WETLAND DELINEATION AND HABITAT CONSERVATION AREAS ASSESSMENT

OAKVIEW PRELIMINARY PLAT

Parcel 0217036009 - 29401 SR 507 City of Roy, Pierce County, Washington

prepared for

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INTRODUCTION

This document presents the culmination of activities and onsite evaluations undertaken to complete a *Wetland Delineation and Habitat Conservation Area Assessment* of specific environmentally critical areas (wetlands, stream/surface water drainages, fish and wildlife critical habitats) within and immediately adjacent to **Parcel 0217036009** (project site). The project site was located as at 29401 SR 507 within the southeastern portion of the City of Roy, Pierce County, Washington (part of Section 03, Township 17 North, Range 02 East, W.M.) (Figure 1). The evaluation and characterization of onsite and adjacent wetlands and other environmentally critical areas is a vital element in land use planning. The goal of this approach is to ensure that present and future proposed planned site development does not result in adverse environmental impacts to identified wetland or other critical areas, their associated buffer, or local water quality. **Please note** that this assessment does not include an evaluation of potential erosion hazard areas, potential seismic hazard areas, potential landslide hazard areas, potential aquifer recharge areas, potential septic soil suitability, or potential flood hazard areas.

The onsite assessment and characterization of specific environmentally critical areas was completed followed the methods and procedures defined in the *Corps of Engineers Wetland Delineation Manual* (1987 Manual) with the 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (2010 Supplement); the *Washington State Wetlands Rating System* (WDOE 2014 version); the State of Washington Department of Natural Resources (WDNR) Forest Practice Rules (WAC 222-16-030); and City of Roy Title 10 – Sections 5A and 5E. The overall intent of this onsite assessment focused on identification and characterization of wetlands and other specific environmentally critical areas potentially within or immediately adjacent to the project site. This document was designed to accommodate site planning and potentially other regulatory actions, and has been prepared for submittal to the City of Roy and potentially other resource permitting agencies for critical areas verification and permitting actions.

PROJECT SITE DESCRIPTION

The project site was located in the southeastern portion of the City of Roy, was approximately 38 acres in size, and composed of an existing single parcel of record. The project site had undergone prior land use manipulations to include forest harvest, clearing, grading, ditch excavations, pasture creation and management, utilization by livestock, the development and removal of a single-family homesite and associated outbuildings, the development of the adjacent City of Tacoma Railroad Corridor, internal and external fencing, internal and external road construction, and the development of adjacent properties. The project site was within an area of existing residential communities and area converting into high intensity residential uses.

Directions to Project Site: From SR512 exit onto Pacific Highway (SR7). Turn south onto Pacific Highway and continue through the Parkland/Spanaway Area to the Roy "Y." At the Roy "Y" veer southwesterly onto SR 507 South and continue southwesterly to the City of Roy. Continue south through the City of Roy to 292nd Street South. Turn east onto 292nd Street South and continue to the project site.

BACKGROUND INFORMATION

NATIONAL WETLAND INVENTORY

The *National Wetland Inventory Mapping* (NWI) completed by the U.S. Fish and Wildlife Service was reviewed as a part of this assessment (Figure 2). This mapping resource identified a portion of a wetland within the southeastern boundary area of the project site. This wetland was identified as palustrine, forested, seasonally flooded (PFOC) and noted to continue offsite to the east and southwest.

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 identified a wetland within the southeastern portion of the project site. This wetland was also noted to extent offsite to the northeast and southwest.

The mapping resource identified masked layers of potential habitats for Townsend's bigeared bat (*Corynorhinus townsendii*) and Yuma myotis (*Myotis yumanensis*) within the general area of the project site. The mapping resource also identified the occurrence of Mazama pocket gopher (*Thomomys mazama*) within the southwestern portion of the project site and within somewhat adjacent areas.

STATE OF WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

The State of Washington Department of Fish and Wildlife SalmonScape Mapping was reviewed as a part of this assessment (Figure 4). This mapping resource did not identify any streams within or adjacent to the project site.

STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES

The State of Washington Department of Natural Resources *Water Type Mapping* was reviewed as a part of this assessment. This mapping resource identified a forested wetland within the southeastern portion of the project site that was also noted to extend offsite to the northeast and southwest.

PIERCE COUNTY MAPPING

The Pierce County Inventory Mapping was reviewed as a part of this assessment (Figure 6). This mapping resource identified a wetland within the southeastern portion of the project site that also extended offsite to the northwest. This mapping resource further identified the presence of potential wetlands, Oregon oak trees, and potential fish and wildlife habitat conservation areas within the project site.

SOILS MAPPING

The *Soil Mapping Inventory* completed by the National Resource Conservation Service was reviewed as a part of this assessment (Figure 7). This mapping resource identified the soil throughout the majority of the project site as Everett gravelly sandy loam (13C and 13D). The Everett soil series is defined as somewhat excessively drained, as formed in gravelly glacial outwash, and as not meeting the criteria for designation as a "hydric" soil.

Bands of Spanaway gravelly sandy loam (41A) and Nisqually loamy sand (25A) were noted in the far western portion of the project site. The Spanaway soil series is defined as somewhat excessively drained and as formed in glacial outwash. The Nisqually soil series is defined as somewhat excessively drained and as formed in sandy glacial outwash. Both of these soils are <u>not</u> listed as meeting the criteria for designation as a "hydric" soil.

WASHINGTON STATE NATURAL HERITAGE PROGRAM

The Washington State Natural Heritage Program was reviewed as a part of this assessment. This resource did not identify any high quality, undisturbed wetland or a wetland that supports state Threatened, Endangered, or Sensitive plant species within the Section/Township/Range of the project site.

PRIOR ASSESSMENTS

A prior wetland assessment of the project site completed by Habitat Technologies (then Watershed Dynamics) in 1994 had identified a wetland within the southeastern portion of the project site (previously noted as a part of the Oakview Heights Addition). This prior assessment had identified this wetland as a Pierce County Category 2 Wetland because of its forested character.

PRIOR RESIDENTIAL DEVELOPMENT OF ADJACENT AREAS

Prior single-family residential community developments had been established adjacent to the project site. Two of these residential communities – the McKenna Meadows Residential Community and the Oakview Heights Residential Community - had set aside reservation/ preservation areas for wildlife habitats.

The McKenna Meadows Residential Community to the south of the project site had established a reservation area for the Mazama pocket gophers. This reservation area commenced adjacent to the southern boundary of the project site and generally extended to the southwest of the project site. This reservation area was noted at approximately seven (7) acres in total size.

The Oakview Heights Residential Community to the north/northeast of the project site had also established a preservation area for the Mazama pocket gophers. This preservation area was identified to the north of the project site – to the north of 292nd Street South. This preservation area was noted at approximately four (4) acres in total size. A second area was noted adjacent to the southeastern portion of the project site. This reservation area was approximately one-quarter acre in size.

ONSITE ANALYSIS

CRITERIA FOR WETLAND AND OTHER CRITICAL AREAS IDENTIFICATION

For the assessment documented below the environmentally critical areas reviewed focused on potential wetlands, surface water drainage corridors (natural waters), and fish and wildlife habitats which may be located within or immediately adjacent to the project site. As noted above this assessment did <u>not</u> include an evaluation of potential erosion hazard areas, potential seismic hazard areas, potential landslide hazard areas, potential aquifer recharge areas, potential septic soil suitability, or potential flood hazard areas.

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 occurs 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.

The City of Roy defines "wetlands" as those areas, designated in accordance with the approved federal wetland delineation manual and applicable regional supplements, 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. Wetlands may include those artificial

wetlands intentionally created from nonwetland areas created to mitigate conversion of wetlands (Title 10, 5A).

Habitat Conservation Areas: The City of Roy defines "habitat conservation areas" to include:

- A. Areas having a primary association with fish and wildlife species identified by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service as being in danger of extinction or threatened to become endangered.
- B. Areas having a primary association with fish and wildlife species identified by the Washington Department of Fish and Wildlife as being in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. See Washington administrative code 232-12-014 (state endangered species) and Washington administrative code 232-12-011 (state threatened and sensitive species).
- C. State priority habitats as identified by the State Department of Fish and Wildlife.
- D. Habitats and species of local importance as identified by the City in accordance with section <u>10-5E-2</u> of this article.
- E. Waters of the state, including lakes, rivers, ponds, stream, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington, as classified in Washington administrative code 222-16-031.
- F. Ponds under twenty (20) acres that provide fish or wildlife habitat except artificial ponds created for a nonwildlife purpose such as storm water detention facilities, wastewater treatment facilities, farm ponds, and temporary construction ponds.
- G. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity.
- H. Natural area preserves and natural resource conservation areas as defined by the Washington state department of natural resources.
- I. Areas of rare plant species and high quality ecosystems as identified by the Washington state department of natural resources through the natural heritage program.
- J. Land useful or essential for preserving connections between habitat blocks and open spaces.

STUDY METHODS

As noted above, Habitat Technologies had completed as assessment of the project site during 1994. Since the initial assessment Habitat Technologies completed a series of site assessments between August 2005 and January 2008, during the spring of 2012 and 2013, during the fall of 2016 through the spring of 2017, during the summer and fall of 2018, and again during the fall of 2021 through the late winter of 2022. The objective of this evaluation was to define and delineate potential wetlands, drainage corridors, and critical habitats that may be present within or immediately adjacent to the project area. These assessments were initially undertaken consistent with the methodologies outlined in the Corps of Engineers Wetland Delineation Manual (1987 Manual); the Washington State Wetlands Identification and Delineation Manual (Wash Manual); Pierce County Title 18E; the City of Roy Title 10 – Building Code and Regulations; and the WDFW Mazama Pocket Gopher Assessment Protocols. Following changes in "best available science" the assessments undertake after 2008 were completed consistent with the Corps of Engineers Wetland Delineation Manual (1987 Manual) with the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (2010 Supplement); the Washington State Wetlands Rating System (WDOE 2008 and 2014 versions); the State of Washington Department of Natural Resources (WDNR) Forest Practice Rules (WAC 222-16-030); the City of Roy Title 10 – Sections 5A and 5E; and the WDFW Mazama Pocket Gopher Assessment Protocols. Representative field data compiled through a series of onsite assessments are provided in Appendix A.

FIELD OBSERVATION

The project site was accessed via 292nd Street South. The project site was irregular in shape and once contained a single-family homesite and associated outbuildings within the southwestern portion of the project site. The majority of the project site had been historically managed as livestock pasture but was identified as fallow since the initial 1994 assessment. The western portion of the project site was identified as once open pasture that was becoming overgrown with invasive shrubs (primarily Scots broom – *Cytisus scoparius*). The central and eastern portions of the project site appeared to have historically been managed as a forested woodlot. However, with the removal of livestock this area had become overgrown with very dense thickets of blackberries (*Rubus* spp.). The project site was generally sloped to the south/southwest and bound to the north, east, and south by existing residential developments. The City of Tacoma Railroad Right of Way formed the western boundary of the project site.

A depressional swale was identified within the southeastern boundary area of the project site. This depressional swale entered the project site along the southeastern boundary then continued through the project site to the southwest, exiting the project site along the southern boundary.

Soils

As documented at representative sample plots the majority of the project site was dominated by soil that exhibited a gravelly sandy loam to sandy loam texture and coloration typical of the Everett and Nisqually soil series. The majority of the onsite soil appeared to drain moderately well to well and did not exhibit prominent redoximorphic features.

The soil within the depressional swale generally crossing through the southeastern portion of the project site exhibited silty loam to compact gravelly silty loam texture. The surface soil exhibited a black to very dark gray (10YR 2/1 to 10YR 3/1) coloration and a silty loam to gravelly silty loam texture. The subsoil to a depth of approximately 20 inches exhibited a very dark gray to dark grayish brown (10YR 3/1 to 10YR 4/2) coloration, a compacted gravelly loam texture, prominent redoximorphic features (soil mottles), and oxidized root channels. The soil within this shallow topographic swale exhibited field indicators typical of hydric soil.

Hydrology

Onsite hydrology appeared to be the result of seasonal stormwater runoff from onsite and from adjacent properties. The majority of the project site was noted to drain moderately well to well and did not exhibit field indicators typically associated with wetland hydrology.

The depressional swale within the southeastern portion of the project site was noted to receive seasonal stormwater sheetflow from the surrounding areas to the north and east. This swale remained seasonally ponded and appeared to convey season surface stormwater offsite to the south. Prior land use manipulations appeared to have excavated a depressional area within the southern portion of the onsite wetland for utilization by livestock. This area appeared to remain ponded/saturated at least into the early portion of the growing season. Observed field indicators included ponding, waterstained leaves, buttress tree bases, and oxidized root channels.

Vegetation

ONSITE: The project site exhibited two primary plant communities, both of which had been modified by prior land use actions. These prior land use actions had included forest harvest, clearing, grading, ditch excavations, pasture creation and management, internal and perimeter fencing, utilization by livestock, the development and removal of a single-family homesite and associated outbuildings, internal and external road construction, adjacent railroad construction, and the development of adjacent properties.

The western portion of the project site exhibited a once managed pasture plant community that had been actively utilized and livestock and for the production of pasture crops. However, with the cessation of active pasture management the area was becoming overgrown with often dense thickets of Scots broom (*Cytisus scoparius*). Additional species observed within this area included Himalayan blackberry (*Rubus armeniacus*), evergreen blackberry (*Rubus laciniatus*), daisy (*Bellis* spp.), smooth cats ear (*Hypochaeris glabra*), hairy cats ear (*Hypochaeris radicata*), bracken fern (*Pteridium aquilium*), field mint (*Mentha arvensis*), dovesfoot (*Geranium molle*), plantain (*Plantago major*), buttercup (*Ranunculus repens*), sheep sorrel (*Rumex acetosella*), dandelion (*Taraxacum officinale*), clover (*Trifolium* spp.), Canadian thistle (*Cirsium arvensis*), bull thistle (*Cirsium vulgare*), orchardgrass (*Dactylis glomerata*), timothy grass (*Phleum pratense*), velvet grass (*Holcus lanatus*), fescue (*Festuca arundinacea*), and bluegrass (*Poa* spp.). This plant community was identified as non-hydrophytic in character (typical of uplands.

The central and eastern portions of the project site exhibited a once actively managed pastured woodlot. Observed species within this area included Douglas fir (*Pseudotsuga menziesii*), big leaf maple (*Acer macrophyllum*), Oregon white oak (*Quercus garryana*), domestic apple (*Pyrus spp.*), cherry (*Prunus emarginata*), snowberry (*Symphoricarpus albus*), hazelnut (*Corylus cornuta*), Indian plum (*Oemleria cerasiformis*), Scots broom, Pacific red elderberry (*Sambucus racemosa*), Oregon grape (*Berberis nervosa* and *Berberis aquifolium*), Himalayan blackberry, evergreen blackberry, Pacific blackberry, bracken fern, daisy, Canadian thistle, bull thistle, orchardgrass, timothy grass, velvet grass, fescue, and bluegrass. This plant community was identified as non-hydrophytic in character (typical of uplands).

