wa Ecy W
Owner Type:	Private
Operator Name:	Mike O
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN

LATHROP PROPERTY SPILL (Continued) **1001490512**

Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20120216
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	LATHROP PROPERTY SPILL
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	4408 44TH AVE E
Owner/Operator City,State,Zip:	TACOMA, WA 98433
Owner/Operator Telephone:	000-000-0000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	WA ECY W
Legal Status:	Private
Date Became Current:	19961206
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 42589
Owner/Operator City,State,Zip:	OLYMPIA, WA 98504
Owner/Operator Telephone:	000-000-0000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	WA ECY
Legal Status:	Private
Date Became Current:	19961206
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 42589

LATHROP PROPERTY SPILL (Continued) **1001490512**

Owner/Operator City,State,Zip: OLYMPIA, WA 98504
Owner/Operator Telephone: 000-000-0000
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: WA ECY
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: PO BOX 42589
Owner/Operator City,State,Zip: OLYMPIA, WA 98504
Owner/Operator Telephone: 000-000-0000
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: MIKE O
Legal Status: Private
Date Became Current: 19961206
Date Ended Current: Not reported
Owner/Operator Address: PO BOX 42589
Owner/Operator City,State,Zip: OLYMPIA, WA 98504
Owner/Operator Telephone: 360-586-0365
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: OSWEILER, MIKE
Legal Status: Private
Date Became Current: 19961206
Date Ended Current: Not reported
Owner/Operator Address: PO BOX 42589
Owner/Operator City,State,Zip: OLYMPIA, WA 98504
Owner/Operator Telephone: 360-586-0365
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: SEE PAPER COPY
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 4408 44TH AVE E
Owner/Operator City,State,Zip: TACOMA, WA 98433
Owner/Operator Telephone: 000-000-0000
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 19950417
Handler Name: LATHROP PROPERTY SPILL

LATHROP PROPERTY SPILL (Continued) **1001490512**

Federal Waste Generator Description: Not a generator, verified
State District Owner: Wa
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19950417
Handler Name: LATHROP PROPERTY SPILL
Federal Waste Generator Description: Not a generator, verified
State District Owner: Wa
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19950417
Handler Name: LATHROP PROPERTY SPILL
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Wa
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: Not reported
Recognized Trader Exporter: Not reported
Spent Lead Acid Battery Importer: Not reported
Spent Lead Acid Battery Exporter: Not reported
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 92411
NAICS Description: ADMINISTRATION OF AIR AND WATER RESOURCE AND SOLID WASTE MANAGEMENT PROGRAMS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110005350164

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
Washington Facility / Site Identification System (WA-FSIS) provides a

LATHROP PROPERTY SPILL (Continued) **1001490512**

means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1001490512
Registry ID:	110005350164
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110005350164
Name:	LATHROP PROPERTY SPILL
Address:	4408 44TH AVE E
City,State,Zip:	TACOMA, WA 98443

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4 **KURT CHRISTIANSEN PROPERTY** **CSCSL** **S107565966**
East **4521 PIONEER WAY E** **ALLSITES** **N/A**
1/8-1/4 **TACOMA, WA 98443** **SPILLS**
0.173 mi.
911 ft.

Relative:
Lower

Actual:
22 ft.

CSCSL:

Name:	KURT CHRISTIANSEN PROPERTY
Address:	4521 PIONEER WAY E
City,State,Zip:	TACOMA, WA 98443
Facility ID:	3993371
Region:	Southwest
Lat/Long:	47.216472 / -122.369333
Clean Up Siteid:	3844
Site Status:	Awaiting Cleanup
Contaminant Name:	Metals Priority Pollutants
Alternate Site Names:	Not reported
Site Rank:	Not reported
Has Institutional Control:	Not reported
Past VCP:	Not reported
Current VCP:	Not reported
URL:	https://apps.ecology.wa.gov/cleanupsearch/site/3844
Ground Water:	Suspected
Surface Water:	Not reported
Soil:	Suspected
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Southwest

Name:	KURT CHRISTIANSEN PROPERTY
Address:	4521 PIONEER WAY E
City,State,Zip:	TACOMA, WA 98443
Facility ID:	3993371
Region:	Southwest

KURT CHRISTIANSEN PROPERTY (Continued) **S107565966**

Lat/Long:	47.216472 / -122.369333
Clean Up Siteid:	3844
Site Status:	Awaiting Cleanup
Contaminant Name:	Petroleum Products-Unspecified
Alternate Site Names:	Not reported
Site Rank:	Not reported
Has Institutional Control:	Not reported
Past VCP:	Not reported
Current VCP:	Not reported
URL:	https://apps.ecology.wa.gov/cleanupsearch/site/3844
Ground Water:	Suspected
Surface Water:	Not reported
Soil:	Confirmed Above Cleanup Levels
Sediment:	Not reported
Air:	Suspected
Bedrock:	Not reported
Responsible Unit:	Southwest

Name:	KURT CHRISTIANSEN PROPERTY
Address:	4521 PIONEER WAY E
City,State,Zip:	TACOMA, WA 98443
Facility ID:	3993371
Region:	Southwest
Lat/Long:	47.216472 / -122.369333
Clean Up Siteid:	3844
Site Status:	Awaiting Cleanup
Contaminant Name:	Polycyclic Aromatic Hydrocarbons
Alternate Site Names:	Not reported
Site Rank:	Not reported
Has Institutional Control:	Not reported
Past VCP:	Not reported
Current VCP:	Not reported
URL:	https://apps.ecology.wa.gov/cleanupsearch/site/3844
Ground Water:	Suspected
Surface Water:	Not reported
Soil:	Suspected
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Southwest

ALLSITES:

Name:	KURT CHRISTIANSEN PROPERTY
Facility Id:	3993371

Interaction:	13845
Interaction 1:	A
Interaction 2:	SCS
Ecology Program:	TOXICS
Program Data:	ISIS
Facility Alt.:	KURT CHRISTIANSEN PROPERTY
Program ID:	Not reported
Date Interaction:	07/29/2004
Date Interaction 3:	State Cleanup Site
Latitude:	47.216466406
Longitude:	-122.36931819

KURT CHRISTIANSEN PROPERTY (Continued) **S107565966**

SPILLS:

Name:	Not reported
Address:	4521 PIONEER WAY E
City,State,Zip:	TACOMA, WA 98443
Facility ID:	90714
Medium:	Land
Material Desc:	HYDRAULIC OIL
Material Qty:	1
Material Units:	Other
Incident Date:	09/26/2016
Incident Category Type:	Oil Spill
Incident Category:	Oil Spill
Latitude:	47.217
Longitude:	-122.368
Source Type:	Vehicle
Source:	Non-commercial vehicle
Vessel Facility Name2:	Not reported
Recovered Quantity:	1
Resp Party Contact:	Not reported
Cause:	Hydraulic oil spill to roadway
Cause Type:	Not reported
Resp Party Name:	Pierce County Road Ops
Medium Type:	Land
Contributing Factors:	MECHANICAL FAILURE

SPILLS ERTS:

Facility Site ID:	Not reported
Name:	Not reported
Address:	4521 PIONEER WAY E
City,State,Zip:	TACOMA, WA 98443
Program Name:	Spill Prevention, Preparedness & Response
Incident ID:	667874
Incident Status:	Historic
Incident Date:	09/26/2016
Initial Report Activity Name:	Not operating or not performing designed function
Initial Report Cause Category:	Not reported
Initial Report Cause Name:	Not reported
Initial Report Medium Name:	Soil
Initial Report Medium Category:	Ground
Initial Report Source Name:	Non-commercial vehicle
Initial Report Source Category:	Vehicle
Initial Report Substance Name:	Hydraulic oil
Initial Report Substance Category:	Oil
Initial Report Substance Quantity:	Not reported
Initial Report Substance Unit Of Measure:	U.S. gallons
Potentially Responsible Party First Name:	Not reported
Potentially Responsible Party Last Name:	Not reported
Potentially Responsible Party Organization	Pierce County Road Ops
External Reference Number:	Not reported
Latitude:	Not reported
Longitude:	Not reported

5
NNE
1/4-1/2
0.438 mi.
2315 ft.

REESE AND SALSHEIDER FILL
4518 AND 4520 GAY RD
TACOMA, WA

SWF/LF **S118402056**
N/A

Relative:
Lower

Actual:
21 ft.

SWF/LF:

Name:	REESE AND SALSHEIDER FILL
Address:	4518 AND 4520 GAY RD
City,State,Zip:	TACOMA, WA
Facility ID:	2458
Region:	STATE
Permit Status:	Not reported
Contact Organization:	Unaffiliated Historic Landfills
Contact Address1:	Not reported
Contact Address2:	Not reported
Contact City:	Not reported
Contact State:	Not reported
Contact Postal:	Not reported
Contact EMail:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Permit No:	Not reported
Phone:	Not reported
Operator Name:	Not reported
Operator Organization:	Unaffiliated Historic Landfills
Operator EMail:	Not reported
Operator Title:	Not reported
Recycle Survey Code:	Not reported
Ownership:	Not reported
Facility Type:	Historic Landfill (non-regulated)
Contact Name:	Not reported
Contact Title:	Not reported
Year Closed:	Not reported
Open to Public Flag:	No
Website:	Not reported
Operational Status:	Not reported
Recycle Survey Required:	No
Latitude:	Not reported
Longitude:	Not reported

6
SE
1/2-1
0.905 mi.
4779 ft.

PIONEER & CANYON COLLISION
, WA

CSCSL **S123790167**
ALLSITES **N/A**

Relative:
Higher

Actual:
52 ft.

CSCSL:

Name:	PIONEER & CANYON COLLISION
Address:	Not reported
City,State,Zip:	WA
Facility ID:	71608
Region:	Southwest
Lat/Long:	47.205067 / -122.358839
Clean Up Siteid:	14913
Site Status:	Awaiting Cleanup
Contaminant Name:	Benzene
Alternate Site Names:	Not reported
Site Rank:	Not reported
Has Institutional Control:	Not reported

PIONEER & CANYON COLLISION (Continued) **S123790167**

Past VCP: Not reported
Current VCP: Not reported
URL: https://apps.ecology.wa.gov/cleanupsearch/site/14913
Ground Water: Suspected
Surface Water: Suspected
Soil: Suspected
Sediment: Not reported
Air: Not reported
Bedrock: Not reported
Responsible Unit: Southwest

Name: PIONEER & CANYON COLLISION
Address: Not reported
City,State,Zip: WA
Facility ID: 71608
Region: Southwest
Lat/Long: 47.205067 / -122.358839
Clean Up Siteid: 14913
Site Status: Awaiting Cleanup
Contaminant Name: Petroleum-Diesel
Alternate Site Names: Not reported
Site Rank: Not reported
Has Institutional Control: Not reported
Past VCP: Not reported
Current VCP: Not reported
URL: https://apps.ecology.wa.gov/cleanupsearch/site/14913
Ground Water: Suspected
Surface Water: Suspected
Soil: Suspected
Sediment: Not reported
Air: Not reported
Bedrock: Not reported
Responsible Unit: Southwest

ALLSITES:
Name: PIONEER & CANYON COLLISION
Facility Id: 71608

Interaction: 130690
Interaction 1: A
Interaction 2: SCS
Ecology Program: TOXICS
Program Data: ISIS
Facility Alt.: Pioneer & Canyon Collision
Program ID: Not reported
Date Interaction: 09/08/2016
Date Interaction 3: State Cleanup Site
Latitude: 47.205062632
Longitude: -122.35881966

7
NNE
1/2-1
0.966 mi.
5102 ft.

NEAR OLYMPIC PIPLE LINE TACOMA JUNCTION
2660 FRANK ALBERT RD
FIFE, WA 98424

CSCSL
ALLSITES
SPILLS
ASBESTOS

S116362595
N/A

Relative:
Lower

Actual:
22 ft.

CSCSL:

Name:	OPLC TACOMA JUNCTION FACILITY
Address:	2660 FRANK ALBERT RD E
City,State,Zip:	FIFE, WA 98424
Facility ID:	24529
Region:	Southwest
Lat/Long:	47.23261 / -122.36816
Clean Up Siteid:	12943
Site Status:	Cleanup Started
Contaminant Name:	Benzene
Alternate Site Names:	2660 Frank Albert Rd
Site Rank:	Not reported
Has Institutional Control:	Not reported
Past VCP:	Not reported
Current VCP:	Not reported
URL:	https://apps.ecology.wa.gov/cleanupsearch/site/12943
Ground Water:	Confirmed Above Cleanup Levels
Surface Water:	Not reported
Soil:	Remediated-Above
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Southwest

Name:	OPLC TACOMA JUNCTION FACILITY
Address:	2660 FRANK ALBERT RD E
City,State,Zip:	FIFE, WA 98424
Facility ID:	24529
Region:	Southwest
Lat/Long:	47.23261 / -122.36816
Clean Up Siteid:	12943
Site Status:	Cleanup Started
Contaminant Name:	Non-Halogenated Solvents
Alternate Site Names:	2660 Frank Albert Rd
Site Rank:	Not reported
Has Institutional Control:	Not reported
Past VCP:	Not reported
Current VCP:	Not reported
URL:	https://apps.ecology.wa.gov/cleanupsearch/site/12943
Ground Water:	Not reported
Surface Water:	Not reported
Soil:	Remediated-Above
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Southwest

Name:	OPLC TACOMA JUNCTION FACILITY
Address:	2660 FRANK ALBERT RD E
City,State,Zip:	FIFE, WA 98424
Facility ID:	24529
Region:	Southwest
Lat/Long:	47.23261 / -122.36816

NEAR OLYMPIC PIPLE LINE TACOMA JUNCTION (Continued) **S116362595**

Clean Up Siteid: 12943
Site Status: Cleanup Started
Contaminant Name: Other Non-Halogenated Organics
Alternate Site Names: 2660 Frank Albert Rd
Site Rank: Not reported
Has Institutional Control: Not reported
Past VCP: Not reported
Current VCP: Not reported
URL: https://apps.ecology.wa.gov/cleanupsearch/site/12943
Ground Water: Confirmed Above Cleanup Levels
Surface Water: Not reported
Soil: Not reported
Sediment: Not reported
Air: Not reported
Bedrock: Not reported
Responsible Unit: Southwest

Name: OPLC TACOMA JUNCTION FACILITY
Address: 2660 FRANK ALBERT RD E
City,State,Zip: FIFE, WA 98424
Facility ID: 24529
Region: Southwest
Lat/Long: 47.23261 / -122.36816
Clean Up Siteid: 12943
Site Status: Cleanup Started
Contaminant Name: Petroleum-Diesel
Alternate Site Names: 2660 Frank Albert Rd
Site Rank: Not reported
Has Institutional Control: Not reported
Past VCP: Not reported
Current VCP: Not reported
URL: https://apps.ecology.wa.gov/cleanupsearch/site/12943
Ground Water: Confirmed Above Cleanup Levels
Surface Water: Not reported
Soil: Remediated-Above
Sediment: Not reported
Air: Not reported
Bedrock: Not reported
Responsible Unit: Southwest

Name: OPLC TACOMA JUNCTION FACILITY
Address: 2660 FRANK ALBERT RD E
City,State,Zip: FIFE, WA 98424
Facility ID: 24529
Region: Southwest
Lat/Long: 47.23261 / -122.36816
Clean Up Siteid: 12943
Site Status: Cleanup Started
Contaminant Name: Petroleum-Gasoline
Alternate Site Names: 2660 Frank Albert Rd
Site Rank: Not reported
Has Institutional Control: Not reported
Past VCP: Not reported
Current VCP: Not reported
URL: https://apps.ecology.wa.gov/cleanupsearch/site/12943
Ground Water: Confirmed Above Cleanup Levels
Surface Water: Not reported

NEAR OLYMPIC PIPLE LINE TACOMA JUNCTION (Continued) **S116362595**

Soil: Remediated-Above
Sediment: Not reported
Air: Not reported
Bedrock: Not reported
Responsible Unit: Southwest

Name: OPLC TACOMA JUNCTION FACILITY
Address: 2660 FRANK ALBERT RD E
City,State,Zip: FIFE, WA 98424
Facility ID: 24529
Region: Southwest
Lat/Long: 47.23261 / -122.36816
Clean Up Siteid: 12943
Site Status: Cleanup Started
Contaminant Name: Petroleum-Other
Alternate Site Names: 2660 Frank Albert Rd
Site Rank: Not reported
Has Institutional Control: Not reported
Past VCP: Not reported
Current VCP: Not reported
URL: https://apps.ecology.wa.gov/cleanupsearch/site/12943
Ground Water: Confirmed Above Cleanup Levels
Surface Water: Not reported
Soil: Not reported
Sediment: Not reported
Air: Not reported
Bedrock: Not reported
Responsible Unit: Southwest

ALLSITES:
Name: 2660 FRANK ALBERT RD
Facility Id: 24529

Interaction: 116139
Interaction 1: A
Interaction 2: SCS
Ecology Program: TOXICS
Program Data: ISIS
Facility Alt.: 2660 Frank Albert Rd
Program ID: Not reported
Date Interaction: 10/15/2015
Date Interaction 3: State Cleanup Site
Latitude: 47.232603060
Longitude: -122.36814738

SPILLS:
Name: NEAR OLYMPIC PIPLE LINE TACOMA JUNCTION
Address: 2660 FRANK ALBERT RD
City,State,Zip: FIFE, WA 98424
Facility ID: 33057
Medium: Fresh water
Material Desc: Z-OTHER
Material Qty: 1
Material Units: Other
Incident Date: 01/03/2014

NEAR OLYMPIC PIPLE LINE TACOMA JUNCTION (Continued) **S116362595**

Incident Category Type:	Non Oil
Incident Category:	Other Non-Oil
Latitude:	47.232616
Longitude:	-122.368171
Source Type:	Not reported
Source:	Other Source-Other
Vessel Facility Name2:	Not reported
Recovered Quantity:	Not reported
Resp Party Contact:	UNKNOWN
Cause:	ERTS# 646042 - 01/03/2014
Cause Type:	Not reported
Resp Party Name:	Not reported
Medium Type:	Fresh water
Contributing Factors:	Not reported

SPILLS ERTS:

Facility Site ID:	Not reported
Name:	NEAR OLYMPIC PIPLE LINE TACOMA JUNCTION
Address:	2660 FRANK ALBERT RD
City,State,Zip:	FIFE, WA 98424
Program Name:	Spill Prevention, Preparedness & Response
Incident ID:	646042
Incident Status:	Historic
Incident Date:	01/03/2014
Initial Report Activity Name:	Unknown
Initial Report Cause Category:	Not reported
Initial Report Cause Name:	Not reported
Initial Report Medium Name:	Surface water-Fresh
Initial Report Medium Category:	Water
Initial Report Source Name:	Not reported
Initial Report Source Category:	Not reported
Initial Report Substance Name:	Diesel oil/Marine gas
Initial Report Substance Category:	Oil
Initial Report Substance Quantity:	Not reported
Initial Report Substance Unit Of Measure:	U.S. gallons
Potentially Responsible Party First Name:	Not reported
Potentially Responsible Party Last Name:	Uknown
Potentially Responsible Party Organization	Not reported
External Reference Number:	Not reported
Latitude:	47.232616
Longitude:	122.368171

ASBESTOS:

Name:	Not reported
Address:	2660 FRANK ALBERT RD
City,State,Zip:	FIFE, WA 98424
Facility Type:	commercial
Parent ID:	0
Form ID:	101461##1279Envir288801
Notice Date:	06/08/2015
Start Date:	06/29/2015
Completion Date:	06/29/2015
Initial:	1
Amended:	Not reported
On Hold:	Not reported
Off Hold:	Not reported

NEAR OLYMPIC PIPLE LINE TACOMA JUNCTION (Continued) **S116362595**

Emergency:	Not reported
Site Hours Start:	7am
Site Hours End:	3:30pm
Sunday:	Not reported
Monday:	1
Tuesday:	Not reported
Wednesday:	Not reported
Thursday:	Not reported
Friday:	Not reported
Saturday:	Not reported
Contractor ID:	Not reported
Phone:	360-755-1085
Job Site CAS:	Catherine Marquez
Project Form Email:	asbestoseas@comcast.net
Property Owner Name:	Not reported
Property Owner Agent:	Keith Russell
Property Owner Company:	Environmental Abtmnt Srvcs Inc (ABCN00001279)
Property Owner Address:	601 W State
Property Owner City:	Sedro Woolley
Property Owner State:	WA
Property Owner Zip4:	98284
Property Owner Phone:	360-391-8383
Job Site Room:	Not reported
Facility Age:	‘1950
Facility Size:	150
Facility Remodel:	1
Facility Demo:	Not reported
Facility Repair:	Not reported
Facility Maint:	Not reported
Removed:	1
Encapsulated:	Not reported
Quantity Sq Ft:	316
Fireproofing:	Not reported
Popcorn Ceiling:	Not reported
CAB:	Not reported
Sheet Vinyl:	Not reported
Asbestos Paper:	Not reported
Boiler Insulation:	Not reported
Duct Paper:	Not reported
VAT:	1
Roofing:	1
Sq Ft Other:	1
Sq Ft Other Text:	countertop
Quantity Lin Ft:	Not reported
Mag Pipe Insulation:	Not reported
Air Cell Pipe Insulation:	Not reported
Ducting Insulation:	Not reported
Cement Asbestos Pipe:	Not reported
Mudded Pipe Insulation:	Not reported
Duct Tape:	Not reported
Lin Ft Other1:	Not reported
Lin Ft Other1 Text:	Not reported
Lin Ft Other2:	Not reported
Lin Ft Other2 Text:	Not reported
Indoors:	1
Outdoors:	1
Neg Pres Enclosure:	Not reported

NEAR OLYMPIC PIPLE LINE TACOMA JUNCTION (Continued) **S116362595**

Glove Bag:	Not reported
Mini Enclosure:	Not reported
Critical Barriers:	1
Wrap And Cut:	Not reported
Wet Methods:	1
HEPA Vacuum:	1
MANUALMETHODS :	1
Other CM1:	Not reported
Other CM1 Text:	Not reported
Other CM2:	Not reported
Other CM2 Text:	Not reported
Half Mask APR:	1
Full Face APR:	Not reported
PAPR:	Not reported
Type C Continuous:	Not reported
Type C Pressure:	Not reported
Other Resp Pro:	Not reported
Other Resp Pro Text:	Not reported
Comments:	Not reported
Date Time Submitted:	2015-06-08 13:23:18
Submitter IP Address:	67.183.249.78
Region:	3
UBI:	601991237
Notice type:	Initial
Project Type:	Other Square Footage, Roofing, Vinyl Asbestos Tile
Supervisor:	Catherine Marquez ()
Supervisor Phone:	Not reported
Certificate Status:	ACTIVE

Name:	Not reported
Address:	2660 FRANK ALBERT RD
City,State,Zip:	FIFE, WA 98424
Facility Type:	commercial
Parent ID:	101461
Form ID:	102915##1577Puget965380
Notice Date:	07/08/2015
Start Date:	07/08/2015
Completion Date:	07/08/2015
Initial:	Not reported
Amended:	1
On Hold:	Not reported
Off Hold:	Not reported
Emergency:	Not reported
Site Hours Start:	7: a.m.
Site Hours End:	2:00 p.m.
Sunday:	Not reported
Monday:	Not reported
Tuesday:	Not reported
Wednesday:	1
Thursday:	Not reported
Friday:	Not reported
Saturday:	Not reported
Contractor ID:	Not reported
Phone:	425-757-6872
Job Site CAS:	Ismael Arenas
Project Form Email:	asbestoseas@comcast.net
Property Owner Name:	Not reported

NEAR OLYMPIC PIPLE LINE TACOMA JUNCTION (Continued) **S116362595**

Property Owner Agent:	Keith Russell
Property Owner Company:	Puget Sound Abatement LLC (ABCN00001577)
Property Owner Address:	601 W State
Property Owner City:	Sedro Woolley
Property Owner State:	WA
Property Owner Zip4:	98284
Property Owner Phone:	360-391-8383
Job Site Room:	Not reported
Facility Age:	‘1950
Facility Size:	150
Facility Remodel:	1
Facility Demo:	Not reported
Facility Repair:	Not reported
Facility Maint:	Not reported
Removed:	1
Encapsulated:	Not reported
Quantity Sq Ft:	120
Fireproofing:	Not reported
Popcorn Ceiling:	Not reported
CAB:	Not reported
Sheet Vinyl:	Not reported
Asbestos Paper:	Not reported
Boiler Insulation:	Not reported
Duct Paper:	Not reported
VAT:	1
Roofing:	Not reported
Sq Ft Other:	1
Sq Ft Other Text:	Mastic
Quantity Lin Ft:	Not reported
Mag Pipe Insulation:	Not reported
Air Cell Pipe Insulation:	Not reported
Ducting Insulation:	Not reported
Cement Asbestos Pipe:	Not reported
Mudded Pipe Insulation:	Not reported
Duct Tape:	Not reported
Lin Ft Other1:	Not reported
Lin Ft Other1 Text:	Not reported
Lin Ft Other2:	Not reported
Lin Ft Other2 Text:	Not reported
Indoors:	Not reported
Outdoors:	1
Neg Pres Enclosure:	Not reported
Glove Bag:	Not reported
Mini Enclosure:	Not reported
Critical Barriers:	Not reported
Wrap And Cut:	Not reported
Wet Methods:	1
HEPA Vacuum:	1
MANUALMETHODS :	1
Other CM1:	Not reported
Other CM1 Text:	Not reported
Other CM2:	1
Other CM2 Text:	demarcation
Half Mask APR:	1
Full Face APR:	Not reported
PAPR:	Not reported
Type C Continuous:	Not reported

NEAR OLYMPIC PIPLE LINE TACOMA JUNCTION (Continued) **S116362595**

Type C Pressure:	Not reported
Other Resp Pro:	Not reported
Other Resp Pro Text:	Not reported
Comments:	Spoke with John Stebbins about using the same notification previously filed by Environmental. Existing Abatement company got kicked off job for Starting when no one was on site. There is nor roofing or countertops to abate. I removed them off of the old notification.
Date Time Submitted:	2015-07-08 06:08:46
Submitter IP Address:	216.160.123.110
Region:	3
UBI:	603345715
Notice type:	Initial
Project Type:	Other Square Footage, Vinyl Asbestos Tile
Supervisor:	Ismael Arenas ()
Supervisor Phone:	Not reported
Certificate Status:	ACTIVE
Name:	Not reported
Address:	2660 FRANK ALBERT RD
City,State,Zip:	FIFE, WA 98424
Facility Type:	commercial
Parent ID:	101461
Form ID:	102028##1279Envir215200
Notice Date:	06/19/2015
Start Date:	07/06/2015
Completion Date:	07/06/2015
Initial:	Not reported
Amended:	1
On Hold:	Not reported
Off Hold:	Not reported
Emergency:	Not reported
Site Hours Start:	7am
Site Hours End:	3:30pm
Sunday:	Not reported
Monday:	1
Tuesday:	Not reported
Wednesday:	Not reported
Thursday:	Not reported
Friday:	Not reported
Saturday:	Not reported
Contractor ID:	Not reported
Phone:	360-755-1085
Job Site CAS:	Catherine Marquez
Project Form Email:	asbestoseas@comcast.net
Property Owner Name:	Not reported
Property Owner Agent:	Keith Russell
Property Owner Company:	Environmental Abtmnt Srvcs Inc (ABCN00001279)
Property Owner Address:	601 W State
Property Owner City:	Sedro Woolley
Property Owner State:	WA
Property Owner Zip4:	98284
Property Owner Phone:	360-391-8383
Job Site Room:	Not reported
Facility Age:	‘1950
Facility Size:	150
Facility Remodel:	1
Facility Demo:	Not reported

NEAR OLYMPIC PIPLE LINE TACOMA JUNCTION (Continued) **S116362595**

Facility Repair:	Not reported
Facility Maint:	Not reported
Removed:	1
Encapsulated:	Not reported
Quantity Sq Ft:	316
Fireproofing:	Not reported
Popcorn Ceiling:	Not reported
CAB:	Not reported
Sheet Vinyl:	Not reported
Asbestos Paper:	Not reported
Boiler Insulation:	Not reported
Duct Paper:	Not reported
VAT:	1
Roofing:	1
Sq Ft Other:	1
Sq Ft Other Text:	countertop
Quantity Lin Ft:	Not reported
Mag Pipe Insulation:	Not reported
Air Cell Pipe Insulation:	Not reported
Ducting Insulation:	Not reported
Cement Asbestos Pipe:	Not reported
Mudded Pipe Insulation:	Not reported
Duct Tape:	Not reported
Lin Ft Other1:	Not reported
Lin Ft Other1 Text:	Not reported
Lin Ft Other2:	Not reported
Lin Ft Other2 Text:	Not reported
Indoors:	1
Outdoors:	1
Neg Pres Enclosure:	Not reported
Glove Bag:	Not reported
Mini Enclosure:	Not reported
Critical Barriers:	1
Wrap And Cut:	Not reported
Wet Methods:	1
HEPA Vacuum:	1
MANUALMETHODS :	1
Other CM1:	Not reported
Other CM1 Text:	Not reported
Other CM2:	Not reported
Other CM2 Text:	Not reported
Half Mask APR:	1
Full Face APR:	Not reported
PAPR:	Not reported
Type C Continuous:	Not reported
Type C Pressure:	Not reported
Other Resp Pro:	Not reported
Other Resp Pro Text:	Not reported
Comments:	Not reported
Date Time Submitted:	2015-06-19 10:02:30
Submitter IP Address:	67.160.73.38
Region:	3
UBI:	601991237
Notice type:	Initial
Project Type:	Other Square Footage, Roofing, Vinyl Asbestos Tile
Supervisor:	Catherine Marquez ()
Supervisor Phone:	Not reported

NEAR OLYMPIC PIPLE LINE TACOMA JUNCTION (Continued) **S116362595**

Certificate Status:	ACTIVE
Name:	Not reported
Address:	2660 FRANK ALBERT RD
City,State,Zip:	FIFE, WA 98424
Facility Type:	commercial
Parent ID:	101461
Form ID:	102780##1279Envir079297
Notice Date:	07/06/2015
Start Date:	07/06/2015
Completion Date:	07/06/2015
Initial:	Not reported
Amended:	1
On Hold:	1
Off Hold:	Not reported
Emergency:	Not reported
Site Hours Start:	7am
Site Hours End:	3:30pm
Sunday:	Not reported
Monday:	1
Tuesday:	Not reported
Wednesday:	Not reported
Thursday:	Not reported
Friday:	Not reported
Saturday:	Not reported
Contractor ID:	Not reported
Phone:	360-755-1085
Job Site CAS:	Catherine Marquez
Project Form Email:	asbestoseas@comcast.net
Property Owner Name:	Not reported
Property Owner Agent:	Keith Russell
Property Owner Company:	Environmental Abtmnt Srvcs Inc (ABCN00001279)
Property Owner Address:	601 W State
Property Owner City:	Sedro Woolley
Property Owner State:	WA
Property Owner Zip4:	98284
Property Owner Phone:	360-391-8383
Job Site Room:	Not reported
Facility Age:	‘1950
Facility Size:	150
Facility Remodel:	1
Facility Demo:	Not reported
Facility Repair:	Not reported
Facility Maint:	Not reported
Removed:	1
Encapsulated:	Not reported
Quantity Sq Ft:	316
Fireproofing:	Not reported
Popcorn Ceiling:	Not reported
CAB:	Not reported
Sheet Vinyl:	Not reported
Asbestos Paper:	Not reported
Boiler Insulation:	Not reported
Duct Paper:	Not reported
VAT:	1
Roofing:	1
Sq Ft Other:	1

NEAR OLYMPIC PIPLE LINE TACOMA JUNCTION (Continued) **S116362595**

Sq Ft Other Text:	countertop
Quantity Lin Ft:	Not reported
Mag Pipe Insulation:	Not reported
Air Cell Pipe Insulation:	Not reported
Ducting Insulation:	Not reported
Cement Asbestos Pipe:	Not reported
Mudded Pipe Insulation:	Not reported
Duct Tape:	Not reported
Lin Ft Other1:	Not reported
Lin Ft Other1 Text:	Not reported
Lin Ft Other2:	Not reported
Lin Ft Other2 Text:	Not reported
Indoors:	1
Outdoors:	1
Neg Pres Enclosure:	Not reported
Glove Bag:	Not reported
Mini Enclosure:	Not reported
Critical Barriers:	1
Wrap And Cut:	Not reported
Wet Methods:	1
HEPA Vacuum:	1
MANUALMETHODS :	1
Other CM1:	Not reported
Other CM1 Text:	Not reported
Other CM2:	Not reported
Other CM2 Text:	Not reported
Half Mask APR:	1
Full Face APR:	Not reported
PAPR:	Not reported
Type C Continuous:	Not reported
Type C Pressure:	Not reported
Other Resp Pro:	Not reported
Other Resp Pro Text:	Not reported
Comments:	Not reported
Date Time Submitted:	2015-07-06 08:36:01
Submitter IP Address:	67.160.73.38
Region:	3
UBI:	601991237
Notice type:	Initial
Project Type:	Other Square Footage, Roofing, Vinyl Asbestos Tile
Supervisor:	Catherine Marquez ()
Supervisor Phone:	Not reported
Certificate Status:	ACTIVE

Count: 3 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
PIERCE COUNTY	S118401734	GEORGE LEINGANG DUMP	4606 GAY RD		SWF/LF
PIERCE COUNTY	S118401558	CANYON SAND & GRAVEL	IMMEDIATLY S OF 4715 PIONEER W		SWF/LF
PIERCE COUNTY	S118401723	FRED MASELLA & WALTER MIKESKI DUMP	4214 RIVER RD AND 3937 GAY RD		SWF/LF

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: EPA
Telephone: N/A
Last EDR Contact: 06/02/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: EPA
Telephone: N/A
Last EDR Contact: 06/02/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: EPA
Telephone: N/A
Last EDR Contact: 06/02/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 03/26/2023
Date Data Arrived at EDR: 03/28/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 06/23/2023
Next Scheduled EDR Contact: 10/09/2023
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/02/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/02/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/20/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 06/20/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 06/20/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 06/20/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 06/20/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/08/2023
Date Data Arrived at EDR: 02/09/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 82

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 08/21/2023
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/20/2023
Date Data Arrived at EDR: 02/21/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/20/2023
Date Data Arrived at EDR: 02/21/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/20/2023
Date Data Arrived at EDR: 03/21/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 70

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/20/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

HSL: Hazardous Sites List

The Hazardous Sites List is a subset of the CSCSL Report. It includes sites which have been assessed and ranked using the Washington Ranking Method (WARM).

