

HABITAT TECHNOLOGIES

ENVIRONMENTALLY CRITICAL AREAS ASSESSMENT (WETLANDS, STREAMS, AND CRITICAL HABITATS)

PARCEL 0420324002

**Fruitland Elementary School - 1515 South Fruitland Avenue
Puyallup, Washington 98371**

prepared for

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A VETERAN OWNED SMALL BUSINESS COOPERATIVE

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INTRODUCTION

This document details the culmination of activities and onsite evaluations undertaken to complete an assessment and characterization of potential environmentally critical areas (wetlands, streams, critical fish and wildlife habitat areas) as an element of the planning within the Fruitland Elementary School Facility (**Parcel 0420324002 - project site**). The project site was located at 1515 South Fruitland Avenue within the City of Puyallup, Pierce County, Washington (part of Section 32, Township 20 North, Range 04 East W.M.) (Figure 1). The evaluation, delineation, and characterization of onsite and adjacent specific environmentally critical areas is a vital element in the planning and selection of a potential site development action. The goal of this approach is to ensure that future site development does not result in adverse environmental impacts to these specific critical areas or their associated protective buffers.

The assessment and delineation of specific critical areas within and immediately adjacent to the project site followed the methods and procedures defined in the *Corps of Engineers Wetland Delineation Manual* (United States Army Corps of Engineers, 1987) with the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (United States Army Corps of Engineers, 2010); the 2014 Washington State Department of Ecology *Wetland Rating Form for Western Washington* (Hruby, T. & Yahnke, A. 2023); the State of Washington Department of Natural Resources (WDNR) Forest Practice Rules (WAC 222-16-030); and City of Puyallup – *Chapter 21.06*. This document was designed to accommodate site planning and potential regulatory actions and is suitable for submittal to federal, state, and local authorities for environmentally critical areas verification and permitting actions. This document does not provide an assessment of potential steep slopes, potential erosion hazard areas, potential geotechnical issues, potential septic suitability, potential stormwater issues, or potential aquifer recharge issues.

PROJECT SITE DESCRIPTION

The project site was approximately 11-acres in size and irregular in shape. The project site had undergone prior land use manipulations and management to include clearing and grading, the initial development and subsequent upgrading of the Fruitland Elementary School facility, the development of adjacent properties, and the development of adjacent public roadways/utilities. The project site was generally flat to slightly sloped northwesterly. Prior development actions within the school facility had created a set of shallow topographic swales for stormwater management along the very western boundary of the project site. This set of swales connected to a stormwater system associated with Fruitland Avenue at the northwestern corner of the project site.

Directions to Project Site: From Pioneer Avenue westbound through the City of Puyallup turn south onto South Fruitland Avenue. Continue southward on South Fruitland Avenue to the project site at 1515 South Fruitland Avenue.

BACKGROUND INFORMATION

NATIONAL WETLAND INVENTORY

The *National Wetland Inventory (NWI) Mapping* completed by the U.S. Fish and Wildlife Service was reviewed as a part of this assessment (Figure 2). This mapping resource did not identify any wetlands or surface water drainages within or immediately adjacent to the project site.

STATE OF WASHINGTON PRIORITY HABITATS AND SPECIES

The State of Washington *Priority Habitats and Species (PHS) Mapping* was reviewed as a part of this assessment (Figure 3). This mapping resource did not identify any priority habitat or priority species within or immediately adjacent to the project site.

STATE OF WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

The State of Washington Department of Fish and Wildlife (WDFW) *SalmonScape Mapping* was reviewed as a part of this assessment (Figure 4). This mapping resource did not identify any surface drainage corridors within or immediately adjacent to the project site. This mapping resource identified the Clarks Creek Corridor well offsite to the east of the project site.

STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES

The State of Washington Department of Natural Resources (WDNR) *Water Type Mapping* was reviewed as a part of this assessment (Figure 5). This mapping resource did not identify any wetlands or surface water drainage corridors within or immediately adjacent to the project site. This mapping resource identified the Clarks Creek Corridor well offsite to the east of the project site. This corridor was identified as a WDNR Type F Water (fish bearing) and included a scattering of WDNR Type U (unknown) and Type N (non-fish bearing) Waters.

CITY OF PUYALLUP MAPPING

The City of Puyallup *Mapping Inventory* was reviewed as a part of this assessment (Figure 6). This mapping resource did not identify any environmentally critical areas within the project site. This mapping resource did identify the adjacent property to the east, northeast, southeast, and south as a “general habitat area.” This offsite property is under the ownership of the WDFW and has been retained as a somewhat mature forested character to protect water quality within the Clarks Creek Corridor. This corridor provides the supportive water for the Clarks Creek Hatchery.

SOILS MAPPING

The *Soil Mapping Inventory* completed by the Natural Resource Conservation Service (NRCS) was reviewed as a part of this assessment (Figure 7). This mapping resource identified the soils throughout the majority of the project site as Kitsap silt loam (20C). The Kitsap soil series is defined as moderately well drained, as formed in glacial lake sediments on remnant terraces, and as not listed as a “hydric” soil.

This mapping resource also identified Kapowsin gravelly loam (19B) generally along the western boundary of the project site. The Kapowsin soil series is defined as moderately well drained, as formed in glacial till, and as not listed as a “hydric” soil.

ONSITE ANALYSIS

CRITERIA FOR ENVIRONMENTALLY CRITICAL AREAS IDENTIFICATION

The assessment documented below focused on the identification and characterization of specific environmentally critical areas (wetlands, surface water drainage corridors/streams, and fish and wildlife habitats) which may be located within or immediately adjacent to the project site.

WETLANDS: Wetlands are transitional areas between aquatic and upland habitats. In general terms, wetlands are lands where the extent and duration of saturation with water is the primary factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface (Cowardin, et al., 1979). Wetlands are generally defined within land use regulations as “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (United States Army Corps of Engineers 1987). Wetlands exhibit three essential characteristics, all of which must be present for an area to meet the established criteria (United States Army Corps of Engineers, 1987 and United States Army Corps of Engineers, 2010). These essential characteristics are:

- 1. Hydrophytic Vegetation:** The assemblage of macrophytes that occur in areas where inundation or soil saturation is either permanent or of sufficient frequency and duration to influence plant occurrence. Hydrophytic vegetation is present when the plant community is dominated by species that require or can tolerate prolonged inundation or soil saturation during the growing season.
- 2. Hydric Soil:** A soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions

in the upper parts. Most hydric soils exhibit characteristic morphologies that result from recent periods of saturation or inundation. These processes result in distinctive characteristics that persist in the soil during both wet and dry periods.

- 3. Wetland Hydrology:** Permanent or periodic inundation, or surface soil saturation, at least seasonally. Wetland hydrology indicators are used in combination with indicators of hydric soil and hydrophytic vegetation to define the area. Wetland hydrology indications provide evidence that the site has a continuing wetland hydrology regime. Where hydrology has not been altered vegetation and soils provide strong evidence that wetland hydrology is present.

WETLANDS: The City of Puyallup defines “wetlands” as those areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. However, wetlands include those artificial wetlands intentionally created to mitigate wetland impacts.

STREAMS: The City of Puyallup defines a “stream” as a physical feature where surface waters produce a defined channel or bed. A defined channel or bed is an area that demonstrates clear evidence of the passage of water and includes, but is not limited to, bedrock channels, gravel beds, sand and silt beds, and defined-channel swales. The channel or bed need not contain water year-round. This definition is not intended to include artificially created irrigation ditches, canals, storm or surface water devices, or other entirely artificial watercourses, unless they are used by salmonids or created for the purposes of stream mitigation.

CRITICAL FISH AND WILDLIFE HABITAT AREAS: The City of Puyallup defines “fish and wildlife habitat conservation areas” as those areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term.

- (a) These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness. These areas also include locally important habitats and species as determined by the city.
- (b) “Habitats of local importance” designated as fish and wildlife habitat conservation areas include those areas found to be locally important by the city.

- (c) These areas do not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of and are maintained by a port district or an irrigation district, unless these features are documented as being used by salmonids for habitat.

STUDY METHODS

Habitat Technologies completed a series of onsite assessments during September and October 2024. In addition, Habitat Technologies has also completed a variety of similar assessments for properties adjacent to the project site. Onsite activities were completed in accordance with criteria and procedures established the *Corps of Engineers Wetland Delineation Manual* (United States Army Corps of Engineers, 1987) with the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (United States Army Corps of Engineers, 2010); the 2014 Washington State Department of Ecology *Wetland Rating Form for Western Washington* (Hruby, T. & Yahnke, A. 2023); the State of Washington Department of Natural Resources (WDNR) Forest Practice Rules (WAC 222-16-030); and City of Puyallup – *Chapter 21.06*. Representative field data sheets are provided in Appendix A.