The very southeastern potion of the project site exhibited a forested plant community more commonly associated with seasonally damp to saturated soils. Observed species included black cottonwood (*Populus trichocarpa*), red alder (*Alnus rubra*), Western red cedar (*Thuja plicata*), Sitka willow (*Salix sitchensis*), Oregon ash (*Fraxinus latifolia*), crabapple (*Pyrus fusca*), cascara (*Rhamnus purshiana*), salmonberry (*Rubus spectabilis*), black twinberry (*Lonicera involucrata*), Pacific ninebark (*Physocarpus capitatus*), Douglas spiraea (*Spiraea douglasii*), Nootka rose (*Rosa nutkana*), bentgrass (*Agrostis tenuis*), velvet grass (*Holcus lanatus*), reed canarygrass (*Phalaris arundinacea*), softrush (*Juncus effusus*), nettle (*Urtica dioica*), meadow foxtail, water foxtail, common lady fern (*Athyrium filix-femina*), slough sedge (*Carex obnupta*), beaked sedge (*Carex rostrata*), skunk cabbage (*Lysichitum americanum*), water parsley (*Oenanthe sarmentosa*), speedwell (*Veronica scutellata*), buttercup (*Ranunculus repens*), and curled dock (*Rumex crispus*). This plant community was identified as hydrophytic in character (typical of wetlands).

OFFSITE: As noted above, the project site was bound by residential development to the north, northeast, east, and south. These residential developments included a variety of ornamental plant species interspersed with retained native trees. The western

boundary of the project site was formed by a managed railroad right of way and residential development further to the west.

The wetland forested plant community identified in the very southeastern portion of the project site was identified to continue offsite to the northeast and a short distance to the south.

Wildlife Observations

Wildlife species observed directly or indirectly over a number of years, observed within the general area during prior assessments, and those species that may potentially utilize the habitats provided by project site included red tailed hawk (Buteo jamaicensis), sharp-shinned hawk (Accipiter striatus), merlin (Falco columbarius), American kestrel (Flaco sparverius), bald eagle (Haliaeetus leucocephalus), turkey vulture (Cathartes aura), great horned owl (Bubo virginianus), Western screech owl (Otus kennicotti), barn owl (Tyto alba), rock dove (Columbia livia), mourning dove (Zenaida macroura), tree swallow (Tachycineta bicolor), violet green swallow (Tachycineta thallassina), barn swallow (Hirundo rustica), song sparrow (Melospiza melodia), common raven (Corvus coraw), American crow (Corvus brachynchos), American robin (Turdus migratorius), dark eyed junco (Junco hyemalis), Steller's jay (Cyanocitta stelleri), starling (Sturnus vulgaris), black capped chickadee (Parus atricapillus), house sparrow (Passer domesticus), rufous hummingbird (Selasphorus rufus), Northern flicker (Colaptes auratus), pileated woodpecker (Dryocopus pileatus), hairy woodpecker (Picoides villosus), downy woodpecker (Picoides pubescens), rufous-sided towhee (Pipilo erythrophthalmus), marsh wren (Cistothorus palustirs), killdeer (Charadrius vociferus), chestnut backed chickadee (Parus rufescens), dark brown creeper (Certhia familiaris), golden crowned sparrow (Zonotrichia atricapilla), rufous-sided towhee (Pipilo erythrophthalmus), dark eyed junco (Junco hyemalis), purple finch (Carpodacus purpureus), white crowned sparrow (Zonotrichia leucophrys), red breasted nuthatch (Sitta canadensis), California quail (Callipepla californica), common mallard (Anas platyrhynchos), black tailed deer (Odocoileus hemionus), coyote (Canis latrans), bobcat (Lynx rufus), raccoon (Procyon lotor), porcupine (Erithizon dorsatum), striped skunk (Mephitis mephitis), opossum (Didelphis virginianus), longtail weasel (Mustela frenata), Douglas squirrel (Tamiasciurus douglasii), deer mouse (Peromyscus maniculatus), shrew (Sorex spp.), eastern gray squirrel (Sciurus carolinensis), Townsend chipmunk (Eutamias townsendi), voles (Microtus spp.), moles (Scapanus spp.), eastern cottontail (Sylvilagus floridanus), bats (Myotis spp.), Norway rat (Rattus norvegicus), common garter snakes (Thamnophis sirtalis), red-legged frog (Rana aurora), and Pacific treefrog (Hyla regilla).

The project site was not identified and has not been documented to provide habitats for salmonid fish species.

ROY POCKET GOPHER: A series of species onsite assessments of potential utilization of the project site by Roy Prairie Pocket Gophers (*Thomomys mazama*

glacialis) were completed between 2005 and 2018 following the procedures outlined in the *Mazama Pocket Gopher Assessment Protocols* prepared by the Washington Department of Fish and Wildlife and the U.S. Fish and Wildlife Service. The initial assessment completed during the summer of 2005, the summer of 2006, and the summer of 2007 did not identify Pocket gopher utilization within the project site. During this period Pocket gopher utilization was identified within the established reserve to the south of the project site.

During the summer of 2008 Habitat Technologies re-visited the project site with the Washington Dept. of Fish and Wildlife Regional Biologist and identified a single Pocket gopher occupied area approximately 863 square meters in size within the very southwestern portion of the project site. This occupied area exhibited a series of new mounds indicating more recent utilization and potential re-introduction of this species onsite (Appendix C).

Additional onsite assessments of potential Pocket gopher utilization of the project site were also completed during the early summer of 2012, the early summer of 2013, and the summer/fall of 2018. As noted during the early summer of 2012 very few active gopher mounds were identified within the area of the 2008 occupied area. However, no gopher mounds were identified onsite during the early summer of 2013 or the summer/fall of 2018. The once managed pasture area within the western portion of the project site continued to be heavily used by moles. In addition, the once managed pasture area was becoming more and more dominated by invasive shrubs – primarily Scots broom.

State Priority Species

A few species identified by the State of Washington as "Priority Species" were observed onsite or potentially may utilize the habitats provided within or immediately adjacent to the project site. 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. Observed or potential "game species" within and adjacent to the project site included black-tailed deer, ruffed grouse, California quail, common mallard, 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. One State Candidate species - pileated woodpecker – was identified to utilize feeding habitats (stumps and down logs) within the southeaster portion of the project site.

State Sensitive: State Sensitive species are native to Washington and is vulnerable to declining and is 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 use 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. A single State Threatened species – Mazama pocket gopher – has been previously identified to utilize a portion of the southwestern corner of the project site. A second State Threatened species – Wester gray squirrel (*Sciurus griseus*) – has <u>not</u> been identified within or adjacent to 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 use the habitats provided within the project site.

State Priority Habitats

A stand of mixed conifer (Douglas fir) and Oregon white oak (*Quercus garryana*) trees was identified within the central and north central portion of the project site. This stand of trees was identified to meet the criteria for designation as a State Priority Habitat and was noted to have been actively utilized as livestock pasture at one time and the understory has become dominated by dense blackberry thickets.

A second State Priority Habitat – Wetland A – was identified within the southeastern portion of the project site. This wetland is defined as a "water of the state."

Federally Listed Species

A single federally listed threatened species – Mazama pocket gopher – has been previously identified (2008 through 2012) to utilize a portion of the southwestern corner of the project site. However, more recent assessments did not identify this species within the project site. This species has also been documented offsite to the south and well offsite to the north and west of the project site.

The project site was not observed and has not been documented to provide critical habitats for other federally listed endangered, threatened, or sensitive species. A federally listed "species of concern" – bald eagle – has been documented to utilize the habitats generally associated with larger area lakes and surface water drainages within

the general area of the project site. However, the project site was not identified to provide critical habitat for this species.

ASSESSMENT FINDINGS

WETLAND

A single wetland was identified within the very southeastern portion of the project site and appeared to also extend offsite to the northeast and a short distance to the south. This area met all three of the established criteria for designation as "wetland."

WETLAND	CLASSIFICATION (USFWS)	CITY OF ROY	WDOE RATING	FUNCTION AND VALUE RATING	BUFFER WIDTH (high intensity)
		CATEGORY	SCORE		
Α	PFOCx	III	18	Low-moderate	105 feet

Wetland A: Wetland A was located within a topographic swale within the southeastern portion of the project site. Wetland A was identified to extend offsite to the northeast and a short distance to the south of the project site. Wetland A was dominated by a mixed forest and shrub plant community that had been modified by prior land use actions. Hydrology for Wetland A appeared provided by the topographical character, seasonal stormwater sheetflow, and soils characteristics. The movement of seasonal surface water was generally to the south. A portion of this wetland appeared to have been excavated to form a small farm pond near the southern site boundary and offsite to the south. Wetland A appeared to remain ponded/saturated at least into the early portion of the growing season. The majority of Wetland A would be expected to become dry by late spring.

Wetland A met the U.S. Fish and Wildlife Service (USFWS) criteria for classifications of palustrine, forested, seasonally flooded, excavated (PFOCx). Wetland A was further identified to meet the criteria for designation as a City of Roy Category III Wetland. Wetland A achieved a total functions score of **18 points** (5 habitat score) utilizing the Department of Ecology Wetland Rating Form for Western Washington (2014 version) (Appendix B). The standard buffer for a Category III Wetland with a habitat score of 5 points adjacent to a proposed high intensity land use is 105 feet as measured perpendicular from the wetland boundary (Figure 8).

HABITAT CONSERVATION AREAS

As defined through a series of onsite assessments the project site was identified to exhibit the following City of Roy listed "habitat conservation areas."

- 1. A portion of the southwestern corner of the project site was previously identified to provide habitats for Mazama pocket gopher a federally listed threatened species by the U.S. Fish and Wildlife Service.
- 2. A portion of the southwestern corner of the project site was previously identified to provide habitats for Mazama pocket gopher a state listed threatened species by the Washington Dept. of Fish and Wildlife.
- 3. Wetland A this wetland is located within the southeastern corner of the project site and is defined as both a State of Washington "priority habitat" and as a State of Washington "water of the state."
- 4. The mixed conifer and Oregon white oak woodland dominating the northcentral and northeastern portions of the project site meets the definition criteria for designation as a State of Washington "priority habitat."

The project site was <u>not</u> identified to exhibit the following City of Roy listed "habitat conservation areas."

- 1. Ponds under twenty (20) acres that provide fish or wildlife habitat except artificial ponds created for a nonwildlife purpose such as storm water detention facilities, wastewater treatment facilities, farm ponds, and temporary construction ponds.
- 2. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity.
- 3. Natural area preserves and natural resource conservation areas as defined by the Washington state department of natural resources.
- Areas of rare plant species and high quality ecosystems as identified by the Washington state department of natural resources through the natural heritage program.
- 5. Land useful or essential for preserving connections between habitat blocks and open spaces.

SELECTED DEVELOPMENT ACTION

The Selected Development Action for Parcel 0217036009 focuses on the creation of the Oakview Preliminary Plat eventually leading to the establishment of the Oakview Residential Community. This preliminary plat and eventual residential community development would be consistent with the City of Roy Comprehensive Plan, local zoning, and Title 10.

The creation of this preliminary plat would not encroach into the identified Category III Wetland or its associated buffer in the southeastern portion of the project site. This preliminary plat creation would also establish a "Tree Conservation Program" within the identified mixed conifer/oak woodland in the northcentral and northeastern portions of the project site.

STANDARD OF CARE

This document has been completed by Habitat Technologies for use by **Apex Engineering.** Prior to extensive site planning the defined critical habitats should be reviewed and verified by the City of Roy Planning Staff and potentially other resource and permitting agencies. 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 Thomas D. Deming

Bryan 🕢. Peck

Senior Wetland Biologist

Thomas D. Deming, SPWS Habitat Technologies

FIGURES

Habitat Technologies

265

1:12,000

1,060

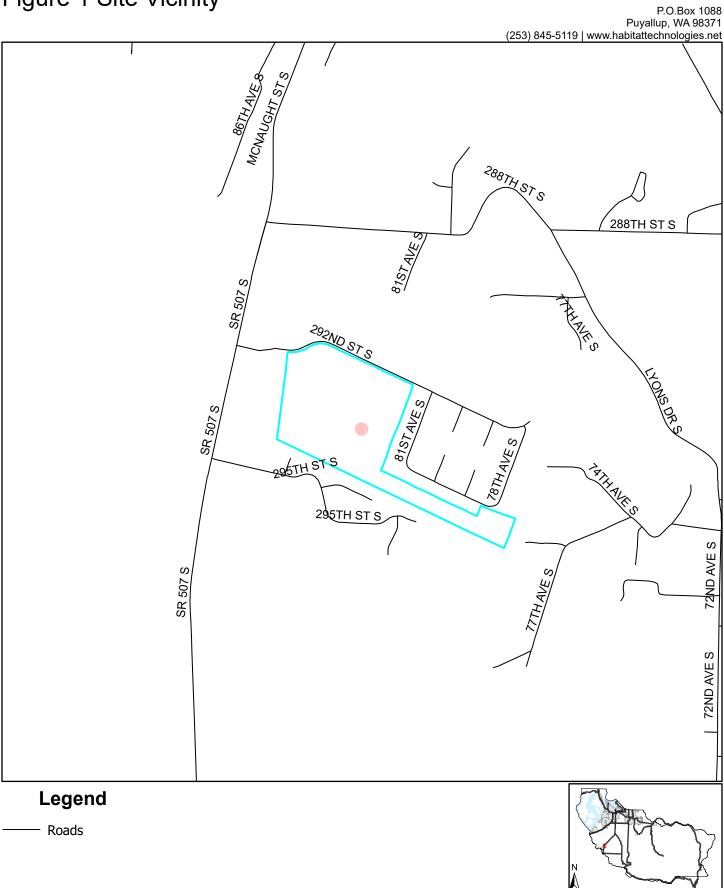
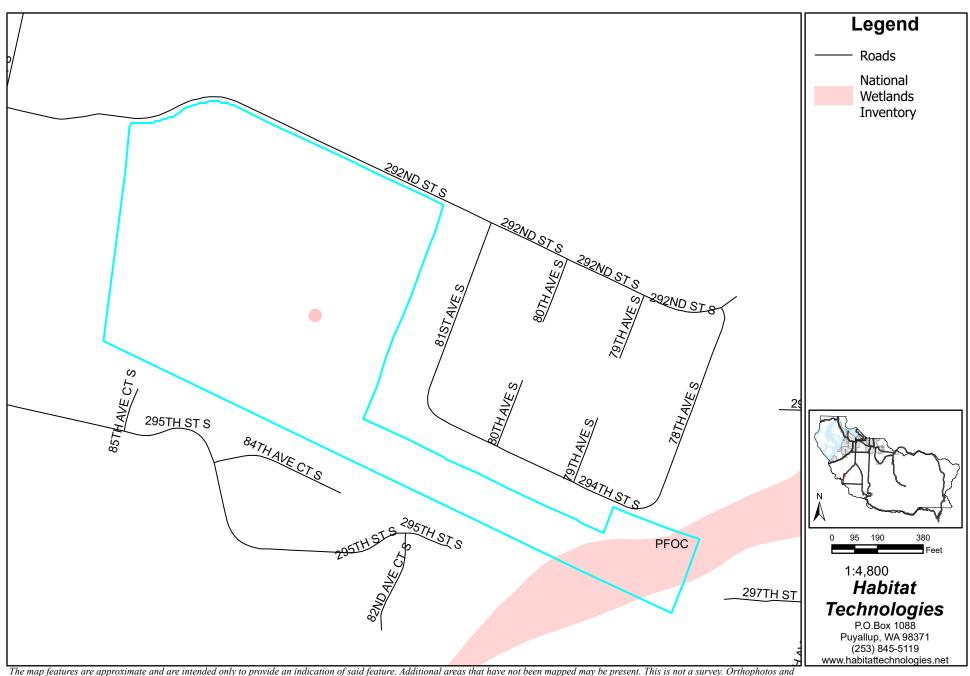