Date of Government Version: 02/23/2023
Date Data Arrived at EDR: 03/02/2023
Date Made Active in Reports: 05/22/2023
Number of Days to Update: 81

Source: Department of Ecology
Telephone: 360-407-7200
Last EDR Contact: 05/30/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Semi-Annually

Lists of state- and tribal hazardous waste facilities

CSCSL: Confirmed and Suspected Contaminated Sites List

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 01/09/2023
Date Data Arrived at EDR: 01/11/2023
Date Made Active in Reports: 03/29/2023
Number of Days to Update: 77

Source: Department of Ecology
Telephone: 360-407-7200
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF: Solid Waste Facility Database

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/30/2022
Date Data Arrived at EDR: 12/27/2022
Date Made Active in Reports: 12/30/2022
Number of Days to Update: 3

Source: Department of Ecology
Telephone: 360-407-6132
Last EDR Contact: 05/22/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Annually

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tanks Site List

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 02/06/2023
Date Data Arrived at EDR: 02/08/2023
Date Made Active in Reports: 04/28/2023
Number of Days to Update: 79

Source: Department of Ecology
Telephone: 360-407-7183
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 08/21/2023
Data Release Frequency: Quarterly

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/14/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 134
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/19/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/26/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/14/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 05/08/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 82
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

UST: Underground Storage Tank Database
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 02/06/2023
Date Data Arrived at EDR: 02/08/2023
Date Made Active in Reports: 04/28/2023
Number of Days to Update: 79
Source: Department of Ecology
Telephone: 360-407-7183
Last EDR Contact: 05/10/2023
Next Scheduled EDR Contact: 08/21/2023
Data Release Frequency: Quarterly

AST: Aboveground Storage Tank Locations
A listing of aboveground storage tank locations regulated by the Department of Ecology's Spill Prevention, Preparedness and Response Program.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 02/02/2016
Date Made Active in Reports: 05/03/2016
Number of Days to Update: 91
Source: Department of Ecology
Telephone: 360-407-7562
Last EDR Contact: 04/20/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 134
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87
Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/14/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/19/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/14/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

INST CONTROL: Institutional Control Site List

The Environmental Covenants Registry is a list of sites that have implemented institutional controls as part of the remedy. Institutional controls are administrative or legal measures used to prevent activities that may compromise the integrity of a cleanup action. They are meant to prevent exposure to contamination remaining on site. Institutional controls may include environmental covenants (also known as "deed restrictions"), zoning restrictions, public health advisories, or other administrative tools. The most common institutional control is an environmental covenant. Environmental covenants are legal recorded documents that typically limit certain uses of the property, such as: Drilling a water supply well on the property. Disturbing pavement covering contaminated areas. Residential use of the property.

Date of Government Version: 01/09/2023
Date Data Arrived at EDR: 01/11/2023
Date Made Active in Reports: 03/29/2023
Number of Days to Update: 77

Source: Department of Ecology
Telephone: 360-407-7170
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Quarterly

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/13/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Sites

Sites that have entered either the Voluntary Cleanup Program or its predecessor Independent Remedial Action Program.

Date of Government Version: 01/09/2023
Date Data Arrived at EDR: 01/11/2023
Date Made Active in Reports: 03/29/2023
Number of Days to Update: 77

Source: Department of Ecology
Telephone: 360-407-7200
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Varies

ICR: Independent Cleanup Reports

These are remedial action reports Ecology has received from either the owner or operator of the sites. These actions have been conducted without department oversight or approval and are not under an order or decree. This database is no longer updated by the Department of Ecology.

Date of Government Version: 12/01/2002
Date Data Arrived at EDR: 01/03/2003
Date Made Active in Reports: 01/22/2003
Number of Days to Update: 19

Source: Department of Ecology
Telephone: 360-407-7200
Last EDR Contact: 08/10/2009
Next Scheduled EDR Contact: 11/09/2009
Data Release Frequency: No Update Planned

PTAP: PTAP Site Listing

A list of sites accepted into the Petroleum Technical Assistance Program. The Petroleum Technical Assistance Program (PTAP) expands the state's ability to respond to the high customer demand to clean up petroleum contaminated sites. Under the PTAP, the Pollution Liability Insurance Agency (PLIA) may provide informal site-specific technical consultations and issue written opinion letters to persons conducting independent remedial actions at qualifying petroleum cleanup sites. PLIA may provide these services under the authority of RCW 70.149.040(9) and the Model Toxics Control Act (MTCA), Chapter 70.149 RCW and Chapter 173-340 WAC.

Date of Government Version: 01/31/2023
Date Data Arrived at EDR: 02/01/2023
Date Made Active in Reports: 02/01/2023
Number of Days to Update: 0

Source: Department of Ecology
Telephone: 360-407-0515
Last EDR Contact: 05/10/2023
Next Scheduled EDR Contact: 08/21/2023
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS: Brownfields Sites Listing

A listing of brownfields sites included in the Confirmed & Suspected Sites Listing. Brownfields are abandoned, idle or underused commercial or industrial properties, where the expansion or redevelopment is hindered by real or perceived contamination. Brownfields vary in size, location, age, and past use -- they can be anything from a five-hundred acre automobile assembly plant to a small, abandoned corner gas station.

Date of Government Version: 04/10/2023
Date Data Arrived at EDR: 04/12/2023
Date Made Active in Reports: 06/30/2023
Number of Days to Update: 79

Source: Department of Ecology
Telephone: 360-725-4030
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 04/06/2023
Date Data Arrived at EDR: 04/13/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/08/2023
Next Scheduled EDR Contact: 09/25/2023
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWTIRE 2: Solid Waste Tire Facilities 2

solid waste tire piles

Date of Government Version: 06/01/2022
Date Data Arrived at EDR: 06/23/2022
Date Made Active in Reports: 09/12/2022
Number of Days to Update: 81

Source: Department of Ecology
Telephone: 425-649-7104
Last EDR Contact: 05/24/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

SWTIRE: Solid Waste Tire Facilities

This study identified sites statewide with unauthorized accumulations of scrap tires.

Date of Government Version: 11/01/2005
Date Data Arrived at EDR: 03/16/2006
Date Made Active in Reports: 04/13/2006
Number of Days to Update: 28

Source: Department of Ecology
Telephone: N/A
Last EDR Contact: 09/08/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Varies

SWRCY: Recycling Facility List
A llisting of recycling center locations.

Date of Government Version: 01/19/2023
Date Data Arrived at EDR: 01/25/2023
Date Made Active in Reports: 04/10/2023
Number of Days to Update: 75
Source: Department of Ecology
Telephone: 360-407-6105
Last EDR Contact: 04/13/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/19/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/27/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 01/06/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 8
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: No Update Planned

ALLSITES: Facility/Site Identification System Listing
Information on facilities and sites of interest to the Department of Ecology.

Date of Government Version: 01/23/2023
Date Data Arrived at EDR: 01/25/2023
Date Made Active in Reports: 04/11/2023
Number of Days to Update: 76

Source: Department of Ecology
Telephone: 360-407-6423
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Quarterly

CDL: Clandestine Drug Lab Contaminated Site List
Illegal methamphetamine labs use hazardous chemicals that create public health hazards. Chemicals and residues can cause burns, respiratory and neurological damage, and death. Biological hazards associated with intravenous needles, feces, and blood also pose health risks.

Date of Government Version: 01/31/2023
Date Data Arrived at EDR: 02/07/2023
Date Made Active in Reports: 04/28/2023
Number of Days to Update: 80

Source: Department of Health
Telephone: 360-236-3380
Last EDR Contact: 04/27/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

HIST CDL: List of Sites Contaminated by Clandestine Drug Labs
This listing of contaminated sites by Clandestine Drug Labs includes non-remediated properties. The current CDL listing does not. This listing is no longer updated by the state agency.

Date of Government Version: 02/08/2007
Date Data Arrived at EDR: 06/26/2007
Date Made Active in Reports: 07/19/2007
Number of Days to Update: 23

Source: Department of Health
Telephone: 360-236-3381
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

CSCSL NFA: Confirmed and Contaminated Sites - No Further Action
This report contains information about sites that are undergoing cleanup and sites that are awaiting further investigation and/or cleanup. Sites on the Hazardous Sites List (see above) are included in this data set.

Date of Government Version: 04/10/2023
Date Data Arrived at EDR: 04/12/2023
Date Made Active in Reports: 06/30/2023
Number of Days to Update: 79

Source: Department of Ecology
Telephone: 360-407-7170
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 01/06/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 8

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Quarterly

Local Land Records

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 06/02/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/19/2023
Date Data Arrived at EDR: 03/21/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 70

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/20/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

SPILLS ERTS: Environmental Report Tracking System Listing
All programs in Ecology use the ERTS System for any Incidents regardless of the ?type? of incident. The programs include; Spills, Hazardous Waste, Water Quality, Air Quality, Toxics Cleanup, Water Resources, etc.

Date of Government Version: 03/13/2023
Date Data Arrived at EDR: 03/24/2023
Date Made Active in Reports: 06/07/2023
Number of Days to Update: 75

Source: Department of Ecology
Telephone: 360-407-7455
Last EDR Contact: 05/24/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

SPILLS: Reported Spills
Spills reported to the Spill Prevention, Preparedness and Response Division.

Date of Government Version: 02/27/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 05/22/2023
Number of Days to Update: 80

Source: Department of Ecology
Telephone: 360-407-6950
Last EDR Contact: 05/24/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Semi-Annually

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 05/23/2006
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/06/2013
Number of Days to Update: 62

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 06/20/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 02/01/2023
Date Data Arrived at EDR: 02/14/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 77

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/16/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/11/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 08/21/2023
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/13/2023
Date Data Arrived at EDR: 03/21/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/20/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/01/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/04/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/16/2023
Next Scheduled EDR Contact: 09/25/2023
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 02/16/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 75

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/19/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 01/17/2023
Date Data Arrived at EDR: 01/18/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 91

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/18/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/02/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/04/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 06/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 06/02/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/20/2023
Date Data Arrived at EDR: 04/04/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 66

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/04/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/15/2023
Date Data Arrived at EDR: 03/21/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 70
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 04/13/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 84
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/04/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 06/22/2023
Next Scheduled EDR Contact: 10/09/2023
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 04/07/2023
Number of Days to Update: 85

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 06/20/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/06/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/24/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 06/02/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 04/03/2023
Date Data Arrived at EDR: 04/04/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 66

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 05/24/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/02/2023
Date Data Arrived at EDR: 02/22/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 84

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/24/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 01/07/2022
Date Data Arrived at EDR: 02/24/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 82

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/17/2023
Date Data Arrived at EDR: 03/17/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 74
Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/13/2023
Next Scheduled EDR Contact: 09/18/2023
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/02/2023
Date Data Arrived at EDR: 02/28/2023
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 24
Source: EPA
Telephone: (206) 553-1200
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 11/09/2021
Date Data Arrived at EDR: 10/20/2022
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 82
Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/27/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/25/2023
Date Data Arrived at EDR: 03/31/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 70
Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 06/29/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82
Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/17/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/13/2023
Date Data Arrived at EDR: 02/14/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 64
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/17/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 06/07/2023
Date Data Arrived at EDR: 06/08/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 1

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 06/08/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/07/2023
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 04/20/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/07/2023
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/03/2023
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS ECHO FIRE TRAINING: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/03/2023
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS PART 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/03/2023
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 5

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/27/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

PFOS and PFOA stand for perfluorooctane sulfonate and perfluorooctanoic acid, respectively. Both are fluorinated organic chemicals, part of a larger family of compounds referred to as perfluoroalkyl substances (PFASs).

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 06/20/2023
Number of Days to Update: 82

Source: Department of Ecology
Telephone: 360-407-6116
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

AQUEOUS FOAM: Firefighting Foam Incidents

Aqueous film-forming foam-laced water running off from fuel spills, firefighting events and routine training sessions has put those chemicals in ground water, surface water, sediments, biota, and other natural resources of the state.

Date of Government Version: 03/21/2023
Date Data Arrived at EDR: 03/22/2023
Date Made Active in Reports: 06/07/2023
Number of Days to Update: 77

Source: Department of Ecology
Telephone: 360-407-6116
Last EDR Contact: 06/28/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

AIRS (EMI): Washington Emissions Data System

Emissions inventory data.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 07/12/2022
Date Made Active in Reports: 09/28/2022
Number of Days to Update: 78

Source: Department of Ecology
Telephone: 360-407-6040
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Annually

ASBESTOS: Asbestos Notification Listing

Asbestos sites

Date of Government Version: 02/17/2023
Date Data Arrived at EDR: 02/17/2023
Date Made Active in Reports: 03/10/2023
Number of Days to Update: 21

Source: Department of Labor & Industries
Telephone: 360-902-6209
Last EDR Contact: 06/01/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Site Listing

A listing of coal ash disposal site locations.

Date of Government Version: 07/11/2022
Date Data Arrived at EDR: 07/20/2022
Date Made Active in Reports: 10/04/2022
Number of Days to Update: 76

Source: Department of Ecology
Telephone: 360-407-6933
Last EDR Contact: 05/24/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEANERS: Drycleaner List

A listing of registered drycleaners who registered with the Department of Ecology (using the SIC code of 7215 and 7216) as hazardous waste generators.

Date of Government Version: 04/10/2023
Date Data Arrived at EDR: 04/12/2023
Date Made Active in Reports: 06/30/2023
Number of Days to Update: 79

Source: Department of Ecology
Telephone: 360-407-6732
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

A listing of financial assurance information for underground storage tank facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/17/2023
Date Data Arrived at EDR: 02/23/2023
Date Made Active in Reports: 05/10/2023
Number of Days to Update: 76

Source: Department of Ecology
Telephone: 360-586-1060
Last EDR Contact: 05/18/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: No Update Planned

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/17/2023
Date Data Arrived at EDR: 02/17/2023
Date Made Active in Reports: 05/10/2023
Number of Days to Update: 82

Source: Department of Ecology
Telephone: 360-407-6754
Last EDR Contact: 05/04/2023
Next Scheduled EDR Contact: 08/21/2023
Data Release Frequency: Varies

Financial Assurance 3: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/15/2017
Date Data Arrived at EDR: 11/20/2017
Date Made Active in Reports: 01/04/2018
Number of Days to Update: 45

Source: Department of Ecology
Telephone: 360-407-6136
Last EDR Contact: 04/07/2023
Next Scheduled EDR Contact: 08/21/2023
Data Release Frequency: No Update Planned

INACTIVE DRYCLEANERS: Inactive Drycleaners

A listing of inactive drycleaner facility locations.

Date of Government Version: 04/10/2023
Date Data Arrived at EDR: 04/12/2023
Date Made Active in Reports: 06/30/2023
Number of Days to Update: 79

Source: Department of Ecology
Telephone: 360-407-6732
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Annually

WA MANIFEST: Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 08/11/2021
Date Made Active in Reports: 11/23/2021
Number of Days to Update: 104

Source: Department of Ecology
Telephone: N/A
Last EDR Contact: 06/07/2023
Next Scheduled EDR Contact: 09/25/2023
Data Release Frequency: Annually

NPDES: Water Quality Permit System Data
A listing of permitted wastewater facilities.

Date of Government Version: 01/10/2023
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/29/2023
Number of Days to Update: 76

Source: Department of Ecology
Telephone: 360-407-6073
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Quarterly

UIC: Underground Injection Wells Listing
A listing of underground injection wells.

Date of Government Version: 01/12/2023
Date Data Arrived at EDR: 01/26/2023
Date Made Active in Reports: 03/08/2023
Number of Days to Update: 41

Source: Department of Ecology
Telephone: 360-407-6143
Last EDR Contact: 04/06/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Quarterly

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI
Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 06/07/2023
Date Data Arrived at EDR: 06/08/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 1

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 06/08/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 08/23/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 98

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Ecology in Washington.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/2013
Number of Days to Update: 176

Source: Department of Ecology
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Ecology in Washington.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Department of Ecology
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Ecology in Washington.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/2013
Number of Days to Update: 176

Source: Department of Ecology
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

KING COUNTY:

LF KING: Abandoned Landfill Study in King County

The King County Abandoned Landfill Survey was conducted from October through December 1984 by the Health Department's Environmental Health Division at the request of the King County Council. The primary objective of the survey was to determine if any public health problems existed at the predetermined 24 sites.

Date of Government Version: 04/30/1985
Date Data Arrived at EDR: 11/07/1994
Date Made Active in Reports: N/A
Number of Days to Update: 0

Source: Seattle-King County Department of Public Health
Telephone: 206-296-4785
Last EDR Contact: 10/21/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SEATTLE COUNTY:

LF SEATTLE CITY: Abandoned Landfill Study in the City of Seattle

The Seattle Abandoned Landfill Survey was conducted in June and July of 1984 by the Health Department's Environmental Health Division at the request of the Mayor's Office. The primary objective of the survey was to determine if any public health problems existed at the predetermined 12 sites.

Date of Government Version: 07/30/1984
Date Data Arrived at EDR: 11/07/1994
Date Made Active in Reports: N/A
Number of Days to Update: 0

Source: Seattle - King County Department of Public Health
Telephone: 206-296-4785
Last EDR Contact: 10/21/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SEATTLE/KING COUNTY:

LF SEATTLE/KING: Seattle - King County Abandoned Landfill Toxicity / Hazard Assessment Project
This report presents the Seattle-King County Health Department's follow-up investigation of two city owned and four county owned abandoned landfills which was conducted from February to December 1986.

Date of Government Version: 12/31/1986
Date Data Arrived at EDR: 08/18/1995
Date Made Active in Reports: 09/20/1995
Number of Days to Update: 33

Source: Department of Public Health
Telephone: 206-296-4785
Last EDR Contact: 08/14/1995
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SNOHOMISH COUNTY:

LF SNOHOMISH: Solid Waste Sites of Record at Snohomish Health District
Solid waste disposal and/or utilization sites in Snohomish County.

Date of Government Version: 09/23/2019
Date Data Arrived at EDR: 09/25/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 29

Source: Snohomish Health District
Telephone: 206-339-5250
Last EDR Contact: 06/07/2023
Next Scheduled EDR Contact: 09/25/2023
Data Release Frequency: No Update Planned

TACOMA/PIERCE COUNTY:

LF TACOMA/PIERCE: Closed Landfill Survey
Following numerous requests for information about closed dumpsites and landfills in Pierce County, the Tacoma-Pierce County Health Department decided to conduct a study on the matter. The aim of the study was to evaluate public health risks associated with the closed dumpsites and landfills, and to determine the need, if any, for further investigations of a more detailed nature. The sites represent all of the known dumpsites and landfills closed after 1950.

Date of Government Version: 09/01/2002
Date Data Arrived at EDR: 03/24/2003
Date Made Active in Reports: 05/14/2003
Number of Days to Update: 51

Source: Tacoma-Pierce County Health Department
Telephone: 206-591-6500
Last EDR Contact: 03/19/2003
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/16/2022
Date Data Arrived at EDR: 11/16/2022
Date Made Active in Reports: 02/06/2023
Number of Days to Update: 82

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 08/21/2023
Data Release Frequency: No Update Planned

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 04/27/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/06/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/01/2023
Next Scheduled EDR Contact: 09/18/2023
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Daycare Center Listing
Source: Department of Social & Health Services
Telephone: 253-383-1735

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Ecology
Telephone: 360-407-6121

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

TROUT LODGE - CLEAR CREEK PROJECT
4008 PIONEER WAY
TACOMA, WA 98443

TARGET PROPERTY COORDINATES

Latitude (North):	47.217401 - 47° 13' 2.64''
Longitude (West):	122.373356 - 122° 22' 24.08''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	547448.8
UTM Y (Meters):	5229295.5
Elevation:	43 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	14742704 PUYALLUP, WA
Version Date:	2020
Southwest Map:	14742728 TACOMA SOUTH, WA
Version Date:	2020

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

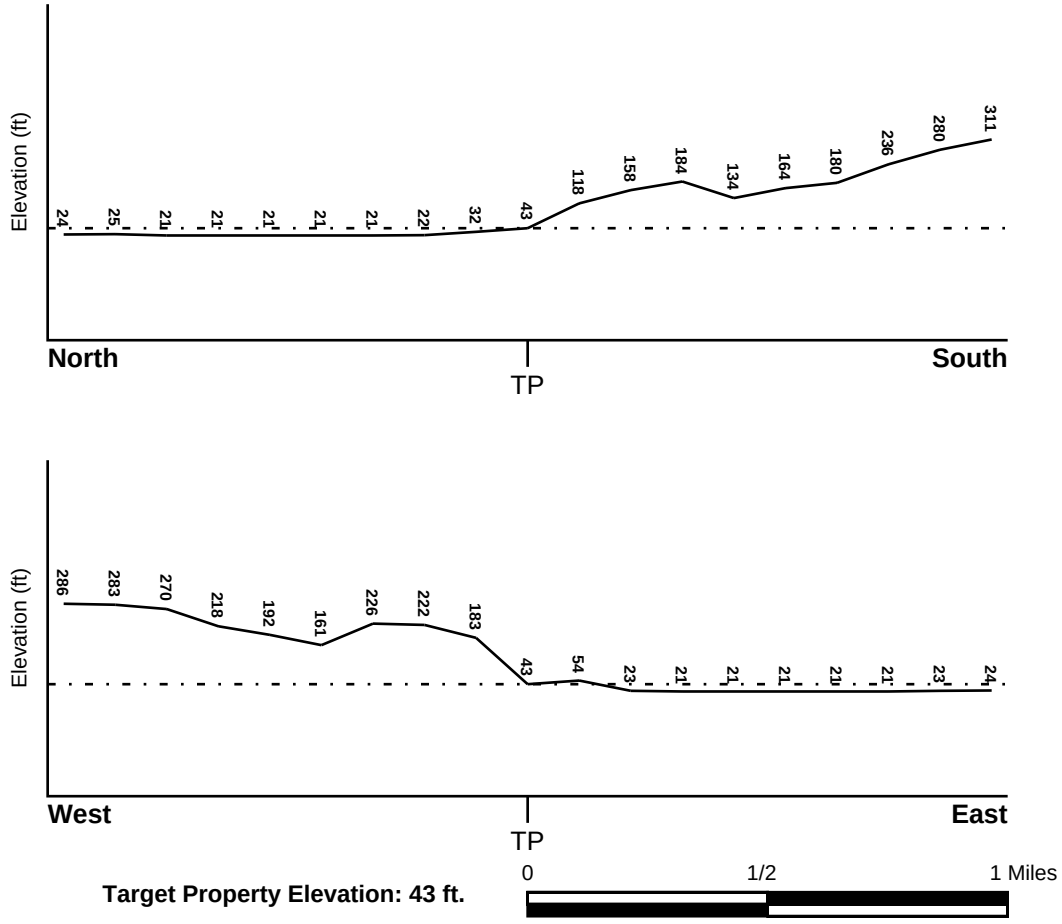
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ENE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 43 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
5301380328C	FEMA Q3 Flood data

Additional Panels in search area:	FEMA Source Type
5301400005B	FEMA Q3 Flood data
5301380307C	FEMA Q3 Flood data
5301380326C	FEMA Q3 Flood data
5301480035B	FEMA Q3 Flood data
5301380309C	FEMA Q3 Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
PUYALLUP	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

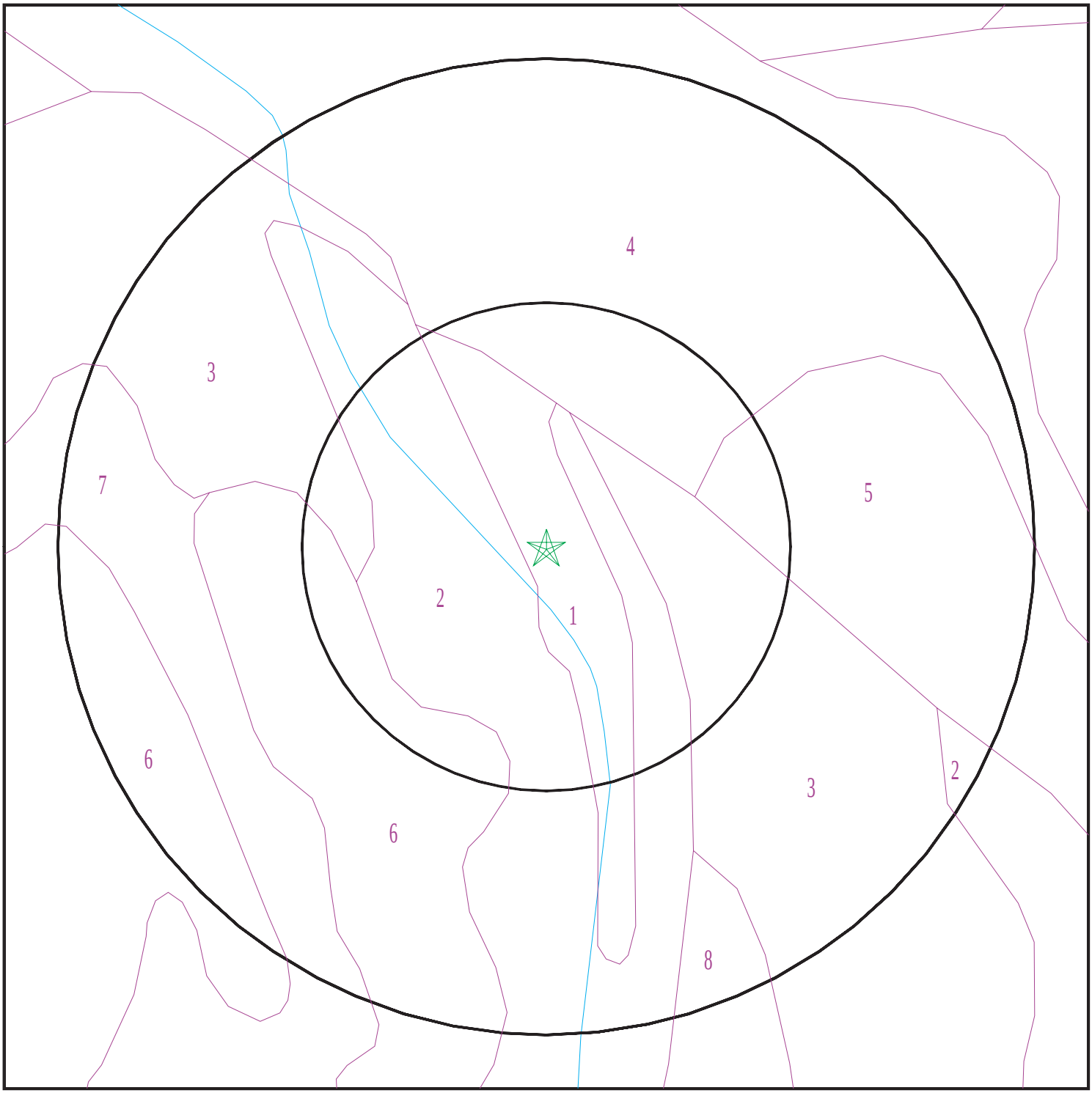
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 7382051.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Trout Lodge - Clear Creek Project	CLIENT:	HNTB CORPORATION
ADDRESS:	4008 Pioneer Way Tacoma WA 98443	CONTACT:	Buffie Chournos
LAT/LONG:	47.217401 / 122.373356	INQUIRY #:	7382051.2s
		DATE:	July 05, 2023 4:41 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name:	Urban land
Soil Surface Texture:	
Hydrologic Group:	Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.
Soil Drainage Class:	
Hydric Status: Not hydric	
Corrosion Potential - Uncoated Steel:	Not Reported
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 0 inches

No Layer Information available.