FIELD OBSERVATION

The project site was accessed via an existing driveway connected to South Fruitland Avenue which generally formed the western boundary of the project site. The project site had undergone prior land use manipulations to include prior site clearing and grading, the initial development and subsequent upgrading of the of Fruitland Elementary School facility, the development of adjacent properties, and the development of adjacent public roadways/utilities. The majority of the project site was dominated by the existing elementary school facilities along with the associated playgrounds, multi-purpose field areas, and bus/vehicle access driveways and parking areas. Remnant forested areas were located along the southern and western boundaries of the project site. In addition, prior site upgrading activities had included the creation of a stormwater management system for the existing buildings and parking/driveway areas that outlet into a created swale system along the central and northwestern portions of the project site.

- **Soils**

As documented at representative sample plots throughout the project site the soils exhibited a silt loam to gravelly silt loam texture and coloration typical of the Kitsap soil series. The surface soil to a depth of approximately five (5) to eight (8) inches was generally very dark grayish brown to dark brown (10YR 3/2 to 10YR 3/3). The subsoil to a depth of approximately 24 inches was generally dark brown to brown (10YR 3/3 to

10YR 4/3). The soil appeared to drain moderately well and did not exhibit prominent redoximorphic characteristics, soil color concentrations, or soil color depletion features.

As defined as sample plots within the center of the created topographic depressions (SP5 and SP8) within the western portion of the project site the surface soil to a depth of approximately ten (10) to eighteen (18) inches was generally black (10YR 2/1) to very dark gray (10YR 3/1). The surface soil appeared dominated by fine alluvial silts and fines intermixed with decomposing fine organic matter. The subsoil to a depth of approximately 24 inches was generally very dark grayish brown (10YR 3/2) to brown (10YR 4/3). The subsoil did not exhibit prominent redoximorphic features and appeared to drain moderately well. The character of the soil within these depressions appeared influenced by prior and ongoing stormwater management actions and processes.

- **Hydrology**

Onsite hydrology appeared to be the result of seasonal stormwater runoff from onsite and adjacent properties, public roadside runoff directed onto the site, the topographical character of the project site and adjacent offsite areas, flow within the identified stormwater systems, and soil characteristics. With the exception of the created stormwater management swales, the project site appeared to drain moderately well to well and did not exhibit field indicators associated with the movement of seasonal surface water runoff or indicators typically associated with wetland characteristics.

As noted above and as defined within prior construction details, a series of stormwater management swales had been created within the forested areas along the very western portion of the project site. This series of swales receives seasonal stormwater from offsite areas to the south of the southwestern corner of the project site and from the school facility. The swale in the southwestern portion of the project site connects to a stormwater management ditch along the edge of Fruitland Avenue and continues generally northerly. The created topographic swales in the central and northwestern portion of the forested area connect to a culvert drainage system at the very northwestern corner of the project site. The swale in the central portion appears to drain moderately well following seasonal stormwater events with only very limited shallow ponding at the location of the culvert leading northerly into the northwestern portion of the project site. The swale in the northwestern portion was identified to exhibit short-term seasonal ponding during and following seasonal rainfall events. However, this area also appears to drain moderately well and is connected to a culvert at the very northwestern corner of the project site. The extent and limited duration of seasonal ponding within this northwestern swale also appears influenced by alluvial debris at the connection to this culvert.

- **Vegetation**

ONSITE: The project site exhibited two (2) general plant communities, both of which had undergone prior land use manipulations associated with prior and ongoing land use

actions. The majority of the project site was dominated by a mixture of landscaping and managed lawns associated with the existing school facilities.

The second plant community was dominated by a deciduous forest plant community that had become established following prior land use actions. This plant community was present in a narrow strip along the northern, eastern, and central boundary fence lines. This plant community was also present along the western boundary adjacent to Fruitland Avenue. Observed tree species within this plant community included red alder (*Alnus rubra*), big leaf maple (*Acer macrophyllum*), black cottonwood (*Populus trichocarpa*), cascara (*Rhamnus purshiana*), cherry (*Prunus* spp.). Observed species within the understory included Himalayan blackberry (*Rubus armeniacus*), evergreen blackberry (*Rubus laciniatus*), trailing blackberry (*Rubus ursinus*), Oregon grape (*Berberis nervosa*), holly (*Ilex aquifolium*), rose (*Rosa* spp.), Indian plum (*Oemleria cerasiformis*), salmonberry (*Rubus spectabilis*), snowberry (*Symphoricarpus albus*), sword fern (*Polystichum munitum*), bracken fern (*Pteridium aquilium*), and nettle (*Urtica dioica*). This plant community was identified as non-hydrophytic in character (typical of uplands).

As noted above, the western portion of the project site had been previously modified by the development of topographic swales associated with onsite stormwater management actions. The plant community within the bottom-most portions of these swales included red alder, black cottonwood, Oregon ash (*Fraxinus latifolia*), salmonberry, Himalayan blackberry, ivy, slough sedge (*Carex obnupta*), big leaf avens (*Geum macrophyllum*), and reed canarygrass (*Phalaris arundinacea*). This plant community was identified as somewhat hydrophytic in character (typical of wetlands).

OFFSITE: The plant community immediately offsite to the north was dominated by managed landscaping within a residential community. The plant community offsite to the east and south of the project site was dominated by a mixed, upland forest plant community. Observed tree species within this offsite forest plant community included Western red cedar (*Thuja plicata*), Douglas fir (*Pseudotsuga menziesii*), Western hemlock (*Tsuga heterophylla*), red alder, big leaf maple, black cottonwood, cascara, and cherry. Adjacent to the project site this forest plant community was identified as non-hydrophytic in character (typical of uplands).

- **Wildlife Observations**

Species observed onsite, species that would be expected to utilize the habitats provided by the project site, and species that may potentially utilize the habitats provided by the project site included red tailed hawk (*Buteo jamaicensis*), merlin (*Falco columbarius*), sharp-shinned hawk (*Accipiter striatus*), common raven (*Corvus corax*), American crow (*Corvus brachynchos*), American robin (*Turdus migratorius*), house sparrow (*Passer domesticus*), starling (*Sturnus vulgaris*), mourning dove (*Zenaida macroura*), song sparrow (*Melospiza melodia*), American goldfinch (*Carduelis tristis*), tree swallow (*Tachycineta bicolor*), violet green swallow (*Tachycineta thalassina*), dark eyed junco (*Junco hyemalis*), Anna's hummingbird (*Calypte anna*), rufous hummingbird

(*Selasphorus rufus*), common bushtit (*Psaltirparus minimus*), northern flicker (*Colaptes auratus*), black tailed deer (*Odocoileus hemionus*), raccoon (*Procyon lotor*), coyote (*Canis latrans*), eastern cottontail (*Sylvilagus floridanus*), opossum (*Didelphis virginianus*), deer mouse (*Peromyscus maniculatus*), voles (*Microtus* spp.), Norway rat (*Rattus norvegicus*), shrew (*Sorex* spp.), bats (*Myotis* spp.), Pacific tree frog (*Hyla regilla*), and common garter snake (*Thamnophis sirtalis*).

The project site did not appear to provide suitable spawning or juvenile rearing habitats for amphibians and did not provide habitats for fish species.

MOVEMENT CORRIDORS

The project site was located within a well urbanized portion of the City of Puyallup adjacent to the Clarks Creek Corridor. As identified by onsite wildlife trials, small and medium mammals appeared to be moving throughout the project site. The project site was within the seasonal migratory pathway for passerine birds and raptors.

STATE PRIORITY SPECIES

A few species identified by the State of Washington as “Priority Species” were observed onsite or potentially may utilize the project site and surrounding habitats. Priority species require protective measures for their survival due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance.

Game Species: “Game species” are regulated by the State of Washington through recreational hunting bag limits, harvest seasons, and harvest area restrictions. Game species observed to use the project site included black tailed deer and mourning dove.

State Candidate: State Candidate species are presently under review by the State of Washington Department of Fish and Wildlife (WDFW) for possible listing as endangered, threatened, or sensitive. No State Candidate species were observed or have been documented to utilize the habitats provided within the project site.

State Sensitive: State Sensitive species are native to Washington and are vulnerable to declining and are likely to become endangered or threatened throughout a significant portion of its range without cooperative management or removal of threats. No State Sensitive species were observed or have been documented to utilize the habitats provided within the project site.

State Threatened: State Threatened species means any wildlife species native to the state of Washington that is likely to become an endangered species within the foreseeable future throughout a significant portion of its range within the state without cooperative management or removal of threats. No State Threatened

species were observed or have been documented to utilize the habitats provided within the project site.

State Endangered: State endangered species means any species native to the state of Washington that is seriously threatened with extinction throughout all or a significant portion of its range within the state. No State Endangered species were observed or have been documented to utilize the habitats provided within the project site.

FEDERALLY LISTED SPECIES

The project site did not provide and has not been documented to provide critical habitats for federally listed endangered, threatened, or sensitive species. A single, federally listed “species of concern” – bald eagle – has been documented to utilize the habitats associated with the Puyallup River Corridor, the Clarks Creek Corridor, and a variety of the larger ponds within this portion of the City of Puyallup. As such, this species may occasionally overfly the project site.