Figure 2 NWI Mapping



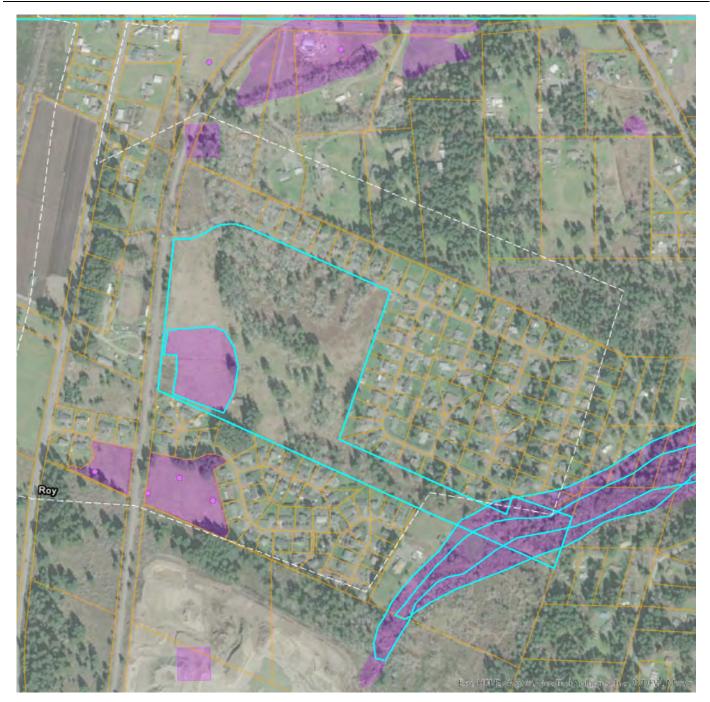
The map features are approximate and are intended only to provide an indication of said feature. Additional areas that have not been mapped may be present. This is not a survey. Orthophotos and other data may not align. The County assumes no liability for variations ascertained by actual survey. ALL 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 3



Priority Habitats and Species on the Web



Report Date: 04/12/2022, Parcel ID: <u>0217036009</u>

PHS Species/Habitats Overview:

4/12/22, 1:17 PM PHS Report

Occurence Name	Federal Status	State Status	Sensitive Location
Wetlands	N/A	N/A	No
Mazama (Western) pocket gopher	Threatened	Threatened	No
Freshwater Forested/Shrub Wetland	N/A	N/A	No
Townsend's Big-eared Bat	N/A	Candidate	Yes
Yuma myotis	N/A	N/A	Yes

PHS Species/Habitats Details:

Wetlands	
Priority Area	Aquatic Habitat
Site Name	MURRAY CREEK WETLANDS
Accuracy	1/4 mile (Quarter Section)
Notes	VARIOUS WETLANDS ASSOCIATED WITH MURRAY CREEK. SOME FORESTED, EMERGENT MARSH, RIVERINE, SCRUBSHRUB, AND AGRICULTURAL WETLANDS-NISQUALLY DRAINAGE.
Source Record	902588
Source Dataset	PHSREGION
Source Name	NAUER, DON WDW
Source Entity	WA Dept. of Fish and Wildlife
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
ManagementRecommendations	http://www.ecy.wa.gov/programs/sea/wetlands/bas/index.html
Geometry Type	Polygons

4/12/22, 1:17 PM PHS Report

Mazama (Western) pocket gopher	
Scientific Name	Thomomys mazama
Priority Area	Occurrence
Site Name	OAKVIEW HEIGHTS ADDITION - ROY
Accuracy	Map 1:12,000 <= 33 feet
Notes	MAPPED TO GENERAL AREA OF OCCUPANCY.
Source Record	4749
Source Dataset	WS_OccurPolygon
Source Date	WS_OccurPolygon
Source Name	DEMMING, T/HABITAT TECHNOLOGIE
Source Entity	WA Dept. of Fish and Wildlife
Federal Status	Threatened
State Status	Threatened
PHS Listing Status	PHS LISTED OCCURRENCE
Sensitive	N
SGCN	Y
Display Resolution	AS MAPPED
ManagementRecommendations	http://wdfw.wa.gov/publications/pub.php?id=01175
Geometry Type	Polygons

Freshwater Forested/Shrub Wetland	
Priority Area	Aquatic Habitat
Site Name	N/A
Accuracy	NA
Notes	Wetland System: Freshwater Forested/Shrub Wetland - NWI Code: PFOC
Source Dataset	NWIWetlands
Source Name	Not Given
Source Entity	US Fish and Wildlife Service
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
ManagementRecommendations	http://www.ecy.wa.gov/programs/sea/wetlands/bas/index.html
Geometry Type	Polygons

4/12/22, 1:17 PM PHS Report

Townsend's Big-eared Bat	
Scientific Name	Corynorhinus townsendii
Notes	This polygon mask represents one or more records of the above species or habitat occurrence. Contact PHS Data Release (360-902-2543) for obtaining information about masked sensitive species and habitats.
Federal Status	N/A
State Status	Candidate
PHS Listing Status	PHS Listed Occurrence
Sensitive	Y
SGCN	Y
Display Resolution	TOWNSHIP
ManagementRecommendations	http://wdfw.wa.gov/publications/pub.php?id=00027

Yuma myotis	
Scientific Name	Myotis yumanensis
Notes	This polygon mask represents one or more records of the above species or habitat occurrence. Contact PHS Data Release (360-902-2543) for obtaining information about masked sensitive species and habitats.
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	Y
SGCN	N
Display Resolution	TOWNSHIP
ManagementRecommendations	http://wdfw.wa.gov/publications/pub.php?id=00605

DISCLAIMER. This report includes information that the Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. It is not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife. This information only documents the location of fish and wildlife resources to the best of our knowledge. It is not a complete inventory and it is important to note that fish and wildlife resources may occur in areas not currently known to WDFW biologists, or in areas for which comprehensive surveys have not been conducted. Site specific surveys are frequently necessary to rule out the presence of priority resources. Locations of fish and wildlife resources are subject to variation caused by disturbance, changes in season and weather, and other factors. WDFW does not recommend using reports more than six months old.

Figure 4 WDFW Salmonscape Mapping



Esri, HERE, Garmin, GeoTechnologies, Inc., USGS/NHD, Dale Gombert (WDFW), WDFW, Maxar

0.15

0.3 km

0.07

Figure 5 Forest Practices Water Type Map

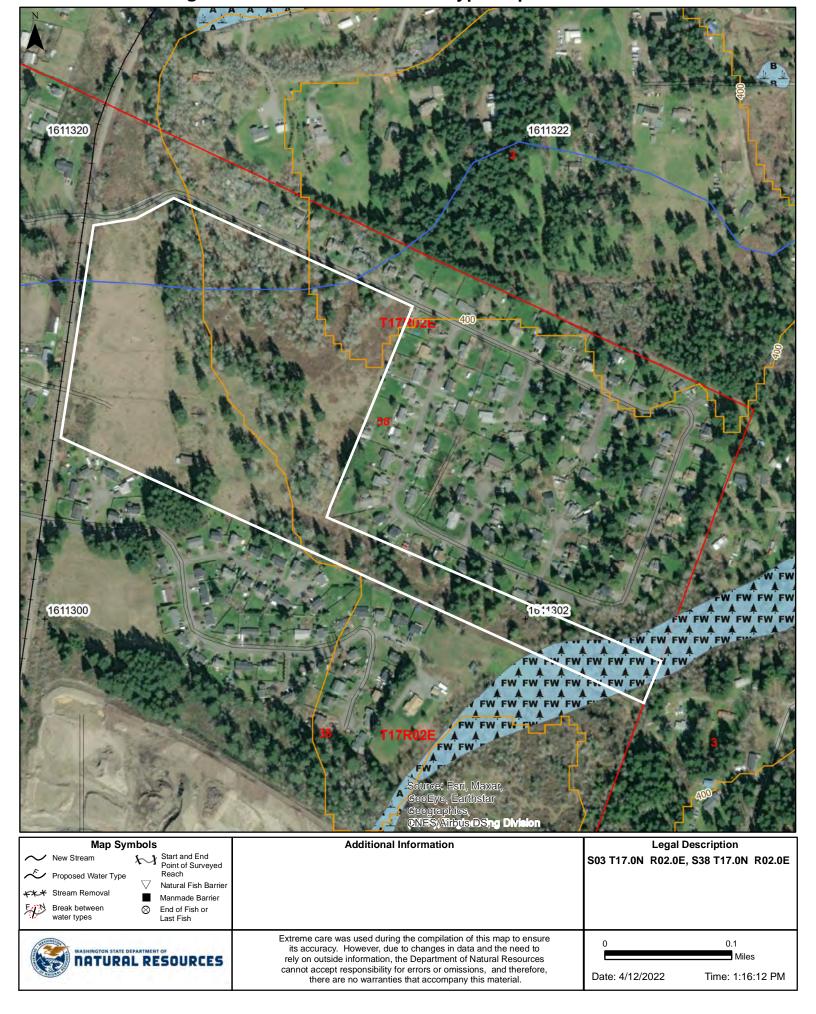
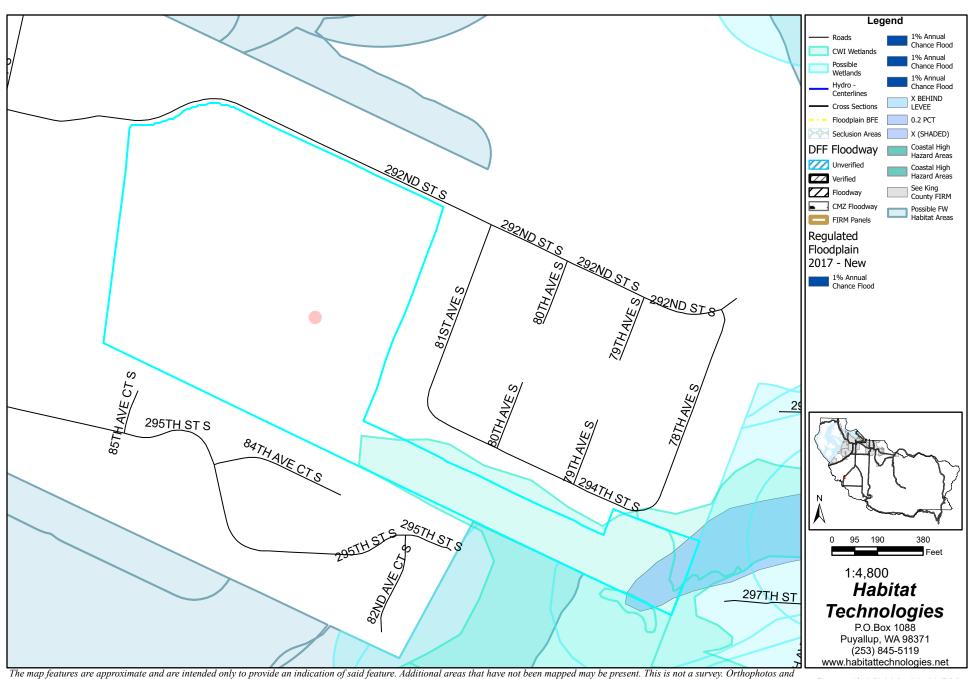


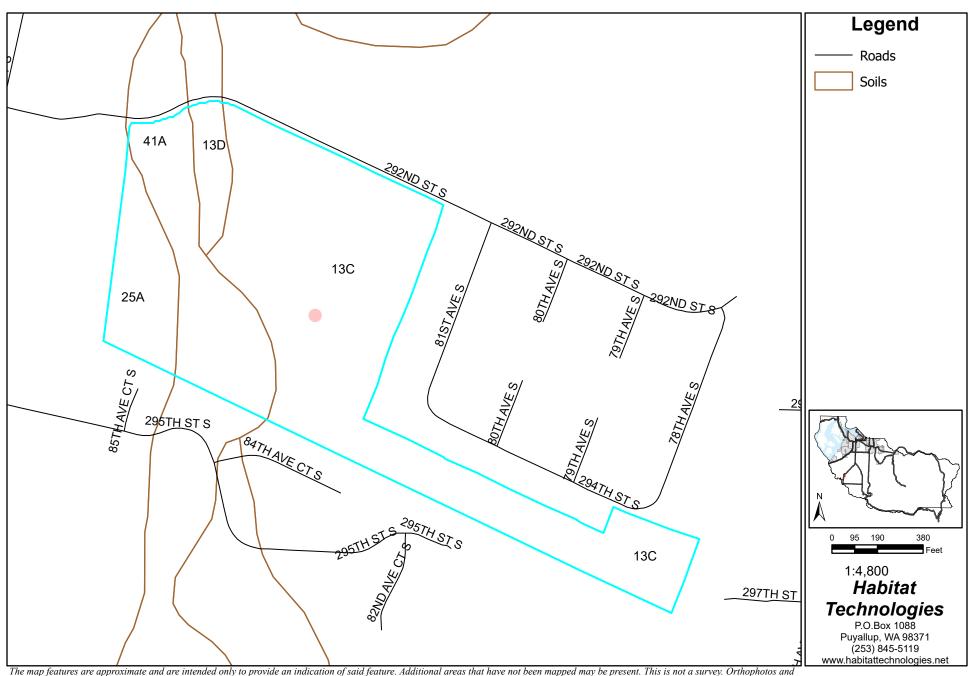
Figure 6 Pierce County Mapping



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.