Soil Map ID: 2

Soil Component Name:	Xerochrepts
Soil Surface Texture:	gravelly sandy loam
Hydrologic Group:	Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
Soil Drainage Class:	Well drained
Hydric Status: Not hydric	
Corrosion Potential - Uncoated Steel:	Moderate
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 42 Min: 4	Max: 6.5 Min: 5.6
2	5 inches	40 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 42 Min: 4	Max: 6.5 Min: 5.6
3	40 inches	59 inches	very gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 42 Min: 4	Max: 6.5 Min: 5.6

Soil Map ID: 3

Soil Component Name: Alderwood

Soil Surface Texture: gravelly sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 0.42 Min: 0.01	Max: 6 Min: 5.6
2	7 inches	40 inches	very gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 0.42 Min: 0.01	Max: 6 Min: 5.6
3	40 inches	59 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 0.42 Min: 0.01	Max: 6 Min: 5.6

Soil Map ID: 4

Soil Component Name: Snohomish

Soil Surface Texture: silty clay loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 31 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.3 Min: 5.6
2	9 inches	16 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.3 Min: 5.6
3	16 inches	29 inches	mucky peat	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.3 Min: 5.6
4	29 inches	51 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.3 Min: 5.6
5	51 inches	59 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.3 Min: 5.6

Soil Map ID: 5

Soil Component Name: Shalcar

Soil Surface Texture: muck

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Very poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 8 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	muck	A-8	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: Min:
2	26 inches	46 inches	silty clay	A-8	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: Min:
3	11 inches	26 inches	mucky peat	A-8	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: Min:
4	46 inches	59 inches	fine sandy loam	A-8	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: Min:

Soil Map ID: 6

Soil Component Name: Alderwood

Soil Surface Texture: gravelly sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 0.42 Min: 0.01	Max: 6 Min: 5.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	7 inches	37 inches	very gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 0.42 Min: 0.01	Max: 6 Min: 5.6
3	37 inches	59 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 0.42 Min: 0.01	Max: 6 Min: 5.6

Soil Map ID: 7

Soil Component Name: Alderwood

Soil Surface Texture: gravelly sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 0.42 Min: 0.01	Max: 6 Min: 5.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	7 inches	37 inches	very gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 0.42 Min: 0.01	Max: 6 Min: 5.6
3	37 inches	59 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 0.42 Min: 0.01	Max: 6 Min: 5.6

Soil Map ID: 8

Soil Component Name: Kitsap

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 61 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 7.3 Min: 6.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	9 inches	31 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 7.3 Min: 6.1
3	31 inches	59 inches	stratified silt to silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 7.3 Min: 6.1

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40001251003	0 - 1/8 Mile NNW
A2	USGS40001251004	0 - 1/8 Mile NNW
B3	USGS40001251055	0 - 1/8 Mile SW
26	USGS40001251005	1/4 - 1/2 Mile WSW
27	USGS40001251096	1/4 - 1/2 Mile East
E28	USGS40001251148	1/4 - 1/2 Mile WNW
73	USGS40001251508	1/4 - 1/2 Mile North
102	USGS40001251240	1/2 - 1 Mile WNW
M106	USGS40001251420	1/2 - 1 Mile NE
N107	USGS40001251509	1/2 - 1 Mile North
M146	USGS40001251444	1/2 - 1 Mile NE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
M147	USGS40001251431	1/2 - 1 Mile NE
159	USGS40001251341	1/2 - 1 Mile NW
160	USGS40001251340	1/2 - 1 Mile ENE
S181	USGS40001251558	1/2 - 1 Mile North
S182	USGS40001251559	1/2 - 1 Mile North
T186	USGS40001251277	1/2 - 1 Mile ENE
T193	USGS40001251287	1/2 - 1 Mile ENE
T197	USGS40001251321	1/2 - 1 Mile ENE
207	USGS40001250883	1/2 - 1 Mile SE
208	USGS40001251326	1/2 - 1 Mile ENE
209	USGS40001251510	1/2 - 1 Mile NW
X210	USGS40001251560	1/2 - 1 Mile NNW
X211	USGS40001251567	1/2 - 1 Mile NNW
X212	USGS40001251598	1/2 - 1 Mile NNW
213	USGS40001250744	1/2 - 1 Mile SSW
214	USGS40001251133	1/2 - 1 Mile West
215	USGS40001251547	1/2 - 1 Mile NE
Y216	USGS40001251178	1/2 - 1 Mile East
AB235	USGS40001251507	1/2 - 1 Mile NE
Z239	USGS40001251529	1/2 - 1 Mile NW
Y240	USGS40001251089	1/2 - 1 Mile East
AB241	USGS40001251506	1/2 - 1 Mile NE
AC242	USGS40001251239	1/2 - 1 Mile East
AC298	USGS40001251117	1/2 - 1 Mile ENE
AF302	USGS40001250755	1/2 - 1 Mile SE
AG308	USGS40001251369	1/2 - 1 Mile WNW
357	USGS40001250620	1/2 - 1 Mile South

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
C4	WALOG2000829682	1/8 - 1/4 Mile NW
C5	WALOG2000829683	1/8 - 1/4 Mile NW
C6	WALOG2000829693	1/8 - 1/4 Mile NW
C7	WALOG2000829679	1/8 - 1/4 Mile NW
C8	WALOG2000180309	1/8 - 1/4 Mile NW
C9	WALOG2000030653	1/8 - 1/4 Mile NW
C10	WALOG2000180311	1/8 - 1/4 Mile NW
C11	WALOG2000180310	1/8 - 1/4 Mile NW
B12	WALOG2000203124	1/8 - 1/4 Mile SW
B13	WALOG2000229874	1/8 - 1/4 Mile SW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
D14	WALOG2000380592	1/8 - 1/4 Mile NE
D15	WALOG2000380595	1/8 - 1/4 Mile NE
D16	WALOG2000380591	1/8 - 1/4 Mile NE
D17	WALOG2000377843	1/8 - 1/4 Mile NE
D18	WALOG2000377944	1/8 - 1/4 Mile NE
D19	WALOG2000380596	1/8 - 1/4 Mile NE
D20	WALOG2000380601	1/8 - 1/4 Mile NE
D21	WALOG2000380602	1/8 - 1/4 Mile NE
D22	WALOG2000380599	1/8 - 1/4 Mile NE
D23	WALOG2000380597	1/8 - 1/4 Mile NE
D24	WALOG2000380598	1/8 - 1/4 Mile NE
25	WA1200000031098	1/8 - 1/4 Mile ESE
29	WALOG2000030833	1/4 - 1/2 Mile NE
E30	WALOG2000031179	1/4 - 1/2 Mile WNW
F31	WALOG2000034112	1/4 - 1/2 Mile NNW
F32	WALOG2000034111	1/4 - 1/2 Mile NNW
F33	WALOG2000770664	1/4 - 1/2 Mile NNW
F34	WALOG2000037283	1/4 - 1/2 Mile NNW
35	WALOG2000030558	1/4 - 1/2 Mile WSW
G36	WALOG2000037172	1/4 - 1/2 Mile NNE
G37	WALOG2000037288	1/4 - 1/2 Mile NNE
G38	WALOG2000380600	1/4 - 1/2 Mile NNE
G39	WALOG2000582043	1/4 - 1/2 Mile NNE
G40	WALOG2000587750	1/4 - 1/2 Mile NNE
G41	WALOG2000380594	1/4 - 1/2 Mile NNE
G42	WALOG2000370439	1/4 - 1/2 Mile NNE
G43	WALOG2000380590	1/4 - 1/2 Mile NNE
G44	WALOG2000380593	1/4 - 1/2 Mile NNE
G45	WALOG2000194028	1/4 - 1/2 Mile NNE
46	WALOG2000252756	1/4 - 1/2 Mile SSW
H47	WALOG2000408032	1/4 - 1/2 Mile ENE
H48	WALOG2000408033	1/4 - 1/2 Mile ENE
H49	WALOG2000408031	1/4 - 1/2 Mile ENE
H50	WALOG2000400126	1/4 - 1/2 Mile ENE
H51	WALOG2000408030	1/4 - 1/2 Mile ENE
H52	WALOG2000408034	1/4 - 1/2 Mile ENE
H53	WALOG2000493447	1/4 - 1/2 Mile ENE
H54	WALOG2000493449	1/4 - 1/2 Mile ENE
H55	WALOG2000493444	1/4 - 1/2 Mile ENE
H56	WALOG2000493445	1/4 - 1/2 Mile ENE
H57	WALOG2000708400	1/4 - 1/2 Mile ENE
H58	WALOG2000823346	1/4 - 1/2 Mile ENE
H59	WALOG2000680077	1/4 - 1/2 Mile ENE
H60	WALOG2000680089	1/4 - 1/2 Mile ENE
H61	WALOG2000493442	1/4 - 1/2 Mile ENE
H62	WALOG2000408037	1/4 - 1/2 Mile ENE
H63	WALOG2000408038	1/4 - 1/2 Mile ENE
H64	WALOG2000408035	1/4 - 1/2 Mile ENE
H65	WALOG2000408036	1/4 - 1/2 Mile ENE
H66	WALOG2000493439	1/4 - 1/2 Mile ENE
H67	WALOG2000493441	1/4 - 1/2 Mile ENE
H68	WALOG2000493436	1/4 - 1/2 Mile ENE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
H69	WALOG2000493438	1/4 - 1/2 Mile ENE
I70	WALOG2000791880	1/4 - 1/2 Mile ESE
I71	WALOG2000791893	1/4 - 1/2 Mile ESE
72	WA1200000012881	1/4 - 1/2 Mile NNW
J74	WALOG2000030941	1/2 - 1 Mile NW
J75	WA1200000018797	1/2 - 1 Mile NW
J76	WA1200000029886	1/2 - 1 Mile NW
K77	WALOG2000307476	1/2 - 1 Mile NE
K78	WALOG2000307475	1/2 - 1 Mile NE
K79	WALOG2000307478	1/2 - 1 Mile NE
K80	WALOG2000307477	1/2 - 1 Mile NE
K81	WALOG2000307474	1/2 - 1 Mile NE
K82	WALOG2000032921	1/2 - 1 Mile NE
K83	WALOG2000032146	1/2 - 1 Mile NE
K84	WALOG2000307473	1/2 - 1 Mile NE
K85	WALOG2000032958	1/2 - 1 Mile NE
K86	WALOG2000307936	1/2 - 1 Mile NE
K87	WALOG2000307935	1/2 - 1 Mile NE
K88	WALOG2000307930	1/2 - 1 Mile NE
K89	WALOG2000307937	1/2 - 1 Mile NE
K90	WALOG2000307933	1/2 - 1 Mile NE
K91	WALOG2000307934	1/2 - 1 Mile NE
K92	WALOG2000307931	1/2 - 1 Mile NE
K93	WALOG2000307932	1/2 - 1 Mile NE
K94	WALOG2000307481	1/2 - 1 Mile NE
K95	WALOG2000307482	1/2 - 1 Mile NE
K96	WALOG2000307479	1/2 - 1 Mile NE
K97	WALOG2000307480	1/2 - 1 Mile NE
K98	WALOG2000307928	1/2 - 1 Mile NE
K99	WALOG2000307929	1/2 - 1 Mile NE
K100	WALOG2000307483	1/2 - 1 Mile NE
K101	WALOG2000307484	1/2 - 1 Mile NE
L103	WALOG2000298433	1/2 - 1 Mile SE
L104	WALOG2000032092	1/2 - 1 Mile SE
M105	WA1200000026055	1/2 - 1 Mile NE
O108	WALOG2000392168	1/2 - 1 Mile West
O109	WALOG2000392153	1/2 - 1 Mile West
O110	WALOG2000392167	1/2 - 1 Mile West
N111	WA1200000032568	1/2 - 1 Mile North
N112	WALOG2000542681	1/2 - 1 Mile North
N113	WALOG2000542682	1/2 - 1 Mile North
N114	WALOG2000542679	1/2 - 1 Mile North
N115	WALOG2000542680	1/2 - 1 Mile North
N116	WALOG2000542685	1/2 - 1 Mile North
N117	WALOG2000583054	1/2 - 1 Mile North
N118	WALOG2000542683	1/2 - 1 Mile North
N119	WALOG2000542684	1/2 - 1 Mile North
N120	WALOG2000542678	1/2 - 1 Mile North
N121	WALOG2000033979	1/2 - 1 Mile North
N122	WALOG2000258778	1/2 - 1 Mile North
N123	WALOG2000030944	1/2 - 1 Mile North
N124	WALOG2000032928	1/2 - 1 Mile North

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
N125	WALOG2000350239	1/2 - 1 Mile North
N126	WALOG2000370319	1/2 - 1 Mile North
N127	WALOG2000333423	1/2 - 1 Mile North
N128	WALOG2000333424	1/2 - 1 Mile North
N129	WALOG2000619296	1/2 - 1 Mile North
N130	WALOG2000619297	1/2 - 1 Mile North
N131	WALOG2000619271	1/2 - 1 Mile North
N132	WALOG2000619295	1/2 - 1 Mile North
N133	WALOG2000637492	1/2 - 1 Mile North
N134	WALOG2000871384	1/2 - 1 Mile North
N135	WALOG2000619298	1/2 - 1 Mile North
N136	WALOG2000628009	1/2 - 1 Mile North
N137	WALOG2000619270	1/2 - 1 Mile North
N138	WALOG2000587336	1/2 - 1 Mile North
N139	WALOG2000587337	1/2 - 1 Mile North
N140	WALOG2000587334	1/2 - 1 Mile North
N141	WALOG2000587335	1/2 - 1 Mile North
N142	WALOG2000619268	1/2 - 1 Mile North
N143	WALOG2000619269	1/2 - 1 Mile North
N144	WALOG2000587338	1/2 - 1 Mile North
N145	WALOG2000617373	1/2 - 1 Mile North
P148	WALOG2000419133	1/2 - 1 Mile NNE
P149	WALOG2000419134	1/2 - 1 Mile NNE
P150	WALOG2000419132	1/2 - 1 Mile NNE
P151	WALOG2000194782	1/2 - 1 Mile NNE
P152	WALOG2000419131	1/2 - 1 Mile NNE
P153	WALOG2000421332	1/2 - 1 Mile NNE
P154	WALOG2000421336	1/2 - 1 Mile NNE
P155	WALOG2000422557	1/2 - 1 Mile NNE
P156	WALOG2000421335	1/2 - 1 Mile NNE
P157	WALOG2000421333	1/2 - 1 Mile NNE
P158	WALOG2000421334	1/2 - 1 Mile NNE
Q161	WA1200000006971	1/2 - 1 Mile East
Q162	WALOG2000355395	1/2 - 1 Mile East
Q163	WALOG2000366176	1/2 - 1 Mile East
Q164	WALOG2000355394	1/2 - 1 Mile East
Q165	WALOG2000366177	1/2 - 1 Mile East
Q166	WALOG2000355393	1/2 - 1 Mile East
R167	WALOG2000327570	1/2 - 1 Mile ESE
R168	WALOG2000740913	1/2 - 1 Mile ESE
R169	WALOG2000740912	1/2 - 1 Mile ESE
R170	WALOG2000740911	1/2 - 1 Mile ESE
R171	WALOG2000740916	1/2 - 1 Mile ESE
R172	WALOG2000740915	1/2 - 1 Mile ESE
R173	WALOG2000740914	1/2 - 1 Mile ESE
R174	WALOG2000740738	1/2 - 1 Mile ESE
R175	WALOG2000473860	1/2 - 1 Mile ESE
R176	WALOG2000473859	1/2 - 1 Mile ESE
R177	WALOG2000364561	1/2 - 1 Mile ESE
R178	WALOG2000740737	1/2 - 1 Mile ESE
R179	WALOG2000740736	1/2 - 1 Mile ESE
R180	WALOG2000740735	1/2 - 1 Mile ESE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
183	WA1200000028229	1/2 - 1 Mile NE
184	WA1200000014204	1/2 - 1 Mile NNW
185	WA1200000020229	1/2 - 1 Mile North
U187	WALOG2000734280	1/2 - 1 Mile NNE
U188	WALOG2000734279	1/2 - 1 Mile NNE
U189	WALOG2000734290	1/2 - 1 Mile NNE
U190	WALOG2000734288	1/2 - 1 Mile NNE
V191	WA1200000027727	1/2 - 1 Mile ENE
192	WA1200000026075	1/2 - 1 Mile North
V194	WALOG2000035824	1/2 - 1 Mile ENE
V195	WALOG2000035829	1/2 - 1 Mile ENE
V196	WALOG2000791864	1/2 - 1 Mile ENE
198	WALOG2000759739	1/2 - 1 Mile SSW
W199	WALOG2000377758	1/2 - 1 Mile SSE
W200	WALOG2000377759	1/2 - 1 Mile SSE
W201	WALOG2000377760	1/2 - 1 Mile SSE
W202	WALOG2000377757	1/2 - 1 Mile SSE
W203	WALOG2000377754	1/2 - 1 Mile SSE
W204	WALOG2000377753	1/2 - 1 Mile SSE
W205	WALOG2000377756	1/2 - 1 Mile SSE
W206	WALOG2000377755	1/2 - 1 Mile SSE
Z217	WALOG2000372683	1/2 - 1 Mile NW
Z218	WALOG2000372684	1/2 - 1 Mile NW
Z219	WALOG2000372682	1/2 - 1 Mile NW
Z220	WALOG2000372680	1/2 - 1 Mile NW
Z221	WALOG2000372681	1/2 - 1 Mile NW
Z222	WALOG2000372688	1/2 - 1 Mile NW
Z223	WALOG2000372689	1/2 - 1 Mile NW
Z224	WALOG2000372687	1/2 - 1 Mile NW
Z225	WALOG2000372685	1/2 - 1 Mile NW
Z226	WALOG2000372686	1/2 - 1 Mile NW
AA227	WALOG2000785456	1/2 - 1 Mile North
AA228	WALOG2000785457	1/2 - 1 Mile North
AA229	WALOG2000785458	1/2 - 1 Mile North
AA230	WALOG2000785482	1/2 - 1 Mile North
AA231	WALOG2000785454	1/2 - 1 Mile North
AA232	WALOG2000785455	1/2 - 1 Mile North
233	WA1200000011459	1/2 - 1 Mile NNW
234	WA1200000031410	1/2 - 1 Mile South
AB236	WALOG2000032167	1/2 - 1 Mile NE
AB237	WALOG2000035099	1/2 - 1 Mile NE
AB238	WALOG2000848435	1/2 - 1 Mile NE
AC243	WA1200000009592	1/2 - 1 Mile East
AC244	WALOG2000205409	1/2 - 1 Mile East
AC245	WALOG2000750674	1/2 - 1 Mile East
AC246	WALOG2000703503	1/2 - 1 Mile East
AC247	WALOG2000205408	1/2 - 1 Mile East
AC248	WA1200000023610	1/2 - 1 Mile East
249	WALOG2000759738	1/2 - 1 Mile South
AD250	WALOG2000808139	1/2 - 1 Mile South
AD251	WALOG2000808137	1/2 - 1 Mile South
AD252	WALOG2000808114	1/2 - 1 Mile South

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AD253	WALOG2000808465	1/2 - 1 Mile South
AD254	WALOG2000808464	1/2 - 1 Mile South
AD255	WALOG2000808408	1/2 - 1 Mile South
AD256	WALOG2000808113	1/2 - 1 Mile South
AD257	WALOG2000808092	1/2 - 1 Mile South
AD258	WALOG2000808089	1/2 - 1 Mile South
AD259	WALOG2000808112	1/2 - 1 Mile South
AD260	WALOG2000808111	1/2 - 1 Mile South
AD261	WA1200000030201	1/2 - 1 Mile South
AE262	WALOG2000357740	1/2 - 1 Mile East
AE263	WALOG2000357739	1/2 - 1 Mile East
AE264	WALOG2000356456	1/2 - 1 Mile East
AE265	WALOG2000357741	1/2 - 1 Mile East
AE266	WALOG2000703508	1/2 - 1 Mile East
AE267	WALOG2000703507	1/2 - 1 Mile East
AE268	WALOG2000357742	1/2 - 1 Mile East
AE269	WALOG2000356455	1/2 - 1 Mile East
AE270	WALOG2000356453	1/2 - 1 Mile East
AE271	WALOG2000356454	1/2 - 1 Mile East
AF272	WALOG2000343322	1/2 - 1 Mile SE
AF273	WALOG2000343323	1/2 - 1 Mile SE
AF274	WALOG2000343324	1/2 - 1 Mile SE
AF275	WALOG2000032138	1/2 - 1 Mile SE
AF276	WALOG2000333006	1/2 - 1 Mile SE
AF277	WALOG2000343321	1/2 - 1 Mile SE
AF278	WALOG2000835227	1/2 - 1 Mile SE
AF279	WALOG2000835226	1/2 - 1 Mile SE
AF280	WALOG2000835225	1/2 - 1 Mile SE
AF281	WALOG2000865129	1/2 - 1 Mile SE
AF282	WALOG2000835229	1/2 - 1 Mile SE
AF283	WALOG2000835228	1/2 - 1 Mile SE
AF284	WALOG2000835224	1/2 - 1 Mile SE
AF285	WALOG2000835220	1/2 - 1 Mile SE
AF286	WALOG2000835219	1/2 - 1 Mile SE
AF287	WALOG2000835218	1/2 - 1 Mile SE
AF288	WALOG2000835223	1/2 - 1 Mile SE
AF289	WALOG2000835222	1/2 - 1 Mile SE
AF290	WALOG2000835221	1/2 - 1 Mile SE
AF291	WALOG2000835215	1/2 - 1 Mile SE
AF292	WALOG2000835216	1/2 - 1 Mile SE
AF293	WALOG2000835217	1/2 - 1 Mile SE
AF294	WALOG2000804843	1/2 - 1 Mile SE
AF295	WALOG2000804844	1/2 - 1 Mile SE
AF296	WALOG2000835214	1/2 - 1 Mile SE
AF297	WA1200000002333	1/2 - 1 Mile SE
AG299	WALOG2000335418	1/2 - 1 Mile WNW
AG300	WALOG2000296560	1/2 - 1 Mile WNW
AG301	WALOG2000035798	1/2 - 1 Mile WNW
AH303	WALOG2000848662	1/2 - 1 Mile NNE
AH304	WALOG2000406801	1/2 - 1 Mile NNE
AH305	WALOG2000406802	1/2 - 1 Mile NNE
306	WA1200000031654	1/2 - 1 Mile WNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

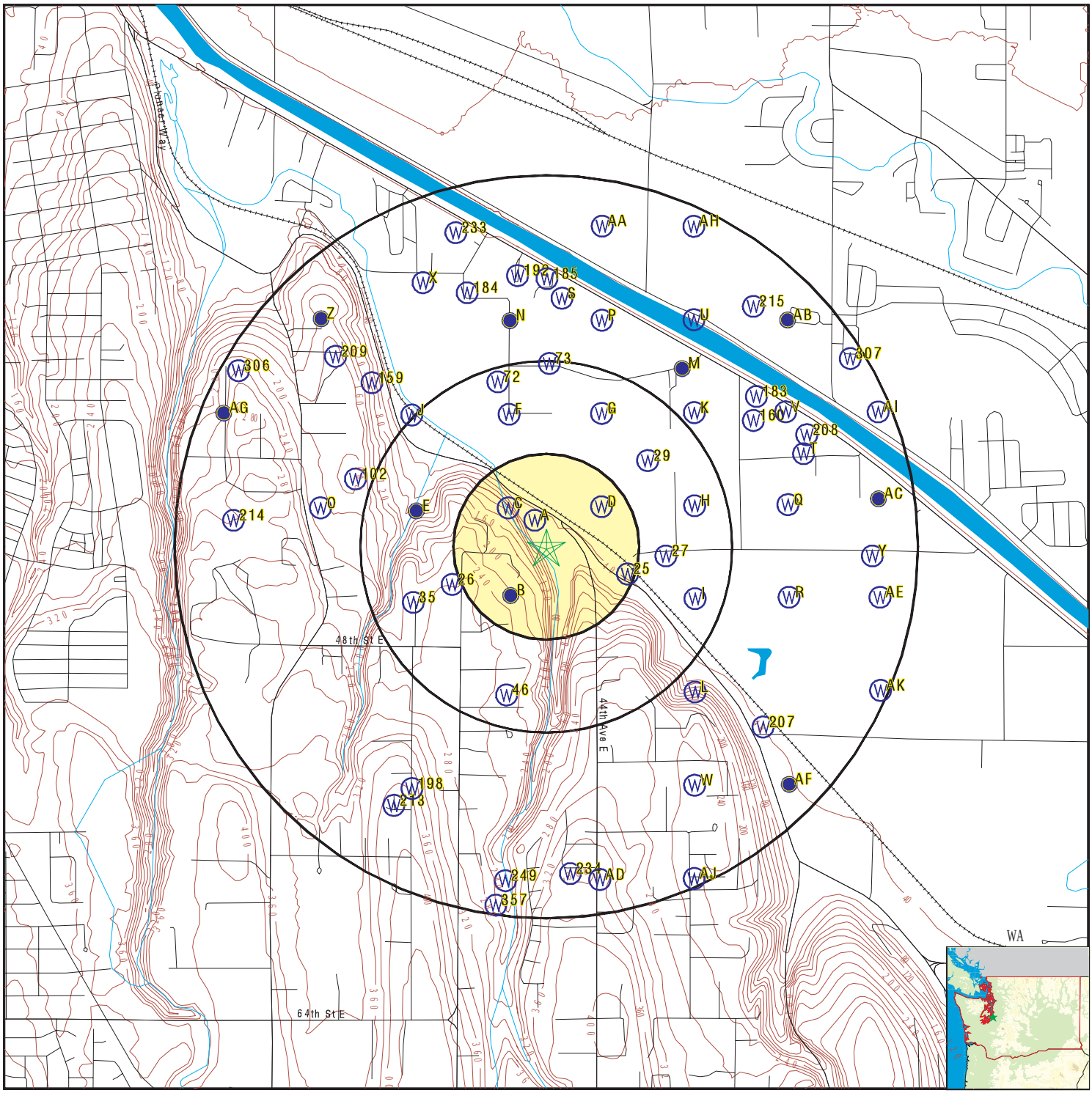
MAP ID	WELL ID	LOCATION FROM TP
307	WA1200000015994	1/2 - 1 Mile ENE
AI309	WALOG2000365743	1/2 - 1 Mile ENE
AI310	WALOG2000365744	1/2 - 1 Mile ENE
AI311	WALOG2000365742	1/2 - 1 Mile ENE
AI312	WALOG2000365740	1/2 - 1 Mile ENE
AI313	WALOG2000365741	1/2 - 1 Mile ENE
AI314	WALOG2000365748	1/2 - 1 Mile ENE
AI315	WALOG2000365749	1/2 - 1 Mile ENE
AI316	WALOG2000365747	1/2 - 1 Mile ENE
AI317	WALOG2000365745	1/2 - 1 Mile ENE
AI318	WALOG2000365746	1/2 - 1 Mile ENE
AI319	WALOG2000359591	1/2 - 1 Mile ENE
AI320	WALOG2000359592	1/2 - 1 Mile ENE
AI321	WALOG2000359590	1/2 - 1 Mile ENE
AI322	WALOG2000359588	1/2 - 1 Mile ENE
AI323	WALOG2000359589	1/2 - 1 Mile ENE
AI324	WALOG2000365738	1/2 - 1 Mile ENE
AI325	WALOG2000365739	1/2 - 1 Mile ENE
AI326	WALOG2000365737	1/2 - 1 Mile ENE
AI327	WALOG2000359593	1/2 - 1 Mile ENE
AI328	WALOG2000359594	1/2 - 1 Mile ENE
AI329	WALOG2000365750	1/2 - 1 Mile ENE
AI330	WALOG2000366919	1/2 - 1 Mile ENE
AI331	WALOG2000524280	1/2 - 1 Mile ENE
AI332	WALOG2000524281	1/2 - 1 Mile ENE
AI333	WALOG2000365765	1/2 - 1 Mile ENE
AI334	WALOG2000365766	1/2 - 1 Mile ENE
AI335	WALOG2000365767	1/2 - 1 Mile ENE
AI336	WALOG2000524282	1/2 - 1 Mile ENE
AI337	WALOG2000626120	1/2 - 1 Mile ENE
AI338	WALOG2000626123	1/2 - 1 Mile ENE
AI339	WALOG2000626141	1/2 - 1 Mile ENE
AI340	WALOG2000524283	1/2 - 1 Mile ENE
AI341	WALOG2000524284	1/2 - 1 Mile ENE
AI342	WALOG2000626109	1/2 - 1 Mile ENE
AI343	WALOG2000365764	1/2 - 1 Mile ENE
AI344	WALOG2000365754	1/2 - 1 Mile ENE
AI345	WALOG2000365755	1/2 - 1 Mile ENE
AI346	WALOG2000365756	1/2 - 1 Mile ENE
AI347	WALOG2000365751	1/2 - 1 Mile ENE
AI348	WALOG2000365752	1/2 - 1 Mile ENE
AI349	WALOG2000365753	1/2 - 1 Mile ENE
AI350	WALOG2000365757	1/2 - 1 Mile ENE
AI351	WALOG2000365761	1/2 - 1 Mile ENE
AI352	WALOG2000365762	1/2 - 1 Mile ENE
AI353	WALOG2000365763	1/2 - 1 Mile ENE
AI354	WALOG2000365758	1/2 - 1 Mile ENE
AI355	WALOG2000365759	1/2 - 1 Mile ENE
AI356	WALOG2000365760	1/2 - 1 Mile ENE
AJ358	WALOG2000713258	1/2 - 1 Mile SSE
AJ359	WALOG2000713257	1/2 - 1 Mile SSE
AJ360	WALOG2000713260	1/2 - 1 Mile SSE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AJ361	WALOG2000713259	1/2 - 1 Mile SSE
AJ362	WALOG2000219562	1/2 - 1 Mile SSE
AJ363	WALOG2000219559	1/2 - 1 Mile SSE
AJ364	WALOG2000219558	1/2 - 1 Mile SSE
AJ365	WALOG2000219561	1/2 - 1 Mile SSE
AJ366	WALOG2000219560	1/2 - 1 Mile SSE
AK367	WALOG2000372709	1/2 - 1 Mile ESE
AK368	WALOG2000372710	1/2 - 1 Mile ESE
AK369	WALOG2000372711	1/2 - 1 Mile ESE
AK370	WALOG2000043566	1/2 - 1 Mile ESE
AK371	WALOG2000372707	1/2 - 1 Mile ESE
AK372	WALOG2000372708	1/2 - 1 Mile ESE
AK373	WALOG2000541266	1/2 - 1 Mile ESE
AK374	WALOG2000541265	1/2 - 1 Mile ESE
AK375	WALOG2000541267	1/2 - 1 Mile ESE
AK376	WALOG2000779947	1/2 - 1 Mile ESE
AK377	WALOG2000541268	1/2 - 1 Mile ESE
AK378	WALOG2000541262	1/2 - 1 Mile ESE
AK379	WALOG2000373709	1/2 - 1 Mile ESE
AK380	WALOG2000372718	1/2 - 1 Mile ESE
AK381	WALOG2000373710	1/2 - 1 Mile ESE
AK382	WALOG2000540861	1/2 - 1 Mile ESE
AK383	WALOG2000540860	1/2 - 1 Mile ESE
AK384	WALOG2000372715	1/2 - 1 Mile ESE
AK385	WALOG2000372716	1/2 - 1 Mile ESE
AK386	WALOG2000372714	1/2 - 1 Mile ESE
AK387	WALOG2000372712	1/2 - 1 Mile ESE
AK388	WALOG2000372713	1/2 - 1 Mile ESE
AK389	WALOG2000372717	1/2 - 1 Mile ESE
AK390	WALOG2000848446	1/2 - 1 Mile ESE
AK391	WALOG2000779948	1/2 - 1 Mile ESE

PHYSICAL SETTING SOURCE MAP - 7382051.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Trout Lodge - Clear Creek Project	CLIENT:	HNTB CORPORATION
ADDRESS:	4008 Pioneer Way Tacoma WA 98443	CONTACT:	Buffie Chournos
		INQUIRY #:	7382051.2s
LAT/LONG:	47.217401 / 122.373356	DATE:	July 05, 2023 4:41 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
NNW
0 - 1/8 Mile
Higher

FED USGS **USGS40001251003**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13M01	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19641014
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	2	Level reading date:	1985-05-22
Feet below surface:	Not Reported	Feet to sea level:	Not Reported
Note:	The site was flowing, but the head could not be measured without additional equipment.		