CRITICAL AREAS DETERMINATION

The assessment and evaluation of potential wetlands, streams, and critical fish and wildlife habitats within and immediately adjacent to the project site was completed in accordance with the *Corps of Engineers Wetland Delineation Manual* (United States Army Corps of Engineers, 1987) with the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (United States Army Corps of Engineers, 2010); the 2014 Washington State Department of Ecology *Wetland Rating Form for Western Washington* (Hruby, T. & Yahnke, A. 2023), the State of Washington Department of Natural Resources (WDNR) Forest Practice Rules (WAC 222-16-030), and City of Puyallup – *Chapter 21.06*.

WETLANDS: Onsite assessment identified that the project site had been modified and managed in association with the existing Fruitland Elementary School facilities. These actions had included the creation of a series of stormwater management topographic swales within the very western portion of the project site. These swales appeared to exhibit short-term seasonal hydrology during and immediately following seasonal rainfall events. However, these swale also appeared to drain moderately well to well following these rainfall events as a result of the created topography and outlet management. These swales were identified as **not** meeting the established criteria for designation as “wetlands.”

In addition, the City of Puyallup definition of a “wetland” specifically excludes those areas that may exhibit wetland characteristics but were intentionally created for such purposes as drainage ditches, grass-lined swales, canals, detention facilities, and wastewater treatment facilities.

STREAMS: Onsite assessment identified that the project site had been modified and managed in association with the existing Fruitland Elementary School facilities. **No** portion of the project site was identified to exhibit a continuous, defined channel created by the passage of naturally occurring surface waters.

CRITICAL FISH AND WILDLIFE HABITAT AREAS: Onsite assessment identified that the project site had been modified and managed in association with the existing Fruitland Elementary School facilities. **No** portion of the project site was identified to provide “fish and wildlife habitat conservation areas” as defined by the City of Puyallup.

OFFSITE: In addition, no portion of the area immediately adjacent to the project site would appear defined as a “critical fish and wildlife habitat conservation area” as designed by the City of Puyallup based upon rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness. However, the forested areas immediately offsite to the east and south of the project site would appear best defined as meeting the criteria for designation as a City of Puyallup locally important “general habitat area - habitat of local importance.” This offsite area has been incorporated into the Clarks Creek Park which generally extends from 23rd Avenue SW along its southern boundary to West Pioneer Way along its northern boundary. Clarks Creek Park is under the ownership and control of the City of Puyallup (northern portion) and the Washington State Department of Fish and Wildlife (WDFW) (southern portion). The southern portion of the park was initially established by WDFW for the protection of surface water which supports the Puyallup Fish Hatchery located at the intersection of 15th Avenue SW and 14th Street SW. WDFW manages properties for the benefit of the citizens of Washington and over time the initial management actions designed to protect water quality for the fish hatchery have expanded into a variety of recreational opportunities (hiking, bike trails, bird watching) associated with the overall Clarks Creek Park. The central and northern portions of Clarks Creek Park have been crafted by the City of Puyallup into a variety of generally higher intensity recreational uses to include ballfields, picnicking areas, a dog park, active playfields, public facilities, well used hiking/biking trails, and associated parking areas.

The WDFW has not established specific protective buffers for general habitat areas. However, non-specific guidance generally points to ensuring that proposed adjacent activities that do not adversely affect local water quality, do not removal of significant adjacent habitat features, or do not create a completed/adverse blockage of wildlife movement corridors. As noted above, the project site is presently dominated by the Fruitland Elementary School facility. Presently proposed upgrades to this existing facility focuses on much needed safety improvements to vehicle traffic circulation in the western portion of the facility – along Fruitland Avenue. As such, a buffer adjacent to the offsite

forested area to the east and southeast would not be required for the continued protection of the offsite physical and biological functions within Clarks Creek Park.

SELECTED DEVELOPMENT ACTION

The *Selected Development Action* for **Parcel 0420324002** is presently in the preliminary design phase and generally focuses on much needed safety improvements to vehicle traffic circulation in the western portion of the facility. However, all proposed future actions would also be consistent with the City of Puyallup *Comprehensive Plan*, local zoning, the character of the neighborhood, and the provisions of the City of Puyallup Chapter 21.06.

STANDARD OF CARE

This report has been completed by Habitat Technologies for the use by **JMJ Team**. Prior to extensive site planning the findings documented in this report should be reviewed, verified, and approved by City of Puyallup and potentially other resource and permitting agency(s) staff. Habitat Technologies has provided professional services that are in accordance with the degree of care and skill generally accepted in the nature of the work accomplished. No other warranties are expressed or implied. Habitat Technologies is not responsible for design costs incurred before this document is approved by the appropriate resource and permitting agencies.

Bryan W. Peck

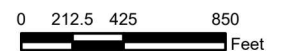
Bryan W. Peck
Senior Wetland Biologist

Thomas D. Deming

Thomas D. Deming, SPWS
Habitat Technologies (Appendix B)

FIGURES

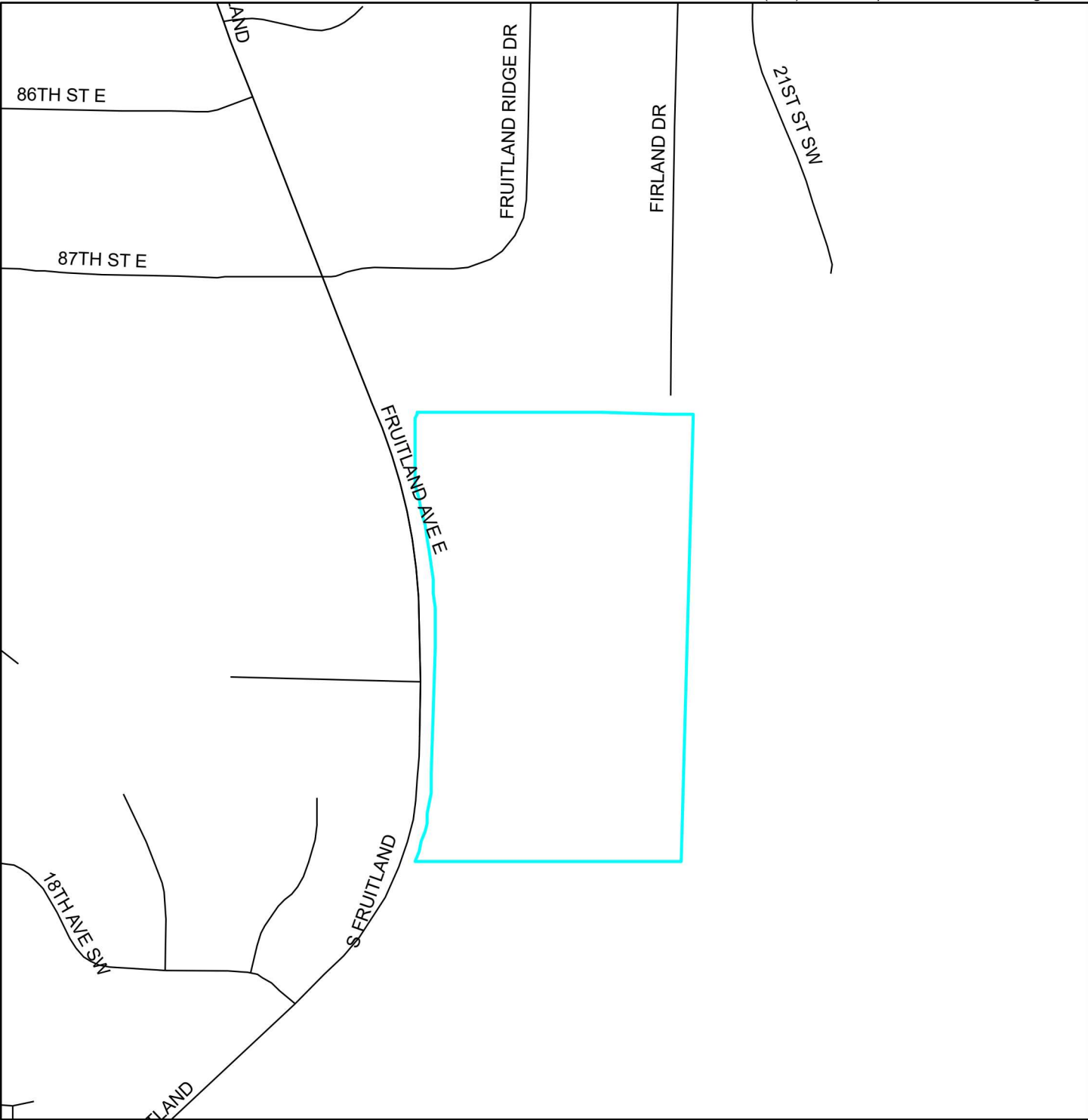
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The map features are approximate and are intended only to provide an indication of said feature. Additional areas that have not been mapped may be present. This is not a survey. Orthophotos and other data may not align. The County assumes no liability for variations ascertained by actual survey. ALL DATA IS EXPRESSLY PROVIDED 'AS IS' AND 'WITH ALL FAULTS'. The County makes no warranty of fitness for a particular purpose.