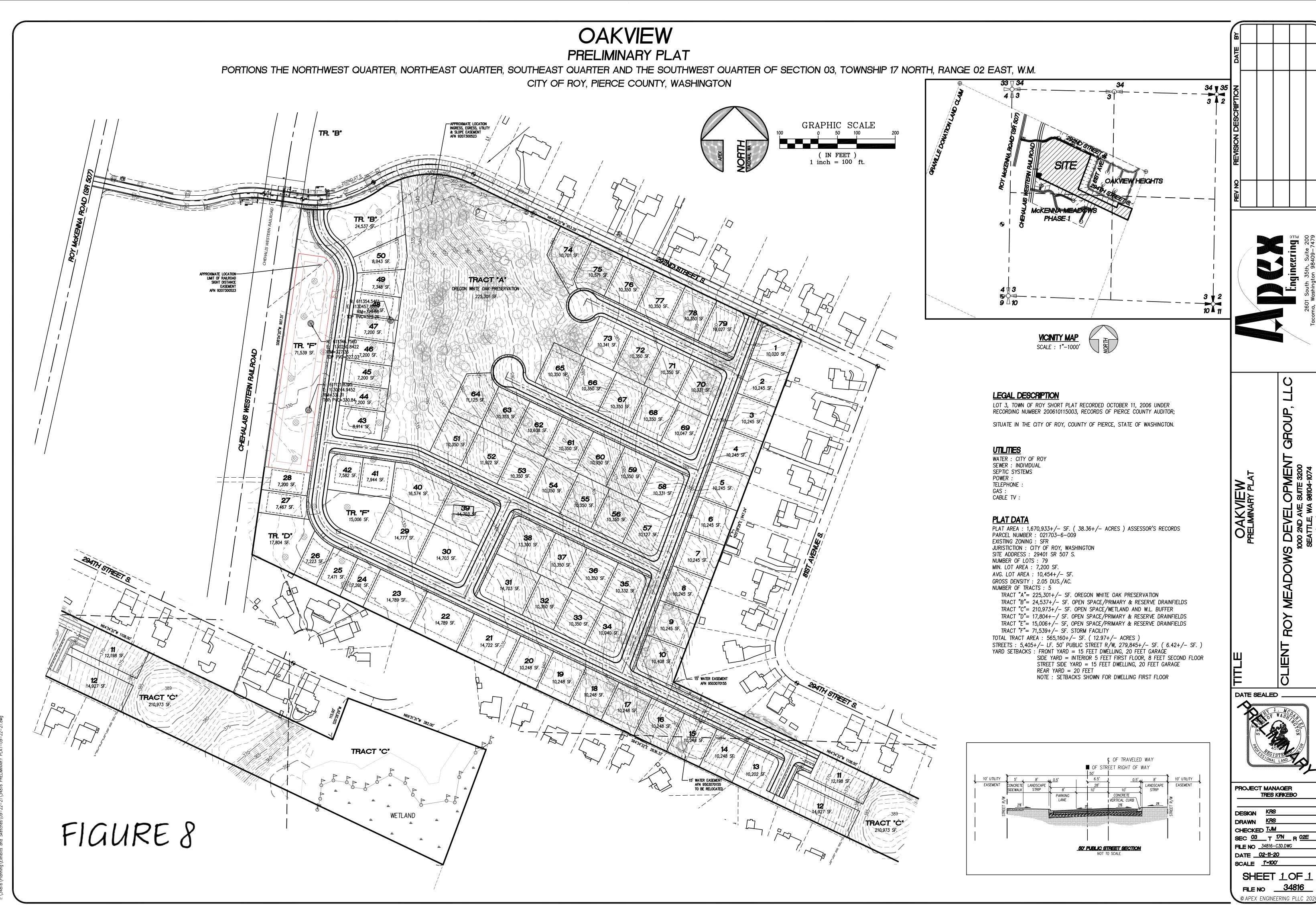
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Figure 7 Soils Mapping



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.

Date: 4/12/2022 01:10 PM



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

APPENDIX A – Wetland Field Data Worksheets

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

Project/Site: Parcel 0217036009		City/Cou	nty: City of Ro	by S	Sampling Date: <u>many</u>
Applicant/Owner:				State: WA.	Sampling Point: SP1
Investigator(s): Habitat Technologies			_ Section, To	ownship, Range:	
Landform (hillslope, terrace, etc.): terrace		_Local re	elief (concave	, convex, none): rolling	Slope (%):
Subregion (LRR): A					
Soil Map Unit Name: Everette					
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology sign	-		·	ormal Circumstances" prese	nt? Yes ⊠ No □
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in I	
SUMMARY OF FINDINGS – Attach site map			•		,
Hydrophytic Vegetation Present? Yes ⊠ No □					
Hydric Soil Present? Yes ☐ No ☒			the Sampled		N 7
Wetland Hydrology Present? Yes ☐ No ☒		W W	ithin a Wetlaı	nd? Yes ☐ No	X
Remarks: Assessments completed 1994, 2005-2008, sprii	ng 2012, spr	ing 2013	, summer-fall	2018, fall/winter 2021/2022	
location in southeastern corner adjacent to identified wetla	ınd				
VEGETATION – Use scientific names of plan	ts.				
			int Indicator	Dominance Test worksh	ieet:
Tree Stratum (Plot size: 15ft radius) 1			s? Status	Number of Dominant Spe That Are OBL, FACW, or	
Populus trichocarpa 3				Total Number of Dominar Species Across All Strata	
4				Percent of Dominant Spe	
Cardina/Chards Charter (Diet sines 45ft andise)	80	= Total	Cover	That Are OBL, FACW, or	
Sapling/Shrub Stratum (Plot size: 15ft radius) 1. Rubus armeniacus	25	V00	FAC	Prevalence Index works	heet:
Acer circinatum		•	FAC	Total % Cover of:	
Physocarpus capitatus			FACW	OBL species	
4. Symphoricarpus albus			FACU	FACW species	
5. Rubus ursinus	<5	no	FACU	FAC species	x 3 =
	100%	= Total	Cover	FACU species	x 4 =
Herb Stratum (Plot size: 15ft radius)				UPL species	
Polystichum munitum			EACH	Column Totals:	(A) (B)
3		-		Prevalence Index =	B/A =
4				Hydrophytic Vegetation	
5				☐ Rapid Test for Hydrop	hytic Vegetation
6.				□ Dominance Test is >5	0%
7.				☐ Prevalence Index is ≤	3.0 ¹
8					tions ¹ (Provide supporting
9				□ Wetland Non-Vascula	or on a separate sheet)
10				☐ Problematic Hydrophy	
11					nd wetland hydrology must
Woody Vine Stratum (Plot size: 15ft radius)	40			be present, unless disturb	
1			_	Hydrophytic	
2			Cover	Vegetation Present? Yes	⊠ No □
% Bare Ground in Herb Stratum <u>%</u>		= lotal	Cover	riesein: fes	∆ 140 ∐
Remarks: deciduous forest adjacent to wetland				1	

Depth				eeded to document the indicator Redox Features					,
(inches)	Color (moist)	%_	_ Colo	r (moist) % Type ¹	Loc ²	<u>Textur</u>	re	F	<u>lemarks</u>
<u>0-14</u>	10YR 3/2	100				<u>GL</u>		gravelly loan	1
14-22	10YR 3/3	100				GL	g	ravelly sand	y loam
				uced Matrix, CS=Covered or Coate	ed Sand Gr				re Lining, M=Matrix.
-		icable to		s, unless otherwise noted.)					natic Hydric Soils ³ :
☐ Black His ☐ Hydroge ☐ Depleted ☐ Thick Da	oipedon (A2) stic (A3) en Sulfide (A4) d Below Dark Surfa ark Surface (A12)	ce (A11)	S L L F	Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) (except Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6)	MLRA 1)		Red Pa Very S Other (Explain in R	Surface (TF12) emarks) rtic vegetation and
•	flucky Mineral (S1)			Depleted Dark Surface (F7)				, ,,	nust be present,
	Bleyed Matrix (S4)		F	Redox Depressions (F8)			unless	disturbed or	problematic.
Type:	Layer (if present):								
Depth (in	iches).					l			
						Hydr	ric Soil P	resent? Y	'es □ No ⊠
		ndicators	s of nyaria	, suils.					
	PGY		s or nyand	, SUIS.					
Wetland Hy		s:					Seconda	ary Indicator	s (2 or more required)
Wetland Hy Primary India	drology Indicator cators (minimum of Water (A1)	s:			xcept MLR	RA	☐ Wat	•	s (2 or more required) eaves (B9) (MLRA 1, 2 ,
Wetland Hy Primary India	drology Indicators cators (minimum of Water (A1) ater Table (A2)	s:		eck all that apply) Water-Stained Leaves (B9) (e.	xcept MLR	RA	☐ Wat	er-Stained L	eaves (B9) (MLRA 1, 2 ,
Wetland Hy Primary India Surface High Wa Saturation	drology Indicators cators (minimum of Water (A1) ater Table (A2)	s:		eck all that apply) Water-Stained Leaves (B9) (example 1, 2, 4A, and 4B)	xcept MLR		□ Wat	er-Stained L IA, and 4B) nage Patter	eaves (B9) (MLRA 1, 2,
Wetland Hy Primary India Surface High Wa Saturatio Water M	rdrology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3)	s:		eck all that apply) Water-Stained Leaves (B9) (e: 1, 2, 4A, and 4B) Salt Crust (B11)	xcept MLR	RA	☐ Wat	er-Stained L 1A, and 4B) nage Pattern Season Wat	ns (B10)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1)	s:		eck all that apply) Water-Stained Leaves (B9) (e. 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)			☐ Wate	er-Stained L 1A, and 4B) nage Pattern Season Wat	eaves (B9) (MLRA 1, 2, ns (B10) ter Table (C2) e on Aerial Imagery (C9)
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Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	rdrology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	s:		eck all that apply) Water-Stained Leaves (B9) (e. 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled	Living Roof) d Soils (C6	ts (C3)	Wate Properties of the Control of th	er-Stained L 1A, and 4B) nage Patteri Season Wat iration Visibl morphic Pos illow Aquitare -Neutral Tes	eaves (B9) (MLRA 1, 2, ns (B10) er Table (C2) e on Aerial Imagery (C9) d (D3) st (D5)
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Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Water Table Saturation P	rdrology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria v Vegetated Conca rvations: ter Present? Present?	s: f one required in the second secon	uired; che	eck all that apply) Water-Stained Leaves (B9) (example 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C4 Recent Iron Reduction in Tilled Stunted or Stressed Plants (D Other (Explain in Remarks)	Living Roof) d Soils (C6) 1) (LRR A)	ts (C3)	☐ Wate ☐ Drai ☐ Dry- ☐ Satu ☐ Geo ☐ Sha ☐ FAC	er-Stained L 1A, and 4B) nage Patteri Season Wat iration Visibl morphic Pos illow Aquitaro -Neutral Tes ied Ant Mou	eaves (B9) (MLRA 1, 2, as (B10) ter Table (C2) te on Aerial Imagery (C9) tition (D2) ti (D3) ti (D5) ands (D6) (LRR A) ammocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P (includes cal	rdrology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria v Vegetated Conca rvations: ter Present? Present? Present? pillary fringe)	s: f one required in the second of the seco	uired; che	eck all that apply) Water-Stained Leaves (B9) (example 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Stunted or Stressed Plants (D) Other (Explain in Remarks) Depth (inches): Depth (inches):	Living Roof Soils (C6) Clark A)	ts (C3)) and Hyo	☐ Wate ☐ Drai ☐ Dry- ☐ Satu ☐ Geo ☐ Shai ☐ FAC ☐ Rais ☐ Fros	er-Stained L 1A, and 4B) nage Pattern Season Wat uration Visibl morphic Pos llow Aquitard -Neutral Tes ed Ant Mou st-Heave Hun	eaves (B9) (MLRA 1, 2, as (B10) ter Table (C2) te on Aerial Imagery (C9) tition (D2) ti (D3) ti (D5) ands (D6) (LRR A) ammocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes cal	rdrology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar rvations: ter Present? Present? pillary fringe) ecorded Data (streat	s: I Imagery ve Surface Yes Yes Yes Managery	uired; che	eck all that apply) Water-Stained Leaves (B9) (e: 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Stunted or Stressed Plants (D) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): 18 inches	Living Roof) d Soils (C6) 1) (LRR A) Wetla	ts (C3)) and Hyo	☐ Wate ☐ Drai ☐ Dry- ☐ Satu ☐ Geo ☐ Sha ☐ FAC ☐ Rais ☐ Fros	er-Stained L 1A, and 4B) nage Pattern Season Water Interpretation Visible Morphic Pose Illow Aquitare I-Neutral Test Interpretation Moules Interpretation Visible Interpretation Visib	eaves (B9) (MLRA 1, 2, as (B10) for Table (C2) for on Aerial Imagery (C9) for (D3) for (D5) for (D6) (LRR A) formmocks (D7) Yes No
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca) Describe Re	rdrology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar rvations: ter Present? Present? pillary fringe) ecorded Data (streat	s: I Imagery ve Surface Yes Yes Yes Managery	uired; che	eck all that apply) Water-Stained Leaves (B9) (e. 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C4 Recent Iron Reduction in Tilled Stunted or Stressed Plants (D Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): 18 inches	Living Roof) d Soils (C6) 1) (LRR A) Wetla	ts (C3)) and Hyo	☐ Wate ☐ Drai ☐ Dry- ☐ Satu ☐ Geo ☐ Sha ☐ FAC ☐ Rais ☐ Fros	er-Stained L 1A, and 4B) nage Pattern Season Water Interpretation Visible Morphic Pose Illow Aquitare I-Neutral Test Interpretation Moules Interpretation Visible Interpretation Visib	eaves (B9) (MLRA 1, 2, as (B10) for Table (C2) for on Aerial Imagery (C9) for (D3) for (D5) for (D5) for (D6) (LRR A) for mmocks (D7) Yes No
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wate Water Table Saturation P (includes cal	rdrology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar rvations: ter Present? Present? pillary fringe) ecorded Data (streat	s: I Imagery ve Surface Yes Yes Yes Managery	uired; che	eck all that apply) Water-Stained Leaves (B9) (e: 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Stunted or Stressed Plants (D) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): 18 inches	Living Roof) d Soils (C6) 1) (LRR A) Wetla	ts (C3)) and Hyo	☐ Wate ☐ Drai ☐ Dry- ☐ Satu ☐ Geo ☐ Sha ☐ FAC ☐ Rais ☐ Fros	er-Stained L 1A, and 4B) nage Pattern Season Water Interpretation Visible Morphic Pose Illow Aquitare I-Neutral Test Interpretation Moules Interpretation Visible Interpretation Visib	eaves (B9) (MLRA 1, 2, as (B10) for Table (C2) for on Aerial Imagery (C9) for (D3) for (D5) for (D6) (LRR A) formmocks (D7) Yes No