Level reading date:	1964-11-20	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		

A2
NNW
0 - 1/8 Mile
Higher

FED USGS **USGS40001251004**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13M01D1	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19760101
Well Depth:	670	Well Depth Units:	ft
Well Hole Depth:	670	Well Hole Depth Units:	ft

B3
SW
0 - 1/8 Mile
Lower

FED USGS **USGS40001251055**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13N01	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	20010328
Well Depth:	315	Well Depth Units:	ft
Well Hole Depth:	315	Well Hole Depth Units:	ft

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

C4
NW
1/8 - 1/4 Mile
Higher

WA WELLS **WALOG2000829682**

Database:	Ecology Well Logs	Well Log ID:	1873983
Well Tag #:	BLH166	Project Tag #:	Not Reported
Notice of Intent #:	RE16570	Date Received:	25-OCT-18
Diameter (in):	2	Casing Depth (ft):	12
Well completion:	11-OCT-18	Well Owner:	Pierce County
Well Type:	Resource Protection	Driller #:	3146
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

C5
NW
1/8 - 1/4 Mile
Higher

WA WELLS **WALOG2000829683**

Database:	Ecology Well Logs	Well Log ID:	1873984
Well Tag #:	BLH167	Project Tag #:	Not Reported
Notice of Intent #:	RE16570	Date Received:	25-OCT-18
Diameter (in):	2	Casing Depth (ft):	12
Well completion:	11-OCT-18	Well Owner:	Pierce County
Well Type:	Resource Protection	Driller #:	3146
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

C6
NW
1/8 - 1/4 Mile
Higher

WA WELLS **WALOG2000829693**

Database:	Ecology Well Logs	Well Log ID:	1873994
Well Tag #:	BLH169	Project Tag #:	Not Reported
Notice of Intent #:	RE16570	Date Received:	25-OCT-18
Diameter (in):	2	Casing Depth (ft):	12
Well completion:	11-OCT-18	Well Owner:	Pierce County
Well Type:	Resource Protection	Driller #:	3146
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

C7
NW
1/8 - 1/4 Mile
Higher

WA WELLS **WALOG2000829679**

Database:	Ecology Well Logs	Well Log ID:	1873980
Well Tag #:	BLH168	Project Tag #:	Not Reported
Notice of Intent #:	RE16570	Date Received:	25-OCT-18
Diameter (in):	2	Casing Depth (ft):	12

Well completion:	11-OCT-18	Well Owner:	Pierce County
Well Type:	Resource Protection	Driller #:	3146
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

C8
NW
1/8 - 1/4 Mile
Higher

WA WELLS **WALOG2000180309**

Database:	Ecology Well Logs	Well Log ID:	231485
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	Not Reported	Well Owner:	UNOCAL (TACOMA)
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

C9
NW
1/8 - 1/4 Mile
Higher

WA WELLS **WALOG2000030653**

Database:	Ecology Well Logs	Well Log ID:	35143
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	W061215	Date Received:	26-DEC-95
Diameter (in):	6	Casing Depth (ft):	78
Well completion:	11-AUG-95	Well Owner:	EDWARD BROWN
Well Type:	Water	Driller #:	2017
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

C10
NW
1/8 - 1/4 Mile
Higher

WA WELLS **WALOG2000180311**

Database:	Ecology Well Logs	Well Log ID:	231487
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	Not Reported	Well Owner:	UNOCAL (TACOMA)
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

C11
NW
1/8 - 1/4 Mile
Higher

WA WELLS **WALOG2000180310**

Database:	Ecology Well Logs	Well Log ID:	231486
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	Not Reported	Well Owner:	UNOCAL (TACOMA)
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

B12
SW
1/8 - 1/4 Mile
Higher

WA WELLS **WALOG2000203124**

Database:	Ecology Well Logs	Well Log ID:	274402
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	12	Casing Depth (ft):	275
Well completion:	Not Reported	Well Owner:	EDWARD MCLEARY
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

B13
SW
1/8 - 1/4 Mile
Higher

WA WELLS **WALOG2000229874**

Database:	Ecology Well Logs	Well Log ID:	312192
Well Tag #:	AEP183	Project Tag #:	Not Reported
Notice of Intent #:	W103774	Date Received:	25-APR-01
Diameter (in):	6	Casing Depth (ft):	315
Well completion:	05-APR-01	Well Owner:	DON ARNESTAD
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

D14
NE
1/8 - 1/4 Mile
Lower

WA WELLS **WALOG2000380592**

Database:	Ecology Well Logs	Well Log ID:	500940
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE02492	Date Received:	29-OCT-07
Diameter (in):	2	Casing Depth (ft):	70

Well completion:	11-SEP-07	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

D15
NE
1/8 - 1/4 Mile
Lower

WA WELLS **WALOG2000380595**

Database:	Ecology Well Logs	Well Log ID:	500946
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE02486	Date Received:	29-OCT-07
Diameter (in):	2	Casing Depth (ft):	70
Well completion:	11-SEP-07	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

D16
NE
1/8 - 1/4 Mile
Lower

WA WELLS **WALOG2000380591**

Database:	Ecology Well Logs	Well Log ID:	500938
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE02487	Date Received:	29-OCT-07
Diameter (in):	2	Casing Depth (ft):	70
Well completion:	10-SEP-07	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

D17
NE
1/8 - 1/4 Mile
Lower

WA WELLS **WALOG2000377843**

Database:	Ecology Well Logs	Well Log ID:	496164
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE02495	Date Received:	20-SEP-07
Diameter (in):	2	Casing Depth (ft):	70
Well completion:	11-SEP-07	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

D18
NE
1/8 - 1/4 Mile
Lower

WA WELLS **WALOG2000377944**

Database:	Ecology Well Logs	Well Log ID:	496365
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE02494	Date Received:	20-SEP-07
Diameter (in):	2	Casing Depth (ft):	70
Well completion:	12-SEP-07	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

D19
NE
1/8 - 1/4 Mile
Lower

WA WELLS **WALOG2000380596**

Database:	Ecology Well Logs	Well Log ID:	500948
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE02491	Date Received:	29-OCT-07
Diameter (in):	2	Casing Depth (ft):	65
Well completion:	13-SEP-07	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

D20
NE
1/8 - 1/4 Mile
Lower

WA WELLS **WALOG2000380601**

Database:	Ecology Well Logs	Well Log ID:	500958
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE02485	Date Received:	29-OCT-07
Diameter (in):	2	Casing Depth (ft):	65
Well completion:	10-SEP-07	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

D21
NE
1/8 - 1/4 Mile
Lower

WA WELLS **WALOG2000380602**

Database:	Ecology Well Logs	Well Log ID:	500960
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE02489	Date Received:	29-OCT-07
Diameter (in):	2	Casing Depth (ft):	70

Well completion:	12-SEP-07	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

D22
NE
1/8 - 1/4 Mile
Lower

WA WELLS **WALOG2000380599**

Database:	Ecology Well Logs	Well Log ID:	500954
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE02490	Date Received:	29-OCT-07
Diameter (in):	2	Casing Depth (ft):	70
Well completion:	12-SEP-07	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

D23
NE
1/8 - 1/4 Mile
Lower

WA WELLS **WALOG2000380597**

Database:	Ecology Well Logs	Well Log ID:	500950
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE02493	Date Received:	29-OCT-07
Diameter (in):	2	Casing Depth (ft):	65
Well completion:	13-SEP-07	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

D24
NE
1/8 - 1/4 Mile
Lower

WA WELLS **WALOG2000380598**

Database:	Ecology Well Logs	Well Log ID:	500952
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE02488	Date Received:	29-OCT-07
Diameter (in):	2	Casing Depth (ft):	65
Well completion:	12-SEP-07	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

25
ESE
1/8 - 1/4 Mile
Lower

WA WELLS **WA1200000031098**

Database:	Water Wells	PWS ID:	52564
Source #:	01	Source Name:	WELL #1
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Puyallup-White
Well Depth:	45	Source Susceptibility:	X
System Name:	ARCH W.S.	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	0
Total Population Served:	10	Total Connections:	1
PWS Status:	Active	Residential Connection:	0
DOE Well Tag:	Not Reported	Capacity (gpm):	20
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

26
WSW
1/4 - 1/2 Mile
Higher

FED USGS **USGS40001251005**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-14R01	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19510801
Well Depth:	226	Well Depth Units:	ft
Well Hole Depth:	230.5	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	4	Level reading date:	1995-06-14
Feet below surface:	172.15	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1985-05-22	Feet below surface:	177.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1960-03-11	Feet below surface:	187.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-08-04	Feet below surface:	170
Feet to sea level:	Not Reported	Note:	Not Reported

27
East
1/4 - 1/2 Mile
Lower

FED USGS **USGS40001251096**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13Q01	Type:	Well

Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19400101
Well Depth:	15	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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E28
WNW **FED USGS** **USGS40001251148**
1/4 - 1/2 Mile
Higher

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-14J01	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110014	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19900920	Well Depth:	57
Well Depth Units:	ft	Well Hole Depth:	64
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1990-09-24
Feet below surface:	38	Feet to sea level:	Not Reported
Note:	Not Reported		

29
NE **WA WELLS** **WALOG2000030833**
1/4 - 1/2 Mile
Lower

Database:	Ecology Well Logs	Well Log ID:	35357
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	2	Casing Depth (ft):	75
Well completion:	Not Reported	Well Owner:	FLED MASELLA
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

E30
WNW **WA WELLS** **WALOG2000031179**
1/4 - 1/2 Mile
Higher

Database:	Ecology Well Logs	Well Log ID:	35781
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	066263	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	57
Well completion:	21-SEP-90	Well Owner:	GARY WIFFLER
Well Type:	Water	Driller #:	1498
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported

Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

F31
NNW **WA WELLS** **WALOG2000034112**
1/4 - 1/2 Mile
Lower

Database:	Ecology Well Logs	Well Log ID:	39156
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S000239	Date Received:	Not Reported
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	15-JUN-98	Well Owner:	PUYALLUP PIPELINE CROSSING - FIFE
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

F32
NNW **WA WELLS** **WALOG2000034111**
1/4 - 1/2 Mile
Lower

Database:	Ecology Well Logs	Well Log ID:	39155
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S000239	Date Received:	Not Reported
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	15-JUN-98	Well Owner:	PUYALLUP PIPELINE - FIFE
Well Type:	Resource Protection	Driller #:	2223
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

F33
NNW **WA WELLS** **WALOG2000770664**
1/4 - 1/2 Mile
Lower

Database:	Ecology Well Logs	Well Log ID:	1644133
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE44442	Date Received:	02-OCT-17
Diameter (in):	6	Casing Depth (ft):	0
Well completion:	19-SEP-17	Well Owner:	Pierce County Planning Public Works
Well Type:	Decommisioning	Driller #:	2467
Static Water Level:	0	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

F34
NNW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000037283**

Database:	Ecology Well Logs	Well Log ID:	42951
Well Tag #:	ACM155	Project Tag #:	Not Reported
Notice of Intent #:	W066547	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	76
Well completion:	17-SEP-96	Well Owner:	MARK FROHMADER
Well Type:	Water	Driller #:	0379
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

35
WSW
1/4 - 1/2 Mile
Higher

WA WELLS **WALOG2000030558**

Database:	Ecology Well Logs	Well Log ID:	35037
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	8	Casing Depth (ft):	230
Well completion:	Not Reported	Well Owner:	DWIGHT ROBINSON
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

G36
NNE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000037172**

Database:	Ecology Well Logs	Well Log ID:	42831
Well Tag #:	ACF253	Project Tag #:	Not Reported
Notice of Intent #:	W073532	Date Received:	12-NOV-98
Diameter (in):	6	Casing Depth (ft):	87
Well completion:	01-NOV-98	Well Owner:	WAYNE & KENDRA REED
Well Type:	Water	Driller #:	1462
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

G37
NNE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000037288**

Database:	Ecology Well Logs	Well Log ID:	42956
Well Tag #:	ACM181	Project Tag #:	Not Reported
Notice of Intent #:	W066849	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	95

Well completion:	12-NOV-96	Well Owner:	C & S DEVELOPMENT
Well Type:	Water	Driller #:	0837
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

G38
NNE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000380600**

Database:	Ecology Well Logs	Well Log ID:	500956
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE02484	Date Received:	29-OCT-07
Diameter (in):	2	Casing Depth (ft):	65
Well completion:	28-AUG-07	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

G39
NNE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000582043**

Database:	Ecology Well Logs	Well Log ID:	859567
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A101498	Date Received:	14-MAY-13
Diameter (in):	2	Casing Depth (ft):	67
Well completion:	15-MAR-13	Well Owner:	Pierce County
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

G40
NNE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000587750**

Database:	Ecology Well Logs	Well Log ID:	870807
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A101499	Date Received:	09-JUL-13
Diameter (in):	2	Casing Depth (ft):	65
Well completion:	06-JUN-13	Well Owner:	Pierce County SWM
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G41
NNE **WA WELLS** **WALOG2000380594**
1/4 - 1/2 Mile
Lower

Database:	Ecology Well Logs	Well Log ID:	500944
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE02482	Date Received:	29-OCT-07
Diameter (in):	2	Casing Depth (ft):	65
Well completion:	27-AUG-07	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

G42
NNE **WA WELLS** **WALOG2000370439**
1/4 - 1/2 Mile
Lower

Database:	Ecology Well Logs	Well Log ID:	485159
Well Tag #:	ALM307	Project Tag #:	Not Reported
Notice of Intent #:	WE06613	Date Received:	10-JUL-07
Diameter (in):	6	Casing Depth (ft):	83.5
Well completion:	22-JUN-07	Well Owner:	MARK KAINING
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

G43
NNE **WA WELLS** **WALOG2000380590**
1/4 - 1/2 Mile
Lower

Database:	Ecology Well Logs	Well Log ID:	500936
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE02481	Date Received:	29-OCT-07
Diameter (in):	2	Casing Depth (ft):	80
Well completion:	28-AUG-07	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

G44
NNE **WA WELLS** **WALOG2000380593**
1/4 - 1/2 Mile
Lower

Database:	Ecology Well Logs	Well Log ID:	500942
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE02483	Date Received:	29-OCT-07
Diameter (in):	2	Casing Depth (ft):	60

Well completion:	27-AUG-07	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

G45
NNE **WA WELLS** **WALOG2000194028**
1/4 - 1/2 Mile
Lower

Database:	Ecology Well Logs	Well Log ID:	251730
Well Tag #:	ACY792	Project Tag #:	Not Reported
Notice of Intent #:	W123428	Date Received:	06-MAY-00
Diameter (in):	6	Casing Depth (ft):	135
Well completion:	23-FEB-00	Well Owner:	KALNING MARK
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

46
SSW **WA WELLS** **WALOG2000252756**
1/4 - 1/2 Mile
Higher

Database:	Ecology Well Logs	Well Log ID:	337524
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A061523	Date Received:	07-MAY-02
Diameter (in):	6	Casing Depth (ft):	27
Well completion:	16-APR-02	Well Owner:	GUY RAMERIZE
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H47
ENE **WA WELLS** **WALOG2000408032**
1/4 - 1/2 Mile
Lower

Database:	Ecology Well Logs	Well Log ID:	539497
Well Tag #:	BAA815	Project Tag #:	Not Reported
Notice of Intent #:	RE02248	Date Received:	25-JUN-08
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	18-APR-08	Well Owner:	PIERCE COUNTY DAVID RENSTROM | CH2M HIL
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

H48
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000408033**

Database:	Ecology Well Logs	Well Log ID:	539499
Well Tag #:	BAA816	Project Tag #:	Not Reported
Notice of Intent #:	RE02248	Date Received:	25-JUN-08
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	18-APR-08	Well Owner:	PIERCE COUNTY DAVID RENSTROM | CH2M HIL
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H49
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000408031**

Database:	Ecology Well Logs	Well Log ID:	539495
Well Tag #:	BAA814	Project Tag #:	Not Reported
Notice of Intent #:	RE02248	Date Received:	25-JUN-08
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	18-APR-08	Well Owner:	PIERCE COUNTY DAVID RENSTROM | CH2M HIL
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H50
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000400126**

Database:	Ecology Well Logs	Well Log ID:	527936
Well Tag #:	BAC206	Project Tag #:	Not Reported
Notice of Intent #:	WE06556	Date Received:	22-APR-08
Diameter (in):	6	Casing Depth (ft):	76
Well completion:	01-JUN-07	Well Owner:	BJ JIN
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H51
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000408030**

Database:	Ecology Well Logs	Well Log ID:	539493
Well Tag #:	BAA813	Project Tag #:	Not Reported
Notice of Intent #:	RE02248	Date Received:	25-JUN-08
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported

Well completion:	18-APR-08	Well Owner:	PIERCE COUNTY DAVID RENSTROM | CH2M HIL
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H52
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000408034**

Database:	Ecology Well Logs	Well Log ID:	539501
Well Tag #:	BAA817	Project Tag #:	Not Reported
Notice of Intent #:	RE02248	Date Received:	25-JUN-08
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	18-APR-08	Well Owner:	PIERCE COUNTY DAVID RENSTROM | CH2M HIL
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H53
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000493447**

Database:	Ecology Well Logs	Well Log ID:	684844
Well Tag #:	BAA818	Project Tag #:	Not Reported
Notice of Intent #:	A104942	Date Received:	02-NOV-10
Diameter (in):	1	Casing Depth (ft):	9
Well completion:	24-JUN-10	Well Owner:	WA STATE DEPT OF TRANSPORTATION
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H54
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000493449**

Database:	Ecology Well Logs	Well Log ID:	684847
Well Tag #:	BAA819	Project Tag #:	Not Reported
Notice of Intent #:	A104942	Date Received:	02-NOV-10
Diameter (in):	1	Casing Depth (ft):	9
Well completion:	24-JUN-10	Well Owner:	WA STATE DEPT OF TRANSPORTATION
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

H55
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000493444**

Database:	Ecology Well Logs	Well Log ID:	684838
Well Tag #:	BAA817	Project Tag #:	Not Reported
Notice of Intent #:	A104942	Date Received:	02-NOV-10
Diameter (in):	1	Casing Depth (ft):	9
Well completion:	24-JUN-10	Well Owner:	WA STATE DEPT OF TRANSPORTATION
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H56
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000493445**

Database:	Ecology Well Logs	Well Log ID:	684840
Well Tag #:	BAA813	Project Tag #:	Not Reported
Notice of Intent #:	A104942	Date Received:	02-NOV-10
Diameter (in):	1	Casing Depth (ft):	9
Well completion:	24-JUN-10	Well Owner:	WA STATE DEPT OF TRANSPORTATION
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H57
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000708400**

Database:	Ecology Well Logs	Well Log ID:	1562251
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE34966	Date Received:	18-MAY-16
Diameter (in):	2	Casing Depth (ft):	69
Well completion:	17-DEC-15	Well Owner:	Pierce County Public Works Utilities
Well Type:	Decommisioning	Driller #:	0
Static Water Level:	0	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H58
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000823346**

Database:	Ecology Well Logs	Well Log ID:	1864233
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE50020	Date Received:	16-AUG-18
Diameter (in):	2	Casing Depth (ft):	65

Well completion:	02-AUG-18	Well Owner:	Pierce County Public Works
Well Type:	Decommisioning	Driller #:	3188
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H59
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000680077**

Database:	Ecology Well Logs	Well Log ID:	1069064
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE33066	Date Received:	07-OCT-15
Diameter (in):	2	Casing Depth (ft):	70
Well completion:	08-SEP-15	Well Owner:	Pierce County Public Works Utilities Water Pr
Well Type:	Decommisioning	Driller #:	2989
Static Water Level:	1	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H60
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000680089**

Database:	Ecology Well Logs	Well Log ID:	1069080
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE33067	Date Received:	07-OCT-15
Diameter (in):	2	Casing Depth (ft):	75
Well completion:	08-SEP-15	Well Owner:	Pierce County Public Works Utilities Water Pr
Well Type:	Decommisioning	Driller #:	2989
Static Water Level:	1	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H61
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000493442**

Database:	Ecology Well Logs	Well Log ID:	684834
Well Tag #:	BAA814	Project Tag #:	Not Reported
Notice of Intent #:	A104942	Date Received:	02-NOV-10
Diameter (in):	1	Casing Depth (ft):	9
Well completion:	24-JUN-10	Well Owner:	WA STATE DEPT OF TRANSPORTATION
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

H62
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000408037**

Database:	Ecology Well Logs	Well Log ID:	539507
Well Tag #:	BAA820	Project Tag #:	Not Reported
Notice of Intent #:	RE02248	Date Received:	25-JUN-08
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	18-APR-08	Well Owner:	PIERCE COUNTY DAVID RENSTROM | CH2M HIL
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H63
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000408038**

Database:	Ecology Well Logs	Well Log ID:	539509
Well Tag #:	BAA821	Project Tag #:	Not Reported
Notice of Intent #:	RE02248	Date Received:	25-JUN-08
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	18-APR-08	Well Owner:	PIERCE COUNTY DAVID RENSTROM | CH2M HIL
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H64
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000408035**

Database:	Ecology Well Logs	Well Log ID:	539503
Well Tag #:	BAA818	Project Tag #:	Not Reported
Notice of Intent #:	RE02248	Date Received:	25-JUN-08
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	18-APR-08	Well Owner:	PIERCE COUNTY DAVID RENSTROM | CH2M HIL
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H65
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000408036**

Database:	Ecology Well Logs	Well Log ID:	539505
Well Tag #:	BAA819	Project Tag #:	Not Reported
Notice of Intent #:	RE02248	Date Received:	25-JUN-08
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported

Well completion:	18-APR-08	Well Owner:	PIERCE COUNTY DAVID RENSTROM | CH2M HIL
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H66
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000493439**

Database:	Ecology Well Logs	Well Log ID:	684828
Well Tag #:	BAA816	Project Tag #:	Not Reported
Notice of Intent #:	A104942	Date Received:	02-NOV-10
Diameter (in):	1	Casing Depth (ft):	9
Well completion:	24-JUN-10	Well Owner:	WA STATE DEPT OF TRANSPORTATION
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H67
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000493441**

Database:	Ecology Well Logs	Well Log ID:	684832
Well Tag #:	BAA821	Project Tag #:	Not Reported
Notice of Intent #:	A104942	Date Received:	02-NOV-10
Diameter (in):	1	Casing Depth (ft):	9
Well completion:	24-JUN-10	Well Owner:	WA STATE DEPT OF TRANSPORTATION
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

H68
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000493436**

Database:	Ecology Well Logs	Well Log ID:	684823
Well Tag #:	BAA820	Project Tag #:	Not Reported
Notice of Intent #:	A104942	Date Received:	02-NOV-10
Diameter (in):	1	Casing Depth (ft):	9
Well completion:	24-JUN-10	Well Owner:	WA STATE DEPT OF TRANSPORTATION
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

H69
ENE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000493438**

Database:	Ecology Well Logs	Well Log ID:	684826
Well Tag #:	BAA815	Project Tag #:	Not Reported
Notice of Intent #:	A104942	Date Received:	02-NOV-10
Diameter (in):	1	Casing Depth (ft):	9
Well completion:	24-JUN-10	Well Owner:	WA STATE DEPT OF TRANSPORTATION
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

I70
ESE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000791880**

Database:	Ecology Well Logs	Well Log ID:	1696766
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE47923	Date Received:	09-APR-18
Diameter (in):	2	Casing Depth (ft):	72
Well completion:	30-MAR-18	Well Owner:	Pierce County Public Works
Well Type:	Decommisioning	Driller #:	3188
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

I71
ESE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000791893**

Database:	Ecology Well Logs	Well Log ID:	1696781
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE47922	Date Received:	09-APR-18
Diameter (in):	2	Casing Depth (ft):	109
Well completion:	30-MAR-18	Well Owner:	Pierce County Public Works
Well Type:	Decommisioning	Driller #:	3188
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

72
NNW
1/4 - 1/2 Mile
Lower

WA WELLS **WA1200000012881**

Database:	Water Wells	PWS ID:	06316
Source #:	01	Source Name:	WELL #1
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	11/12/1997

Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Puyallup-White
Well Depth:	143	Source Susceptibility:	X
System Name:	CHINCHINSKI WATER SUPPLY CO		
Public Water System Group:	B	System Type:	GRPB
Full Time Res Pop:	10	Total Population Served:	10
Total Connections:	3	PWS Status:	Inactive
Residential Connection:	3	DOE Well Tag:	Not Reported
Capacity (gpm):	55	Influenced by Droughts:	N
Influenced by Flooding:	N	Influenced by Surface Water:	U

73
North
1/4 - 1/2 Mile
Lower

FED USGS **USGS40001251508**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13D02	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110014	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19871112	Well Depth:	105
Well Depth Units:	ft	Well Hole Depth:	105
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1995-07-04
Feet below surface:	4.81	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1987-11-24	Feet below surface:	-3
Feet to sea level:	Not Reported	Note:	Not Reported

J74
NW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000030941**

Database:	Ecology Well Logs	Well Log ID:	35505
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	032590	Date Received:	31-JUL-91
Diameter (in):	6	Casing Depth (ft):	73
Well completion:	21-JUL-91	Well Owner:	FRED LUCKOW
Well Type:	Water	Driller #:	0684
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

J75
NW
1/2 - 1 Mile
Lower

WA WELLS **WA1200000018797**

Database:	Water Wells	PWS ID:	88755
Source #:	01	Source Name:	Well 01

Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	06/10/1994	Water Resource Inventory Area:	Puyallup-White
Well Depth:	72	Source Susceptibility:	Not Reported
System Name:	Not Reported	Public Water System Group:	Not Reported
System Type:	Not Reported	Full Time Res Pop:	0
Total Population Served:	0	Total Connections:	0
PWS Status:	Not Reported	Residential Connection:	0
DOE Well Tag:	Not Reported	Capacity (gpm):	20
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

J76
NW
1/2 - 1 Mile
Lower

WA WELLS **WA1200000029886**

Database:	Water Wells	PWS ID:	67620
Source #:	01	Source Name:	Spring
Source Status:	Active	Source Type:	Ground Water - Spring
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Puyallup-White
Well Depth:	0	Source Susceptibility:	H
System Name:	MABEE WATER SYSTEM	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	12
Total Population Served:	12	Total Connections:	3
PWS Status:	Active	Residential Connection:	3
DOE Well Tag:	Not Reported	Capacity (gpm):	10
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

K77
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307476**

Database:	Ecology Well Logs	Well Log ID:	399624
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	E004878	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K78
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307475**

Database:	Ecology Well Logs	Well Log ID:	399623
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	E004878	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO

Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K79
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307478**

Database:	Ecology Well Logs	Well Log ID:	399626
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	E004878	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K80
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307477**

Database:	Ecology Well Logs	Well Log ID:	399625
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	E004878	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K81
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307474**

Database:	Ecology Well Logs	Well Log ID:	399622
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	E004878	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

K82
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000032921**

Database:	Ecology Well Logs	Well Log ID:	37705
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	8	Casing Depth (ft):	98
Well completion:	25-MAY-51	Well Owner:	LEON ZABROSKI
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K83
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000032146**

Database:	Ecology Well Logs	Well Log ID:	36857
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	W093407	Date Received:	03-AUG-97
Diameter (in):	6	Casing Depth (ft):	100
Well completion:	12-JUN-97	Well Owner:	JINS FARM
Well Type:	Water	Driller #:	1547
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K84
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307473**

Database:	Ecology Well Logs	Well Log ID:	399621
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	E004878	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K85
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000032958**

Database:	Ecology Well Logs	Well Log ID:	37745
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	2	Casing Depth (ft):	86

Well completion:	Not Reported	Well Owner:	LESTER WEBB
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K86
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307936**

Database:	Ecology Well Logs	Well Log ID:	400122
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A068559	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K87
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307935**

Database:	Ecology Well Logs	Well Log ID:	400121
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A068559	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K88
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307930**

Database:	Ecology Well Logs	Well Log ID:	400116
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	E004878	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

K89
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307937**

Database:	Ecology Well Logs	Well Log ID:	400123
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A068559	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K90
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307933**

Database:	Ecology Well Logs	Well Log ID:	400119
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	E004878	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K91
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307934**

Database:	Ecology Well Logs	Well Log ID:	400120
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A068559	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	5.5
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K92
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307931**

Database:	Ecology Well Logs	Well Log ID:	400117
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	E004878	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8

Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K93
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307932**

Database:	Ecology Well Logs	Well Log ID:	400118
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	E004878	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K94
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307481**

Database:	Ecology Well Logs	Well Log ID:	399630
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A068559	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K95
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307482**

Database:	Ecology Well Logs	Well Log ID:	399632
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A068559	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

K96
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307479**

Database:	Ecology Well Logs	Well Log ID:	399627
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A068559	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K97
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307480**

Database:	Ecology Well Logs	Well Log ID:	399628
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A068559	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K98
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307928**

Database:	Ecology Well Logs	Well Log ID:	400114
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	E004878	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K99
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307929**

Database:	Ecology Well Logs	Well Log ID:	400115
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	E004878	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8

Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K100
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307483**

Database:	Ecology Well Logs	Well Log ID:	399633
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A068559	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

K101
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000307484**

Database:	Ecology Well Logs	Well Log ID:	399635
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A068559	Date Received:	21-JAN-04
Diameter (in):	2	Casing Depth (ft):	8
Well completion:	24-SEP-03	Well Owner:	PIERCE CO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

102
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40001251240**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-14K01	Type:	Well
Description:	AKA: SE NW S14 T20N R03E W		
HUC:	17110014	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	20040712	Well Depth:	196
Well Depth Units:	ft	Well Hole Depth:	198
Well Hole Depth Units:	ft		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

L103
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000298433**

Database:	Ecology Well Logs	Well Log ID:	389296
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A063481	Date Received:	25-AUG-04
Diameter (in):	3.5	Casing Depth (ft):	15
Well completion:	28-APR-04	Well Owner:	CHARLIE BATTS
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

L104
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000032092**

Database:	Ecology Well Logs	Well Log ID:	36802
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	048852	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	59
Well completion:	24-APR-92	Well Owner:	JIM MASHBURN
Well Type:	Water	Driller #:	2017
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

M105
NE
1/2 - 1 Mile
Lower

WA WELLS **WA1200000026055**

Database:	Water Wells	PWS ID:	71510
Source #:	01	Source Name:	WELL #1
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Puyallup-White
Well Depth:	94	Source Susceptibility:	X
System Name:	GILLESPIE TRAILER PARK	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	8
Total Population Served:	8	Total Connections:	3
PWS Status:	Active	Residential Connection:	3
DOE Well Tag:	Not Reported	Capacity (gpm):	8
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

M106
NE
1/2 - 1 Mile
Lower

FED USGS **USGS40001251420**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13G02	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19570101
Well Depth:	92	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1957-01-01
Feet below surface:	1	Feet to sea level:	Not Reported
Note:	Not Reported		

N107
North
1/2 - 1 Mile
Lower

FED USGS **USGS40001251509**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13D01	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110014	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Unclassified Overburden	Aquifer Type:	Not Reported
Construction Date:	19861215	Well Depth:	143
Well Depth Units:	ft	Well Hole Depth:	143
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1986-12-19
Feet below surface:	2	Feet to sea level:	Not Reported
Note:	Not Reported		

O108
West
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000392168**

Database:	Ecology Well Logs	Well Log ID:	516046
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	R036682	Date Received:	30-OCT-98
Diameter (in):	Not Reported	Casing Depth (ft):	17
Well completion:	30-OCT-98	Well Owner:	TUCCI AND SONS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

O109
West
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000392153**

Database:	Ecology Well Logs	Well Log ID:	516031
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	R036682	Date Received:	30-OCT-98
Diameter (in):	Not Reported	Casing Depth (ft):	37
Well completion:	30-OCT-98	Well Owner:	TUCCI AND SONS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

O110
West
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000392167**

Database:	Ecology Well Logs	Well Log ID:	516045
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	R036682	Date Received:	30-OCT-98
Diameter (in):	Not Reported	Casing Depth (ft):	32
Well completion:	30-OCT-98	Well Owner:	TUCCI AND SONS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N111
North
1/2 - 1 Mile
Lower

WA WELLS **WA1200000032568**

Database:	Water Wells	PWS ID:	AC607
Source #:	01	Source Name:	Well #1
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	10/13/2010
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Puyallup-White
Well Depth:	60	Source Susceptibility:	H
System Name:	Gratzer Water System	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	6
Total Population Served:	6	Total Connections:	2
PWS Status:	Active	Residential Connection:	2
DOE Well Tag:	Not Reported	Capacity (gpm):	0
Influenced by Droughts:	N	Influenced by Flooding:	N
Influenced by Surface Water:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

N112
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000542681**

Database:	Ecology Well Logs	Well Log ID:	780439
Well Tag #:	BCH924	Project Tag #:	Not Reported
Notice of Intent #:	RE06522	Date Received:	19-DEC-11
Diameter (in):	2.125	Casing Depth (ft):	10
Well completion:	21-NOV-11	Well Owner:	PORT OF TACOMA | ASPECT CONSULTING
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N113
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000542682**

Database:	Ecology Well Logs	Well Log ID:	780441
Well Tag #:	BCH925	Project Tag #:	Not Reported
Notice of Intent #:	RE06522	Date Received:	19-DEC-11
Diameter (in):	2.125	Casing Depth (ft):	15
Well completion:	22-NOV-11	Well Owner:	PORT OF TACOMA | ASPECT CONSULTING
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N114
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000542679**

Database:	Ecology Well Logs	Well Log ID:	780435
Well Tag #:	BCH922	Project Tag #:	Not Reported
Notice of Intent #:	RE06522	Date Received:	19-DEC-11
Diameter (in):	2.125	Casing Depth (ft):	15
Well completion:	22-NOV-11	Well Owner:	PORT OF TACOMA | ASPECT CONSULTING
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N115
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000542680**

Database:	Ecology Well Logs	Well Log ID:	780437
Well Tag #:	BCH923	Project Tag #:	Not Reported
Notice of Intent #:	RE06522	Date Received:	19-DEC-11
Diameter (in):	2.125	Casing Depth (ft):	15

Well completion:	21-NOV-11	Well Owner:	PORT OF TACOMA | ASPECT CONSULTING
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N116
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000542685**

Database:	Ecology Well Logs	Well Log ID:	780447
Well Tag #:	BCH928	Project Tag #:	Not Reported
Notice of Intent #:	RE06522	Date Received:	19-DEC-11
Diameter (in):	2.125	Casing Depth (ft):	15
Well completion:	22-NOV-11	Well Owner:	PORT OF TACOMA | ASPECT CONSULTING
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N117
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000583054**

Database:	Ecology Well Logs	Well Log ID:	861542
Well Tag #:	BHF979	Project Tag #:	Not Reported
Notice of Intent #:	WE14853	Date Received:	30-AUG-13
Diameter (in):	6	Casing Depth (ft):	70
Well completion:	24-AUG-12	Well Owner:	Kenneth Kluge
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N118
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000542683**

Database:	Ecology Well Logs	Well Log ID:	780443
Well Tag #:	BCH926	Project Tag #:	Not Reported
Notice of Intent #:	RE06522	Date Received:	19-DEC-11
Diameter (in):	2.125	Casing Depth (ft):	15
Well completion:	22-NOV-11	Well Owner:	PORT OF TACOMA
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

N119
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000542684**

Database:	Ecology Well Logs	Well Log ID:	780445
Well Tag #:	BCH927	Project Tag #:	Not Reported
Notice of Intent #:	RE06522	Date Received:	19-DEC-11
Diameter (in):	2.125	Casing Depth (ft):	15
Well completion:	22-NOV-11	Well Owner:	PORT OF TACOMA | ASPECT CONSULTING
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N120
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000542678**

Database:	Ecology Well Logs	Well Log ID:	780433
Well Tag #:	BCH921	Project Tag #:	Not Reported
Notice of Intent #:	RE06522	Date Received:	19-DEC-11
Diameter (in):	2.125	Casing Depth (ft):	10
Well completion:	21-NOV-11	Well Owner:	PORT OF TACOMA | ASPECT CONSULTING
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N121
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000033979**

Database:	Ecology Well Logs	Well Log ID:	38984
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	02-MAR-87
Diameter (in):	6	Casing Depth (ft):	143
Well completion:	19-DEC-86	Well Owner:	PETE BENNISON
Well Type:	Water	Driller #:	1465
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N122
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000258778**

Database:	Ecology Well Logs	Well Log ID:	344331
Well Tag #:	AHA276	Project Tag #:	Not Reported
Notice of Intent #:	WE00600	Date Received:	17-OCT-02
Diameter (in):	6	Casing Depth (ft):	67

Well completion:	01-OCT-02	Well Owner:	JEFF GRAHAM
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N123
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000030944**

Database:	Ecology Well Logs	Well Log ID:	35508
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	153
Well completion:	12-OCT-77	Well Owner:	FRED MASELLA
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N124
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000032928**

Database:	Ecology Well Logs	Well Log ID:	37713
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	007483	Date Received:	Not Reported
Diameter (in):	5	Casing Depth (ft):	105
Well completion:	25-NOV-87	Well Owner:	LEONARD PICCOLOS
Well Type:	Water	Driller #:	0252
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N125
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000350239**