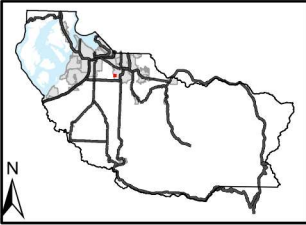
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Figure 2 NWI Mapping

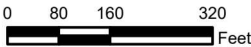


Legend

- Roads
- National Wetlands Inventory

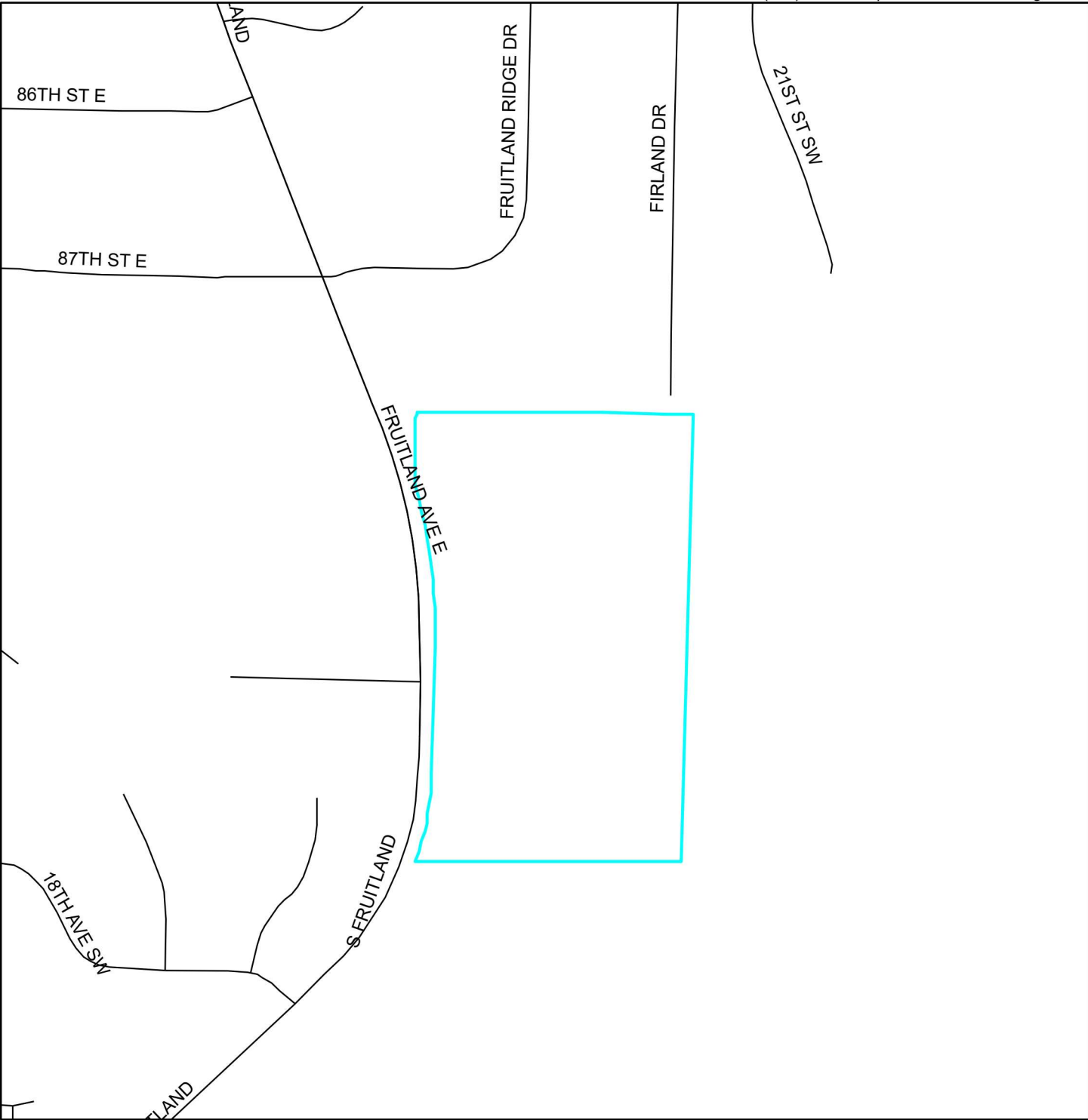


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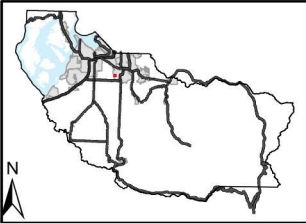
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Figure 3 PHS Mapping



Legend

- Roads
- Priority Habitat and Species

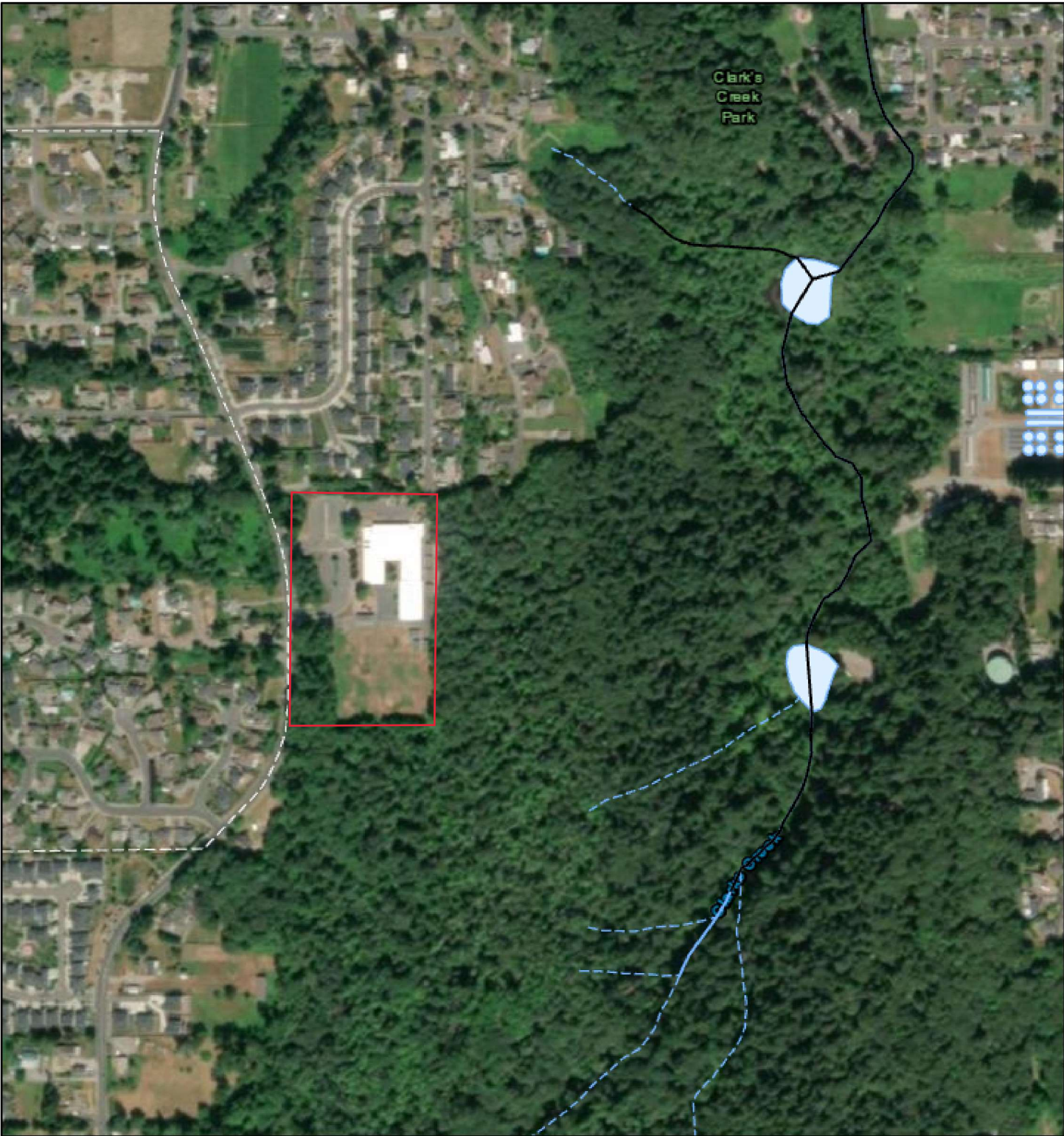


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0 80 160 320 Feet

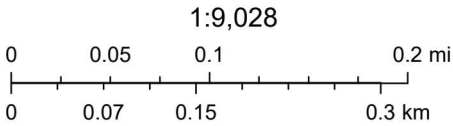
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Figure 4 WDFW Salmonscape Mapping



October 24, 2024

— All SalmonScape Species



[illegible]

	New Stream		Start and End Point of Surveyed Reach
	Proposed Water Type		Natural Fish Barrier
	Stream Removal		Manmade Barrier
	Break between water types		End of Fish or Last Fish