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

Project/Site: Parcel 0217036009			City/Cour	nty: City of Ro	ру	_ Sampling	g Date: <u>many</u>	<u>'</u>
Applicant/Owner:					State: WA.	_ Samplino	g Point: <u>SP3</u>	
Investigator(s): Habitat Technologies				_ Section, To	ownship, Range:			
Landform (hillslope, terrace, etc.): terrace			Local re	lief (concave	, convex, none): rolling		Slope (%	6):
Subregion (LRR): A		_ Lat:			_ Long:		Datum:	
Soil Map Unit Name: Everette								
Are climatic / hydrologic conditions on the site typic								
Are Vegetation, Soil, or Hydrology _		•		,	ormal Circumstances" pre	•	s⊠ No □	1
Are Vegetation, Soil, or Hydrology _					ed, explain any answers			
SUMMARY OF FINDINGS – Attach sit								res, etc.
	 I No □				· · · · · · · · · · · · · · · · · · ·	•		
	l No □			the Sampled				
_	No 🗆		wit	thin a Wetlaı	nd? Yes ⊠	No 🗌		
Remarks: Assessments completed 1994, 2005-2	.008, sprin	g 2012, spr	ing 2013,	summer-fall	2018, fall/winter 2021/20	22		
location at edgw of southeastern corner wetland								
VEGETATION – Use scientific names	of plant	ts.						
		Absolute	Domina	nt Indicator	Dominance Test worl	sheet:		
Tree Stratum (Plot size: 15ft radius)				? Status	Number of Dominant S			
1. Fraxinus latifolia		<u>75</u>		FACU_	That Are OBL, FACW,	or FAC: 4	4	_ (A)
2. Populus trichocarpa		20		FAC	Total Number of Domin		_	(5)
3. Alnus rubra		5	no	<u>FAC</u>	Species Across All Stra	ata: <u>{</u>	5	_ (B)
4		100	= Total	Cover	Percent of Dominant S		200/	(A /D)
Sapling/Shrub Stratum (Plot size: 15ft radius)		100	- rotar	OOVCI	That Are OBL, FACW,	or FAC: 8	30%	_ (A/B)
1. Rubus armeniacus		trace	no	FAC	Prevalence Index wo	ksheet:		
2. Acer circinatum		trace	no	<u>FAC</u>	Total % Cover of:		Multiply by:	
3				FACW	OBL species			
4. Symphoricarpus albus		30	yes	<u>FACU</u>	FACW species			
5					FACULARISIS			
 Herb Stratum (Plot size: 15ft radius)		30%	= I otal	Cover	FACU species		=	
1. Phalaris arundinacea		60	yes	FACW	Column Totals:			
2. Carex obnupta		40	yes	OBL	Goldmin Foldie.	(//		(5)
3					Prevalence Index			•
4					Hydrophytic Vegetati			
5					Rapid Test for Hyd		getation	
6					□ Dominance Test is □ Dominance Test is			
7					☐ Prevalence Index i☐ Morphological Ada		Provido supo	orting
8					☐ Morphological Ada data in Remark			
9					☐ Wetland Non-Vaso	ular Plants¹	I	
10. 11.					☐ Problematic Hydro	phytic Vege	etation¹ (Exp	lain)
		100		Cover	¹Indicators of hydric so			y must
Woody Vine Stratum (Plot size: 15ft radius)			iotal	20101	be present, unless dist	urbed or pro	opiematic.	
1					Hydrophytic			
2					Vegetation		_	
% Bare Ground in Herb Stratum %			= Total	Cover	Present? Ye	es 🛛 No	Ц	
Remarks: deciduous forest within wetland					1			

Depth	Matrix			Rad	ox Featur	26					
(inches)	Color (moist)	_ %	Colo	r (moist)	<u>%</u>		_Loc ² _	Textu	re	Remarks	
0-8	10YR 2/1	100						GL		sandy loam	
8-22	10YR 4/1	80	10YI	R 4/6	20	С	М	GL		gravelly sandy loam	
<u> </u>	10111111			, 0			<u></u>	<u> </u>		graveny carray rearri	
	_									-	
1Type: C=C	Concentration, D=De	— —— anletion		uced Matrix C		ed or Coat	ed Sand G	raine	2l oc	cation: PL=Pore Lining, M=Matrix.	
	Indicators: (Appl						ed Sand O			rs for Problematic Hydric Soils ³ :	
☐ Histosol				Sandy Redox (,				Muck (A10)	
	pipedon (A2)			Stripped Matrix						Parent Material (TF2)	
	istic (A3)		[_oamy Mucky∃	Mineral (F	1) (excep	t MLRA 1)			Shallow Dark Surface (TF12)	
	en Sulfide (A4)			_oamy Gleyed			,] Othe	r (Explain in Remarks)	
□ Deplete	d Below Dark Surfa	ce (A11)		Depleted Matri	x (F3)						
	ark Surface (A12)		☐ F	Redox Dark Sເ	ırface (F6)		³ l		rs of hydrophytic vegetation and	
	Mucky Mineral (S1)			Depleted Dark	,					nd hydrology must be present,	
	Gleyed Matrix (S4)		F	Redox Depress	sions (F8)				unles	s disturbed or problematic.	
	Layer (if present):										
Type:	nches):										
	,							Hydr	ic Soil	Present? Yes ⊠ No □	
Remarks. p	prominent field indic	at015 01 1	iyunc soi	15.							
LIVEROLO	NCV										
		e·									
Wetland Hy	/drology Indicator		uired: che	eck all that ann	oly)				Secon	ndary Indicators (2 or more required	<u> </u>
Wetland Hy	drology Indicator		uired; che			ves (B0) (e	aycant MI F			ndary Indicators (2 or more required	_
Wetland Hy Primary Indi ☐ Surface	ydrology Indicator icators (minimum of Water (A1)		uired; che	☐ Water-Sta	ained Leav	, , ,	except MLF	RA		ater-Stained Leaves (B9) (MLRA 1	_
Wetland Hy Primary Indi	ydrology Indicator icators (minimum of Water (A1) ater Table (A2)		uired; che	☐ Water-Sta	ained Leav	, , ,	except MLF	RA	□ w	ater-Stained Leaves (B9) (MLRA 1 4A, and 4B)	_
Wetland Hy Primary Indi ☐ Surface ☐ High Wa ☐ Saturation	rdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3)		uired; che	☐ Water-Sta 1, 2, 4 ☐ Salt Crust	ained Leav I A, and 4I t (B11)	3)	except MLF	RA	□ W	ater-Stained Leaves (B9) (MLRA 1 4A, and 4B) rainage Patterns (B10)	-
Wetland Hy Primary Indi Surface High Wa Saturati Water M	rdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1)		uired; che	☐ Water-Sta 1, 2, 4 ☐ Salt Crust ☐ Aquatic In	ained Leav I A, and 4I t (B11) overtebrate	3) es (B13)	except MLF	RA	W	ater-Stained Leaves (B9) (MLRA 1 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2)	, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimen	rdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)		uired; che	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen	ained Leaven A. A. and 4. It (B11) invertebrate Sulfide C	es (B13) edor (C1)			☐ W	ater-Stained Leaves (B9) (MLRA 1 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sediment Drift De	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)		uired; che	Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized	nined Leaver AA, and 4I (B11) invertebrate Sulfide C	es (B13) dor (C1) eres along	Living Roo		☐ W ☐ Dr ☐ Dr ☐ Sa ☐ Go	ater-Stained Leaves (B9) (MLRA 1 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimet Drift Det Algal Ma	rdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		uired; che	Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence	ained Leaver A.A., and 4I at (B11) avertebrate Sulfide C Rhizosphe of Reduc	es (B13) dor (C1) eres along ed Iron (C	Living Roo 4)	its (C3)	W Di Di Sa Gi Si	ater-Stained Leaves (B9) (MLRA 1 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (ecomorphic Position (D2) nallow Aquitard (D3)	, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimel Drift Del Algal Ma Iron Dep	rdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		uired; che	Water-Star 1, 2, 4 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Iro	ained Leaver A.A., and 4I at (B11) invertebrate Constitution Sulfide Constitution Reduction Redu	es (B13) Idor (C1) Idor (C1) Idor (C1) Idor (C1) Idor (C1) Idor (C1)	Living Roo 4) ed Soils (C6	ots (C3)	 □ W □ Di □ Si □ Gi □ Si □ Fi 	ater-Stained Leaves (B9) (MLRA 1 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) raturation Visible on Aerial Imagery (recomorphic Position (D2) rallow Aquitard (D3) AC-Neutral Test (D5)	, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sediment Drift Dep Algal Ma Iron Dep Surface	rdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	f one requ		Water-Star 1, 2, 4 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized Presence Recent Inc Stunted o	ained Leav IA, and 4I I (B11) Invertebrate Sulfide C Rhizosphe of Reduct on Reduct r Stressec	es (B13) dor (C1) eres along ed Iron (Ci ion in Tille I Plants (D	Living Roo 4)	ots (C3)	W Di Di Sa Gi Si F# Ra	ater-Stained Leaves (B9) (MLRA 1 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (ecomorphic Position (D2) rallow Aquitard (D3) AC-Neutral Test (D5) raised Ant Mounds (D6) (LRR A)	, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sediment Drift Dep Algal Ma Iron Dep Surface Inundati	rdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria	f one requ	· (B7)	Water-Star 1, 2, 4 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Iro	ained Leav IA, and 4I I (B11) Invertebrate Sulfide C Rhizosphe of Reduct on Reduct r Stressec	es (B13) dor (C1) eres along ed Iron (Ci ion in Tille I Plants (D	Living Roo 4) ed Soils (C6	ots (C3)	W Di Di Sa Gi Si F# Ra	ater-Stained Leaves (B9) (MLRA 1 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) raturation Visible on Aerial Imagery (recomorphic Position (D2) rallow Aquitard (D3) AC-Neutral Test (D5)	, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimel Drift Del Algal Ma Iron Dep Surface Inundati Sparsel	rdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca	f one requ	· (B7)	Water-Star 1, 2, 4 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized Presence Recent Inc Stunted o	ained Leav IA, and 4I I (B11) Invertebrate Sulfide C Rhizosphe of Reduct on Reduct r Stressec	es (B13) dor (C1) eres along ed Iron (Ci ion in Tille I Plants (D	Living Roo 4) ed Soils (C6	ots (C3)	W Di Di Sa Gi Si F# Ra	ater-Stained Leaves (B9) (MLRA 1 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (ecomorphic Position (D2) rallow Aquitard (D3) AC-Neutral Test (D5) raised Ant Mounds (D6) (LRR A)	, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsel	rdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Concar rvations:	f one required in the second s	r (B7) se (B8)	Water-Star 1, 2, 4 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Irc Stunted o Other (Ex	ained Leaven A., and 41 (B11) avertebrate Sulfide Control Reduction Reductor Stressed plain in Reductor Reductor Reductor Stressed plain in Reductor Reductor Reductor Reductor Reductor Stressed plain in Reductor Reducto	es (B13) dor (C1) eres along ed Iron (Ci ion in Tille I Plants (Ci emarks)	Living Roo 4) ed Soils (C6	ots (C3)	W Di Di Sa Gi Si F# Ra	ater-Stained Leaves (B9) (MLRA 1 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (ecomorphic Position (D2) rallow Aquitard (D3) AC-Neutral Test (D5) raised Ant Mounds (D6) (LRR A)	, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely Field Obser	rdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ter Present?	f one required in the second of the second	e (B7) ce (B8)	Water-Star 1, 2, 4 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Irc Stunted o Other (Ex	ained Leav IA, and 4I I (B11) Invertebrate Sulfide C Rhizosphe of Reduct on Reduct r Stressed plain in Re	es (B13) dor (C1) eres along ed Iron (C ion in Tille I Plants (C emarks)	Living Roo 4) ed Soils (C6	ots (C3)	W Di Di Sa Gi Si F# Ra	ater-Stained Leaves (B9) (MLRA 1 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (ecomorphic Position (D2) rallow Aquitard (D3) AC-Neutral Test (D5) raised Ant Mounds (D6) (LRR A)	, 2,
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Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Algal Ma Iron Dep Surface Inundati Sparsely Field Obset Saturation F (includes ca	rdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Concar rvations: ter Present?	I Imagery ve Surfac Yes 🏻 Yes 🛣 Yes 🖎	(B7) te (B8) No No No No No	Water-Star 1, 2, 4 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized Presence Recent In Stunted o Other (Ex Depth (incher	ained Leav A, and 4B (B11) Invertebrate Sulfide C Rhizosphe of Reduct on Reduct r Stressed plain in Re es):es):es):	es (B13) dor (C1) eres along ed Iron (C- ion in Tille d Plants (D- emarks)	Living Roo 4) ed Soils (C6 01) (LRR A)	ots (C3) i) and Hye	W	ater-Stained Leaves (B9) (MLRA 1 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) raturation Visible on Aerial Imagery (recomorphic Position (D2) rallow Aquitard (D3) rac-Neutral Test (D5) raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)	, 2,
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Project/Site: Parcel 0217036009			City/Cour	nty: City of Ro	ру	Sam	pling Date: <u>m</u>	any
Applicant/Owner:					State: <u>WA.</u>	Sam	pling Point: S	SP4
Investigator(s): Habitat Technologies				_ Section, To	ownship, Range:			
Landform (hillslope, terrace, etc.): terrace			_Local re	lief (concave	, convex, none): rolling		Slop	e (%):
Subregion (LRR): A		_ Lat:			_ Long:		Datum	:
Soil Map Unit Name: Everette								
Are climatic / hydrologic conditions on the site ty								
Are Vegetation, Soil, or Hydrology		•		,	ormal Circumstances" p	•	Yes ⊠ No	οП
Are Vegetation, Soil, or Hydrology					ed, explain any answers			_
SUMMARY OF FINDINGS – Attach s							•	tures, etc.
	<u> </u>							,
	⊠ No □ ⊠ No □			the Sampled				
	⊠ No □		wit	thin a Wetlai	nd? Yes ⊠	No 🗌		
Remarks: Assessments completed 1994, 2005		ng 2012, spr	ing 2013,	summer-fall	2018, fall/winter 2021/2	022		
location in southeastern corner inside boundary	y of wetland							
VEGETATION – Use scientific names	s of plan	ts.						
	•		Domina	nt Indicator	Dominance Test wo	rksheet:		
<u>Tree Stratum</u> (Plot size: <u>15ft radius</u>)				? Status	Number of Dominant			
1. Fraxinus latifolia		50	-	FACU_	That Are OBL, FACW	, or FAC	: <u>6</u>	(A)
2. Populus trichocarpa		50			Total Number of Dom			(5)
3. Alnus rubra		<u><5</u>	no	<u>FAC</u>	Species Across All St	rata:	6	(B)
4		100	= Total	Cover	Percent of Dominant		4000/	(A /D)
Sapling/Shrub Stratum (Plot size: 15ft radius)		100	rotar	00101	That Are OBL, FACW	, or FAC	: <u>100%</u>	(A/B)
1					Prevalence Index we	orksheet	t:	
2					Total % Cover of			_ _
3. Cornus stolonifera					OBL species			
4. Symphoricarpus albus		50	yes	<u>FACU</u>	FACW species			
5		4000/			FAC species		'	
<u>Herb Stratum</u> (Plot size: <u>15ft radius</u>)		100%	= rotar	Cover			x 5 =	
Phalaris arundinacea		40	yes	<u>FACw</u>	Column Totals:			
2. carex obnupta		20	yes	<u>OBL</u>				
3					Prevalence Inde			
4					Hydrophytic Vegeta			
5					Rapid Test for Hy		c Vegetation	
6					☐ Dominance Test i☐ Prevalence Index			
7					☐ Morphological Ad		o ¹ (Provide si	upporting
8					data in Rema			
9 10					☐ Wetland Non-Vas	cular Pla	ants ¹	
11					☐ Problematic Hydr	ophytic V	/egetation¹ (l	Explain)
		60		Cover	¹ Indicators of hydric s			
Woody Vine Stratum (Plot size: 15ft radius)				**	be present, unless dis	surbed 0	n problemati	U.
1					Hydrophytic			
2					Vegetation	.	N - 🗔	
% Bare Ground in Herb Stratum %			= Total	Cover	Present?	∕es ⊠	No ∐	
Remarks: shallow depression					1			
·								