Database:	Ecology Well Logs	Well Log ID:	457046
Well Tag #:	ALK400	Project Tag #:	Not Reported
Notice of Intent #:	W159046	Date Received:	18-OCT-06
Diameter (in):	6	Casing Depth (ft):	76
Well completion:	29-SEP-06	Well Owner:	TARRICENE
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

N126
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000370319**

Database:	Ecology Well Logs	Well Log ID:	484939
Well Tag #:	ALA976	Project Tag #:	Not Reported
Notice of Intent #:	D050554	Date Received:	22-JUN-07
Diameter (in):	30	Casing Depth (ft):	35
Well completion:	29-SEP-05	Well Owner:	RICHARD GARCHOW
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N127
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000333423**

Database:	Ecology Well Logs	Well Log ID:	431787
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A104074	Date Received:	24-FEB-06
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	07-OCT-05	Well Owner:	STONEBROOK LLC
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N128
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000333424**

Database:	Ecology Well Logs	Well Log ID:	431788
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	D050551	Date Received:	24-FEB-06
Diameter (in):	30	Casing Depth (ft):	25
Well completion:	26-SEP-06	Well Owner:	STONEBROOK LLC
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N129
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000619296**

Database:	Ecology Well Logs	Well Log ID:	929565
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE27927	Date Received:	18-AUG-14
Diameter (in):	2	Casing Depth (ft):	14

Well completion:	08-AUG-14	Well Owner:	PORT OF TACOMA
Well Type:	Decommisioning	Driller #:	2253
Static Water Level:	2	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N130
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000619297**

Database:	Ecology Well Logs	Well Log ID:	929566
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE27927	Date Received:	18-AUG-14
Diameter (in):	2	Casing Depth (ft):	10
Well completion:	08-AUG-14	Well Owner:	PORT OF TACOMA
Well Type:	Decommisioning	Driller #:	2253
Static Water Level:	1	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N131
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000619271**

Database:	Ecology Well Logs	Well Log ID:	929540
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE27927	Date Received:	18-AUG-14
Diameter (in):	2	Casing Depth (ft):	15
Well completion:	08-AUG-14	Well Owner:	PORT OF TACOMA
Well Type:	Decommisioning	Driller #:	2253
Static Water Level:	3	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N132
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000619295**

Database:	Ecology Well Logs	Well Log ID:	929564
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE27927	Date Received:	18-AUG-14
Diameter (in):	2	Casing Depth (ft):	15
Well completion:	08-AUG-14	Well Owner:	PORT OF TACOMA
Well Type:	Decommisioning	Driller #:	2253
Static Water Level:	1	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

N133
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000637492**

Database:	Ecology Well Logs	Well Log ID:	962500
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE29166	Date Received:	14-NOV-14
Diameter (in):	6	Casing Depth (ft):	55
Well completion:	23-OCT-14	Well Owner:	Port Of Tacoma
Well Type:	Decommisioning	Driller #:	2253
Static Water Level:	5	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N134
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000871384**

Database:	Ecology Well Logs	Well Log ID:	1924235
Well Tag #:	BAF142	Project Tag #:	Not Reported
Notice of Intent #:	WE36316	Date Received:	21-OCT-19
Diameter (in):	6	Casing Depth (ft):	58
Well completion:	16-SEP-19	Well Owner:	Al Wittich
Well Type:	Water	Driller #:	2398
Static Water Level:	7.59999990463257	Flow Rate (gpm):	13
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Bailer Test	Water Reclamation #:	10

N135
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000619298**

Database:	Ecology Well Logs	Well Log ID:	929567
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE27927	Date Received:	18-AUG-14
Diameter (in):	2	Casing Depth (ft):	15
Well completion:	08-AUG-14	Well Owner:	PORT OF TACOMA
Well Type:	Decommisioning	Driller #:	2253
Static Water Level:	2	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N136
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000628009**

Database:	Ecology Well Logs	Well Log ID:	940786
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE29166	Date Received:	04-NOV-14
Diameter (in):	6	Casing Depth (ft):	55

Well completion:	23-OCT-14	Well Owner:	Port Of Tacoma
Well Type:	Decommisioning	Driller #:	2253
Static Water Level:	5	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N137
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000619270**

Database:	Ecology Well Logs	Well Log ID:	929539
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE27927	Date Received:	18-AUG-14
Diameter (in):	2	Casing Depth (ft):	14.6
Well completion:	08-AUG-14	Well Owner:	PORT OF TACOMA
Well Type:	Decommisioning	Driller #:	2253
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Applicable	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N138
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000587336**

Database:	Ecology Well Logs	Well Log ID:	869993
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE48524	Date Received:	24-JUN-13
Diameter (in):	1.5	Casing Depth (ft):	46
Well completion:	18-JUN-13	Well Owner:	Port Of Tacoma
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N139
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000587337**

Database:	Ecology Well Logs	Well Log ID:	869995
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE22384	Date Received:	24-JUN-13
Diameter (in):	1.5	Casing Depth (ft):	35
Well completion:	18-JUN-13	Well Owner:	Port Of Tacoma
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

N140
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000587334**

Database:	Ecology Well Logs	Well Log ID:	869989
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE48524	Date Received:	24-JUN-13
Diameter (in):	1.5	Casing Depth (ft):	35
Well completion:	18-JUN-13	Well Owner:	Port Of Tacoma
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N141
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000587335**

Database:	Ecology Well Logs	Well Log ID:	869991
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE48524	Date Received:	24-JUN-13
Diameter (in):	1.5	Casing Depth (ft):	40
Well completion:	18-JUN-13	Well Owner:	Port Of Tacoma
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N142
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000619268**

Database:	Ecology Well Logs	Well Log ID:	929537
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE27927	Date Received:	18-AUG-14
Diameter (in):	2	Casing Depth (ft):	9.5
Well completion:	08-AUG-14	Well Owner:	PORT OF TACOMA
Well Type:	Decommisioning	Driller #:	2253
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N143
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000619269**

Database:	Ecology Well Logs	Well Log ID:	929538
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE27927	Date Received:	18-AUG-14
Diameter (in):	2	Casing Depth (ft):	15

Well completion:	08-AUG-14	Well Owner:	PORT OF TACOMA
Well Type:	Decommisioning	Driller #:	2253
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Applicable	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N144
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000587338**

Database:	Ecology Well Logs	Well Log ID:	869997
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE22384	Date Received:	24-JUN-13
Diameter (in):	1.5	Casing Depth (ft):	46
Well completion:	18-JUN-13	Well Owner:	Port Of Tacoma
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

N145
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000617373**

Database:	Ecology Well Logs	Well Log ID:	925808
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE27927	Date Received:	30-JUL-14
Diameter (in):	2	Casing Depth (ft):	90
Well completion:	27-JUL-14	Well Owner:	PORT OF TACOMA
Well Type:	Decommisioning	Driller #:	2253
Static Water Level:	8	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

M146
NE
1/2 - 1 Mile
Lower

FED USGS **USGS40001251444**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13B01	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19420101
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

M147
NE
1/2 - 1 Mile
Lower

FED USGS **USGS40001251431**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13G01	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19510601
Well Depth:	98	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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P148
NNE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000419133**

Database:	Ecology Well Logs	Well Log ID:	553986
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE03703	Date Received:	13-OCT-08
Diameter (in):	1.5	Casing Depth (ft):	30
Well completion:	24-SEP-08	Well Owner:	Puyallup Tribe | Kleinfelder
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

P149
NNE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000419134**

Database:	Ecology Well Logs	Well Log ID:	553988
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE02765	Date Received:	13-OCT-08
Diameter (in):	1.5	Casing Depth (ft):	30
Well completion:	24-SEP-08	Well Owner:	Puyallup Tribe | Kleinfelder
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

P150
NNE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000419132**

Database:	Ecology Well Logs	Well Log ID:	553985
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE02765	Date Received:	13-OCT-08

Diameter (in):	1.5	Casing Depth (ft):	30
Well completion:	24-SEP-08	Well Owner:	Puyallup Tribe | Kleinfelder
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

P151
NNE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000194782**

Database:	Ecology Well Logs	Well Log ID:	252580
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	16-JUL-99
Diameter (in):	6	Casing Depth (ft):	93
Well completion:	16-MAR-99	Well Owner:	PUYALLUP INTERNATION INC
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

P152
NNE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000419131**

Database:	Ecology Well Logs	Well Log ID:	553984
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE03703	Date Received:	13-OCT-08
Diameter (in):	1.5	Casing Depth (ft):	30
Well completion:	24-SEP-08	Well Owner:	Puyallup Tribe | Kleinfelder
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

P153
NNE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000421332**

Database:	Ecology Well Logs	Well Log ID:	556918
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE02880	Date Received:	22-OCT-08
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	12-SEP-08	Well Owner:	PUYALLUP TRIBE | KLEINFELDER
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

P154
NNE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000421336**

Database:	Ecology Well Logs	Well Log ID:	556926
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129383	Date Received:	22-OCT-08
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	12-SEP-08	Well Owner:	PUYALLUP TRIBE
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

P155
NNE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000422557**

Database:	Ecology Well Logs	Well Log ID:	558756
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE02880	Date Received:	22-OCT-08
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	12-SEP-08	Well Owner:	PUYALLUP TRIBE | KLEINFELDER
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

P156
NNE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000421335**

Database:	Ecology Well Logs	Well Log ID:	556924
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129383	Date Received:	22-OCT-08
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	12-SEP-08	Well Owner:	PUYALLUP TRIBE
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

P157
NNE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000421333**

Database:	Ecology Well Logs	Well Log ID:	556920
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE02880	Date Received:	22-OCT-08
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported

Well completion:	12-SEP-08	Well Owner:	PUYALLUP TRIBE | KLEINFELDER
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

P158
NNE **WA WELLS** **WALOG2000421334**
1/2 - 1 Mile
Lower

Database:	Ecology Well Logs	Well Log ID:	556922
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129383	Date Received:	22-OCT-08
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	12-SEP-08	Well Owner:	PUYALLUP TRIBE
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

159
NW **FED USGS** **USGS40001251341**
1/2 - 1 Mile
Higher

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-14H01	Type:	Well
Description:	AKA: 20N/03E-14G01	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Unclassified Overburden
Aquifer Type:	Not Reported	Construction Date:	19910627
Well Depth:	73	Well Depth Units:	ft
Well Hole Depth:	77	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	2	Level reading date:	1995-07-07
Feet below surface:	18.6	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1991-07-21	Feet below surface:	35
Feet to sea level:	Not Reported	Note:	Not Reported

160
ENE **FED USGS** **USGS40001251340**
1/2 - 1 Mile
Lower

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13H05	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Quaternary Alluvium

Aquifer Type:	Not Reported	Construction Date:	19800930
Well Depth:	78	Well Depth Units:	ft
Well Hole Depth:	78	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	3	Level reading date:	1995-06-14
Feet below surface:	1.86	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1985-05-29	Feet below surface:	1.64
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-10-02	Feet below surface:	3
Feet to sea level:	Not Reported	Note:	Not Reported

Q161
East
1/2 - 1 Mile
Lower

WA WELLS **WA1200000006971**

Database:	Water Wells	PWS ID:	90978
Source #:	01	Source Name:	Well 01
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	02/06/1998	Water Resource Inventory Area:	Chambers-Clover
Well Depth:	104	Source Susceptibility:	Not Reported
System Name:	VALLEY MOBILE PARK	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	15
Total Population Served:	15	Total Connections:	6
PWS Status:	Inactive	Residential Connection:	6
DOE Well Tag:	Not Reported	Capacity (gpm):	10
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

Q162
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000355395**

Database:	Ecology Well Logs	Well Log ID:	464073
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE01996	Date Received:	22-NOV-06
Diameter (in):	Not Reported	Casing Depth (ft):	15
Well completion:	27-OCT-06	Well Owner:	NORTHWEST BUILDING LLC
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Q163
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000366176**

Database:	Ecology Well Logs	Well Log ID:	479257
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A104088	Date Received:	09-APR-07

Diameter (in):	12	Casing Depth (ft):	30
Well completion:	28-MAR-07	Well Owner:	SSHI LLC
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Q164
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000355394**

Database:	Ecology Well Logs	Well Log ID:	464072
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE01996	Date Received:	22-NOV-06
Diameter (in):	Not Reported	Casing Depth (ft):	9.5
Well completion:	27-OCT-06	Well Owner:	NORTHWEST BUILDING LLC
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Q165
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000366177**

Database:	Ecology Well Logs	Well Log ID:	479258
Well Tag #:	ALA977	Project Tag #:	Not Reported
Notice of Intent #:	D050570	Date Received:	09-APR-07
Diameter (in):	30	Casing Depth (ft):	27
Well completion:	28-MAR-07	Well Owner:	SSHI LLC
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Q166
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000355393**

Database:	Ecology Well Logs	Well Log ID:	464071
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE01996	Date Received:	22-NOV-06
Diameter (in):	Not Reported	Casing Depth (ft):	21.5
Well completion:	27-OCT-06	Well Owner:	NORTHWEST BUILDING LLC
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

R167
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000327570**

Database:	Ecology Well Logs	Well Log ID:	423955
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S027988	Date Received:	28-NOV-05
Diameter (in):	7	Casing Depth (ft):	Not Reported
Well completion:	19-OCT-05	Well Owner:	PUYALLUP SCHOOL DIST
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

R168
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000740913**

Database:	Ecology Well Logs	Well Log ID:	1606696
Well Tag #:	Not Reported	Project Tag #:	B2
Notice of Intent #:	SE60437	Date Received:	30-DEC-16
Diameter (in):	2.25	Casing Depth (ft):	20
Well completion:	06-DEC-16	Well Owner:	George Property Management LLC
Well Type:	Resource Protection	Driller #:	2827
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

R169
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000740912**

Database:	Ecology Well Logs	Well Log ID:	1606695
Well Tag #:	Not Reported	Project Tag #:	B1
Notice of Intent #:	AE40536	Date Received:	30-DEC-16
Diameter (in):	2.25	Casing Depth (ft):	30
Well completion:	06-DEC-16	Well Owner:	George Property Management LLC
Well Type:	Decommisioning	Driller #:	2827
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

R170
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000740911**

Database:	Ecology Well Logs	Well Log ID:	1606694
Well Tag #:	Not Reported	Project Tag #:	B1
Notice of Intent #:	SE60437	Date Received:	30-DEC-16
Diameter (in):	2.25	Casing Depth (ft):	30

Well completion:	06-DEC-16	Well Owner:	George Property Management LLC
Well Type:	Resource Protection	Driller #:	2827
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

R171
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000740916**

Database:	Ecology Well Logs	Well Log ID:	1606699
Well Tag #:	Not Reported	Project Tag #:	B5
Notice of Intent #:	SE60437	Date Received:	30-DEC-16
Diameter (in):	2.25	Casing Depth (ft):	20
Well completion:	06-DEC-16	Well Owner:	George Property Management LLC
Well Type:	Resource Protection	Driller #:	2827
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

R172
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000740915**

Database:	Ecology Well Logs	Well Log ID:	1606698
Well Tag #:	Not Reported	Project Tag #:	B4
Notice of Intent #:	SE60437	Date Received:	30-DEC-16
Diameter (in):	2.25	Casing Depth (ft):	20
Well completion:	06-DEC-16	Well Owner:	George Property Management LLC
Well Type:	Resource Protection	Driller #:	2827
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

R173
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000740914**

Database:	Ecology Well Logs	Well Log ID:	1606697
Well Tag #:	Not Reported	Project Tag #:	B3
Notice of Intent #:	SE60437	Date Received:	30-DEC-16
Diameter (in):	2.25	Casing Depth (ft):	20
Well completion:	06-DEC-16	Well Owner:	George Property Management LLC
Well Type:	Resource Protection	Driller #:	2827
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

R174
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000740738**

Database:	Ecology Well Logs	Well Log ID:	1606521
Well Tag #:	Not Reported	Project Tag #:	B5
Notice of Intent #:	AE40536	Date Received:	30-DEC-16
Diameter (in):	2.25	Casing Depth (ft):	20
Well completion:	06-DEC-16	Well Owner:	George Property Management LLC
Well Type:	Decommisioning	Driller #:	2827
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

R175
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000473860**

Database:	Ecology Well Logs	Well Log ID:	645779
Well Tag #:	BCP433	Project Tag #:	Not Reported
Notice of Intent #:	RE04435	Date Received:	29-APR-10
Diameter (in):	10.25	Casing Depth (ft):	46.5
Well completion:	29-MAR-10	Well Owner:	BNSF RR c/o Kennedy/Jenks | Kennedy/Jenks
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

R176
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000473859**

Database:	Ecology Well Logs	Well Log ID:	645777
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE08881	Date Received:	29-APR-10
Diameter (in):	10.25	Casing Depth (ft):	46.5
Well completion:	29-MAR-10		
Well Owner:	South Tacoma Field | Kennedy/Jenks Consultants		
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

R177
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000364561**

Database:	Ecology Well Logs	Well Log ID:	476662
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A092613	Date Received:	30-APR-07

Diameter (in):	7	Casing Depth (ft):	10
Well completion:	19-OCT-05	Well Owner:	PUYALLUP SCHOOL DIST
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

R178
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000740737**

Database:	Ecology Well Logs	Well Log ID:	1606520
Well Tag #:	Not Reported	Project Tag #:	B4
Notice of Intent #:	AE40536	Date Received:	30-DEC-16
Diameter (in):	2.25	Casing Depth (ft):	20
Well completion:	06-DEC-16	Well Owner:	George Property Management LLC
Well Type:	Decommisioning	Driller #:	2827
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

R179
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000740736**

Database:	Ecology Well Logs	Well Log ID:	1606519
Well Tag #:	Not Reported	Project Tag #:	B3
Notice of Intent #:	AE40536	Date Received:	30-DEC-16
Diameter (in):	2.25	Casing Depth (ft):	20
Well completion:	06-DEC-16	Well Owner:	George Property Management LLC
Well Type:	Decommisioning	Driller #:	2827
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

R180
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000740735**

Database:	Ecology Well Logs	Well Log ID:	1606518
Well Tag #:	Not Reported	Project Tag #:	B2
Notice of Intent #:	AE40536	Date Received:	30-DEC-16
Diameter (in):	2.25	Casing Depth (ft):	20
Well completion:	06-DEC-16	Well Owner:	George Property Management LLC
Well Type:	Decommisioning	Driller #:	2827
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

S181
North
1/2 - 1 Mile
Lower

FED USGS **USGS40001251558**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13C01	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19700301
Well Depth:	75	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1970-04-01
Feet below surface:	7	Feet to sea level:	Not Reported
Note:	Other conditions existed that would affect the measured water level.		

S182
North
1/2 - 1 Mile
Lower

FED USGS **USGS40001251559**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13C02	Type:	Well
Description:	AKA: NW NW S13 T20N R03E W		
HUC:	17110014	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Vashon Drift of Fraser Glaciation		
Aquifer Type:	Not Reported	Construction Date:	19771012
Well Depth:	153	Well Depth Units:	ft
Well Hole Depth:	154	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	2	Level reading date:	1995-05-16
Feet below surface:	0.42	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1977-12-05	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		

183
NE
1/2 - 1 Mile
Lower

WA WELLS **WA1200000028229**

Database:	Water Wells	PWS ID:	01153
Source #:	01	Source Name:	WELL
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	12/31/1991
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Puyallup-White
Well Depth:	30	Source Susceptibility:	H

System Name:	CASTLEBERRY WATER SYSTEM	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	9
Total Population Served:	9	Total Connections:	3
PWS Status:	Active	Residential Connection:	3
DOE Well Tag:	Not Reported	Capacity (gpm):	12
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

184
NNW
1/2 - 1 Mile
Lower

WA WELLS **WA1200000014204**

Database:	Water Wells	PWS ID:	AA275
Source #:	01	Source Name:	WELL #1
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/21/2003
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Puyallup-White
Well Depth:	122	Source Susceptibility:	H
System Name:	GLACIER WATER SYSTEM	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	2
Total Population Served:	7	Total Connections:	2
PWS Status:	Active	Residential Connection:	1
DOE Well Tag:	Not Reported	Capacity (gpm):	13
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	N		

185
North
1/2 - 1 Mile
Lower

WA WELLS **WA1200000020229**

Database:	Water Wells	PWS ID:	34550
Source #:	01	Source Name:	UNKNOWN SOURCE - HISTORICAL DATA
Source Status:	Inactive	Source Type:	Other
Source Use:	Permanent	Date Source Effective:	07/01/1978
Date Source Inactive:	08/01/1979	Water Resource Inventory Area:	Puyallup-White
Well Depth:	0	Source Susceptibility:	Not Reported
System Name:	HOYT MOBILE HOME PARK	Public Water System Group:	A
System Type:	Comm	Full Time Res Pop:	30
Total Population Served:	30	Total Connections:	0
PWS Status:	Inactive	Residential Connection:	0
DOE Well Tag:	Not Reported	Capacity (gpm):	1
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	Not Reported		

T186
ENE
1/2 - 1 Mile
Lower

FED USGS **USGS40001251277**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13H04	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported

Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19510101
Well Depth:	253	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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U187
NNE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000734280**

Database:	Ecology Well Logs	Well Log ID:	1599973
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	EE06218	Date Received:	09-SEP-16
Diameter (in):	2.25	Casing Depth (ft):	20
Well completion:	02-AUG-16	Well Owner:	Fife WA Direct Push Project
Well Type:	Resource Protection	Driller #:	0
Static Water Level:	0	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

U188
NNE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000734279**

Database:	Ecology Well Logs	Well Log ID:	1599972
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE38669	Date Received:	09-SEP-16
Diameter (in):	2.25	Casing Depth (ft):	20
Well completion:	02-AUG-16	Well Owner:	Fife WA Direct Push Project
Well Type:	Decommisioning	Driller #:	0
Static Water Level:	0	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

U189
NNE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000734290**

Database:	Ecology Well Logs	Well Log ID:	1599984
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	EE06218	Date Received:	09-SEP-16
Diameter (in):	2.25	Casing Depth (ft):	20
Well completion:	02-AUG-16	Well Owner:	Fife WA Direct Push Project
Well Type:	Resource Protection	Driller #:	0
Static Water Level:	0	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

U190
NNE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000734288**

Database:	Ecology Well Logs	Well Log ID:	1599982
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE38669	Date Received:	09-SEP-16
Diameter (in):	2.25	Casing Depth (ft):	20
Well completion:	02-AUG-16	Well Owner:	Fife WA Direct Push Project
Well Type:	Decommisioning	Driller #:	0
Static Water Level:	0	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

V191
ENE
1/2 - 1 Mile
Lower

WA WELLS **WA1200000027727**

Database:	Water Wells	PWS ID:	61401
Source #:	01	Source Name:	WELL #1
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Puyallup-White
Well Depth:	145	Source Susceptibility:	H
System Name:	MAIN WELL	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	0
Total Population Served:	45	Total Connections:	2
PWS Status:	Active	Residential Connection:	0
DOE Well Tag:	Not Reported	Capacity (gpm):	36
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

192
North
1/2 - 1 Mile
Lower

WA WELLS **WA1200000026075**

Database:	Water Wells	PWS ID:	71614
Source #:	01	Source Name:	WELL #1
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Puyallup-White
Well Depth:	156	Source Susceptibility:	M
System Name:	RED GATE MOBILE HOME PARK	Public Water System Group:	A
System Type:	Comm	Full Time Res Pop:	25
Total Population Served:	25	Total Connections:	15
PWS Status:	Active	Residential Connection:	15
DOE Well Tag:	Not Reported	Capacity (gpm):	15
Influenced by Droughts:	N	Influenced by Flooding:	N
Influenced by Surface Water:	U		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

T193
ENE
1/2 - 1 Mile
Lower

FED USGS **USGS40001251287**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13H02	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19510101
Well Depth:	38	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1951-02-10
Feet below surface:	8	Feet to sea level:	Not Reported
Note:	Not Reported		

V194
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000035824**

Database:	Ecology Well Logs	Well Log ID:	41211
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	38
Well completion:	10-FEB-51	Well Owner:	WALTER STEMP
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

V195
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000035829**

Database:	Ecology Well Logs	Well Log ID:	41219
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	30-JAN-81
Diameter (in):	6	Casing Depth (ft):	78
Well completion:	02-OCT-80	Well Owner:	WARIN MACOMBER
Well Type:	Water	Driller #:	0829
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

V196
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000791864**

Database:	Ecology Well Logs	Well Log ID:	1696717
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE48086	Date Received:	17-APR-18
Diameter (in):	2	Casing Depth (ft):	0
Well completion:	05-APR-18	Well Owner:	Pierce County Public Works
Well Type:	Decommisioning	Driller #:	2467
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Applicable	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

T197
ENE
1/2 - 1 Mile
Lower

FED USGS **USGS40001251321**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13H01	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19010101
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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198
SSW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000759739**

Database:	Ecology Well Logs	Well Log ID:	1629811
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	0	Casing Depth (ft):	0
Well completion:	Not Reported	Well Owner:	AC KAPPHAHN
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

W199
SSE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000377758**

Database:	Ecology Well Logs	Well Log ID:	496021
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S031407	Date Received:	27-SEP-07

Diameter (in):	Not Reported	Casing Depth (ft):	26.5
Well completion:	05-JUN-07	Well Owner:	KLEINFELDER INC | KLIENFELDER INC
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

W200
SSE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000377759**

Database:	Ecology Well Logs	Well Log ID:	496023
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S031407	Date Received:	27-SEP-07
Diameter (in):	Not Reported	Casing Depth (ft):	26.5
Well completion:	05-JUN-07	Well Owner:	KLEINFELDER INC | KLIENFELDER INC
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

W201
SSE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000377760**

Database:	Ecology Well Logs	Well Log ID:	496025
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S031407	Date Received:	27-SEP-07
Diameter (in):	Not Reported	Casing Depth (ft):	26.5
Well completion:	05-JUN-07	Well Owner:	KLEINFELDER INC | KLIENFELDER INC
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

W202
SSE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000377757**

Database:	Ecology Well Logs	Well Log ID:	496019
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S031407	Date Received:	27-SEP-07
Diameter (in):	Not Reported	Casing Depth (ft):	26.5
Well completion:	05-JUN-07	Well Owner:	KLEINFELDER INC | KLIENFELDER INC
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

W203
SSE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000377754**

Database:	Ecology Well Logs	Well Log ID:	496013
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A118376	Date Received:	27-SEP-07
Diameter (in):	Not Reported	Casing Depth (ft):	26.5
Well completion:	05-JUN-07	Well Owner:	KLEINFELDER INC | KLIENFELDER INC
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

W204
SSE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000377753**

Database:	Ecology Well Logs	Well Log ID:	496011
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A118376	Date Received:	27-SEP-07
Diameter (in):	Not Reported	Casing Depth (ft):	26.5
Well completion:	05-JUN-07	Well Owner:	KLEINFELDER INC | KLIENFELDER INC
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

W205
SSE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000377756**

Database:	Ecology Well Logs	Well Log ID:	496017
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A118376	Date Received:	27-SEP-07
Diameter (in):	Not Reported	Casing Depth (ft):	26.5
Well completion:	05-JUN-07	Well Owner:	KLEINFELDER INC | KLIENFELDER INC
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

W206
SSE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000377755**

Database:	Ecology Well Logs	Well Log ID:	496015
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A118376	Date Received:	27-SEP-07
Diameter (in):	Not Reported	Casing Depth (ft):	26.5

Well completion:	05-JUN-07	Well Owner:	KLEINFELDER INC | KLIENFELDER INC
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

207
SE **FED USGS** **USGS40001250883**
1/2 - 1 Mile
Lower

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-24A01	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110014	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Unclassified Overburden	Aquifer Type:	Not Reported
Construction Date:	19920424	Well Depth:	59
Well Depth Units:	ft	Well Hole Depth:	70
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1992-04-24
Feet below surface:	12	Feet to sea level:	Not Reported
Note:	Not Reported		

208
ENE **FED USGS** **USGS40001251326**
1/2 - 1 Mile
Lower

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13H03	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19500801
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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209
NW **FED USGS** **USGS40001251510**
1/2 - 1 Mile
Higher

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-14B01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19010101

Well Depth:	145	Well Depth Units:	ft
Well Hole Depth:	145	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	23	Level reading date:	1997-05-13
Feet below surface:	101.01	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1997-03-13	Feet below surface:	105.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-01-15	Feet below surface:	101.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-11-25	Feet below surface:	100.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-09-19	Feet below surface:	101.49
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-07-17	Feet below surface:	102.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-05-14	Feet below surface:	101.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-03-06	Feet below surface:	104.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-01-12	Feet below surface:	106.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-11-27	Feet below surface:	103.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-09-10	Feet below surface:	103.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-07-27	Feet below surface:	103.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-06-27	Feet below surface:	103.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-10-08	Feet below surface:	104.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-09-10	Feet below surface:	104.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-08-13	Feet below surface:	104.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-07-16	Feet below surface:	104.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-07-09	Feet below surface:	104.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-07-02	Feet below surface:	103.98
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1985-06-25	Feet below surface:	103.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-06-18	Feet below surface:	103.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-05-22	Feet below surface:	103.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1960-03-11	Feet below surface:	103.98
Feet to sea level:	Not Reported	Note:	Not Reported

X210
NNW **FED USGS** **USGS40001251560**
1/2 - 1 Mile
Lower

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-14A01	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19140101
Well Depth:	80	Well Depth Units:	ft
Well Hole Depth:	80	Well Hole Depth Units:	ft

X211
NNW **FED USGS** **USGS40001251567**
1/2 - 1 Mile
Lower

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-14A02	Type:	Well
Description:	WELL WAS DESTORYED 9/26/84, CASING PULLED		
HUC:	17110014	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Holocene Alluvium	Aquifer Type:	Not Reported
Construction Date:	19840106	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	24.4
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	8	Level reading date:	1984-09-26
Feet below surface:	Not Reported	Feet to sea level:	Not Reported
Note:	The well was destroyed (no water level is recorded).		
Level reading date:	1984-09-25	Feet below surface:	5.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-08-21	Feet below surface:	5.3
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1984-08-14	Feet below surface:	4.7
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1984-05-01	Feet below surface:	3.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-02-07	Feet below surface:	2.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-01-23	Feet below surface:	3.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-01-06	Feet below surface:	12.5
Feet to sea level:	Not Reported	Note:	The site was being pumped.