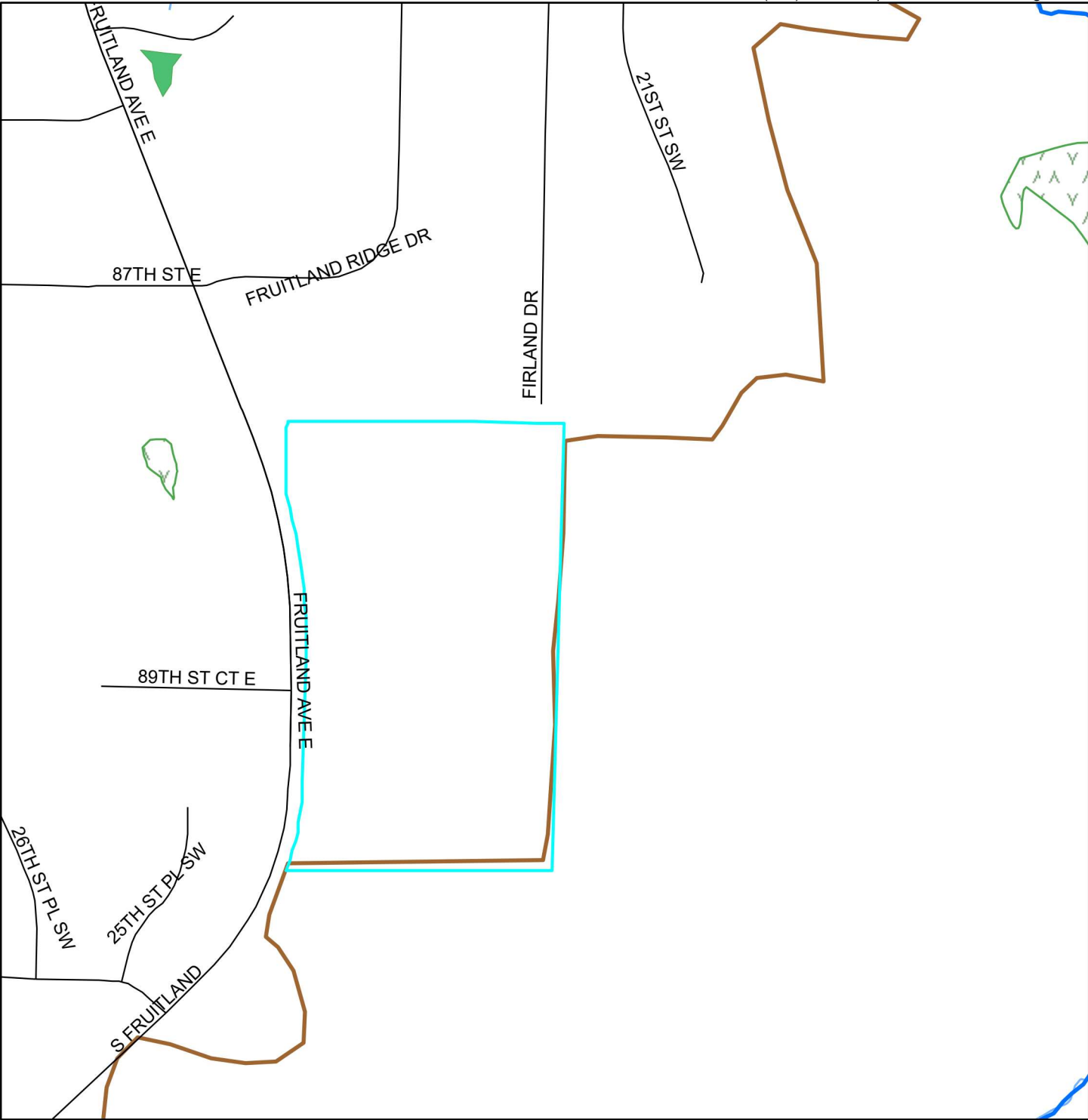
S30 T20.0N R04.0E, S04 T19.0N
R04.0E, S33 T20.0N R04.0E, S06 T19.0N
R04.0E, S05 T19.0N R04.0E, S32 T20.0N
R04.0E, S29 T20.0N R04.0E, S31 T20.0N
R04.0E, S37 T20.0N R04.0E

Approximate Scale :1:12,000

0 500 1,000 2,000 Feet

Date: 10/24/2024 Time: 8:52 AM

Figure 6 City of Puyallup Mapping



Legend

Streams - Puyallup

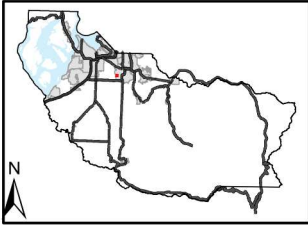
Roads

Hyd Wetlands - Puyallup

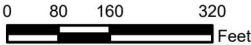
Cen

- Field-verified Delineated
- Field-verified
- Unverified

- Unverified
- Unverified
- Buffer
- Mitigation Site
- General Habitat Areas

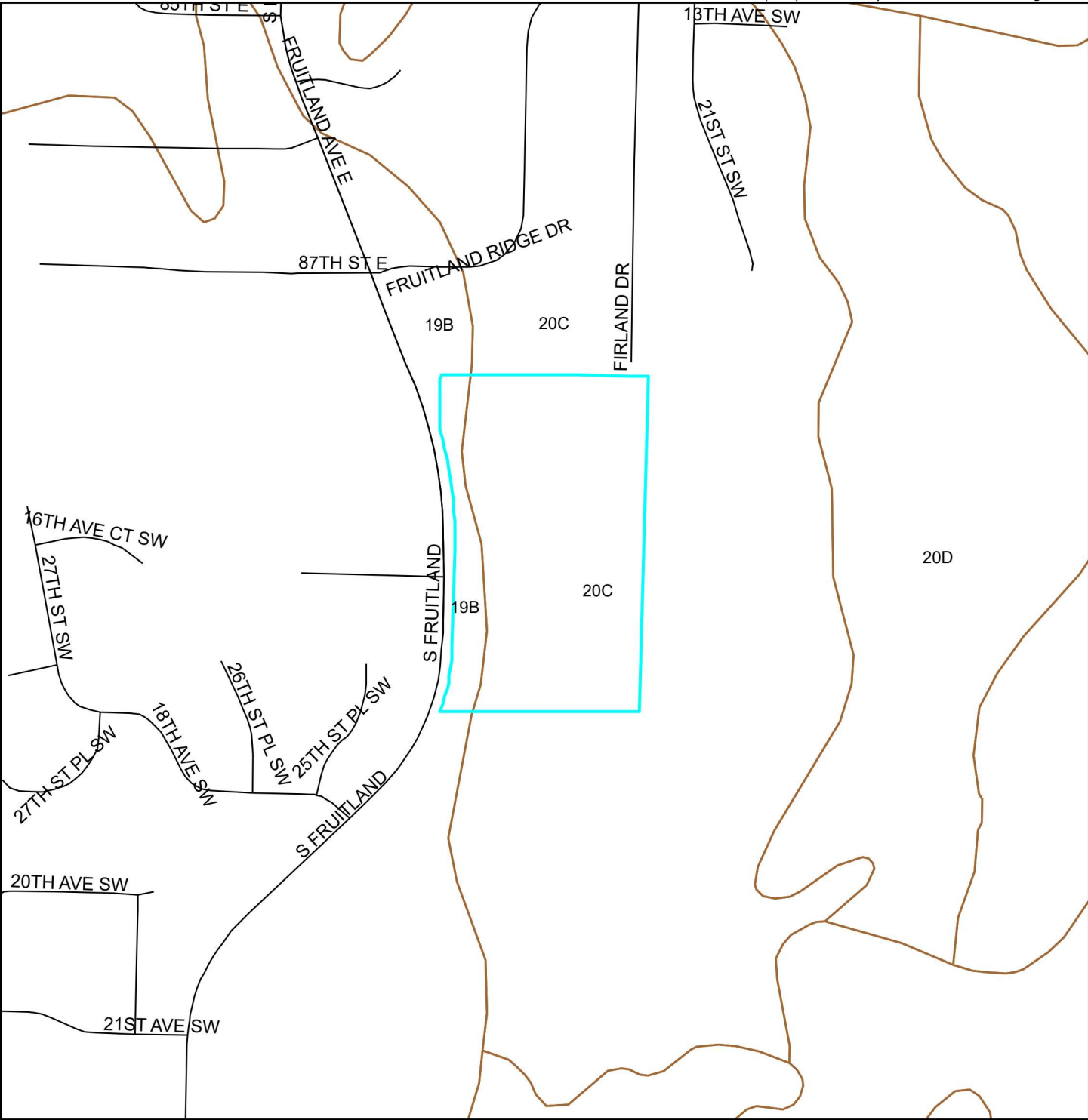


1:3,600



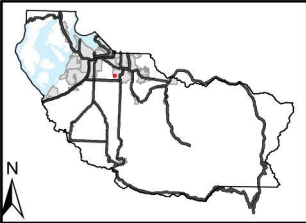
The map features are approximate and are intended only to provide an indication of said feature. Additional areas that have not been mapped may be present. This is not a survey. Orthophotos and other data may not align. The County assumes no liability for variations ascertained by actual survey. ALL DATA IS EXPRESSLY PROVIDED 'AS IS' AND 'WITH ALL FAULTS'. The County makes no warranty of fitness for a particular purpose.