(inches)	Matrix Color (moist)	%	Color (moi	Redox Featu st) %		Loc ²	Texture	Remarks
0-3	10YR 3/1			<u> </u>			TOXIGIO	
				4.5				silty loam
3-22	10YR 4/1	85	10YR 4/6	15		IVI		silty gravelly sandy loam
			-				-	
	Concentration, D=D					ed Sand Gr		Location: PL=Pore Lining, M=Matrix.
-	Indicators: (App	ilicable to a			otea.)			ators for Problematic Hydric Soils ³ :
☐ Histosol	pipedon (A2)		-	Redox (S5) ed Matrix (S6)				cm Muck (A10) ed Parent Material (TF2)
	istic (A3)			Mucky Mineral ((F1) (excep	t MLRA 1)		ery Shallow Dark Surface (TF12)
	en Sulfide (A4)			Gleyed Matrix (I		·		ther (Explain in Remarks)
	d Below Dark Surfa	ace (A11)		ed Matrix (F3)	,		_	,
	ark Surface (A12)			Dark Surface (F	•			ators of hydrophytic vegetation and
	Mucky Mineral (S1)			ed Dark Surface	` '			tland hydrology must be present,
	Gleyed Matrix (S4)		☐ Redox	Depressions (F8	3)		unl	ess disturbed or problematic.
	Layer (if present)							
	nches):							
Deptii (ii	icries)						Hydric S	oil Present? Yes ⊠ No □
HADBOI C)CV							
HYDROLO								
•	/drology Indicato		rod: chock all	that apply)				
☐ Surface	-	one requi					900	condary Indicators (2 or more required)
-	ater Table (A2)		111	valei-Stailleu Lea		voont MI D		condary Indicators (2 or more required)
	ater rable (AZ)		_	1 2 4A and		except MLR		Water-Stained Leaves (B9) (MLRA 1, 2,
	on (A3)			1, 2, 4A, and 4		except MLR	RA 🗆	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
	on (A3) larks (B1)		□ s	alt Crust (B11)	4B)	except MLR	KA 🗆	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
☐ Water M	larks (B1)		□ S	alt Crust (B11) quatic Invertebra	4B) ates (B13)	except MLR	KA	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
☐ Water M☐ Sedime	farks (B1) nt Deposits (B2)		□ S □ A □ H	alt Crust (B11) quatic Invertebra lydrogen Sulfide	4B) ates (B13) Odor (C1)		ΙΑ	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
☐ Water M☐ Sedime☐ Drift De	Marks (B1) nt Deposits (B2) posits (B3)		□ S □ A □ H	alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizospl	ates (B13) Odor (C1) heres along	Living Roof	ts (C3)	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)
☐ Water M☐ Sedime ☐ Drift De ☐ Algal Ma	Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		S A H C	alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu	ates (B13) Odor (C1) heres along ced Iron (C	Living Root 4)	ts (C3)	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)
☐ Water M☐ Sedime☐ Drift De☐ Algal M☐ Iron Dep	Marks (B1) nt Deposits (B2) posits (B3)		S A H C F R	alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Redu	ates (B13) Odor (C1) heres along iced Iron (Cotion in Tille	Living Root 4) d Soils (C6)	ts (C3)	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)
☐ Water M☐ Sedime ☐ Drift De ☐ Algal Ma☐ Iron Dep ☐ Surface	Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	al Imagery (S A H C P F S	alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu	ates (B13) Odor (C1) heres along ced Iron (Cc ction in Tille ed Plants (D	Living Root 4) d Soils (C6)	ts (C3)	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)
Water M Sedime Drift De Algal Ma Iron Dep Surface	Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)		S A D C F S B7) C	alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Redu tunted or Stresse	ates (B13) Odor (C1) heres along ced Iron (Cc ction in Tille ed Plants (D	Living Root 4) d Soils (C6)	ts (C3)	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)
Water M Sedime Drift De Algal Ma Iron Dep Surface	Marks (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B4) Int or Crust (B6) Int or Crust (B1) Int or Crust (B2) Int or Crust (B4) I		S A D C F S B7) C	alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Redu tunted or Stresse	ates (B13) Odor (C1) heres along ced Iron (Cc ction in Tille ed Plants (D	Living Root 4) d Soils (C6)	ts (C3)	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)
Water M Sedime Drift De Algal Mi Iron De Surface Inundati Sparsel	Marks (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B4) Int or Crust (B6) Int or Cracks (B6) Int or Visible on Aeria Int or Cracks (B6) Int or Cracks (B6) Int or Cracks (B6) Int or Cracks (B6)	ave Surface	S A H C F S B7) C (B8)	alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Redu tunted or Stresse	ates (B13) Odor (C1) heres along iced Iron (Cotion in Tille ed Plants (Directions)	Living Root 4) d Soils (C6)	ts (C3)	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)
Water M Sedime Drift De Algal Mi Iron De Surface Inundati Sparsel	Marks (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B4) Int or Crust (B4) Int or Crust (B6) Int or Crust	Yes 🛛	S A F C F S S B7)	alt Crust (B11) quatic Invertebra ydrogen Sulfide exidized Rhizospl resence of Redu ecent Iron Redu tunted or Stresse other (Explain in F	ates (B13) Odor (C1) heres along ced Iron (Cc ction in Tille ed Plants (D Remarks)	Living Root 4) d Soils (C6)	ts (C3)	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)
Water M Sedime Drift De Algal Ma Iron Dep Surface Inundati Sparsel Field Obse Surface Wa	Marks (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B4) Int or Crust (B4) Int or Crust (B6) I	eve Surface Yes ⊠ Yes ⊠	S	alt Crust (B11) quatic Invertebra ydrogen Sulfide exidized Rhizosph resence of Redu ecent Iron Redu tunted or Stresse other (Explain in F	ates (B13) Odor (C1) heres along iced Iron (Cition in Tille ed Plants (Directors)	Living Root 4) d Soils (C6) 11) (LRR A)	ts (C3)	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)
Water M Sedime Drift De Algal Ma Iron Dep Surface Inundati Sparsely Field Obse Surface Wa Water Table Saturation F (includes ca	Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations: ter Present? e Present? pullary fringe)	Yes 🖂 Yes 🖂 Yes 🖂	S	alt Crust (B11) quatic Invertebra ydrogen Sulfide lxidized Rhizospl resence of Redu lecent Iron Reduct tunted or Stresse other (Explain in F	ates (B13) Odor (C1) heres along ced Iron (C- ction in Tille ed Plants (D Remarks)	Living Roof 4) d Soils (C6) 1) (LRR A)	ts (C3)	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)
Water M Sedime Drift De Algal Ma Iron De Surface Inundati Sparsel Field Obse Surface Wa Water Table Saturation F (includes ca	Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations: ter Present? e Present?	Yes 🖂 Yes 🖂 Yes 🖂	S	alt Crust (B11) quatic Invertebra ydrogen Sulfide lxidized Rhizospl resence of Redu lecent Iron Reduct tunted or Stresse other (Explain in F	ates (B13) Odor (C1) heres along ced Iron (C- ction in Tille ed Plants (D Remarks)	Living Roof 4) d Soils (C6) 1) (LRR A)	ts (C3)	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)
Water M Sedime Drift De Algal Ma Iron De Surface Inundati Sparsel Field Obse Surface Wa Water Table Saturation F (includes ca	Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations: ter Present? e Present? pullary fringe)	Yes 🖂 Yes 🔯 Yes 🔯 Yes 🔯	B7) C(B8) No Dep No Dep monitoring wa	alt Crust (B11) quatic Invertebra ydrogen Sulfide exidized Rhizosph resence of Redu ecent Iron Reduc tunted or Stresse ether (Explain in F	ates (B13) Odor (C1) heres along ced Iron (C- ction in Tille ed Plants (D Remarks)	Living Roof 4) d Soils (C6) 1) (LRR A)	ts (C3)	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)
Water M Sedime Drift De Algal Ma Iron De Surface Inundati Sparsel Field Obse Surface Wa Water Table Saturation F (includes ca	Marks (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B6) Int or Crust (B4) Int or Crust (B6) I	Yes 🖂 Yes 🔯 Yes 🔯 Yes 🔯	B7) C(B8) No Dep No Dep monitoring wa	alt Crust (B11) quatic Invertebra ydrogen Sulfide exidized Rhizosph resence of Redu ecent Iron Reduc tunted or Stresse ether (Explain in F	ates (B13) Odor (C1) heres along ced Iron (C- ction in Tille ed Plants (D Remarks)	Living Roof 4) d Soils (C6) 1) (LRR A)	ts (C3)	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)
Water M Sedime Drift De Algal Ma Iron De Surface Inundati Sparsel Field Obse Surface Wa Water Table Saturation F (includes ca	Marks (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B6) Int or Crust (B4) Int or Crust (B6) I	Yes 🖂 Yes 🔯 Yes 🔯 Yes 🔯	B7) C(B8) No Dep No Dep monitoring wa	alt Crust (B11) quatic Invertebra ydrogen Sulfide exidized Rhizosph resence of Redu ecent Iron Reduc tunted or Stresse ether (Explain in F	ates (B13) Odor (C1) heres along ced Iron (C- ction in Tille ed Plants (D Remarks)	Living Roof 4) d Soils (C6) 1) (LRR A)	ts (C3)	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)

Project/Site: Parcel 11915320000			City/Coun	ty: <u>City of Ro</u>	ру	Samp	ling Date: <u>ma</u>	any
Applicant/Owner:					State: <u>WA.</u>	Samp	ling Point: S	P4
Investigator(s): Habitat Technologies				Section, To	ownship, Range:			
Landform (hillslope, terrace, etc.): terrace			_Local reli	ief (concave	, convex, none): rolling		Slope	e (%):
Subregion (LRR): A		_ Lat:			_ Long:		Datum:	:
Soil Map Unit Name: Everette								
Are climatic / hydrologic conditions on the								
Are Vegetation, Soil, or Hyd		•		,	ormal Circumstances" p	•	Yes⊠ No	П
Are Vegetation, Soil, or Hyd					ed, explain any answer			_
SUMMARY OF FINDINGS - Atta							•	tures. etc.
	-			-9 p				
, , , ,	Yes ⊠ No □ Yes ⊠ No □			he Sampled				
Wetland Hydrology Present?	Yes ⊠ No □		wit	hin a Wetla	nd? Yes ⊠	No 🗌		
Remarks: Assessments completed 1994		ng 2012, spr	ing 2013,	summer-fall	2018, fall/winter 2021/2	2022		
location in southeastern corner inside bo	undary of wetland							
VEGETATION – Use scientific n	ames of plant	ts.						
		Absolute	Dominan	t Indicator	Dominance Test wo	rksheet:		
Tree Stratum (Plot size: 15ft radius)		% Cover			Number of Dominant			
1. Fraxinus latifolia		50	-	FACU_	That Are OBL, FACW	/, or FAC:	6	(A)
2. Populus trichocarpa		50			Total Number of Dom		•	(5)
3. Alnus rubra		<u><5</u>	no	FAC	Species Across All S	trata:	6	(B)
4		100	= Total (Cover	Percent of Dominant		4000/	(A /D)
Sapling/Shrub Stratum (Plot size: 15ft r	adius)	100	Total	30101	That Are OBL, FACW	7, or FAC:	100%	(A/B)
1					Prevalence Index w	orksheet:		
2					Total % Cover of		-	
3. Cornus stolonifera					OBL species			
4. Symphoricarpus albus		50	yes	<u>FACU</u>	FACW species			
5		4000/		·	FAC species			
Herb Stratum (Plot size: 15ft radius)		100%	= Total (Jover	UPL species			
1. Phalaris arundinacea		40	yes	<u>FACw</u>	Column Totals:			
2. carex obnupta		20	yes	OBL				
3					Prevalence Inde			
4					Hydrophytic Vegeta			
5					☐ Rapid Test for Hy ☐ Dominance Test		Vegetation	
6					☐ Prevalence Index			
7					☐ Morphological Ad		1 (Provide su	innorting
8					data in Rema			
9 10					☐ Wetland Non-Vas	₃cular Plar	nts¹	
11.					☐ Problematic Hydr		•	' '
			= Total (Cover	¹ Indicators of hydric s be present, unless di			
Woody Vine Stratum (Plot size: 15ft rac					be present, unless un		Problematic	<i>'</i> .
1					Hydrophytic			
2					Vegetation	Voc ⊠ ■	No 🗆	
% Bare Ground in Herb Stratum <u>%</u>			= Total (Jover	Present?	Yes ⊠ N	10 🗀	
Remarks: shallow depression					1			