X212
NNW **FED USGS** **USGS40001251598**
1/2 - 1 Mile
Lower

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-14A03	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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213
SSW **FED USGS** **USGS40001250744**
1/2 - 1 Mile
Higher

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-23H01	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19520522
Well Depth:	254	Well Depth Units:	ft
Well Hole Depth:	256	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	4	Level reading date:	1995-06-29
Feet below surface:	219.73	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1985-05-22	Feet below surface:	150.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1960-03-11	Feet below surface:	214.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-05-22	Feet below surface:	215
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

214
West
1/2 - 1 Mile
Higher

FED USGS **USGS40001251133**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-11Q01	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19541205
Well Depth:	95	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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215
NE
1/2 - 1 Mile
Lower

FED USGS **USGS40001251547**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13A03	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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Y216
East
1/2 - 1 Mile
Lower

FED USGS **USGS40001251178**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/04E-18M03	Type:	Well
Description:	WELL HAS NOT BEEN USED IN THE LAST 4 YEARS		
HUC:	17110014	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Unclassified Overburden	Aquifer Type:	Not Reported
Construction Date:	19820920	Well Depth:	156
Well Depth Units:	ft	Well Hole Depth:	203
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1982-09-23
Feet below surface:	Not Reported	Feet to sea level:	Not Reported
Note:	The site was flowing, but the head could not be measured without additional equipment.		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

Z217
NW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000372683**

Database:	Ecology Well Logs	Well Log ID:	488341
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S030572	Date Received:	18-JUN-07
Diameter (in):	Not Reported	Casing Depth (ft):	11.5
Well completion:	09-MAY-07	Well Owner:	PIERCE COUNTY | GEO ENGINEERS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Z218
NW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000372684**

Database:	Ecology Well Logs	Well Log ID:	488343
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S030572	Date Received:	18-JUN-07
Diameter (in):	Not Reported	Casing Depth (ft):	26.5
Well completion:	09-MAY-07	Well Owner:	PIERCE COUNTY | GEO ENGINEERS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Z219
NW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000372682**

Database:	Ecology Well Logs	Well Log ID:	488339
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S030572	Date Received:	18-JUN-07
Diameter (in):	Not Reported	Casing Depth (ft):	11.5
Well completion:	09-MAY-07	Well Owner:	PIERCE COUNTY | GEO ENGINEERS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Z220
NW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000372680**

Database:	Ecology Well Logs	Well Log ID:	488337
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S030572	Date Received:	18-JUN-07
Diameter (in):	Not Reported	Casing Depth (ft):	11.5

Well completion:	09-MAY-07	Well Owner:	PIERCE COUNTY | GEO ENGINEERS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Z221
NW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000372681**

Database:	Ecology Well Logs	Well Log ID:	488338
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S030572	Date Received:	18-JUN-07
Diameter (in):	Not Reported	Casing Depth (ft):	11.5
Well completion:	09-MAY-07	Well Owner:	PIERCE COUNTY | GEO ENGINEERS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Z222
NW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000372688**

Database:	Ecology Well Logs	Well Log ID:	488349
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S030572	Date Received:	18-JUN-07
Diameter (in):	Not Reported	Casing Depth (ft):	11.5
Well completion:	08-MAY-07	Well Owner:	PIERCE COUNTY | GEO ENGINEERS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Z223
NW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000372689**

Database:	Ecology Well Logs	Well Log ID:	488350
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S030572	Date Received:	18-JUN-07
Diameter (in):	Not Reported	Casing Depth (ft):	26.5
Well completion:	08-MAY-07	Well Owner:	PIERCE COUNTY | GEO ENGINEERS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

Z224
NW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000372687**

Database:	Ecology Well Logs	Well Log ID:	488347
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S030572	Date Received:	18-JUN-07
Diameter (in):	Not Reported	Casing Depth (ft):	15.5
Well completion:	08-MAY-07	Well Owner:	PIERCE COUNTY | GEO ENGINEERS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Z225
NW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000372685**

Database:	Ecology Well Logs	Well Log ID:	488344
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S030572	Date Received:	18-JUN-07
Diameter (in):	Not Reported	Casing Depth (ft):	26.5
Well completion:	09-MAY-07	Well Owner:	PIERCE COUNTY | GEO ENGINEERS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Z226
NW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000372686**

Database:	Ecology Well Logs	Well Log ID:	488346
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S030572	Date Received:	18-JUN-07
Diameter (in):	Not Reported	Casing Depth (ft):	16.5
Well completion:	08-MAY-07	Well Owner:	PIERCE COUNTY | GEO ENGINEERS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AA227
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000785456**

Database:	Ecology Well Logs	Well Log ID:	1681397
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE39421	Date Received:	12-FEB-18
Diameter (in):	8	Casing Depth (ft):	30

Well completion:	19-SEP-16	Well Owner:	Pierce County
Well Type:	Decommisioning	Driller #:	0
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AA228
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000785457**

Database:	Ecology Well Logs	Well Log ID:	1681398
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	ae39421	Date Received:	12-FEB-18
Diameter (in):	8	Casing Depth (ft):	30
Well completion:	19-SEP-16	Well Owner:	Pierce County
Well Type:	Decommisioning	Driller #:	0
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AA229
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000785458**

Database:	Ecology Well Logs	Well Log ID:	1681399
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE39421	Date Received:	12-FEB-18
Diameter (in):	8	Casing Depth (ft):	30
Well completion:	19-SEP-16	Well Owner:	Pierce County
Well Type:	Decommisioning	Driller #:	0
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AA230
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000785482**

Database:	Ecology Well Logs	Well Log ID:	1681424
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE59693	Date Received:	12-FEB-18
Diameter (in):	8	Casing Depth (ft):	30
Well completion:	19-SEP-16	Well Owner:	Pierce County
Well Type:	Resource Protection	Driller #:	0
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AA231
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000785454**

Database:	Ecology Well Logs	Well Log ID:	1681395
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE59693	Date Received:	12-FEB-18
Diameter (in):	8	Casing Depth (ft):	30
Well completion:	19-SEP-16	Well Owner:	Pierce County
Well Type:	Resource Protection	Driller #:	0
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AA232
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000785455**

Database:	Ecology Well Logs	Well Log ID:	1681396
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE59693	Date Received:	12-FEB-18
Diameter (in):	8	Casing Depth (ft):	30
Well completion:	19-SEP-16	Well Owner:	Pierce County
Well Type:	Resource Protection	Driller #:	0
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

233
NNW
1/2 - 1 Mile
Lower

WA WELLS **WA1200000011459**

Database:	Water Wells	PWS ID:	AD230
Source #:	01	Source Name:	Well
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	10/07/2014
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Puyallup-White
Well Depth:	0	Source Susceptibility:	Not Reported
System Name:	Guardians of Hope	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	2
Total Population Served:	12	Total Connections:	2
PWS Status:	Active	Residential Connection:	1
DOE Well Tag:	Not Reported	Capacity (gpm):	10
Influenced by Droughts:	N	Influenced by Flooding:	N
Influenced by Surface Water:	U		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

234
South
1/2 - 1 Mile
Higher

WA WELLS **WA1200000031410**

Database:	Water Wells	PWS ID:	85050
Source #:	07	Source Name:	Well #14
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Emergency	Date Source Effective:	01/01/1970
Date Source Inactive:	03/21/2001	Water Resource Inventory Area:	Chambers-Clover
Well Depth:	300	Source Susceptibility:	X
System Name:	SUMMIT WATER & SUPPLY CO	Public Water System Group:	A
System Type:	Comm	Full Time Res Pop:	16000
Total Population Served:	16000	Total Connections:	6759
PWS Status:	Active	Residential Connection:	6536
DOE Well Tag:	Not Reported	Capacity (gpm):	0
Influenced by Droughts:	N	Influenced by Flooding:	N
Influenced by Surface Water:	U		

AB235
NE
1/2 - 1 Mile
Lower

FED USGS **USGS40001251507**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13A01	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110014	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19810630	Well Depth:	56.5
Well Depth Units:	ft	Well Hole Depth:	56.5
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1981-07-01
Feet below surface:	11	Feet to sea level:	Not Reported
Note:	Not Reported		

AB236
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000032167**

Database:	Ecology Well Logs	Well Log ID:	36882
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	21-JAN-82
Diameter (in):	6	Casing Depth (ft):	56
Well completion:	01-JUL-81	Well Owner:	JOE HALL CONSTRUCTION
Well Type:	Water	Driller #:	0379
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AB237
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000035099**

Database:	Ecology Well Logs	Well Log ID:	40258
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	145
Well completion:	01-MAY-87	Well Owner:	SOLAR MFG.
Well Type:	Water	Driller #:	0419
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AB238
NE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000848435**

Database:	Ecology Well Logs	Well Log ID:	1900148
Well Tag #:	ABM921	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	83
Well completion:	01-JUL-52	Well Owner:	City of Tacoma Water Division
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	Not Reported

Z239
NW
1/2 - 1 Mile
Higher

FED USGS **USGS40001251529**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-14B02	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19550101
Well Depth:	80	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1960-08-01
Feet below surface:	33	Feet to sea level:	Not Reported
Note:	Other conditions existed that would affect the measured water level.		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

Y240
East
1/2 - 1 Mile
Lower

FED USGS **USGS40001251089**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/04E-18N01	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19600301
Well Depth:	173	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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AB241
NE
1/2 - 1 Mile
Lower

FED USGS **USGS40001251506**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-13A02	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110014	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Unclassified Overburden	Aquifer Type:	Not Reported
Construction Date:	19870501	Well Depth:	145
Well Depth Units:	ft	Well Hole Depth:	151
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1987-05-01
Feet below surface:	2	Feet to sea level:	Not Reported
Note:	Not Reported		

AC242
East
1/2 - 1 Mile
Lower

FED USGS **USGS40001251239**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/04E-18M02		
Type:	Well: Test hole not completed as a well		
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Holocene Alluvium
Aquifer Type:	Not Reported	Construction Date:	19840105
Well Depth:	24.2	Well Depth Units:	ft
Well Hole Depth:	24.2	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	6	Level reading date:	1984-09-26

Feet below surface:	Not Reported	Feet to sea level:	Not Reported
Note:	The well was destroyed (no water level is recorded).		
Level reading date:	1984-09-25	Feet below surface:	11.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-08-14	Feet below surface:	10.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-05-01	Feet below surface:	9.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-02-07	Feet below surface:	8.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-01-23	Feet below surface:	8.44
Feet to sea level:	Not Reported	Note:	Not Reported

AC243
East
1/2 - 1 Mile
Lower

WA WELLS **WA1200000009592**

Database:	Water Wells	PWS ID:	AC365
Source #:	01	Source Name:	Well
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	08/04/2009
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Puyallup-White
Well Depth:	100	Source Susceptibility:	H
System Name:	Riverside Fire & Rescue WS		
Public Water System Group:	B	System Type:	GRPB
Full Time Res Pop:	0	Total Population Served:	5
Total Connections:	1	PWS Status:	Active
Residential Connection:	0	DOE Well Tag:	Not Reported
Capacity (gpm):	10	Influenced by Droughts:	Not Reported
Influenced by Flooding:	Not Reported	Influenced by Surface Water:	Not Reported

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AC244
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000205409**

Database:	Ecology Well Logs	Well Log ID:	276805
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	156
Well completion:	Not Reported	Well Owner:	PUUYALLUP SCHOOL DIST. NO. 3
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AC245
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000750674**

Database:	Ecology Well Logs	Well Log ID:	1618411
Well Tag #:	BAF114	Project Tag #:	Not Reported
Notice of Intent #:	W310652	Date Received:	01-MAY-17
Diameter (in):	6	Casing Depth (ft):	118
Well completion:	23-JAN-17	Well Owner:	Lori Bulgrin
Well Type:	Water	Driller #:	2398
Static Water Level:	0	Flow Rate (gpm):	13
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Bailer Test	Water Reclamation #:	10

AC246
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000703503**

Database:	Ecology Well Logs	Well Log ID:	1557225
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	30-NOV-82
Diameter (in):	6	Casing Depth (ft):	156
Well completion:	23-SEP-82	Well Owner:	PUYALLUP SCHOOL DIST
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AC247
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000205408**

Database:	Ecology Well Logs	Well Log ID:	276804
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	156
Well completion:	Not Reported	Well Owner:	PUUYALLUP SCHOOL DIST. NO. 3
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AC248
East
1/2 - 1 Mile
Lower

WA WELLS **WA1200000023610**

Database:	Water Wells	PWS ID:	72827
Source #:	01	Source Name:	WELL #1
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970

Date Source Inactive:	03/14/1991	Water Resource Inventory Area:	Puyallup-White
Well Depth:	90	Source Susceptibility:	Not Reported
System Name:	RIVERSIDE ELEMENTARY SCHOOL		
Public Water System Group:	A	System Type:	NTNC
Full Time Res Pop:	0	Total Population Served:	285
Total Connections:	1	PWS Status:	Inactive
Residential Connection:	0	DOE Well Tag:	Not Reported
Capacity (gpm):	30	Influenced by Droughts:	Not Reported
Influenced by Flooding:	Not Reported	Influenced by Surface Water:	U

249
South
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000759738**

Database:	Ecology Well Logs	Well Log ID:	1629810
Well Tag #:	AEF216	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	8	Casing Depth (ft):	300
Well completion:	28-OCT-60	Well Owner:	PARK TERRACE WATER CO
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	155	Flow Rate (gpm):	100
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	Not Reported

AD250
South
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000808139**

Database:	Ecology Well Logs	Well Log ID:	1769570
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE65841	Date Received:	19-JUN-18
Diameter (in):	2.25	Casing Depth (ft):	25
Well completion:	20-APR-18	Well Owner:	Lidford Ballfields
Well Type:	Resource Protection	Driller #:	0
Static Water Level:	15	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AD251
South
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000808137**

Database:	Ecology Well Logs	Well Log ID:	1769566
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE48539	Date Received:	19-JUN-18
Diameter (in):	2.525	Casing Depth (ft):	28
Well completion:	20-APR-18	Well Owner:	Lidford Ballfields
Well Type:	Decommisioning	Driller #:	0
Static Water Level:	15	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AD252
South
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000808114**

Database:	Ecology Well Logs	Well Log ID:	1769540
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE65841	Date Received:	19-JUN-18
Diameter (in):	2.25	Casing Depth (ft):	28
Well completion:	20-APR-18	Well Owner:	Lidford Ballfields
Well Type:	Resource Protection	Driller #:	0
Static Water Level:	15	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AD253
South
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000808465**

Database:	Ecology Well Logs	Well Log ID:	1770407
Well Tag #:	BKF400	Project Tag #:	Not Reported
Notice of Intent #:	RE15860	Date Received:	19-JUN-18
Diameter (in):	2.25	Casing Depth (ft):	7
Well completion:	20-APR-18	Well Owner:	Lidford Ballfields
Well Type:	Resource Protection	Driller #:	0
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AD254
South
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000808464**

Database:	Ecology Well Logs	Well Log ID:	1770406
Well Tag #:	BKF399	Project Tag #:	Not Reported
Notice of Intent #:	RE15860	Date Received:	19-JUN-18
Diameter (in):	2.25	Casing Depth (ft):	7
Well completion:	20-APR-18	Well Owner:	Lidford Ballfields
Well Type:	Resource Protection	Driller #:	0
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AD255
South
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000808408**

Database:	Ecology Well Logs	Well Log ID:	1770158
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE48539	Date Received:	19-JUN-18
Diameter (in):	2.25	Casing Depth (ft):	15

Well completion:	20-APR-18	Well Owner:	Lidford Ballfields
Well Type:	Decommisioning	Driller #:	0
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AD256
South
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000808113**

Database:	Ecology Well Logs	Well Log ID:	1769539
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE65841	Date Received:	20-JUN-18
Diameter (in):	2.25	Casing Depth (ft):	20
Well completion:	20-APR-18	Well Owner:	Lidford Ballfields
Well Type:	Resource Protection	Driller #:	0
Static Water Level:	15	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AD257
South
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000808092**

Database:	Ecology Well Logs	Well Log ID:	1769516
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE65841	Date Received:	19-JUN-18
Diameter (in):	2.25	Casing Depth (ft):	15
Well completion:	20-APR-18	Well Owner:	Lidford Ballfields
Well Type:	Resource Protection	Driller #:	0
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AD258
South
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000808089**

Database:	Ecology Well Logs	Well Log ID:	1769512
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE65841	Date Received:	19-JUN-18
Diameter (in):	2.25	Casing Depth (ft):	15
Well completion:	20-APR-18	Well Owner:	Lidford Ballfields
Well Type:	Resource Protection	Driller #:	0
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
AD259 **South** **1/2 - 1 Mile** **Higher**	**WA WELLS**	**WALOG2000808112**

Database:	Ecology Well Logs	Well Log ID:	1769538
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE65841	Date Received:	19-JUN-18
Diameter (in):	2.25	Casing Depth (ft):	15
Well completion:	20-APR-18	Well Owner:	Lidford Ballfields
Well Type:	Resource Protection	Driller #:	0
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AD260 **South** **1/2 - 1 Mile** **Higher**	**WA WELLS**	**WALOG2000808111**

Database:	Ecology Well Logs	Well Log ID:	1769536
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE65841	Date Received:	19-JUN-18
Diameter (in):	2.25	Casing Depth (ft):	15
Well completion:	20-APR-18	Well Owner:	Lidford Ballfields
Well Type:	Resource Protection	Driller #:	0
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AD261 **South** **1/2 - 1 Mile** **Higher**	**WA WELLS**	**WA1200000030201**

Database:	Water Wells	PWS ID:	66150
Source #:	01	Source Name:	WELL #1
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	02/01/1985	Water Resource Inventory Area:	Puyallup-White
Well Depth:	300	Source Susceptibility:	Not Reported
System Name:	PARK TERRACE WATER CO	Public Water System Group:	A
System Type:	Comm	Full Time Res Pop:	49
Total Population Served:	49	Total Connections:	20
PWS Status:	Inactive	Residential Connection:	20
DOE Well Tag:	Not Reported	Capacity (gpm):	30
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database | EDR ID Number

AE262
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000357740**

Database:	Ecology Well Logs	Well Log ID:	467145
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	E006780	Date Received:	16-JAN-07
Diameter (in):	2	Casing Depth (ft):	12
Well completion:	05-JAN-07	Well Owner:	SJ SASAKI AND TTEE TOSHIKO
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AE263
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000357739**

Database:	Ecology Well Logs	Well Log ID:	467144
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	E006780	Date Received:	16-JAN-07
Diameter (in):	2	Casing Depth (ft):	12
Well completion:	05-JAN-07	Well Owner:	SJ SASAKI AND TTEE TOSHIKO
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AE264
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000356456**

Database:	Ecology Well Logs	Well Log ID:	465335
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A084060	Date Received:	16-JAN-07
Diameter (in):	2	Casing Depth (ft):	12
Well completion:	05-JAN-07	Well Owner:	SJ SASAKI AND TTEE TOSHIKO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AE265
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000357741**

Database:	Ecology Well Logs	Well Log ID:	467146
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	E006780	Date Received:	16-JAN-07
Diameter (in):	2	Casing Depth (ft):	12

Well completion:	05-JAN-07	Well Owner:	SJ SASAKI AND TTEE TOSHIKO
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AE266
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000703508**

Database:	Ecology Well Logs	Well Log ID:	1557230
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	0	Casing Depth (ft):	0
Well completion:	Not Reported	Well Owner:	JOSEPH BISIG
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AE267
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000703507**

Database:	Ecology Well Logs	Well Log ID:	1557229
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	8	Casing Depth (ft):	173
Well completion:	Not Reported	Well Owner:	S SASAKI
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AE268
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000357742**

Database:	Ecology Well Logs	Well Log ID:	467148
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	E006780	Date Received:	16-JAN-07
Diameter (in):	2	Casing Depth (ft):	12
Well completion:	05-JAN-07	Well Owner:	SJ SASAKI AND TTEE TOSHIKO
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database | EDR ID Number

AE269
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000356455**

Database:	Ecology Well Logs	Well Log ID:	465333
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A084060	Date Received:	16-JAN-07
Diameter (in):	2	Casing Depth (ft):	12
Well completion:	05-JAN-07	Well Owner:	SJ SASAKI AND TTEE TOSHIKO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AE270
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000356453**

Database:	Ecology Well Logs	Well Log ID:	465329
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A084060	Date Received:	16-JAN-07
Diameter (in):	2	Casing Depth (ft):	12
Well completion:	05-JAN-07	Well Owner:	SJ SASAKI AND TTEE TOSHIKO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AE271
East
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000356454**

Database:	Ecology Well Logs	Well Log ID:	465331
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A084060	Date Received:	16-JAN-07
Diameter (in):	2	Casing Depth (ft):	12
Well completion:	05-JAN-07	Well Owner:	SJ SASAKI AND TTEE TOSHIKO
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF272
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000343322**

Database:	Ecology Well Logs	Well Log ID:	446525
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S031138	Date Received:	20-JUL-06
Diameter (in):	Not Reported	Casing Depth (ft):	105

Well completion:	29-JUN-06	Well Owner:	GEOENGINEERS TACOMA
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF273
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000343323**

Database:	Ecology Well Logs	Well Log ID:	446527
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S031138	Date Received:	20-JUL-06
Diameter (in):	Not Reported	Casing Depth (ft):	110
Well completion:	29-JUN-06	Well Owner:	GEOENGINEERS TACOMA
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF274
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000343324**

Database:	Ecology Well Logs	Well Log ID:	446529
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S031138	Date Received:	20-JUL-06
Diameter (in):	Not Reported	Casing Depth (ft):	105
Well completion:	27-JUN-06	Well Owner:	GEOENGINEERS TACOMA
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF275
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000032138**

Database:	Ecology Well Logs	Well Log ID:	36849
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	16-APR-84
Diameter (in):	6	Casing Depth (ft):	88
Well completion:	28-JAN-84	Well Owner:	JIM WILLIAMS
Well Type:	Water	Driller #:	0379
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
AF276 **SE** **1/2 - 1 Mile** **Higher**	**WA WELLS**	**WALOG2000333006**

Database:	Ecology Well Logs	Well Log ID:	431223
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S026003	Date Received:	14-FEB-06
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	31-JAN-06	Well Owner:	GEOENGINEERS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

	Database	EDR ID Number
AF277 **SE** **1/2 - 1 Mile** **Higher**	**WA WELLS**	**WALOG2000343321**

Database:	Ecology Well Logs	Well Log ID:	446523
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S031138	Date Received:	20-JUL-06
Diameter (in):	Not Reported	Casing Depth (ft):	110
Well completion:	29-JUN-06	Well Owner:	GEOENGINEERS TACOMA
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

	Database	EDR ID Number
AF278 **SE** **1/2 - 1 Mile** **Higher**	**WA WELLS**	**WALOG2000835227**

Database:	Ecology Well Logs	Well Log ID:	1881704
Well Tag #:	Not Reported	Project Tag #:	B3
Notice of Intent #:	AE52160	Date Received:	06-DEC-18
Diameter (in):	2.25	Casing Depth (ft):	10
Well completion:	19-NOV-18	Well Owner:	Wallenwein
Well Type:	Decommisioning	Driller #:	3216
Static Water Level:	96	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

	Database	EDR ID Number
AF279 **SE** **1/2 - 1 Mile** **Higher**	**WA WELLS**	**WALOG2000835226**

Database:	Ecology Well Logs	Well Log ID:	1881703
Well Tag #:	Not Reported	Project Tag #:	B2
Notice of Intent #:	AE52160	Date Received:	06-DEC-18
Diameter (in):	2.25	Casing Depth (ft):	10

Well completion:	19-NOV-18	Well Owner:	Wallenwein
Well Type:	Decommisioning	Driller #:	3216
Static Water Level:	77	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF280
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000835225**

Database:	Ecology Well Logs	Well Log ID:	1881702
Well Tag #:	Not Reported	Project Tag #:	B3
Notice of Intent #:	EE07475	Date Received:	06-DEC-18
Diameter (in):	2.25	Casing Depth (ft):	10
Well completion:	19-NOV-18	Well Owner:	Wallenwein
Well Type:	Resource Protection	Driller #:	3216
Static Water Level:	96	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF281
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000865129**

Database:	Ecology Well Logs	Well Log ID:	1917862
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE55698	Date Received:	16-SEP-19
Diameter (in):	6	Casing Depth (ft):	39
Well completion:	23-AUG-19	Well Owner:	Pierce County Public Works
Well Type:	Decommisioning	Driller #:	3188
Static Water Level:	4	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF282
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000835229**

Database:	Ecology Well Logs	Well Log ID:	1881706
Well Tag #:	Not Reported	Project Tag #:	B1
Notice of Intent #:	AE52161	Date Received:	06-DEC-18
Diameter (in):	2.25	Casing Depth (ft):	5
Well completion:	19-NOV-18	Well Owner:	Wallenwein
Well Type:	Decommisioning	Driller #:	3216
Static Water Level:	17	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AF283
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000835228**

Database:	Ecology Well Logs	Well Log ID:	1881705
Well Tag #:	Not Reported	Project Tag #:	B1
Notice of Intent #:	SE68191	Date Received:	06-DEC-18
Diameter (in):	2.25	Casing Depth (ft):	5
Well completion:	19-NOV-18	Well Owner:	Wallenwein
Well Type:	Resource Protection	Driller #:	3216
Static Water Level:	17	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF284
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000835224**

Database:	Ecology Well Logs	Well Log ID:	1881701
Well Tag #:	Not Reported	Project Tag #:	B2
Notice of Intent #:	EE07475	Date Received:	06-DEC-18
Diameter (in):	2.25	Casing Depth (ft):	10
Well completion:	19-NOV-18	Well Owner:	Wallenwein
Well Type:	Resource Protection	Driller #:	3216
Static Water Level:	77	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF285
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000835220**

Database:	Ecology Well Logs	Well Log ID:	1881697
Well Tag #:	Not Reported	Project Tag #:	B5
Notice of Intent #:	AE52160	Date Received:	06-DEC-18
Diameter (in):	2.25	Casing Depth (ft):	15
Well completion:	19-NOV-18	Well Owner:	Wallenwein
Well Type:	Decommisioning	Driller #:	3216
Static Water Level:	77	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF286
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000835219**

Database:	Ecology Well Logs	Well Log ID:	1881696
Well Tag #:	Not Reported	Project Tag #:	B4
Notice of Intent #:	AE52160	Date Received:	06-DEC-18
Diameter (in):	2.25	Casing Depth (ft):	15

Well completion:	19-NOV-18	Well Owner:	Wallenwein
Well Type:	Decommisioning	Driller #:	3216
Static Water Level:	77	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF287
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000835218**

Database:	Ecology Well Logs	Well Log ID:	1881695
Well Tag #:	Not Reported	Project Tag #:	B8
Notice of Intent #:	EE07475	Date Received:	06-DEC-18
Diameter (in):	2.25	Casing Depth (ft):	15
Well completion:	19-NOV-18	Well Owner:	Wallenwein
Well Type:	Resource Protection	Driller #:	3216
Static Water Level:	77	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF288
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000835223**

Database:	Ecology Well Logs	Well Log ID:	1881700
Well Tag #:	Not Reported	Project Tag #:	B8
Notice of Intent #:	AE52160	Date Received:	06-DEC-18
Diameter (in):	2.25	Casing Depth (ft):	15
Well completion:	19-NOV-18	Well Owner:	Wallenwein
Well Type:	Decommisioning	Driller #:	3216
Static Water Level:	77	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF289
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000835222**

Database:	Ecology Well Logs	Well Log ID:	1881699
Well Tag #:	Not Reported	Project Tag #:	B7
Notice of Intent #:	AE52160	Date Received:	06-DEC-18
Diameter (in):	2.25	Casing Depth (ft):	15
Well completion:	19-NOV-18	Well Owner:	Wallenwein
Well Type:	Decommisioning	Driller #:	3216
Static Water Level:	77	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AF290
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000835221**

Database:	Ecology Well Logs	Well Log ID:	1881698
Well Tag #:	Not Reported	Project Tag #:	B6
Notice of Intent #:	AE52160	Date Received:	06-DEC-18
Diameter (in):	2.25	Casing Depth (ft):	15
Well completion:	19-NOV-18	Well Owner:	Wallenwein
Well Type:	Decommisioning	Driller #:	3216
Static Water Level:	77	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF291
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000835215**

Database:	Ecology Well Logs	Well Log ID:	1881692
Well Tag #:	Not Reported	Project Tag #:	B5
Notice of Intent #:	EE07475	Date Received:	06-DEC-18
Diameter (in):	2.25	Casing Depth (ft):	15
Well completion:	19-NOV-18	Well Owner:	Wallenwein
Well Type:	Resource Protection	Driller #:	3216
Static Water Level:	77	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF292
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000835216**

Database:	Ecology Well Logs	Well Log ID:	1881693
Well Tag #:	Not Reported	Project Tag #:	B6
Notice of Intent #:	EE07475	Date Received:	06-DEC-18
Diameter (in):	2.25	Casing Depth (ft):	15
Well completion:	19-NOV-18	Well Owner:	Wallenwein
Well Type:	Resource Protection	Driller #:	3216
Static Water Level:	77	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF293
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000835217**

Database:	Ecology Well Logs	Well Log ID:	1881694
Well Tag #:	Not Reported	Project Tag #:	B7
Notice of Intent #:	EE07475	Date Received:	06-DEC-18
Diameter (in):	2.25	Casing Depth (ft):	15

Well completion:	19-NOV-18	Well Owner:	Wallenwein
Well Type:	Resource Protection	Driller #:	3216
Static Water Level:	77	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF294
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000804843**

Database:	Ecology Well Logs	Well Log ID:	1755646
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE65388	Date Received:	31-AUG-18
Diameter (in):	8	Casing Depth (ft):	25.5
Well completion:	15-MAR-18	Well Owner:	Pierce Co
Well Type:	Resource Protection	Driller #:	3143
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF295
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000804844**

Database:	Ecology Well Logs	Well Log ID:	1755647
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE47845	Date Received:	31-AUG-18
Diameter (in):	8	Casing Depth (ft):	25.5
Well completion:	15-MAR-18	Well Owner:	Pierce Co
Well Type:	Decommisioning	Driller #:	3143
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF296
SE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000835214**

Database:	Ecology Well Logs	Well Log ID:	1881691
Well Tag #:	Not Reported	Project Tag #:	B4
Notice of Intent #:	EE07475	Date Received:	06-DEC-18
Diameter (in):	2.25	Casing Depth (ft):	15
Well completion:	19-NOV-18	Well Owner:	Wallenwein
Well Type:	Resource Protection	Driller #:	3216
Static Water Level:	77	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AF297
SE
1/2 - 1 Mile
Higher

WA WELLS **WA1200000002333**

Database:	Water Wells	PWS ID:	12221
Source #:	01	Source Name:	Well 01
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	03/14/1991	Water Resource Inventory Area:	Chambers-Clover
Well Depth:	0	Source Susceptibility:	Not Reported
System Name:	CHALET TAVERN	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	0
Total Population Served:	0	Total Connections:	1
PWS Status:	Inactive	Residential Connection:	1
DOE Well Tag:	Not Reported	Capacity (gpm):	Not Reported
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

AC298
ENE
1/2 - 1 Mile
Lower

FED USGS **USGS40001251117**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/04E-18M01	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19460101
Well Depth:	253	Well Depth Units:	ft
Well Hole Depth:	253	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1960-03-21
Feet below surface:	5	Feet to sea level:	Not Reported
Note:	Not Reported		

AG299
WNW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000335418**

Database:	Ecology Well Logs	Well Log ID:	434702
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE01629	Date Received:	21-MAR-06
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	15-MAR-06	Well Owner:	TUCCI AND SONS
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AG300
WNW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000296560**

Database:	Ecology Well Logs	Well Log ID:	387130
Well Tag #:	AKT641	Project Tag #:	Not Reported
Notice of Intent #:	WE02118	Date Received:	19-JUL-04
Diameter (in):	6	Casing Depth (ft):	198
Well completion:	13-JUL-04	Well Owner:	BARTON MCMACKEN
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AG301
WNW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000035798**

Database:	Ecology Well Logs	Well Log ID:	41182
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	30-JUN-82
Diameter (in):	6	Casing Depth (ft):	133
Well completion:	25-JUN-82	Well Owner:	WALLACE STALKER
Well Type:	Water	Driller #:	0267
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AF302
SE
1/2 - 1 Mile
Higher

FED USGS **USGS40001250755**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-24H01	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110014	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Unclassified Overburden	Aquifer Type:	Not Reported
Construction Date:	19840126	Well Depth:	88.5
Well Depth Units:	ft	Well Hole Depth:	88.5
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1984-01-28
Feet below surface:	6	Feet to sea level:	Not Reported
Note:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AH303
NNE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000848662**

Database:	Ecology Well Logs	Well Log ID:	1900392
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE51954	Date Received:	16-MAY-19
Diameter (in):	2	Casing Depth (ft):	67
Well completion:	09-APR-19	Well Owner:	Pierce County Public Works
Well Type:	Decommisioning	Driller #:	3188
Static Water Level:	1	Flow Rate (gpm):	Not Reported
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AH304
NNE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000406801**

Database:	Ecology Well Logs	Well Log ID:	537835
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S032626	Date Received:	22-JUL-08
Diameter (in):	4	Casing Depth (ft):	26
Well completion:	14-JUL-08	Well Owner:	WA ST DEPT OF TRANSPORTATION
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AH305
NNE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000406802**

Database:	Ecology Well Logs	Well Log ID:	537837
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S032626	Date Received:	22-JUL-08
Diameter (in):	4	Casing Depth (ft):	36
Well completion:	10-JUL-08	Well Owner:	WA ST DEPT OF TRANSPORTATION
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

306
WNW
1/2 - 1 Mile
Higher

WA WELLS **WA1200000031654**

Database:	Water Wells	PWS ID:	AD050
Source #:	01	Source Name:	S01
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	06/24/2013

Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Puyallup-White
Well Depth:	90	Source Susceptibility:	Not Reported
System Name:	Valley Farms Water	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	5
Total Population Served:	5	Total Connections:	1
PWS Status:	Active	Residential Connection:	0
DOE Well Tag:	Not Reported	Capacity (gpm):	10
Influenced by Droughts:	N	Influenced by Flooding:	N
Influenced by Surface Water:	U		

307
ENE **WA WELLS** **WA1200000015994**
1/2 - 1 Mile
Lower

Database:	Water Wells	PWS ID:	37875
Source #:	01	Source Name:	WELL #1
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Puyallup-White
Well Depth:	95	Source Susceptibility:	X
System Name:	LINGWALL/BRAZDA WATER SYSTEM		
Public Water System Group:	B	System Type:	GRPB
Full Time Res Pop:	5	Total Population Served:	5
Total Connections:	2	PWS Status:	Active
Residential Connection:	2	DOE Well Tag:	Not Reported
Capacity (gpm):	12	Influenced by Droughts:	Not Reported
Influenced by Flooding:	Not Reported	Influenced by Surface Water:	U

AG308
WNW **FED USGS** **USGS40001251369**
1/2 - 1 Mile
Higher

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-14F01	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110014	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Unclassified Overburden	Aquifer Type:	Not Reported
Construction Date:	19820608	Well Depth:	133
Well Depth Units:	ft	Well Hole Depth:	133
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1982-06-25
Feet below surface:	117	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AI309
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365743**

Database:	Ecology Well Logs	Well Log ID:	478453
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S029088	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50
Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI310
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365744**

Database:	Ecology Well Logs	Well Log ID:	478455
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S029088	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50
Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI311
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365742**

Database:	Ecology Well Logs	Well Log ID:	478451
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S029088	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50
Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI312
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365740**