Figure 7 Soils Mapping

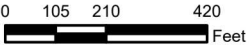


Legend

- Roads
- Soils



1:4,800



The map features are approximate and are intended only to provide an indication of said feature. Additional areas that have not been mapped may be present. This is not a survey. Orthophotos and other data may not align. The County assumes no liability for variations ascertained by actual survey. ALL DATA IS EXPRESSLY PROVIDED 'AS IS' AND 'WITH ALL FAULTS'. The County makes no warranty of fitness for a particular purpose.

REFERENCE AND BACKGROUND LIST

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US Fish and Wildlife Service National Wetland Inventory Mapper, 2016 (for NWI wetland mapping): <http://www.fws.gov/wetlands/Data/Mapper.html>.

Washington State Department of Ecology. 1997. Washington State Wetlands Identification and Delineation Manual. Publication Number 96-94.

Washington State Department of Fish and Wildlife Priority Habitats and Species Maps 2016 <http://wdfw.wa.gov/mapping/phs/>

Washington State Department of Fish and Wildlife SalmonScape Mapping System, 2016 (for fish presence): <http://apps.wdfw.wa.gov/salmonscape/map.html>

Washington State Department of Natural Resources FPARS Mapping System, 2016 (for stream typing): <http://fortess.wa.gov/dnr/app1/fpars/viewer.htm>

APPENDIX A - FIELD DATA FORMS

Sample Plot Locations

Habitat Technologies

P.O.Box 1088
Puyallup, WA 98371
(253) 845-5119 | www.habitattechnologies.net



Legend

Tax Parcels

Base Parcel

Condominium

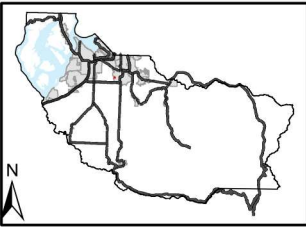
Other

Roads

County - 2023 Ortho

The map features are approximate and are intended only to provide an indication of said feature. Additional areas that have not been mapped may be present. This is not a survey. Orthophotos and other data may not align. The County assumes no liability for variations ascertained by actual survey. ALL DATA IS EXPRESSLY PROVIDED 'AS IS' AND 'WITH ALL FAULTS'. The County makes no warranty of fitness for a particular purpose.

1:1,800



0 37.5 75 150 Feet

Date: 10/29/2024 03:44 PM

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: PARCEL 0420324002 City/County: City of Puyallup / Pierce County Sampling Date: 28 OCT 2024
Applicant/Owner: _____ State: WA Sampling Point: SP1
Investigator(s): Habitat Technologies Section, Township, Range: Section 32 Township 20 Range 04
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Rolling Slope (%): 1-2%
Subregion (LRR): A Lat: N47.17456 Long: W-122.32401 Datum: _____
Soil Map Unit Name: Kitsap NWI classification: Moderately well drained

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: Forested southern boundary of school. active managed playground to north	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
1. <u>Acer macrophyllum</u>	<u>60</u>	<u>YES</u>	<u>FACU</u>	
2. <u>Populus trichocarpa</u>	<u>40</u>	<u>YES</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<u>100</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: 15ft radius)				
1. <u>Rubus laciniatus</u>	<u>20</u>	<u>YES</u>	<u>FACU</u>	
2. <u>Rubus armeniacus</u>	<u>60</u>	<u>yes</u>	<u>FAC</u>	
3. <u>Rubus ursinus</u>	<u>20</u>	<u>yes</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>_____</u> = Total Cover				
Herb Stratum (Plot size: 15ft radius)				
1. <u>Polystichum munitum</u>	<u>40</u>	<u>YES</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: ☐ Rapid Test for Hydrophytic Vegetation ☐ Dominance Test is >50% ☐ Prevalence Index is ≤3.0 ¹ ☐ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ 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.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>40</u> = Total Cover				
Woody Vine Stratum (Plot size: 15ft radius)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☐ No ☒
2. _____	_____	_____	_____	
<u>_____</u> = Total Cover				
% Bare Ground in Herb Stratum _____				

Remarks: Forested southern boundary of property adjacent to the playground of the north.

SOIL

Sampling Point: SP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-3	10YR 3/2	100					GSL	
3-18	10YR 4/3	85	10YR 4/6	15	C	M	GSL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: 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 Soils³: ☐ 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: NO Prominent Field indicators of hydric soils.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
☐ 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)	☐ 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? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ☐ No ☒
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No prominent field indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: PARCEL 0420324002 City/County: City of Puyallup / Pierce County Sampling Date: 28 OCT 2024
Applicant/Owner: _____ State: WA Sampling Point: SP2
Investigator(s): Habitat Technologies Section, Township, Range: Section 32 Township 20 Range 04
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Rolling Slope (%): 1-2%
Subregion (LRR): A Lat: N47.17477 Long: W-122.32514 Datum: _____
Soil Map Unit Name: Kapowsin gravelly loam NWI classification: Moderately well drained

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: retained deciduous forest in southwestern portion of site. Area previously modified for stormwater management	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acer macrophyllum</u>	<u>40</u>	<u>YES</u>	<u>FACU</u>
2. <u>Alnus rubra</u>	<u>40</u>	<u>YES</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
<u>80</u> = Total Cover			
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1. <u>Rubus spectabilis</u>	<u>20</u>	<u>yes</u>	<u>FAC</u>
2. <u>Rubus armeniacus</u>	<u>20</u>	<u>yes</u>	<u>FAC</u>
3. <u>Rubus ursinus</u>	<u>20</u>	<u>yes</u>	<u>FACU</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
<u>60</u> = Total Cover			
Herb Stratum (Plot size: 15ft radius)			
1. <u>Polystichum munitum</u>	<u>20</u>	<u>yes</u>	<u>FACU</u>
2. <u>Hedera helix</u>	<u>30</u>	<u>yes</u>	<u>FACU</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
<u>50</u> = Total Cover			
Woody Vine Stratum (Plot size: 15ft radius)			
1. _____	_____	_____	_____
2. _____	_____	_____	_____
_____ = Total Cover			
% Bare Ground in Herb Stratum _____			
Remarks: upland deciduous forest established following prior clearing			

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
Total Number of Dominant Species Across All Strata: 7 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 43 (A/B)

Prevalence Index worksheet:
Total % Cover of: _____ Multiply by:
OBL species _____ x 1 = _____
FACW species _____ x 2 = _____
FAC species _____ x 3 = _____
FACU species _____ x 4 = _____
UPL species _____ x 5 = _____
Column Totals: _____ (A) _____ (B)
Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
☐ Rapid Test for Hydrophytic Vegetation
☐ Dominance Test is >50%
☐ Prevalence Index is ≤3.0¹
☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Wetland Non-Vascular Plants¹
☐ Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

SOIL

Sampling Point: SP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-5	10YR 3/2	100					GSL	
5-18	10YR 4/2	60					GSL	40% 10YR 4/3

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: 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 Soils³: ☐ 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: No prominent Field indicators of hydric soils.

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)	Secondary Indicators (2 or more required) ☐ 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) ☐ 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? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ☐ No ☒
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No prominent field indicators of wetland hydrology. created stormwater swale to northwest.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: PARCEL 0420324002 City/County: City of Puyallup / Pierce County Sampling Date: 28 OCT 2024
Applicant/Owner: _____ State: WA Sampling Point: SP3
Investigator(s): Habitat Technologies Section, Township, Range: Section 32 Township 20 Range 04
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Rolling Slope (%): 1-2%
Subregion (LRR): A Lat: N47.17549 Long: W-122.32535 Datum: _____
Soil Map Unit Name: Kapowsin gravelly loam NWI classification: Moderately well drained

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: shallow depression formed by prior stormwater management actions. Area appears to drain fairly well following seasonal storm events	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Fraxinus latifolia</u>	<u>60</u>	<u>YES</u>	<u>FACW</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
<u>60</u> = Total Cover			
Sapling/Shrub Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rubus armeniacus</u>	<u>10</u>	<u>no</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
_____ = Total Cover			
Herb Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Hedera helix</u>	<u>20</u>	<u>YES</u>	<u>FACU</u>
2. <u>Carex obnupta</u>	<u>30</u>	<u>YES</u>	<u>OBL</u>
3. <u>Ranunculus acris</u>	<u>20</u>	<u>YES</u>	<u>FAC</u>
4. <u>Lotus corniculatus</u>	<u>20</u>	<u>YES</u>	<u>FAC</u>
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
<u>90</u> = Total Cover			
Woody Vine Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
_____ = Total Cover			
% Bare Ground in Herb Stratum _____			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83 (A/B)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

☐ Rapid Test for Hydrophytic Vegetation

☒ Dominance Test is >50%

☐ Prevalence Index is ≤3.0¹

☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Wetland Non-Vascular Plants¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic
Vegetation
Present?