(inches)	Matrix Color (moist)	%	Color (moi	Redox Featu st) %		Loc ²	Texture	Remarks
0-3	10YR 3/1			<u> </u>			TOXIGIO	
				4.5				silty loam
3-22	10YR 4/1	85	10YR 4/6	15		IVI		silty gravelly sandy loam
			-				-	
	Concentration, D=D					ed Sand Gr		Location: PL=Pore Lining, M=Matrix.
-	Indicators: (App	ilicable to a			otea.)			ators for Problematic Hydric Soils ³ :
☐ Histosol	pipedon (A2)		-	Redox (S5) ed Matrix (S6)				cm Muck (A10) ed Parent Material (TF2)
	istic (A3)			Mucky Mineral ((F1) (excep	t MLRA 1)		ery Shallow Dark Surface (TF12)
	en Sulfide (A4)			Gleyed Matrix (I		·		ther (Explain in Remarks)
	d Below Dark Surfa	ace (A11)		ed Matrix (F3)	,		_	,
	ark Surface (A12)			Dark Surface (F	•			ators of hydrophytic vegetation and
	Mucky Mineral (S1)			ed Dark Surface	` '			tland hydrology must be present,
	Gleyed Matrix (S4)		☐ Redox	Depressions (F8	3)		unl	ess disturbed or problematic.
	Layer (if present)							
	nches):							
Deptii (ii	icries)						Hydric S	oil Present? Yes ⊠ No □
HADBOI C)CV							
HYDROLO								
•	/drology Indicato		rod: chock all	that apply)				
☐ Surface	-	one requi					900	condary Indicators (2 or more required)
-	ater Table (A2)		111	valei-Stailleu Lea		voont MI D		condary Indicators (2 or more required)
	ater rable (AZ)		_	1 2 4A and		except MLR		Water-Stained Leaves (B9) (MLRA 1, 2,
	on (A3)			1, 2, 4A, and 4		except MLR	RA 🗆	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
	on (A3) larks (B1)		□ s	alt Crust (B11)	4B)	except MLR	KA 🗆	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
☐ Water M	larks (B1)		□ S	alt Crust (B11) quatic Invertebra	4B) ates (B13)	except MLR	KA	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
☐ Water M☐ Sedime	farks (B1) nt Deposits (B2)		□ S □ A □ H	alt Crust (B11) quatic Invertebra lydrogen Sulfide	4B) ates (B13) Odor (C1)		ΙΑ	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
☐ Water M☐ Sedime☐ Drift De	Marks (B1) nt Deposits (B2) posits (B3)		□ S □ A □ H	alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizospl	ates (B13) Odor (C1) heres along	Living Roof	ts (C3)	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)
☐ Water M☐ Sedime ☐ Drift De ☐ Algal Ma	Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		S A H C	alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu	ates (B13) Odor (C1) heres along ced Iron (C	Living Root 4)	ts (C3)	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)
☐ Water M☐ Sedime☐ Drift De☐ Algal M☐ Iron Dep	Marks (B1) nt Deposits (B2) posits (B3)		S A H C F R	alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Redu	ates (B13) Odor (C1) heres along iced Iron (Cotion in Tille	Living Root 4) d Soils (C6)	ts (C3)	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)
☐ Water M☐ Sedime ☐ Drift De ☐ Algal Ma☐ Iron Dep ☐ Surface	Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	al Imagery (S A H C P F S	alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu	ates (B13) Odor (C1) heres along ced Iron (Cc ction in Tille ed Plants (D	Living Root 4) d Soils (C6)	ts (C3)	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)
Water M Sedime Drift De Algal Ma Iron Dep Surface	Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)		S A D C F S B7) C	alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Redu tunted or Stresse	ates (B13) Odor (C1) heres along ced Iron (Cc ction in Tille ed Plants (D	Living Root 4) d Soils (C6)	ts (C3)	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)
Water M Sedime Drift De Algal Ma Iron Dep Surface	Marks (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B4) Int or Crust (B6) Int or Cracks (B6) Int or Visible on Aeria Int or Cracks (B6) Int or Cracks (B6) Int or Cracks (B6) Int or Cracks (B6)		S A D C F S B7) C	alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Redu tunted or Stresse	ates (B13) Odor (C1) heres along ced Iron (Cc ction in Tille ed Plants (D	Living Root 4) d Soils (C6)	ts (C3)	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)
Water M Sedime Drift De Algal Mi Iron De Surface Inundati Sparsel	Marks (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B4) Int or Crust (B6) Int or Cracks (B6) Int or Visible on Aeria Int or Cracks (B6) Int or Cracks (B6) Int or Cracks (B6) Int or Cracks (B6)	ave Surface	S A H C F S B7) C (B8)	alt Crust (B11) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Redu tunted or Stresse	ates (B13) Odor (C1) heres along iced Iron (Cotion in Tille ed Plants (Directions)	Living Root 4) d Soils (C6)	ts (C3)	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)
Water M Sedime Drift De Algal Mi Iron De Surface Inundati Sparsel	Marks (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B4) Int or Crust (B4) Int or Crust (B6) Int or Crust	Yes 🛛	S A F C F S S B7)	alt Crust (B11) quatic Invertebra ydrogen Sulfide exidized Rhizospl resence of Redu ecent Iron Redu tunted or Stresse other (Explain in F	ates (B13) Odor (C1) heres along ced Iron (Cc ction in Tille ed Plants (D Remarks)	Living Root 4) d Soils (C6)	ts (C3)	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)
Water M Sedime Drift De Algal Ma Iron Dep Surface Inundati Sparsel Field Obse Surface Wa	Marks (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B4) Int or Crust (B4) Int or Crust (B6) I	eve Surface Yes ⊠ Yes ⊠	S	alt Crust (B11) quatic Invertebra ydrogen Sulfide exidized Rhizosph resence of Redu ecent Iron Redu tunted or Stresse other (Explain in F	ates (B13) Odor (C1) heres along iced Iron (Cition in Tille ed Plants (Directors)	Living Root 4) d Soils (C6) 11) (LRR A)	ts (C3)	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)
Water M Sedime Drift De Algal Ma Iron Dep Surface Inundati Sparsely Field Obse Surface Wa Water Table Saturation F (includes ca	Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations: ter Present? e Present? pullary fringe)	Yes 🖂 Yes 🖂 Yes 🖂	S	alt Crust (B11) quatic Invertebra ydrogen Sulfide lxidized Rhizospl resence of Redu lecent Iron Reduct tunted or Stresse other (Explain in F	ates (B13) Odor (C1) heres along ced Iron (C- ction in Tille ed Plants (D Remarks)	Living Roof 4) d Soils (C6) 1) (LRR A)	ts (C3)	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)
Water M Sedime Drift De Algal Ma Iron De Surface Inundati Sparsel Field Obse Surface Wa Water Table Saturation F (includes ca	Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations: ter Present? e Present?	Yes 🖂 Yes 🖂 Yes 🖂	S	alt Crust (B11) quatic Invertebra ydrogen Sulfide lxidized Rhizospl resence of Redu lecent Iron Reduct tunted or Stresse other (Explain in F	ates (B13) Odor (C1) heres along ced Iron (C- ction in Tille ed Plants (D Remarks)	Living Roof 4) d Soils (C6) 1) (LRR A)	ts (C3)	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)
Water M Sedime Drift De Algal Ma Iron De Surface Inundati Sparsel Field Obse Surface Wa Water Table Saturation F (includes ca	Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations: ter Present? e Present? pullary fringe)	Yes 🖂 Yes 🔯 Yes 🔯 Yes 🔯	B7) C(B8) No Dep No Dep monitoring wa	alt Crust (B11) quatic Invertebra ydrogen Sulfide exidized Rhizosph resence of Redu ecent Iron Reduc tunted or Stresse ether (Explain in F	ates (B13) Odor (C1) heres along ced Iron (C- ction in Tille ed Plants (D Remarks)	Living Roof 4) d Soils (C6) 1) (LRR A)	ts (C3)	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)
Water M Sedime Drift De Algal Ma Iron De Surface Inundati Sparsel Field Obse Surface Wa Water Table Saturation F (includes ca	Marks (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B6) Int or Crust (B4) Int or Crust (B6) I	Yes 🖂 Yes 🔯 Yes 🔯 Yes 🔯	B7) C(B8) No Dep No Dep monitoring wa	alt Crust (B11) quatic Invertebra ydrogen Sulfide exidized Rhizosph resence of Redu ecent Iron Reduc tunted or Stresse ether (Explain in F	ates (B13) Odor (C1) heres along ced Iron (C- ction in Tille ed Plants (D Remarks)	Living Roof 4) d Soils (C6) 1) (LRR A)	ts (C3)	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)
Water M Sedime Drift De Algal Ma Iron De Surface Inundati Sparsel Field Obse Surface Wa Water Table Saturation F (includes ca	Marks (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B6) Int or Crust (B4) Int or Crust (B6) I	Yes 🖂 Yes 🔯 Yes 🔯 Yes 🔯	B7) C(B8) No Dep No Dep monitoring wa	alt Crust (B11) quatic Invertebra ydrogen Sulfide exidized Rhizosph resence of Redu ecent Iron Reduc tunted or Stresse ether (Explain in F	ates (B13) Odor (C1) heres along ced Iron (C- ction in Tille ed Plants (D Remarks)	Living Roof 4) d Soils (C6) 1) (LRR A)	ts (C3)	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)

Project/Site: Parcel 0217036009			City/Cou	nty: <u>City of Ro</u>	ру	Sampl	ing Date: <u>ma</u>	ıny
Applicant/Owner:					State: WA.	Sampl	ing Point: SI	P5
Investigator(s): Habitat Technologies				_ Section, To	ownship, Range:			
Landform (hillslope, terrace, etc.): terrace	e		Local re	elief (concave	, convex, none): rolling	1	Slope	e (%):
Subregion (LRR): A		_ Lat:			Long:		Datum:	
Soil Map Unit Name: Everette					NWI class	ification: we	ell	
Are climatic / hydrologic conditions on th	e site typical for this	s time of yea	ar? Yes	No □ (lf no, explain in Remarl	ks.)		
Are Vegetation, Soil, or Hy	drology sign	nificantly dis	turbed?	Are "N	ormal Circumstances"	present? Y	′es ⊠ No	
Are Vegetation, Soil, or Hy				(If need	ed, explain any answe	rs in Remar	·ks.)	
SUMMARY OF FINDINGS - At				ing point l	ocations, transec	cts, impo	rtant feat	ures, etc.
Hydrophytic Vegetation Present?	Yes⊠ No □							
Hydric Soil Present?	Yes ⊠ No □			the Sampled		1 Na 🗆		
Wetland Hydrology Present?	Yes ⊠ No 🗌		WI	itnin a vvetiai	nd? Yes ⊠	No □		
Remarks: Assessments completed 199	4, 2005-2008, sprir	ng 2012, spr	ing 2013	, summer-fall	2018, fall/winter 2021/	2022		
location in southeastern corner inside b	oundary of wetland							
VEGETATION – Use scientific	names of plant	ts.						
Tron Stratum (Diet size, 45ft radius)				nt Indicator	Dominance Test we	orksheet:		
<u>Tree Stratum</u> (Plot size: <u>15ft radius</u>) 1					Number of Dominan That Are OBL, FAC		3	(A)
Populus trichocarpa 3				FAC	Total Number of Dor Species Across All S		3	(B)
4		40	= Total		Percent of Dominant That Are OBL, FAC		<u>100%</u>	(A/B)
Sapling/Shrub Stratum (Plot size: 15ft	,							
1					Prevalence Index w			ov.
Cornus stolonifera					OBL species			
4					FACW species			
5					FAC species			
		80%	= Total	Cover	FACU species		(4 =	
Herb Stratum (Plot size: 15ft radius)				F40	UPL species			
		trace	no	<u>FACw</u>	Column Totals:	(۹)	(B)
carex obnupta					Prevalence Inc	dex = B/A =	:	
4					Hydrophytic Veget			<u> </u>
5					☐ Rapid Test for H	ydrophytic '	Vegetation	
6.						is >50%		
7					☐ Prevalence Inde	x is ≤3.0 ¹		
8 9					☐ Morphological A data in Rema	daptations¹ arks or on a	(Provide sup separate sh	pporting neet)
10					☐ Wetland Non-Va	ıscular Plan	ts ¹	
11.					☐ Problematic Hyd		•	. ,
Woody Vine Stratum (Plot size: 15ft ra		20	= Total	Cover	¹ Indicators of hydric be present, unless d			
1					Hydrophytic			
2					Vegetation		_	
% Bare Ground in Herb Stratum <u>%</u>			= Total	Cover	Present?	Yes ⊠ N	o 🗌	
Remarks: shallow depression								