Database:	Ecology Well Logs	Well Log ID:	478447
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S029088	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50

Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI313
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365741**

Database:	Ecology Well Logs	Well Log ID:	478449
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S029088	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50
Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI314
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365748**

Database:	Ecology Well Logs	Well Log ID:	478463
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129571	Date Received:	13-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50
Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI315
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365749**

Database:	Ecology Well Logs	Well Log ID:	478465
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129571	Date Received:	13-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50
Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AI316
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365747**

Database:	Ecology Well Logs	Well Log ID:	478461
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S029087	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	80
Well completion:	16-MAR-07	Well Owner:	PUYALLUP TRIBE OF INDIANS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI317
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365745**

Database:	Ecology Well Logs	Well Log ID:	478457
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S029088	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50
Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI318
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365746**

Database:	Ecology Well Logs	Well Log ID:	478459
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S029088	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50
Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI319
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000359591**

Database:	Ecology Well Logs	Well Log ID:	469658
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S031318	Date Received:	01-MAR-07
Diameter (in):	Not Reported	Casing Depth (ft):	60

Well completion:	08-FEB-07	Well Owner:	PUYALLUP TRIBE
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI320
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000359592**

Database:	Ecology Well Logs	Well Log ID:	469660
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A120931	Date Received:	01-MAR-07
Diameter (in):	Not Reported	Casing Depth (ft):	60
Well completion:	08-FEB-07	Well Owner:	[IUA;;I[TRONE
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI321
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000359590**

Database:	Ecology Well Logs	Well Log ID:	469656
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A120931	Date Received:	01-MAR-07
Diameter (in):	Not Reported	Casing Depth (ft):	80
Well completion:	08-FEB-07	Well Owner:	[IUA;;I[TRONE
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI322
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000359588**

Database:	Ecology Well Logs	Well Log ID:	469652
Well Tag #:	ALM184	Project Tag #:	Not Reported
Notice of Intent #:	R070672	Date Received:	01-MAR-07
Diameter (in):	Not Reported	Casing Depth (ft):	40
Well completion:	09-FEB-07	Well Owner:	PUYALLUP TRIBE
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AI323
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000359589**

Database:	Ecology Well Logs	Well Log ID:	469654
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S031318	Date Received:	01-MAR-07
Diameter (in):	Not Reported	Casing Depth (ft):	80
Well completion:	08-FEB-07	Well Owner:	PUYALLUP TRIBE
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI324
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365738**

Database:	Ecology Well Logs	Well Log ID:	478443
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S029088	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50
Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI325
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365739**

Database:	Ecology Well Logs	Well Log ID:	478445
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S029088	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50
Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI326
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365737**

Database:	Ecology Well Logs	Well Log ID:	478441
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S029088	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50

Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI327
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000359593**

Database:	Ecology Well Logs	Well Log ID:	469662
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S031318	Date Received:	01-MAR-07
Diameter (in):	Not Reported	Casing Depth (ft):	60
Well completion:	09-FEB-07	Well Owner:	PUYALLUP TRIBE
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI328
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000359594**

Database:	Ecology Well Logs	Well Log ID:	469664
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A120931	Date Received:	01-MAR-07
Diameter (in):	Not Reported	Casing Depth (ft):	60
Well completion:	09-FEB-07	Well Owner:	[IUA;;I[TRONE
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI329
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365750**

Database:	Ecology Well Logs	Well Log ID:	478467
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129571	Date Received:	13-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50
Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AI330
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000366919**

Database:	Ecology Well Logs	Well Log ID:	480728
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129571	Date Received:	13-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50
Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI331
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000524280**

Database:	Ecology Well Logs	Well Log ID:	744640
Well Tag #:	BCR150	Project Tag #:	Not Reported
Notice of Intent #:	RE06243	Date Received:	22-SEP-11
Diameter (in):	8	Casing Depth (ft):	20
Well completion:	09-SEP-11	Well Owner:	CITY OF FIFE
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI332
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000524281**

Database:	Ecology Well Logs	Well Log ID:	744642
Well Tag #:	BCR148	Project Tag #:	Not Reported
Notice of Intent #:	RE06243	Date Received:	22-SEP-11
Diameter (in):	8	Casing Depth (ft):	20
Well completion:	09-SEP-11	Well Owner:	CITY OF FIFE
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI333
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365765**

Database:	Ecology Well Logs	Well Log ID:	478497
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129569	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	80

Well completion:	16-MAR-07	Well Owner:	PUYALLUP TRIBE OF INDIANS
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI334
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365766**

Database:	Ecology Well Logs	Well Log ID:	478499
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129569	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	80
Well completion:	16-MAR-07	Well Owner:	PUYALLUP TRIBE OF INDIANS
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI335
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365767**

Database:	Ecology Well Logs	Well Log ID:	478501
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129569	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	80
Well completion:	16-MAR-07	Well Owner:	PUYALLUP TRIBE OF INDIANS
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI336
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000524282**

Database:	Ecology Well Logs	Well Log ID:	744644
Well Tag #:	BCR147	Project Tag #:	Not Reported
Notice of Intent #:	RE06243	Date Received:	22-SEP-11
Diameter (in):	8	Casing Depth (ft):	20
Well completion:	09-SEP-11	Well Owner:	CITY OF FIFE
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AI337
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000626120**

Database:	Ecology Well Logs	Well Log ID:	937721
Well Tag #:	BCR150	Project Tag #:	Not Reported
Notice of Intent #:	AE28126	Date Received:	23-SEP-14
Diameter (in):	0	Casing Depth (ft):	20
Well completion:	21-AUG-14	Well Owner:	CITY OF FIFE
Well Type:	Decommisioning	Driller #:	3021
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI338
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000626123**

Database:	Ecology Well Logs	Well Log ID:	937725
Well Tag #:	BCR146	Project Tag #:	Not Reported
Notice of Intent #:	AE28126	Date Received:	23-SEP-14
Diameter (in):	0	Casing Depth (ft):	19
Well completion:	21-AUG-14	Well Owner:	CITY OF FIFE
Well Type:	Decommisioning	Driller #:	3021
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI339
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000626141**

Database:	Ecology Well Logs	Well Log ID:	937745
Well Tag #:	BCR147	Project Tag #:	Not Reported
Notice of Intent #:	AE28126	Date Received:	23-SEP-14
Diameter (in):	0	Casing Depth (ft):	20
Well completion:	21-AUG-14	Well Owner:	CITY OF FIFE
Well Type:	Decommisioning	Driller #:	3021
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI340
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000524283**

Database:	Ecology Well Logs	Well Log ID:	744646
Well Tag #:	BCR146	Project Tag #:	Not Reported
Notice of Intent #:	RE06243	Date Received:	22-SEP-11
Diameter (in):	8	Casing Depth (ft):	19

Well completion:	09-SEP-11	Well Owner:	CITY OF FIFE
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI341
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000524284**

Database:	Ecology Well Logs	Well Log ID:	744648
Well Tag #:	BCR149	Project Tag #:	Not Reported
Notice of Intent #:	RE06243	Date Received:	22-SEP-11
Diameter (in):	8	Casing Depth (ft):	20
Well completion:	09-SEP-11	Well Owner:	CITY OF FIFE
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI342
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000626109**

Database:	Ecology Well Logs	Well Log ID:	937710
Well Tag #:	BCR148	Project Tag #:	Not Reported
Notice of Intent #:	AE28406	Date Received:	23-SEP-14
Diameter (in):	0	Casing Depth (ft):	20
Well completion:	21-AUG-14	Well Owner:	CITY OF FIFE
Well Type:	Decommisioning	Driller #:	3021
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI343
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365764**

Database:	Ecology Well Logs	Well Log ID:	478495
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129569	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	80
Well completion:	16-MAR-07	Well Owner:	PUYALLUP TRIBE OF INDIANS
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AI344
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365754**

Database:	Ecology Well Logs	Well Log ID:	478475
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129571	Date Received:	13-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50
Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI345
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365755**

Database:	Ecology Well Logs	Well Log ID:	478477
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129571	Date Received:	13-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50
Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI346
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365756**

Database:	Ecology Well Logs	Well Log ID:	478479
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129571	Date Received:	13-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50
Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI347
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365751**

Database:	Ecology Well Logs	Well Log ID:	478469
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129571	Date Received:	13-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50

Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI348
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365752**

Database:	Ecology Well Logs	Well Log ID:	478471
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129571	Date Received:	13-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50
Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI349
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365753**

Database:	Ecology Well Logs	Well Log ID:	478473
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129571	Date Received:	13-APR-07
Diameter (in):	1.5	Casing Depth (ft):	50
Well completion:	14-MAR-07	Well Owner:	PIERCE CO WATER
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI350
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365757**

Database:	Ecology Well Logs	Well Log ID:	478481
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S029087	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	80
Well completion:	16-MAR-07	Well Owner:	PUYALLUP TRIBE OF INDIANS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AI351
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365761**

Database:	Ecology Well Logs	Well Log ID:	478489
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S029087	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	80
Well completion:	16-MAR-07	Well Owner:	PUYALLUP TRIBE OF INDIANS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI352
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365762**

Database:	Ecology Well Logs	Well Log ID:	478491
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129569	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	80
Well completion:	16-MAR-07	Well Owner:	PUYALLUP TRIBE OF INDIANS
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI353
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365763**

Database:	Ecology Well Logs	Well Log ID:	478493
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129569	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	80
Well completion:	16-MAR-07	Well Owner:	PUYALLUP TRIBE OF INDIANS
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI354
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365758**

Database:	Ecology Well Logs	Well Log ID:	478483
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S029087	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	80

Well completion:	16-MAR-07	Well Owner:	PUYALLUP TRIBE OF INDIANS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI355
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365759**

Database:	Ecology Well Logs	Well Log ID:	478485
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S029087	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	80
Well completion:	16-MAR-07	Well Owner:	PUYALLUP TRIBE OF INDIANS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AI356
ENE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000365760**

Database:	Ecology Well Logs	Well Log ID:	478487
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S029087	Date Received:	12-APR-07
Diameter (in):	1.5	Casing Depth (ft):	80
Well completion:	16-MAR-07	Well Owner:	PUYALLUP TRIBE OF INDIANS
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

357
South
1/2 - 1 Mile
Higher

FED USGS **USGS40001250620**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	20N/03E-12E01	Type:	Well
Description:	Not Reported	HUC:	17110014
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19010101
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
AJ358 **SSE** **1/2 - 1 Mile** **Higher**	**WA WELLS**	**WALOG2000713258**

Database:	Ecology Well Logs	Well Log ID:	1567290
Well Tag #:	Not Reported	Project Tag #:	1
Notice of Intent #:	AE37210	Date Received:	14-JUN-16
Diameter (in):	8	Casing Depth (ft):	50
Well completion:	04-MAY-16	Well Owner:	Darrel
Well Type:	Decommisioning	Driller #:	1815
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

	Database	EDR ID Number
AJ359 **SSE** **1/2 - 1 Mile** **Higher**	**WA WELLS**	**WALOG2000713257**

Database:	Ecology Well Logs	Well Log ID:	1567289
Well Tag #:	Not Reported	Project Tag #:	1
Notice of Intent #:	SE58238	Date Received:	14-JUN-16
Diameter (in):	8	Casing Depth (ft):	50
Well completion:	04-MAY-16	Well Owner:	Darrel
Well Type:	Resource Protection	Driller #:	1815
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

	Database	EDR ID Number
AJ360 **SSE** **1/2 - 1 Mile** **Higher**	**WA WELLS**	**WALOG2000713260**

Database:	Ecology Well Logs	Well Log ID:	1567292
Well Tag #:	Not Reported	Project Tag #:	2
Notice of Intent #:	AE37210	Date Received:	14-JUN-16
Diameter (in):	8	Casing Depth (ft):	25
Well completion:	04-MAY-16	Well Owner:	Darrel
Well Type:	Decommisioning	Driller #:	1815
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

	Database	EDR ID Number
AJ361 **SSE** **1/2 - 1 Mile** **Higher**	**WA WELLS**	**WALOG2000713259**

Database:	Ecology Well Logs	Well Log ID:	1567291
Well Tag #:	Not Reported	Project Tag #:	2
Notice of Intent #:	SE58238	Date Received:	14-JUN-16
Diameter (in):	8	Casing Depth (ft):	25

Well completion:	04-MAY-16	Well Owner:	Darrel
Well Type:	Resource Protection	Driller #:	1815
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AJ362
SSE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000219562**

Database:	Ecology Well Logs	Well Log ID:	301391
Well Tag #:	AFM744	Project Tag #:	Not Reported
Notice of Intent #:	R041611	Date Received:	17-JAN-01
Diameter (in):	2	Casing Depth (ft):	15
Well completion:	06-NOV-00	Well Owner:	RIDGEVIEW HEIGHTS HOMEOWNERS ASSOC
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AJ363
SSE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000219559**

Database:	Ecology Well Logs	Well Log ID:	301388
Well Tag #:	AFM741	Project Tag #:	Not Reported
Notice of Intent #:	R041611	Date Received:	17-JAN-01
Diameter (in):	2	Casing Depth (ft):	10
Well completion:	06-NOV-00	Well Owner:	RIDGEVIEW HEIGHTS HOMEOWNERS ASSOC
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AJ364
SSE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000219558**

Database:	Ecology Well Logs	Well Log ID:	301387
Well Tag #:	AFM740	Project Tag #:	Not Reported
Notice of Intent #:	R041611	Date Received:	17-JAN-01
Diameter (in):	2	Casing Depth (ft):	10
Well completion:	06-NOV-00	Well Owner:	RIDGEVIEW HEIGHTS HOMEOWNERS ASSOC
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AJ365
SSE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000219561**

Database:	Ecology Well Logs	Well Log ID:	301390
Well Tag #:	AFM743	Project Tag #:	Not Reported
Notice of Intent #:	R041611	Date Received:	17-JAN-01
Diameter (in):	2	Casing Depth (ft):	15
Well completion:	06-NOV-00	Well Owner:	RIDGEVIEW HEIGHTS HOMEOWNERS ASSOC
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AJ366
SSE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000219560**

Database:	Ecology Well Logs	Well Log ID:	301389
Well Tag #:	AFM742	Project Tag #:	Not Reported
Notice of Intent #:	R041611	Date Received:	17-JAN-01
Diameter (in):	2	Casing Depth (ft):	10
Well completion:	06-NOV-00	Well Owner:	RIDGEVIEW HEIGHTS HOMEOWNERS ASSOC
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK367
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000372709**

Database:	Ecology Well Logs	Well Log ID:	488382
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S023280	Date Received:	27-JUL-07
Diameter (in):	9	Casing Depth (ft):	8
Well completion:	12-JUL-07	Well Owner:	PUYALLUP INDIAN TRIBE
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK368
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000372710**

Database:	Ecology Well Logs	Well Log ID:	488384
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S023280	Date Received:	27-JUL-07
Diameter (in):	9	Casing Depth (ft):	Not Reported

Well completion:	11-JUL-07	Well Owner:	PUYALLUP INDIAN TRIBE | PSI
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK369
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000372711**

Database:	Ecology Well Logs	Well Log ID:	488386
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S023280	Date Received:	27-JUL-07
Diameter (in):	9	Casing Depth (ft):	8
Well completion:	11-JUL-07	Well Owner:	PUYALLUP INDIAN TRIBE | PSI
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK370
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000043566**

Database:	Ecology Well Logs	Well Log ID:	50065
Well Tag #:	ABR906	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	07-MAR-88
Diameter (in):	6	Casing Depth (ft):	390
Well completion:	10-SEP-87	Well Owner:	MAJESTIC MOBILE MANOR (TATE)
Well Type:	Water	Driller #:	0419
Static Water Level:	Not Reported	Flow Rate (gpm):	100
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK371
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000372707**

Database:	Ecology Well Logs	Well Log ID:	488379
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S023280	Date Received:	27-JUL-07
Diameter (in):	9	Casing Depth (ft):	6
Well completion:	12-JUL-07	Well Owner:	PUYALLUP INDIAN TRIBE | PSI
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AK372
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000372708**

Database:	Ecology Well Logs	Well Log ID:	488381
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S023280	Date Received:	27-JUL-07
Diameter (in):	9	Casing Depth (ft):	6
Well completion:	12-JUL-07	Well Owner:	PUYALLUP INDIAN TRIBE | PSI
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK373
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000541266**

Database:	Ecology Well Logs	Well Log ID:	777470
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE15554	Date Received:	02-OCT-11
Diameter (in):	4	Casing Depth (ft):	40
Well completion:	17-NOV-11	Well Owner:	Puyallup Tribe | PSI
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK374
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000541265**

Database:	Ecology Well Logs	Well Log ID:	777468
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE15554	Date Received:	02-OCT-11
Diameter (in):	4	Casing Depth (ft):	40
Well completion:	17-NOV-11	Well Owner:	Puyallup Tribe | PSI
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK375
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000541267**

Database:	Ecology Well Logs	Well Log ID:	777472
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE15554	Date Received:	02-OCT-11
Diameter (in):	4	Casing Depth (ft):	40

Well completion:	17-NOV-11	Well Owner:	Puyallup Tribe | PSI
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK376
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000779947**

Database:	Ecology Well Logs	Well Log ID:	1664825
Well Tag #:	Not Reported	Project Tag #:	18
Notice of Intent #:	SE64791	Date Received:	22-JAN-18
Diameter (in):	6	Casing Depth (ft):	121.5
Well completion:	18-JAN-18	Well Owner:	Pierce County
Well Type:	Resource Protection	Driller #:	3119
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK377
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000541268**

Database:	Ecology Well Logs	Well Log ID:	777474
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE44161	Date Received:	02-DEC-11
Diameter (in):	4	Casing Depth (ft):	40
Well completion:	17-NOV-11	Well Owner:	Puyallup Tribe | PSI
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK378
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000541262**

Database:	Ecology Well Logs	Well Log ID:	777463
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE44161	Date Received:	02-DEC-11
Diameter (in):	4	Casing Depth (ft):	40
Well completion:	17-NOV-11	Well Owner:	Puyallup Tribe | PSI
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AK379
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000373709**

Database:	Ecology Well Logs	Well Log ID:	490204
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129886	Date Received:	27-JUL-07
Diameter (in):	9	Casing Depth (ft):	8
Well completion:	11-JUL-07	Well Owner:	PUYALLUP INDIAN TRIBE | PSI
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK380
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000372718**

Database:	Ecology Well Logs	Well Log ID:	488400
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129886	Date Received:	27-JUL-07
Diameter (in):	9	Casing Depth (ft):	20
Well completion:	11-JUL-07	Well Owner:	PUYALLUP INDIAN TRIBE | PSI
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK381
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000373710**

Database:	Ecology Well Logs	Well Log ID:	490206
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129886	Date Received:	27-JUL-07
Diameter (in):	9	Casing Depth (ft):	8
Well completion:	11-JUL-07	Well Owner:	PUYALLUP INDIAN TRIBE | PSI
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK382
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000540861**

Database:	Ecology Well Logs	Well Log ID:	776644
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE15670	Date Received:	07-DEC-11
Diameter (in):	1.5	Casing Depth (ft):	60

Well completion:	05-DEC-11	Well Owner:	Puyallup Tribe Of Indians
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK383
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000540860**

Database:	Ecology Well Logs	Well Log ID:	776642
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	SE44224	Date Received:	07-DEC-11
Diameter (in):	1.5	Casing Depth (ft):	60
Well completion:	05-DEC-11	Well Owner:	Puyallup Tribe Of Indians
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK384
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000372715**

Database:	Ecology Well Logs	Well Log ID:	488394
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129886	Date Received:	27-JUL-07
Diameter (in):	9	Casing Depth (ft):	6
Well completion:	12-JUL-07	Well Owner:	PUYALLUP INDIAN TRIBE | PSI
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK385
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000372716**

Database:	Ecology Well Logs	Well Log ID:	488396
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129886	Date Received:	27-JUL-07
Diameter (in):	9	Casing Depth (ft):	8
Well completion:	12-JUL-07	Well Owner:	PUYALLUP INDIAN TRIBE | PSI
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AK386
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000372714**

Database:	Ecology Well Logs	Well Log ID:	488392
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129886	Date Received:	27-JUL-07
Diameter (in):	9	Casing Depth (ft):	6
Well completion:	12-JUL-07	Well Owner:	PUYALLUP INDIAN TRIBE | PSI
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK387
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000372712**

Database:	Ecology Well Logs	Well Log ID:	488388
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S023280	Date Received:	27-JUL-07
Diameter (in):	9	Casing Depth (ft):	20
Well completion:	11-JUL-07	Well Owner:	PUYALLUP INDIAN TRIBE | PSI
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK388
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000372713**

Database:	Ecology Well Logs	Well Log ID:	488390
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	S023280	Date Received:	27-JUL-07
Diameter (in):	9	Casing Depth (ft):	20
Well completion:	11-JUL-07	Well Owner:	PUYALLUP INDIAN TRIBE | PSI
Well Type:	Resource Protection	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK389
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000372717**

Database:	Ecology Well Logs	Well Log ID:	488398
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A129886	Date Received:	27-JUL-07
Diameter (in):	9	Casing Depth (ft):	8

Well completion:	11-JUL-07	Well Owner:	PUYALLUP INDIAN TRIBE | PSI
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

AK390
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000848446**

Database:	Ecology Well Logs	Well Log ID:	1900159
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	0	Casing Depth (ft):	0
Well completion:	Not Reported	Well Owner:	Van's Owl Tavern
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	Not Reported

AK391
ESE
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000779948**

Database:	Ecology Well Logs	Well Log ID:	1664826
Well Tag #:	Not Reported	Project Tag #:	18
Notice of Intent #:	AE46979	Date Received:	22-JAN-18
Diameter (in):	6	Casing Depth (ft):	121.5
Well completion:	18-JAN-18	Well Owner:	Pierce County
Well Type:	Decommisioning	Driller #:	3119
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	10

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for PIERCE County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for PIERCE COUNTY, WA

Number of sites tested: 86

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.665 pCi/L	97%	3%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	1.120 pCi/L	93%	7%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Ecology
Telephone: 360-407-6121

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Wells
Source: Department of Health
Telephone: 360-236-3148
Group A and B well locations.

Water Well Listing
Source: Public Utility District
Telephone: 206-779-7656
A listing of water well locations in Kitsap County.

Ecology Well Logs
Source: Department of Ecology
Telephone: 360-407-7294
Point geodatabase with a record for each Ecology well report. Points are located by quarter quarter section centroid. Points contain all well report types including water wells, resource protection wells, and decommissioned wells.

OTHER STATE DATABASE INFORMATION

Oil and Gas Well Listing
Source: Department of Natural Resources
Telephone: 360-902-1450
Locations that represent oil and gas test well sites in Washington State from 1890 to present.

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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Attachment 12 – Environmental Justice Memorandum

Date: January 16, 2024

TO: Project File, Communications Office

FROM: SR 509 Megaprogram Environmental Team

SUBJECT: SR 509/Clear Creek Restoration Project – Environmental Justice and Limited English Proficiency Determination

In furtherance of Title VI of the Civil Rights Act of 1964, and in compliance with United States Department of Transportation Order 5610.2 and Federal Highway Administration (FHWA) Order 6640.23, an Environmental Justice (EJ) Analysis and Limited English Proficiency (LEP) Determination was conducted for the SR 509/Clear Creek Restoration Project (Project). The analysis complies with approved Washington State Department of Transportation (WSDOT) guidance and procedures.

Project Description

WSDOT proposes to construct the Project, which will remove two fish-passage barriers and restore stream functions at the Clear Creek site. The Clear Creek site is within the Puyallup-White watershed (Water Resource Inventory Area 10) and is located at 4008 Pioneer Way East on eight privately owned parcels[1] on the Puyallup Tribe of Indians (PTOI) reservation in unincorporated Pierce County, Washington (see Figure 1 and Attachment 1). The Clear Creek site is owned by Troutlodge, Inc. and is developed with a private fish hatchery located along Clear Creek, a tributary of the Puyallup River. The two existing fish-passage barriers (dams) on the site (Washington Department of Fish and Wildlife [WDFW] IDs 600317 and 600318) are located at river mile 1.9.

All of the fish hatchery infrastructure will be removed, opening up approximately 2.4 miles of high-quality spawning habitat that has been unreachable for more than 50 years. Aquatic habitat will be enhanced with installation of large woody material (LWM), creation of new side-channel habitat, expanded floodplain habitat, and riparian vegetation for improved stream shading and nutrient input. As a result, the Project will promote natural stream processes, including sediment transport, LWM transport, marine-derived nutrient input above the dam locations, floodplain interaction, and channel migration.

The Project includes the following major work elements:

- Remove all existing in-water concrete structures, including two fish passage barriers (WDFW IDs 600317 and 600318).
- Remove existing fish hatchery structures, including operational buildings, storage sheds, fish hatchery rearing ponds, and other auxiliary structures.

[1] Parcels: 0320133013, 0320133060, 0320133061, 0320133057, 0320133062, 0320133051, 0320133052, 0320133053.

- Regrade the existing Clear Creek stream channel and regrade the floodplain to mimic historic conditions.

- Construct habitat-enhancement elements, including placement of LWM, creation of habitat berms, and development of analog beaver ponds.

- Clear existing invasive vegetation and replant native riparian and upland vegetation.

WSDOT will acquire the privately owned hatchery parcels and will establish permanent easements at the stream edge for three adjacent, privately owned, residential parcels. The Project is scheduled to be constructed in 2026 through 2028.

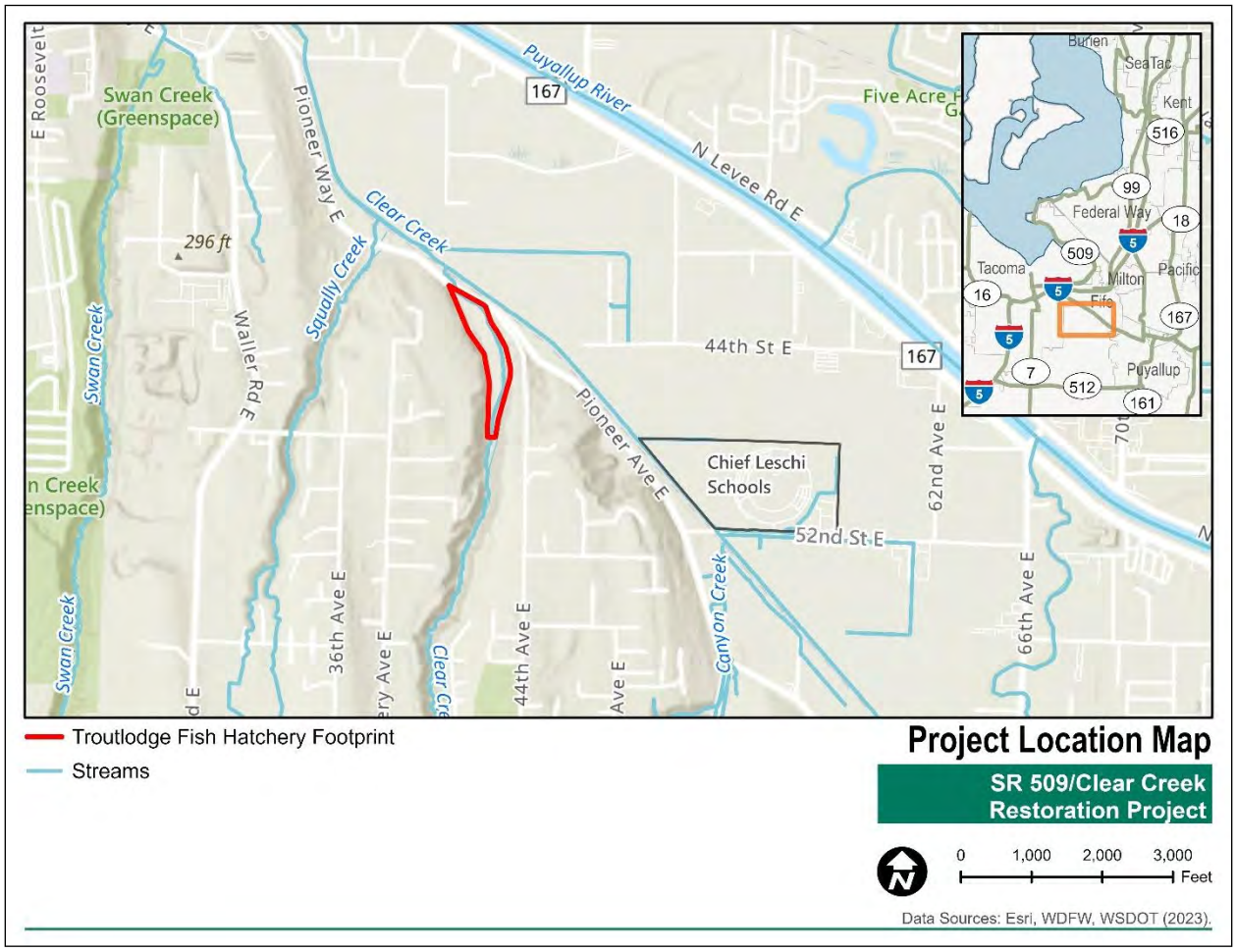

Figure 1: Project location map showing the general location of the Project in relation to the Puyallup River and Chief Leschi Schools

Demographics Data

The study area for the EJ Analysis includes the Project footprint and a 0.5-mile buffer from the center line of the Project footprint. Table 1 summarizes 2020 Census data within the study area.

Table 1: Population by Race

Minority	Number of Persons Adversely Affected	Total Number of Persons	Percent Adversely Affected
White Alone [1]	0	829	0
Hispanic or Latino (of any race) [1]	0	93	0
American Indian and Alaskan Native Alone [1]	0	31	0
Black or African American Alone [1]	0	23	0
Asian Alone [1]	0	54	0
Native Hawaiian and Other Pacific Islander Alone [1]	0	2	0
Some Other Race Alone [1]	0	80	0
Speak English "less than very well" (see Table 3 for data)	0	683	0
Low-income [2]	0	29	0

Sources:

1. FHWA Screening Tool for Equity Analysis (STEAP) web site. Census 2020 Summary Report attached (Attachment 2).
2. FHWA STEAP web site. American Community Survey (ACS) 2016-2020 Report attached (Attachment 3). Per the WSDOT Environmental Manual, "low-income" is defined as "a household income that is at or below the federally designated poverty level for a household of four as defined the U.S. Health and Human Services." As of 2023, that income is $30,000. ACS income estimates for the study area are between $25,000 and $35,000. The 29 person estimate from ACS thus includes persons with income slightly over $35,000.

Note: Numbers have been adjusted to account for rounding.

No schools are located within the study area. Part of the grounds of the Chief Leschi Schools intersects the eastern boundary of the study area (Figure 1). This single school, which combines elementary, middle, and high school grades, in the Puyallup School District is the closest school, of any grade level, to the Clear Creek site. The demographic data for Chief Leschi Schools students in the 2022-2023 school year are summarized in Table 2. As indicated by the data, the school population is more diverse than the total population in the study area (represented by the 2020 Census data). This difference is likely in part because the PTOI runs the school and the school primarily serves tribal members.

Table 2: Chief Leschi Schools Demographic Data

	Enrollment	Percentage
White	3	0.4
Hispanic or Latino	167	24.9
American Indian and Alaskan Native	427	63.7
Black or African American	4	0.6
Asian	0	0
Native Hawaiian and Other Pacific Islander	5	0.7
Two or More Races	64	9.6
Low Income	384	57.3
English Learners	29	4.3

Source: Washington State Office of Public Instruction Washington State Report Card website. Report attached (Attachment 4).

Note: Numbers have been adjusted to account for rounding.

Consideration of Limited English Proficient Populations

WSDOT's *Environmental Manual* (version M 31-11.26, June 23, 2023) requires that translations be performed if 5 percent of the population within the study area or 1,000 individuals within the study area speak a language other than English in their household and speak English "less than very well." The federal census provides LEP data through census tracts. The study area is located at the intersection of census tracts 9400.04, 9400.10, and 712.05, and within these three census tracts, 683 people out of 15,481 total population are estimated to speak English "less than very well." Estimated percentages are included in Table 3; however, none of the language estimates rise to the required standard.

Table 3: LEP Populations Demographic Data in Census Tracts

Total Population Estimate	**15,481**		
Spanish LEP Estimate	186	Chinese LEP Estimate	87
Percent LEP	**1.20%**	**Percent LEP**	**0.56%**
French, Haitian, or Cajun LEP Estimate	3	Vietnamese LEP Estimate	33
Percent LEP	**0.02%**	**Percent LEP**	**0.21%**
German LEP Estimate	0	Tagalog LEP Estimate	135
Percent LEP	**0.00%**	**Percent LEP**	**0.87%**
Russian, Polish, or other Slavic LEP Estimate	68	Other Asian or Pacific Islander LEP Estimate	76
Percent LEP	**0.44%**	**Percent LEP**	**0.49%**
Indo-European LEP Estimate	24	Arabic LEP Estimate	33
Percent LEP	**0.16%**	**Percent LEP**	**0.21%**
Korean LEP Estimate	13	Other LEP Estimate	25
Percent LEP	**0.08%**	**Percent LEP**	**0.16%**

Source: Census.gov website: https://data.census.gov/

Project Effects

The Project is located in a semi-suburban residential and commercial area south of Interstate 5 (I-5) with businesses, residences, and green spaces such as parks and preserves. The Project footprint includes a reach of Clear Creek and adjacent uplands; these include the privately owned and operated Troutlodge fish hatchery and portions of private residential parcels. WSDOT will purchase six parcels owned by Troutlodge, Inc. and will establish permanent easements on portions of three residential parcels adjacent to the Troutlodge property. The hatchery will relocate to a new site to continue business.