Yes ☒ No ☐

Remarks: shallow depression formed by prior stormwater management actions

SOIL

Sampling Point: SP3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-24	10YR 3/1	100					GSL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: 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 Soils³: ☐ 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.
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Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes ☒ No ☐
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Remarks: Prominent Field indicators of hydric soils.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
☐ 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)	☐ 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? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ☐ No ☒
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: NO Prominent field indicators of wetland hydrology. Area appears to receive seasonal surface water runoff but then drain quickly following rain events

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: PARCEL 0420324002 City/County: City of Puyallup / Pierce County Sampling Date: 28 OCT 2024
Applicant/Owner: _____ State: WA Sampling Point: SP4
Investigator(s): Habitat Technologies Section, Township, Range: Section 32 Township 20 Range 04
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Rolling Slope (%): 1-2%
Subregion (LRR): A Lat: N47.17569 Long: W-122.32507 Datum: _____
Soil Map Unit Name: Kapowsin gravelly loam NWI classification: Moderately well drained

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: deciduous forest formed following prior development of shallow stormwater depression. depression overflow to roadside ditch	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60</u> (A/B)
1. <u>Alnus rubra</u>	<u>40</u>	<u>YES</u>	<u>FAC</u>	
2. <u>Populus trichocarpa</u>	<u>30</u>	<u>YES</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<u>70</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: 15ft radius)				
1. <u>Corylus cornuta</u>	<u>20</u>	<u>YES</u>	<u>FACU</u>	
2. <u>Rubus spectabilis</u>	<u>25</u>	<u>YES</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ Rapid Test for Hydrophytic Vegetation ☒ Dominance Test is >50% ☐ Prevalence Index is ≤3.0 ¹ ☐ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ 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.
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>45</u> = Total Cover				Hydrophytic Vegetation Present? Yes ☒ No ☐
Herb Stratum (Plot size: 15ft radius)				
1. <u>Hedera helix</u>	<u>20</u>	<u>YES</u>	<u>FACU</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No ☐
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No ☐
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No ☐
<u>20</u> = Total Cover				
Woody Vine Stratum (Plot size: 15ft radius)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No ☐
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks: deciduous forest established following prior development of stormwater shallow depression				

SOIL

Sampling Point: SP4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-3	10YR 3/2	100					GSL	
3-24	10YR 4/2	100					GSL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: 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 Soils³: ☐ 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.
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Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes ☐ No ☒
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Remarks: No prominent Field indicators of hydric soils.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
☐ 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)	☐ 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? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ☐ No ☒
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No prominent field indicators of wetland hydrology. onsite during period of seasonal rainfall

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: PARCEL 0420324002 City/County: City of Puyallup / Pierce County Sampling Date: 28 OCT 2024
Applicant/Owner: _____ State: WA Sampling Point: SP5
Investigator(s): Habitat Technologies Section, Township, Range: Section 32 Township 20 Range 04
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Rolling Slope (%): 1-2%
Subregion (LRR): A Lat: N47.1761 Long: W-122.32515 Datum: _____
Soil Map Unit Name: Kapowsin gravelly loam NWI classification: Moderately well drained

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: Center of created stormwater swale	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acer macrophyllum</u>	<u>60</u>	<u>YES</u>	<u>FACU</u>
2. <u>Alnus rubra</u>	<u>20</u>	<u>YES</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
<u>80</u> = Total Cover			
Sapling/Shrub Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rubus armeniacus</u>	<u>30</u>	<u>yes</u>	<u>FAC</u>
2. <u>Rubus ursinus</u>	<u>20</u>	<u>yes</u>	<u>FACU</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
<u>50</u> = Total Cover			
Herb Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Polystichum munitum</u>	<u>20</u>	<u>YES</u>	<u>FACU</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
<u>20</u> = Total Cover			
Woody Vine Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
_____ = Total Cover			
% Bare Ground in Herb Stratum <u>80%</u>			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40 (A/B)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

☐ Rapid Test for Hydrophytic Vegetation

☐ Dominance Test is >50%

☐ Prevalence Index is ≤3.0¹

☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Wetland Non-Vascular Plants¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic
Vegetation
Present?

Yes ☐ No ☒

Remarks: Deciduous forest along center of created stormwater swale

SOIL

Sampling Point: SP5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-4	10YR 3/1	100					GSL	
4-24	10YR 3/2	100					GSL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: 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)	Indicators for Problematic Hydric Soils³: ☐ 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) ☐ 2 cm Muck (A10) ☐ Red Parent Material (TF2) ☐ Very Shallow Dark Surface (TF12) ☐ Other (Explain in Remarks)
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³Indicators 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 ☒
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Remarks: No prominent Field indicators of hydric soils.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
☐ 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)	☐ 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? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ☐ No ☒
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No prominent field indicators of wetland hydrology. Onsite during prior of seasonal rainfall and created area drains well

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: PARCEL 0420324002 City/County: City of Puyallup / Pierce County Sampling Date: 28 OCT 2024
Applicant/Owner: _____ State: WA Sampling Point: SP6
Investigator(s): Habitat Technologies Section, Township, Range: Section 32 Township 20 Range 04
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Rolling Slope (%): 1-2%
Subregion (LRR): A Lat: N47.1762 Long: W-122.32539 Datum: _____
Soil Map Unit Name: Kapowsin gravelly loam NWI classification: Moderately well drained

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: <u>deciduous forest just outside of created stormwater swale</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>15ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
1. <u>Acer macrophyllum</u>	<u>80</u>	<u>YES</u>	<u>FACU</u>	
2. <u>Alnus rubra</u>	<u>20</u>	<u>YES</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<u>100</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15ft radius</u>)				
1. <u>Rubus spectabilis</u>	<u>20</u>	<u>YES</u>	<u>FAC</u>	
2. <u>Rubus armeniacus</u>	<u>20</u>	<u>yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ Rapid Test for Hydrophytic Vegetation ☐ Dominance Test is >50% ☐ Prevalence Index is ≤3.0 ¹ ☐ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ 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.
3. <u>Rubus ursinus</u>	<u>20</u>	<u>yes</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>60</u> = Total Cover				Hydrophytic Vegetation Present? Yes ☐ No ☒
Herb Stratum (Plot size: <u>15ft radius</u>)				
1. <u>Polystichum munitum</u>	<u>50</u>	<u>YES</u>	<u>FACU</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>50</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>15ft radius</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>_____</u> = Total Cover				
% Bare Ground in Herb Stratum <u>50%</u>				

Remarks: Deciduous forest established following prior stormwater management actions

SOIL

Sampling Point: SP6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-3	10YR 3/2	100					GSL	
3-18	10YR 4/3	100					GSL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: 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)	Indicators for Problematic Hydric Soils³: ☐ 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) ☐ 2 cm Muck (A10) ☐ Red Parent Material (TF2) ☐ Very Shallow Dark Surface (TF12) ☐ Other (Explain in Remarks)
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³Indicators 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: No prominent Field indicators of hydric soils.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
☐ 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)	☐ 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? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ☐ No ☒
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No prominent field indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: PARCEL 0420324002 City/County: City of Puyallup / Pierce County Sampling Date: 28 OCT 2024
Applicant/Owner: _____ State: WA Sampling Point: SP7
Investigator(s): Habitat Technologies Section, Township, Range: Section 32 Township 20 Range 04
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Rolling Slope (%): 1-2%
Subregion (LRR): A Lat: N47.17681 Long: W-122.32541 Datum: _____
Soil Map Unit Name: Kapowsin gravelly loam NWI classification: Moderately well drained

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: deciduous forest in topographic area of prior stormwater management actions	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acer macrophyllum</u>	<u>40</u>	<u>YES</u>	<u>FACU</u>
2. <u>Populus trichocarpa</u>	<u>60</u>	<u>YES</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
<u>100</u> = Total Cover			
Sapling/Shrub Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rubus armeniacus</u>	<u>30</u>	<u>yes</u>	<u>FAC</u>
2. <u>Rubus ursinus</u>	<u>30</u>	<u>yes</u>	<u>FACU</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
<u>60</u> = Total Cover			
Herb Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
_____ = Total Cover			
Woody Vine Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
_____ = Total Cover			
% Bare Ground in Herb Stratum <u>100</u>			

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 (A/B)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0¹
- ☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants¹
- ☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic
Vegetation
Present?