WSDOT will acquire the Troutlodge parcels to construct the Project.[2] This acquisition will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended. WSDOT's acquisition includes the existing hatchery infrastructure and two manufactured homes on the Troutlodge property. Troutlodge employs two caretakers who live on site under housing contracts. The resident caretakers are not members of any minority population. However, one of the caretaker households is estimated to be between "low income" and "very low income," according to the Tacoma Housing Authority eligibility requirements for public housing and rental assistance.[3] As of October 2023, Troutlodge has indicated it will re-create the on-site housing for employees at its new location and plans to employ the current caretakers who will reside in the homes.

Permanent easements are required to construct the new stream channel which will run along the toe of a forested slope at the edge of three residential parcels. The easements are on steep, non-developable sections of those parcels that are approximately 200 feet away and 100 feet downslope from the homes. Proposed permanent easements on residential parcels adjacent to Clear Creek would not affect current residents. No relocations are required for the permanent easements. Permanent easements on residential properties will have no adverse effects to existing residential uses. It is presumed that temporary impacts during construction, such as noise or vibration, will be minimal; any temporary impacts will be mitigated through best management practices. No night work is expected. A family living on one of the residential parcels is part of an LEP population, and translation services will be provided for easement, permit, and other project construction activities.

Project construction will not have permanent impacts on any roads. No construction access easements will be required for the project. The Project will not add capacity to nearby roads; therefore, it will not increase traffic and nor decrease air quality. Access to Pioneer Way East will be maintained during construction, and no detour will be required. Change to public transit is not anticipated.

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[2] Parcels 0320133013 (18.56 acres), 0320133060 (1.33 acres), 0320133057 (1.15 acres), 0320133061 (0.6 acre), 0320133051 (0.42 acre), and 0320133053 (1.12 acres).

[3] "Find Housing," Tacoma Housing Authority, 2023, accessed October 2023, https://www.tacomahousing.org/housing/.

Project Benefits

The Project will provide ecological benefits with qualitative and quantitative impacts and is fully supported by the PTOI, which has tribal treaty rights in the area. The proposed restoration work would "not only remove…dams but also includes additional improvements to the stream process and ecosystem functions at the Clear Creek site. It will also offer immediate access to high-quality habitat for hundreds of spawning salmonids that queue downstream each year."[4] The Project will provide important restoration at Clear Creek requested by the PTOI and negotiated among WSDOT, PTOI, and WDFW. The Project's removal of the Troutlodge infrastructure along Clear Creek, along with stream restoration and enhancement, is expected to double the amount of salmon habitat of Clear Creek, increase salmon productivity and survival, and help salmon recovery for generations to come. Because these cultural and fisheries benefits are directly relevant to the PTOI, WSDOT will continue to work through government-to-government consultation with the tribe as the Project develops further.

Determination

As there are no adverse effects and there is no controversy for the project, our assessment concludes that no minority or low-income populations have been identified that would be disproportionately adversely affected by this project as determined above. Therefore, this project has met the provisions of Executive Order 12898 as it is supported by Title VI of the Civil Rights Act.

LE/AMR: amr

Attachments:

1. Vicinity Map Clear Creek Restoration Project
2. 2020 Census Summary Report
3. 2016-2020 ACS Summary Report
4. 2022-2023 Chief Leschi Schools Elementary School OSPI Washington State Report Card Summary Report

[4] Washington Department of Transportation (WSDOT), *Unnamed Tributary to South Fork McSorley Creek (WSDFW ID 935070) Conceptual Fish Passage Mitigation Plan, June 2023*, 24-24.

Attachment 1

Vicinity Map for Clear Creek Restoration Project



Notes: Vicinity Map derived from WDFW 2022a, WADNR 2020 WSDOT 2021a; Esri 2022, USGS 2022a

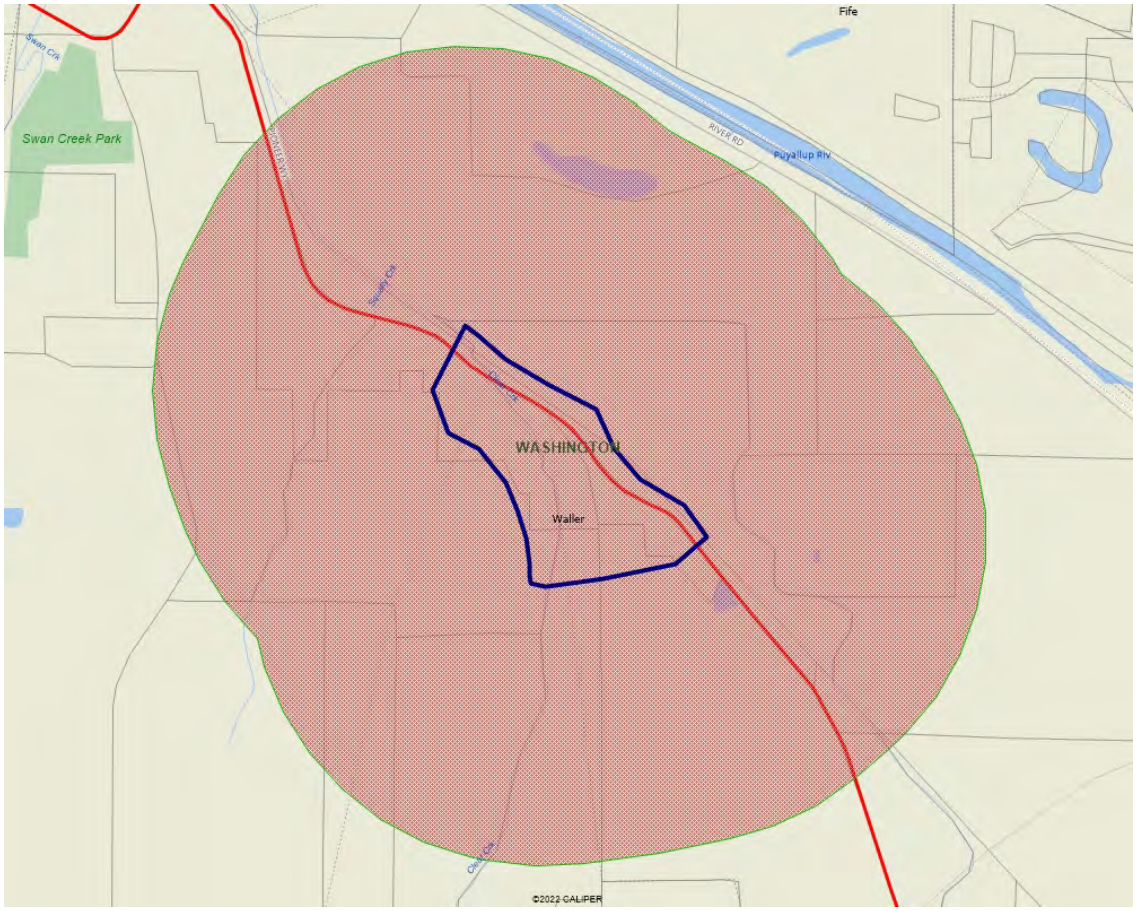
Figure 1: Vicinity Map

Attachment 2

2020 Census Summary Report

Screening Tool for Equity Analysis of Projects (STEAP)
Project Buffer Analysis Profile Report

Source: 2020 Census Block Data and NHTSA Fatality Analysis Reporting System (FARS)
Prepared by FHWA Office of Planning



Analysis of 1 Buffer of Size 0.5 Miles

Reference Layers
City/Town: Waller WA
County: Pierce WA
State: Washington

Note:, Source: 2020 Decennial Census PL94-171 Redistricting Data

0.5 Miles Buffer Analysis

	Buffer Estimates	Percent	City/Town Waller WA	County Pierce WA	State Washington
General Buffer Area Statistics					
Land Area (in square miles)	2		8	1,668	66,455
Population	1,112		8,189	921,130	7,705,281
Housing Units	441		3,219	359,489	3,202,241
Households	422		3,108	339,840	2,974,692
Population by Race					
Total	1,112	100%	8,189	921,130	7,705,281
Population Reporting One Race	1,020	92%	89%	87%	89%
White	864	78%	77%	65%	67%
Black	23	2%	2%	7%	4%
American Indian	35	3%	3%	1%	2%
Asian	54	5%	4%	7%	9%
Pacific Islander	3	0%	0%	2%	1%
Some Other Race	41	4%	4%	5%	7%
Population Reporting Two or More Races	92	8%	11%	13%	11%
Population by Ethnicity					
Total	1,112	100%	8,189	921,130	7,705,281
Hispanic Origin	93	8%	9%	12%	14%
Not Hispanic	1,018	92%	91%	88%	86%
Total Non-Hispanic Population					
Total	1,018	100%	7,462	809,319	6,646,068
White Alone	829	81%	82%	70%	74%
Black or African American Alone	23	2%	2%	8%	4%
American Indian & Alaska Native Alone	31	3%	3%	1%	1%
Asian Alone	54	5%	4%	8%	11%
Native Hawaiian & Other Pacific Islander Alone	2	0%	0%	2%	1%
Some other Race Alone	6	1%	0%	1%	1%
Two or More Race	74	7%	8%	10%	8%

Note:, Source: 2020 Decennial Census PL94-171 Redistricting Data

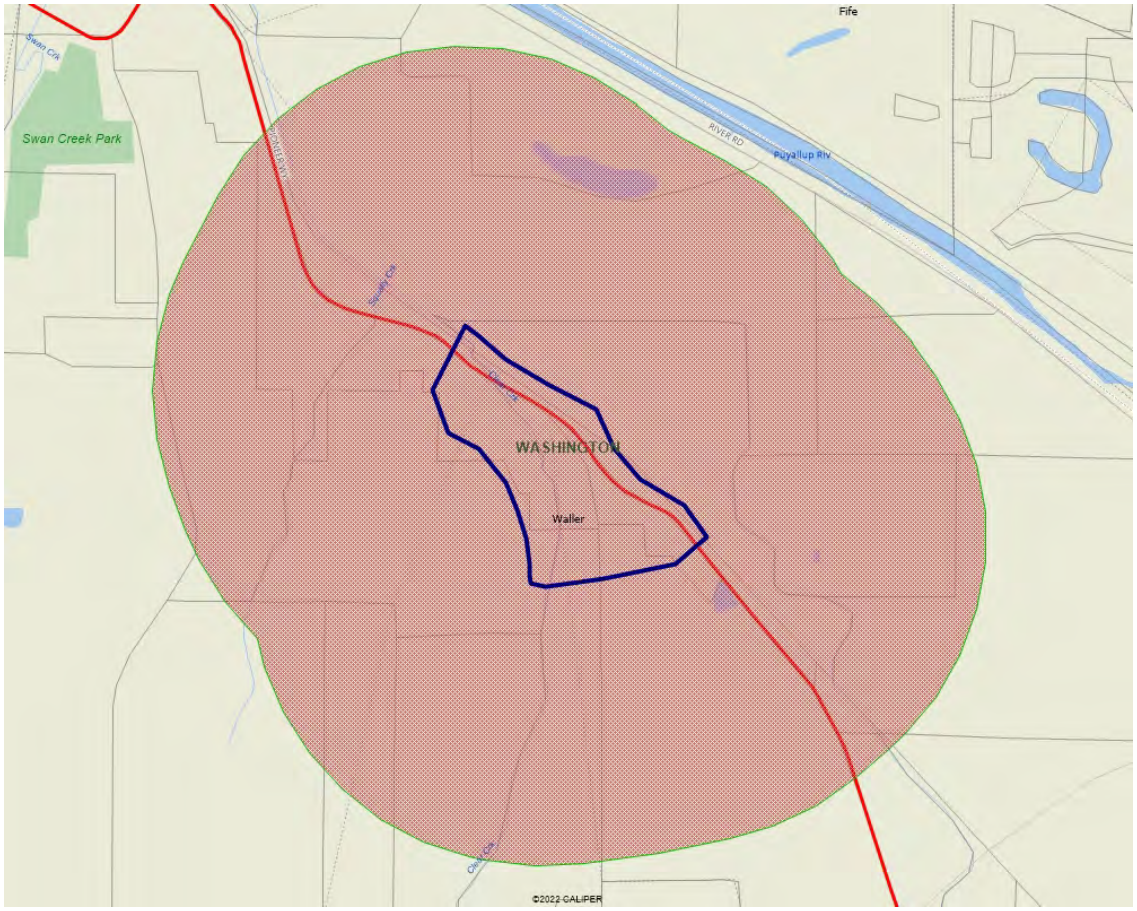
	Buffer Estimates	Percent	City/Town Waller WA	County Pierce WA	State Washington
Population in Housing Units vs. Group Quarters					
Total	1,112	100%	8,189	921,130	7,705,281
People in housing units	1,111	100%	100%	97%	98%
People in group quarters		0%	0%	3%	2%
Population in Group Quarters					
Total		100%	34	23,291	160,207
Nursing facilities		0%	0%	12%	16%
College/University student housing		0%	0%	12%	26%
Military quarters		0%	0%	35%	10%
Other facilities		100%	100%	41%	48%
Housing Unit					
Total Housing Units	441	100%	3,219	359,489	3,202,241
Occupied Housing Units	422	96%	97%	95%	93%
Vacant Housing Units	19	4%	3%	5%	7%
2016-2020 Five Year Fatal Crashes and Fatalities					
Total Fatal Crashes	1	100%	5	301	2,537
Vehicle Crashes	1	100%	100%	78%	79%
Pedestrian and Cyclist Crashes		0%	0%	22%	21%
Total Fatalities	1	100%	6	324	2,707
Vehicle Crash Fatalities	1	100%	100%	80%	81%
Pedestrian and Cyclist Fatalities		0%	0%	20%	19%

Attachment 3

2016-2020 ACS Summary Report

Screening Tool for Equity Analysis of Projects (STEAP)
Project Buffer Analysis Profile Report

Data Source: American Community Survey 2016-2020
Prepared by FHWA Office of Planning



Analysis of 1 Buffer of Size 0.5 Miles

Reference Layers
City/Town: Waller WA
County: Pierce WA
State: Washington

Note:, *: The variables marked with an asterisk are estimated from Census Tract data. More information on the disaggregation method can be found on the "Help" tab of the Screening Tool for Equity Analysis of Projects webpage.

0.5 Miles Buffer Analysis Summary Report

	Buffer Estimates	Percent	City/Town Waller WA	County Pierce WA	State Washington
General Buffer Area Statistics					
Land Area (in square miles)	2		8	1,668	66,455
Population	1,204		7,672	891,862	7,512,465
Housing Units	485		3,120	351,346	3,150,194
Households	473		3,043	330,999	2,905,822
Families	339		2,054	222,167	1,874,376
Population by Race					
Total	1,204	100%	7,672	891,862	7,512,465
Population Reporting One Race	1,100	91%	94%	90%	93%
White	950	79%	86%	71%	74%
Black	22	2%	2%	7%	4%
American Indian	11	1%	2%	1%	1%
Asian	80	7%	4%	6%	9%
Pacific Islander		0%	0%	2%	1%
Some Other Race	38	3%	2%	3%	5%
Population Reporting Two or More Races	104	9%	6%	10%	7%
Population by Ethnicity					
Total	1,204	100%	7,672	891,862	7,512,465
Hispanic Origin	100	8%	8%	11%	13%
Not Hispanic	1,104	92%	92%	89%	87%
Total Non-Hispanic Population					
Total	1,104	100%	7,094	791,328	6,540,943
White Alone	912	83%	88%	74%	77%
Black or African American Alone	22	2%	2%	7%	4%
American Indian & Alaska Native Alone	9	1%	2%	1%	1%
Asian Alone	79	7%	4%	7%	10%
Native Hawaiian & Other Pacific Islander Alone		0%	0%	2%	1%
Some other Race Alone		0%	0%	0%	0%
Two or More Race	82	7%	5%	8%	6%

Note:, *: The variables marked with an asterisk are estimated from Census Tract data. More information on the disaggregation method can be found on the "Help" tab of the Screening Tool for Equity Analysis of Projects webpage.

	Buffer Estimates	Percent	City/Town Waller WA	County Pierce WA	State Washington
Total Hispanic Population *					
Total	100	100%	578	100,534	971,522
Hispanic – Mexican	89	89%	79%	70%	78%
Hispanic – Puerto Rican		0%	0%	10%	4%
Hispanic – Cuban		0%	3%	1%	1%
Hispanic – Other	11	11%	18%	18%	17%
Total American Indian Population *					
Total	11	100%	121	9,899	91,766
American Indian-Cherokee		0%	21%	6%	4%
American Indian-Chippewa	1	5%	3%	3%	2%
American Indian-Navajo		0%	0%	4%	2%
American Indian-Sioux		0%	0%	4%	2%
Population by Sex					
Total	1,204	100%	7,672	891,862	7,512,465
Male	587	49%	48%	50%	50%
Female	617	51%	52%	50%	50%
Population by Age					
Total	1,204	100%	7,672	891,862	7,512,465
Age 0-17 (children)	274	23%	21%	23%	22%
Age 18-64 (Adult)	681	57%	59%	63%	63%
Age 65+ (Senior Population)	249	21%	20%	14%	15%
Age 5+ (used for “language spoken at home”)	1,132	94%	94%	93%	94%
Age 16+ (used for “Labor Forces”)	952	79%	81%	79%	80%
Age 18+ (Used for “voting age”)	930	77%	79%	77%	78%
Age 25+ (used for “Education Attainment”)	883	73%	73%	67%	69%
Employed Population Age 16+ Years					
Total	952	100%	6,250	704,871	6,038,812
In Labor Force	570	60%	61%	66%	65%
Civilian Unemployed in Labor Force	28	3%	3%	3%	3%
Not in Labor Force	382	40%	39%	34%	35%

Note:, *: The variables marked with an asterisk are estimated from Census Tract data. More information on the disaggregation method can be found on the "Help" tab of the Screening Tool for Equity Analysis of Projects webpage.

	Buffer Estimates	Percent	City/Town Waller WA	County Pierce WA	State Washington
Population 25+ by Educational Attainment					
Total	883	100%	5,630	601,918	5,199,771
Less than 9th Grade	19	2%	2%	3%	3%
9th - 12th Grade, No Diploma	29	3%	5%	5%	5%
High School Graduate	271	31%	28%	27%	22%
Some College, No Degree	197	22%	25%	26%	23%
Associate Degree	121	14%	13%	12%	10%
Bachelor's Degree or more	246	28%	27%	28%	37%
Households by Household Size					
Total Households	473	100%	3,043	330,999	2,905,822
1-person households	111	24%	27%	25%	27%
2-person households	183	39%	38%	34%	35%
3-person households	76	16%	13%	17%	15%
4-person households	59	13%	14%	14%	13%
5-person households	18	4%	4%	6%	6%
6-person households	10	2%	2%	2%	2%
7+ person households	16	3%	2%	2%	2%
Households by Household Type (including Living Alone)					
Total Households	473	100%	3,043	330,999	2,905,822
Married-Couple family households	278	59%	53%	51%	50%
Male householder, no spouse present family households	23	5%	8%	5%	5%
Female householder, no spouse present family households	38	8%	7%	11%	10%
Householder living alone – nonfamily households	111	24%	27%	25%	27%
Householder not living alone – nonfamily households	22	5%	6%	8%	9%
Household Type for Children Under 18 years in Households *					
Total Population under 18 years in households (excluding householders, spouse and unmarried partners)	274	100%	1,585	208,267	1,650,399
Married-couple household	223	81%	73%	70%	72%
Cohabiting couple household	14	5%	14%	10%	9%
In male householder, no spouse/partner present household	19	7%	7%	5%	5%

Note:, *: The variables marked with an asterisk are estimated from Census Tract data. More information on the disaggregation method can be found on the "Help" tab of the Screening Tool for Equity Analysis of Projects webpage.

	Buffer Estimates	Percent	City/Town Waller WA	County Pierce WA	State Washington
In female householder, no spouse/partner present household	18	6%	6%	15%	15%
Households by Household Income					
Household Income Base	473	100%	3,043	330,999	2,905,822
< $15,000	44	9%	7%	7%	8%
$15,000 - $25,000	30	6%	6%	6%	6%
$25,000 - $35,000	29	6%	6%	7%	7%
$35,000 - $50,000	33	7%	8%	11%	11%
$50,000 - $75,000	66	14%	14%	18%	17%
$75,000 +	271	57%	59%	51%	51%
Selected Monthly Owner Costs as a % of Household Income in the past 12 months (with or without mortgage)					
Total Owner-Occupied Housing Units	395	100%	2,650	209,486	1,838,059
Less than 10.0%	83	21%	21%	15%	19%
10.0 to 14.9%	50	13%	16%	16%	17%
15.0 to 19.9%	85	22%	17%	17%	17%
20.0 to 24.9%	56	14%	15%	15%	14%
25.0 to 29.9%	28	7%	9%	11%	9%
30.0 to 34.9%	19	5%	5%	7%	6%
35.0 to 39.9%	14	4%	3%	5%	4%
40.0 to 49.9%	14	4%	3%	5%	5%
50.0% or more	43	11%	10%	9%	9%
Not computed	2	1%	0%	1%	1%
Gross Rent as a % of Household Income in the past 12 months					
Total Renter-Occupied Housing Units	78	100%	393	121,513	1,067,763
Less than 10.0%	1	1%	1%	2%	3%
10.0 to 14.9%	4	6%	10%	7%	8%
15.0 to 19.9%	19	24%	16%	13%	13%
20.0 to 24.9%	7	8%	17%	13%	13%
25.0 to 29.9%		0%	3%	12%	12%
30.0 to 34.9%	5	6%	5%	9%	9%
35.0 to 39.9%	4	5%	4%	7%	7%

Note:, *: The variables marked with an asterisk are estimated from Census Tract data. More information on the disaggregation method can be found on the "Help" tab of the Screening Tool for Equity Analysis of Projects webpage.

	Buffer Estimates	Percent	City/Town Waller WA	County Pierce WA	State Washington
40.0 to 49.9%	6	7%	11%	10%	8%
50.0% or more	19	24%	18%	22%	21%
Not computed	15	19%	17%	5%	5%
Monthly Housing Cost *					
Total Occupied Housing Units	473	100%	3,043	330,999	2,905,822
Less than $199	3	1%	3%	1%	1%
$200 to $399	16	3%	6%	3%	5%
$400 to $599	45	10%	9%	6%	7%
$600 to $799	70	15%	13%	8%	9%
$800 to $999	35	7%	9%	9%	9%
$1000 to $1499	70	15%	12%	24%	22%
$1500 to $1999	89	19%	16%	24%	19%
$2000 to $2499	77	16%	17%	14%	12%
$2500 to $2999	38	8%	8%	6%	6%
$3000 or more	23	5%	5%	5%	9%
No Cash Rent	7	1%	1%	1%	1%
Population in Poverty by Race *					
Total (Population for whom poverty status is determined)	1,201	100%	7,653	874,369	7,372,433
People in Poverty - White Alone	83	7%	7%	6%	7%
People in Poverty - Black or African American Alone	5	0%	0%	1%	1%
People in Poverty - American Indian & Alaska Native Alone		0%	0%	0%	0%
People in Poverty - Asian Alone		0%	0%	1%	1%
People in Poverty - Native Hawaiian & other Pacific Islander Alone		0%	0%	0%	0%
People in Poverty - Some Other Race Alone	13	1%	1%	1%	1%
People in Poverty - Two or More Race	3	0%	0%	1%	1%
Population in Poverty by Age *					
Total (Population for whom poverty status is determined)	1,201	100%	7,653	874,369	7,372,433
People in Poverty – Age 0-5	4	0%	0%	1%	1%
People in Poverty – Age 6-17	27	2%	2%	2%	2%
People in Poverty – Age 18-24	6	0%	1%	1%	2%
People in Poverty – Age 25-64	46	4%	4%	5%	5%
People in Poverty – Age 65+	22	2%	1%	1%	1%

Note:, *: The variables marked with an asterisk are estimated from Census Tract data. More information on the disaggregation method can be found on the "Help" tab of the Screening Tool for Equity Analysis of Projects webpage.

	Buffer Estimates	Percent	City/Town Waller WA	County Pierce WA	State Washington
Vehicle Ownership					
Total Households	473	100%	3,043	330,999	2,905,822
Zero Vehicle Households	14	3%	2%	5%	7%
One Vehicle Households	104	22%	24%	27%	29%
Two Vehicle Households	159	34%	32%	39%	37%
Three or More Vehicle Households	196	42%	42%	28%	27%
Foreign Born Population *					
Total (regardless of citizenship status)	64	100%	356	88,465	1,089,651
Foreign Born – Europe	4	7%	9%	17%	15%
Foreign Born – Asia	41	64%	59%	43%	44%
Foreign Born – Africa		0%	0%	7%	6%
Foreign Born – Oceania		0%	0%	3%	2%
Foreign Born – Latin America	16	25%	27%	26%	29%
Foreign Born – Northern America	3	5%	4%	4%	4%
Population Age 5+ Years by Ability to Speak English					
Total	1,132	100%	7,202	832,870	7,057,853
Speak only English	1,004	89%	90%	85%	80%
Non-English at Home	129	11%	10%	15%	20%
Speak English "very well"	75	7%	7%	9%	12%
Speak English "well"	37	3%	2%	3%	4%
Speak English "not well"	13	1%	1%	2%	3%
Speak English "not at all"	4	0%	0%	1%	1%
Linguistically Isolated Households (Household Limited English Speaking Status)					
Total Households	473	100%	3,043	330,999	2,905,822
Speak Spanish	29	6%	6%	6%	8%
Speak Other Indo-European Languages	10	2%	2%	3%	5%
Speak Asian-Pacific Island Languages	16	3%	5%	7%	7%
Speak Other Languages		0%	0%	1%	1%

Note:, *: The variables marked with an asterisk are estimated from Census Tract data. More information on the disaggregation method can be found on the "Help" tab of the Screening Tool for Equity Analysis of Projects webpage.

	Buffer Estimates	Percent	City/Town Waller WA	County Pierce WA	State Washington
Other Vulnerable Populations or Households					
Total Population	928	100%	6,048	665,068	5,802,612
Number of Veterans (18+)	166	18%	15%	13%	9%
Number of People with Disabilities (Civilian Non-Inst) *	178	19%	21%	17%	16%
Total Households	473	100%	3,043	330,999	2,905,822
Number of Households with no Computers	8	2%	4%	5%	5%
Number of Households with no Internet Connection	38	8%	8%	7%	7%

Attachment 4

2022-2023 Chief Leschi Schools Elementary School OSPI Washington State Report Card Summary Report

Chief Leschi Schools

2022-23

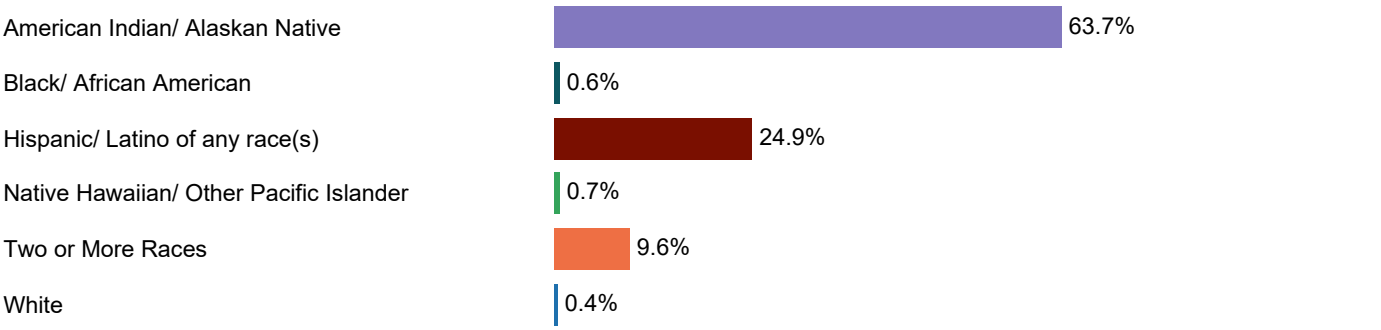
Total Student Enrollment

670

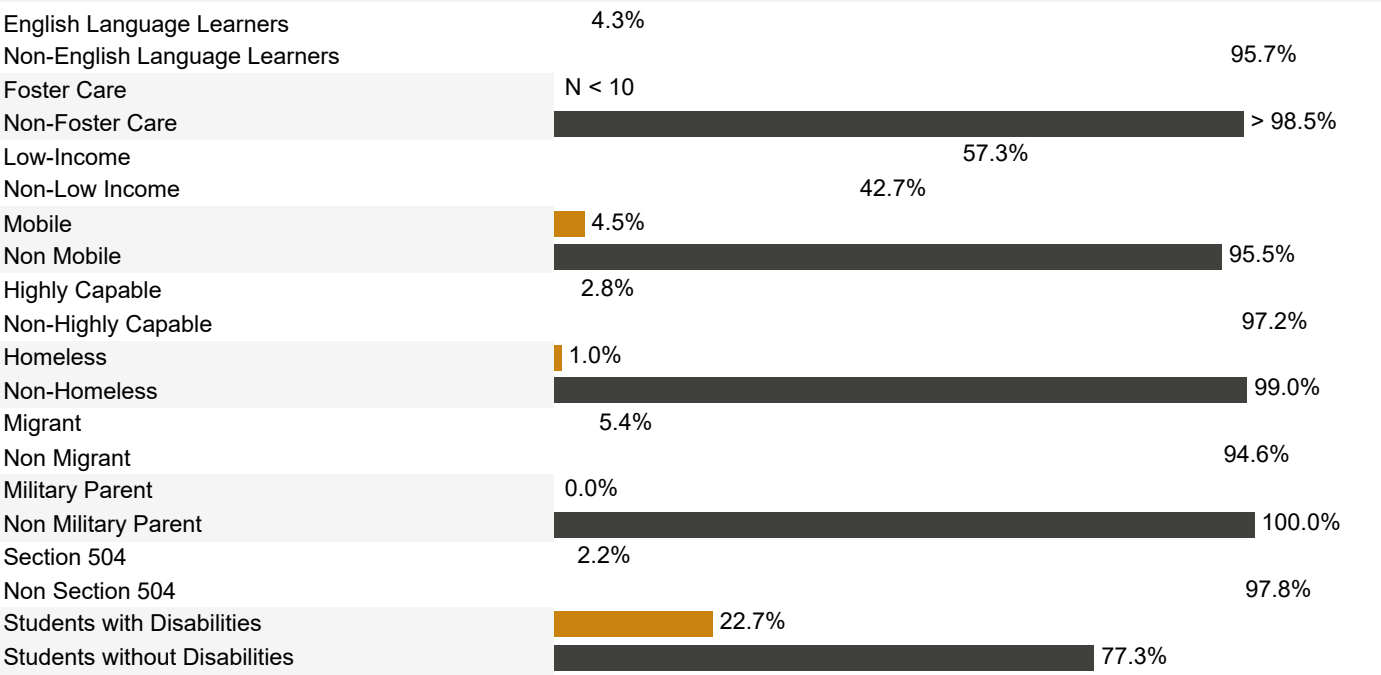
Gender



Race/Ethnicity



Program and Characteristic



Attachment 13 – Visual Resources Memorandum

Washington State Department of Transportation

Northwest Region
15700 Dayton Avenue North
P.O. Box 330310
Seattle, WA 98133-9710
206-440-4000
TTY: 1-800-833-6388
www.wsdot.wa.gov

December 21, 2023

Memorandum to File

Re: A50907X SR 509/Clear Creek Stream Restoration - Visual Quality

To whom it may concern:

This project is part of the expansion and connection of SR 167 and SR 509 to I-5. This portion of the overall project is adjacent to Pioneer Way East and roughly ½ mile off of SR 167. The site is screened from adjacent roadways.

Temporary visual impacts can be expected due to the presence of construction equipment, construction personnel, temporary traffic barriers, and materials. The temporary encroachments will be visible to the traveling public. Temporary impacts to visual quality can be controlled during construction by saving and protecting vegetation to the maximum extent possible and limiting the duration of construction.

Visual quality will be affected by the removal of existing mature vegetation to accommodate the removal of fish hatchery structures. Long-term impacts to visual quality can be avoided by protecting existing vegetation where possible and mitigated by replanting and restoring the native vegetation according to the requirements of the environmental permits and Roadside Policy Manual.

No further visual assessment is required.

Ryan Leigh, PLA