Yes ☐ No ☒

Remarks: deciduous forest in area of prior stormwater management actions

SOIL

Sampling Point: SP7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-3	10YR 3/1	100					GSL	
3-20	10YR 3/3	80	10YR 4/6	20	C	M	GSL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: 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 Soils³: ☐ 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: NO Prominent Field indicators of hydric soils.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
☐ 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)	☐ 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? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ☐ No ☒
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No prominent field indicators of wetland hydrology. created topographic swale appears to drain well. onsite during period of seasonal storm events

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: PARCEL 0420324002 City/County: City of Puyallup / Pierce County Sampling Date: 28 OCT 2024
Applicant/Owner: _____ State: WA Sampling Point: SP8
Investigator(s): Habitat Technologies Section, Township, Range: Section 32 Township 20 Range 04
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Rolling Slope (%): 1-2%
Subregion (LRR): A Lat: N47.17702 Long: W-122.32561 Datum: _____
Soil Map Unit Name: Kapowsin gravelly loam NWI classification: Moderately well drained

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: limited deciduous forest overstory along created stormwater swale leading into culvert going offsite	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Alnus rubra</u>	<u>20</u>	<u>YES</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
<u>20</u> = Total Cover			
Sapling/Shrub Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
_____ = Total Cover			
Herb Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Hedera helix</u>	<u>60</u>	<u>YES</u>	<u>FACU</u>
2. <u>Pteridium aquilium</u>	<u>20</u>	<u>YES</u>	<u>FACU</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
<u>80</u> = Total Cover			
Woody Vine Stratum (Plot size: 15ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
<u>0</u> = Total Cover			
% Bare Ground in Herb Stratum <u>20</u>			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

☐ Rapid Test for Hydrophytic Vegetation

☐ Dominance Test is >50%

☐ Prevalence Index is ≤3.0¹

☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Wetland Non-Vascular Plants¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present?

Yes ☐ No ☒

Remarks: limited deciduous forest overstory

SOIL

Sampling Point: SP8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-15	10YR 3/1	100					GSL	
15-24	10YR 4/3	100					GSL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: 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 Soils³: ☐ 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: Prominent Field indicators of hydric soils. Thick dark surface layer in area of topographic swale. subsoils does not exhibit redox

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
☐ 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)	☐ 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): <u>-3 INCHES</u> Saturation Present? Yes ☒ No ☐ Depth (inches): <u>SURFACE</u> (includes capillary fringe)	Wetland Hydrology Present? Yes ☒ No ☐
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Prominent field indicators of wetland hydrology. edge of created depression that ponds during seasonal storm events. appears to drain maderately well following seasonal strom events.

APPENDIX B – RESUME THOMAS D. DEMING

HABITAT TECHNOLOGIES

THOMAS D. DEMING

Senior Professional Wetland Scientist - Certificate #447

EDUCATION

University of Puget Sound, School of Law - <i>Juris Doctor</i>	Tacoma, WA 1987
Oregon State University	Corvallis, OR
<i>Bachelor of Science - Wildlife Science</i>	1978
<i>Bachelor of Science - Fisheries Science</i>	1978

EXPERIENCE

Freshwater and Estuarine Wetlands and Streams

- Evaluation and delineation of freshwater and estuarine wetland areas using federal and state guidelines (1987 Manual with 2010 Supplement, Washington State Wetland Rating System) and the U.S. Fish and Wildlife Service classification systems.
- Conducting wetland function and value analysis evaluations.
- Development of workable wetland and stream impact mitigation programs and habitat restoration and enhancement plans. Included within these programs and plans has been the development and implementation of post-mitigation monitoring programs.
- Completion of onsite technical support and project team coordination during the implementation of mitigation site construction and vegetation planting.
- Coordination of wetland project activities and permitting processes to obtain appropriate and timely permits and project completion within defined timelines.
- Identification and evaluation of plant communities within wetland and buffer areas.

Wildlife and Fisheries

- Completion of Biological Evaluations for Threatened and Endangered Species following USFWS, NMFS, and FEMA guidelines.
- Completion of wildlife and fisheries habitat assessments to determine limiting factors to population dynamics and habitat utilization (both existing and potential).
- Completion of threatened and endangered species and habitat assessments for plants, fish, and wildlife to determine project impacts and restoration/enhancement potential.
- Development, implementation, and monitoring of restoration and enhancement projects within freshwater, estuarine, and upland habitats designed to improve wildlife and fisheries utilization and migration corridors.
- Preparation of wildlife and fisheries management prescriptions for both project-specific areas and basin-level planning processes.
- Development and implementation of hatchery components and operations for Chinook salmon, coho salmon, chum salmon, and steelhead trout culture.
- Coordination of wildlife and fisheries project activities and permitting processes to obtain appropriate and timely permits.

EMPLOYMENT HISTORY

Habitat Technologies (sole proprietorship)	1997 to present
Watershed Dynamics, Inc. (equal owner)	1990 to 1997
Habitat Technologies (sole proprietorship)	1987 to 1990
Puyallup Tribal Fisheries Division (habitat biologist)	1979 to 1989

PROFESSIONAL AFFILIATIONS

Washington State Bar Association (retired) - Society of Wetland Scientists (Senior Scientist)

wetlands, streams, fisheries, wildlife – mitigation and permitting solutions
P.O. Box 1088, Puyallup, Washington 98371
253-845-5119 contact@habitattechnologies.net

A VETERAN OWNED SMALL BUSINESS COOPERATIVE

PHOTOS



General view of the deciduous forest in the western portion of the project site (at SP2).



General view of the created topographic swale in the western portion of the project site (near SP3).



View of the northwestern corner of the project site (near SP8) during a period of seasonal rainfall. This area created topographic swale receives stormwater runoff from the school facilities and Fruitland Avenue prior to entering a culvert near the center right part of the photo. This swale appears to drain moderately well following seasonal storm events.



CITY OF PUYALLUP

Development and Permitting Services

333 S Meridian, Puyallup, WA 98371

(253) 864-4165 Fax (253) 840-6678

Critical Areas Report Checklist—Fish and Wildlife Habitat Conservation Areas

This checklist reflects the minimum elements needed for a complete Fish and Wildlife Habitat Conservation Area (FWHCA) critical areas report as described in Puyallup Municipal Code 21.06.530 and 21.06.1070. It is intended to be used as a preliminary review for basic completeness prior to technical review, which may address concerns or requirements beyond the basic elements included here. Use of this checklist will ensure efficient and consistent review of development proposals in the City of Puyallup. If a report element is included, note the page, section, or figure number in Column 2.

Report Details	
Name of Report	Environmentally Critical Areas Assessment - Parcel 0420324002
Date of Report	October 24, 2024
Author of Report	Habitat Technologies
Application Number	

Included?	Location in Report ¹	Report Element
☒ Yes ☐ No	1	A description of the methods used to determine/delineate FWHCAs
☒ Yes ☐ No	5-7	A description of vegetation and FWCHA characteristics of on-site
☒ Yes ☐ No	9-10	A written qualitative assessment of the known or suspected critical areas and buffers within 300 feet of the site/project area and an estimate of the existing acreage for each critical area
☒ Yes ☐ No	9-10	A detailed description of the delineated FWHCAs and buffers on or adjacent to the site, including the size, type/classification, condition, disturbance history, and functions and values
☐ Yes ☒ No		A detailed assessment of the potential impacts to critical areas and buffers resulting from site development (this may also be in a separate mitigation plan)
☐ Yes ☒ No		An analysis of site development alternatives and measures taken to avoid and minimize critical area impacts (this may also be in a separate mitigation plan)
☒ Yes ☐ No	9-10	A detailed description of the effects of the proposed development on wetland and buffer area and function, including a quantification of the area of wetland disturbance (this may also be in a separate mitigation plan)
☐ Yes ☒ No		A description of the proposed storm water management plan for the development and consideration of impacts to drainage alterations (this may also be in a separate mitigation plan)

¹ Location in report can be either page number, figure number, or report section.



CITY OF PUYALLUP

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Included?	Location in Report ¹	Report Element
☐ Yes ☒ No		Assessment of FWHCA functions under pre- and post-development conditions (post-development conditions may also be described in a separate mitigation plan)
☒ Yes ☐ No	Appen B	The dates, names, and qualifications of the person(s) preparing the report and documentation of any fieldwork performed on the site and analysis of consultants compliance with the city's Qualified Professional requirements (PMC 21.06.210 (108))
☒ Yes ☐ No	Figure 1	Site vicinity map
☒ Yes ☐ No	Figures	Figure showing study area (including within 300 feet of the site/project area)
☐ Yes ☒ No	na	Figure showing location of delineated ordinary high water mark, for sites with streams on-site
☒ Yes ☐ No	Figures	Figure showing FWHCAs on-site and within 300 feet and the associated buffers
☐ Yes ☒ No		A site plan for the development proposal showing the proposed development footprint and clearing limits (this may also be in a separate mitigation plan)

Comments:

Onsite assessment did not identify any onsite wetlands, streams, or critical habitats. Prior development actions had created a stormwater management system along the western boundary of the project site that appears best defined as an "INTENTIONALLY CREATED FEATURE" and not a "wetland" or "stream."

Onsite assessment identified a locally important "habitat" offsite to the east and south. Any proposed onsite actions would not adversely encroach into this offsite area.

The site development plans has not yet been finalized. However, based on the findings of the onsite assessment any such future onsite development would not adversely encroach into wetlands, streams, critical areas, or associated habitats.

Following City review of the Environmentally Critical Areas Assessment and the proposed site development plan a separate mitigation plan would be prepared (while not expected) if required.