Depth (inches)	Matrix Color (moist)	%	— Colo	Red or (moist)	ox Feature %		_Loc ² _	Texture	Remarks	
0-3	10YR 3/1			n (moiot)				Toxtaro	silty loam	
				D 4/0	45					
3-22	10YR 4/1	85	<u>10Y</u>	R 4/6	15	<u> </u>	M	-	silty gravelly sandy loam	
								-		
								-		
	Concentration, D=D						ed Sand G		² Location: PL=Pore Lining, M=Matrix.	
-	Indicators: (Appl	iicabie to				tea.)			cators for Problematic Hydric Soils ³ :	
☐ Histosol	` '			Sandy Redox (2 cm Muck (A10)	
	oipedon (A2) stic (A3)			Stripped Matrix Loamy Mucky	. ,	1) (ovcon	+ MI DA 1\		Red Parent Material (TF2) Very Shallow Dark Surface (TF12)	
	en Sulfide (A4)			Loamy Gleyed	•		LIVILNA I)		Other (Explain in Remarks)	
	d Below Dark Surfa	nce (A11)		Depleted Matri		-)		<u></u> Ч	other (Explain in Nemarks)	
	ark Surface (A12)	(00 () (111)		Redox Dark Su	. ,)		³ Indi	cators of hydrophytic vegetation and	
	/lucky Mineral (S1)			Depleted Dark					etland hydrology must be present,	
•	Gleyed Matrix (S4)			Redox Depres	•	,			nless disturbed or problematic.	
Restrictive	Layer (if present):									
Type:				=						
Depth (in	nches):			-				Hydric	Soil Present? Yes ⊠ No □	
Remarks: pr	rominent field indica	ators of h	ydric soil	ls.						
		•								
Wetland Hy	drology Indicator		uirod: ch	ock all that any	oly)			ç	ocondary Indicators (2 or more required)	
Wetland Hy Primary Indi	drology Indicator		uired; ch		•	voo (DO) (a	aveant MI F		econdary Indicators (2 or more required)	-
Wetland Hy Primary Indi ☑ Surface	rdrology Indicator cators (minimum o Water (A1)		uired; ch	☐ Water-Sta	ained Leav		except MLF		Water-Stained Leaves (B9) (MLRA 1,	-
Wetland Hy Primary Indi ☑ Surface ☐ High Wa	rdrology Indicator cators (minimum o Water (A1) ater Table (A2)		uired; ch	☐ Water-Sta	ained Leav		except MLF	RA [Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B)	-
Wetland Hy Primary Indi ☐ Surface ☐ High Wa ☐ Saturation	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3)		uired; ch	☐ Water-Sta 1, 2, 4 ☐ Salt Crus	ained Leav IA, and 4E t (B11)	3)	except MLF	RA [Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10)	-
Wetland Hy Primary Indi ☐ Surface ☐ High Wa ☐ Saturatio ☐ Water M	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1)		uired; ch	☐ Water-Sta 1, 2, 4 ☐ Salt Crusi ☐ Aquatic Ir	ained Leav IA, and 4E t (B11) nvertebrate	B) es (B13)	except MLF	RA [Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)	2,
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2)		uired; ch	☐ Water-Sta 1, 2, 4 ☐ Salt Crusi ☐ Aquatic Ir ☐ Hydrogen	ained Leav IA, and 4E t (B11) nvertebrate i Sulfide O	es (B13) dor (C1)		AA [Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C	2,
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3)		uired; ch	Water-Sta 1, 2, 4 Salt Crusi Aquatic Ir Hydrogen Oxidized	ained Leav IA, and 4E t (B11) nvertebrate i Sulfide O Rhizosphe	es (B13) dor (C1) eres along	Living Roo	RA Cots (C3)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2)	2,
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		uired; ch	Water-Sta 1, 2, 4 Salt Crusi Aquatic Ir Hydrogen Oxidized Presence	ained Leav IA, and 4E t (B11) nvertebrate Sulfide O Rhizosphe of Reduce	es (B13) dor (C1) eres along ed Iron (C	Living Roo 4)	ents (C3)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Ca) Geomorphic Position (D2) Shallow Aquitard (D3)	2,
Wetland Hy Primary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		uired; ch	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydrogen Oxidized Presence Recent Ire	ained Leav IA, and 4E t (B11) nvertebrate a Sulfide O Rhizosphe of Reduce	es (B13) dor (C1) eres along ed Iron (Coion in Tille	Living Roo 4) d Soils (C6	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Ca) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)	2,
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6)	f one requ		Water-Star 1, 2, 4 \[\] Salt Crusi \[\] Aquatic Ir \[\] Hydrogen \[\] Oxidized \[\] Presence \[\] Recent Ir \[\] Stunted o	ained Leav IA, and 4E t (B11) overtebrate a Sulfide O Rhizosphe of Reduce on Reduct or Stressed	es (B13) dor (C1) eres along ed Iron (Coion in Tille I Plants (D	Living Roo 4)	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Caracteristics) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)	2,
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria	f one requ	(B7)	Water-Star 1, 2, 4 \[\] Salt Crusi \[\] Aquatic Ir \[\] Hydrogen \[\] Oxidized \[\] Presence \[\] Recent Ir \[\] Stunted o	ained Leav IA, and 4E t (B11) nvertebrate a Sulfide O Rhizosphe of Reduce	es (B13) dor (C1) eres along ed Iron (Coion in Tille I Plants (D	Living Roo 4) d Soils (C6	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Ca) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)	2,
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca	f one requ	(B7)	Water-Star 1, 2, 4 \[\] Salt Crusi \[\] Aquatic Ir \[\] Hydrogen \[\] Oxidized \[\] Presence \[\] Recent Ir \[\] Stunted o	ained Leav IA, and 4E t (B11) overtebrate a Sulfide O Rhizosphe of Reduce on Reduct or Stressed	es (B13) dor (C1) eres along ed Iron (Coion in Tille I Plants (D	Living Roo 4) d Soils (C6	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Caracteristics) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)	2,
Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria or Vegetated Conca	f one requ I Imagery ve Surfac	(B7) be (B8)	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydrogen Oxidized Presence Recent Ir Stunted o	ained Leav IA, and 4E t (B11) overtebrate I Sulfide O Rhizosphe of Reduct on Reduct or Stressed	es (B13) dor (C1) eres along ed Iron (Coion in Tille I Plants (Demarks)	Living Roo 4) d Soils (C6	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Caracteristics) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)	2,
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria or Vegetated Conca	f one requ I Imagery ve Surfac Yes ⊠	(B7) te (B8)	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydrogen Oxidized Presence Recent Ir Stunted o Other (Ex	ained Leav IA, and 4E t (B11) nvertebrate a Sulfide O Rhizosphe of Reduce on Reduce r Stressed plain in Re	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D emarks)	Living Roo 4) d Soils (C6	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Caracteristics) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)	2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca	f one requ I Imagery ve Surfac	(B7) be (B8)	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydrogen Oxidized Presence Recent Ir Stunted o	ained Leav IA, and 4E t (B11) nvertebrate a Sulfide O Rhizosphe of Reduce on Reduce r Stressed plain in Re	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D emarks)	Living Roo 4) d Soils (C6	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Caracteristics) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)	2,
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations: ter Present? Present?	f one requ I Imagery ve Surfac Yes ⊠	(B7) te (B8)	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydrogen Oxidized Presence Recent Ir Stunted o Other (Ex	ained Leav IA, and 4E t (B11) nvertebrate I Sulfide O Rhizosphe of Reduct on Reduct or Stressed plain in Re	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D- emarks)	Living Roo 4) d Soils (C6 01) (LRR A	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Caracteristics) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)	2,
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations: ter Present?	I Imagery ve Surfac Yes ⊠ Yes ⊠ Yes ⊠	(B7) te (B8) No	Water-Start, 2, 4 1, 2, 4 Salt Crusi Aquatic Ir Hydrogen Oxidized Presence Recent Ir Stunted o Other (Ex	ained Leav IA, and 4E t (B11) nvertebrate a Sulfide O Rhizosphe of Reduce on Reduct or Stressed plain in Re es):	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D- emarks)	Living Roo 4) d Soils (C6 01) (LRR A	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)	2,
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations: ter Present? Present? Present? pillary fringe)	I Imagery ve Surfac Yes ⊠ Yes ⊠ Yes ⊠	(B7) te (B8) No	Water-Start, 2, 4 1, 2, 4 Salt Crusi Aquatic Ir Hydrogen Oxidized Presence Recent Ir Stunted o Other (Ex	ained Leav IA, and 4E t (B11) nvertebrate a Sulfide O Rhizosphe of Reduce on Reduct or Stressed plain in Re es):	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D- emarks)	Living Roo 4) d Soils (C6 01) (LRR A	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)	2,
Wetland Hy Primary Indi Surface High Wa Saturatic Water M Sedimer Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations: ter Present? Present? Present? pillary fringe)	l Imagery ve Surfac Yes ⊠ Yes ⊠ Yes ⊠	No N	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydrogen Oxidized Presence Recent Ir Stunted o Other (Ex Depth (inche Depth (inche	ained Leav IA, and 4E t (B11) nvertebrate a Sulfide O Rhizosphe of Reduce on Reduct or Stressed plain in Re es):	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D- emarks)	Living Roo 4) d Soils (C6 01) (LRR A	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)	2,
Wetland Hy Primary Indi Surface High Wa Saturatic Water M Sedimer Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations: ter Present? Present? pillary fringe) ecorded Data (streat	l Imagery ve Surfac Yes ⊠ Yes ⊠ Yes ⊠	No N	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydrogen Oxidized Presence Recent Ir Stunted o Other (Ex Depth (inche Depth (inche	ained Leav IA, and 4E t (B11) nvertebrate a Sulfide O Rhizosphe of Reduce on Reduct or Stressed plain in Re es):	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D- emarks)	Living Roo 4) d Soils (C6 01) (LRR A	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)	2,
Wetland Hy Primary Indi Surface High Wa Saturatic Water M Sedimer Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	rdrology Indicator cators (minimum or Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations: ter Present? Present? pillary fringe) ecorded Data (streat	l Imagery ve Surfac Yes ⊠ Yes ⊠ Yes ⊠	No N	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydrogen Oxidized Presence Recent Ir Stunted o Other (Ex Depth (inche Depth (inche	ained Leav IA, and 4E t (B11) nvertebrate a Sulfide O Rhizosphe of Reduce on Reduct or Stressed plain in Re es):	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D- emarks)	Living Roo 4) d Soils (C6 01) (LRR A	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)	2,

Applicant/Owner:		Oity, Ooai		-	_ Sampling Date: <u>ma</u>	шу
Applicant/Owner:				State: WA.	_ Sampling Point: <u>S</u> l	P6
Investigator(s): Habitat Technologies			_ Section, To	ownship, Range:		
Landform (hillslope, terrace, etc.): terrace		Local re	elief (concave	, convex, none): rolling	Slope	(%):
Subregion (LRR): A						
Soil Map Unit Name: Everette						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sign	-		·	ormal Circumstances" pre		П
Are Vegetation, Soil, or Hydrology natu	-			ed, explain any answers i		
SUMMARY OF FINDINGS – Attach site map			`		,	ures, etc.
Hydrophytic Vegetation Present? Yes ☐ No ☒		lo.	the Samples	I Aron		
Hydric Soil Present? Yes ☐ No ☒			the Sampled thin a Wetlar		No M	
Wetland Hydrology Present? Yes ☐ No ⊠				_		
Remarks: Assessments completed 1994, 2005-2008, sprii	•	J		2018, fall/winter 2021/20	22	
upland in southeastern portion of site. once managed past	ture now ove	ergrowing	9			
VEGETATION - Use scientific names of plan	ts.					
			nt Indicator	Dominance Test work	sheet:	
Tree Stratum (Plot size: 15ft radius)			s? Status	Number of Dominant S		
1. Alnus rubra			FAC	That Are OBL, FACW,	or FAC: 0	(A)
2. Prunue emarginata				Total Number of Domin		(D)
3				Species Across All Stra	ata: <u>3</u>	(B)
4	20			Percent of Dominant S		(A /D)
Sapling/Shrub Stratum (Plot size: 15ft radius)	20	- Total	OOVCI	That Are OBL, FACW,	or FAC: <u>0%</u>	(A/B)
1. Rubus laciniatus	40	yes	<u>FACU</u>	Prevalence Index wor	ksheet:	
2. Symphoricarpus albus	30	yes	<u>FACU</u>	Total % Cover of:	Multiply b	<u>oy:</u>
3. Berberis aquifolium	10	no	<u>UPL</u>	OBL species		
4				FACW species		
5				FAC species		
 Herb Stratum (Plot size: 15ft radius)	80%	= Total	Cover	FACU species		
Polystichum munitum	20	yes	FACU	UPL species Column Totals:	x 5 =	
2.		-		Column rotals.	(A)	(D)
3.				Prevalence Index	= B/A =	
4				Hydrophytic Vegetation	on Indicators:	
5				Rapid Test for Hydi	. ,	
6				Dominance Test is		
7		-		☐ Prevalence Index is		
8					ptations¹ (Provide su s or on a separate sh	
9				☐ Wetland Non-Vasc		,
10				☐ Problematic Hydrop	ohytic Vegetation¹ (E	xplain)
11			Cover	¹ Indicators of hydric soi		
Woody Vine Stratum (Plot size: 15ft radius)	20	= rotal	Cover	be present, unless distr	urbed or problematic	-
1				Thudway be 41 -		
2.				Hydrophytic Vegetation		
		= Total	Cover	•	s □ No ⊠	
% Bare Ground in Herb Stratum <u>%</u>		- i otai	00101			

	cription: (Describ	e to the	depth n				or confi	rm the al	bsence	e of indicators.)
Depth (inches)	Matrix Color (moist)	%	— Colo	Redo or (moist)	ox Features %		Loc ²	Textu	ıre	Remarks
0-16	10YR 3/2	100		or (moioty		1,700				gravelly sandy loam
	•									-
16-22	10YR 4/3	<u>100</u>	_				-			gravelly sandy loam
					_			_		
		_								
	oncentration, D=De Indicators: (Appl						ed Sand			cation: PL=Pore Lining, M=Matrix. ors for Problematic Hydric Soils ³ :
Histosol		icable to		Sandy Redox (.u.,				n Muck (A10)
	oipedon (A2)			Stripped Matrix						l Parent Material (TF2)
☐ Black His				Loamy Mucky N	` '	(except	MLRA	1) [y Shallow Dark Surface (TF12)
	n Sulfide (A4)			Loamy Gleyed						er (Explain in Remarks)
☐ Depleted	d Below Dark Surfa	ce (A11)		Depleted Matrix	(F3)					
	ark Surface (A12)			Redox Dark Su	. ,			3		ors of hydrophytic vegetation and
	lucky Mineral (S1)			Depleted Dark	,	7)				and hydrology must be present,
	Sleyed Matrix (S4) Layer (if present):			Redox Depress	ions (F8)				unles	ss disturbed or problematic.
Type:	Layer (II present):									
Depth (in				_				Llscol	wia Cail	I Drocomt 2 Voc 🗆 No 🕅
, ,	,	Р		-				пуа	ric Soil	I Present? Yes ☐ No ☒
Remarks. IN	O prominent field ir	idicators	or riyaric	S SOIIS.						
HYDROLO	GY									
Wetland Hy	drology Indicators	s:								
	cators (minimum of	one requ	uired; ch		• • • • • • • • • • • • • • • • • • • •					ndary Indicators (2 or more required)
l —	Water (A1)			☐ Water-Sta	ined Leave	s (B9) (e	xcept M	LRA	□ W	Vater-Stained Leaves (B9) (MLRA 1, 2,
l	iter Table (A2)				A, and 4B)					4A, and 4B)
Saturatio	,			Salt Crust	` '					Prainage Patterns (B10)
	arks (B1)			☐ Aquatic In		. ,				Ory-Season Water Table (C2)
	nt Deposits (B2)			Hydrogen						saturation Visible on Aerial Imagery (C9)
l ·	posits (B3)			Oxidized F	•	_	-	oots (C3)		Geomorphic Position (D2)
_	at or Crust (B4)			Presence				20)		Shallow Aquitard (D3)
1	osits (B5)			☐ Recent Iro						AC-Neutral Test (D5)
	Soil Cracks (B6)	lmagan	(D7)		Stressed F	,	1) (LKK	A)		Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
	on Visible on Aerial			☐ Other (Exp	olain in Rer	narks)				Tost-Heave Hummocks (D7)
Field Obser	Vegetated Concar	ve Suriac	е (Бо)							
Surface Wat		V00 🏻	Мо □	Donth (inches	٠).					
		Yes □	No 🗌	Depth (inche	•					
Water Table		Yes 🗌	No 🗌	Depth (inche	,			41		
Saturation P	resent? pillary fringe)	Yes 🗌	No 🗌	Depth (inche	s):		VVE	etiand Hy	arolog	yy Present? Yes □ No ⊠
Describe Re	corded Data (strea	m gauge	, monito	ring well, aerial	photos, pre	evious ins	spections	s), if availa	able:	
Remarks: No	o prominent field in	dicators of	of wetlar	nd hydrology. d	rains well					

Project/Site: Parcel 0217036009		(City/Coun	ty: <u>City of Ro</u>	ру	Samp	oling Date: <u>m</u>	ıany
Applicant/Owner:					State: WA.	Samp	oling Point: §	SP7
Investigator(s): Habitat Technologies				Section, To	ownship, Range:			
Landform (hillslope, terrace, etc.): terrace	e		Local reli	ief (concave	, convex, none): rolling	g	Slop	oe (%):
Subregion (LRR): A		_ Lat:			_ Long:		Datum	n:
Soil Map Unit Name: <u>Everette</u>					NWI class	sification: <u>w</u>	ell	
Are climatic / hydrologic conditions on the	e site typical for this	time of yea	ar? Yes ⊠		f no, explain in Rema	rks.)		
Are Vegetation, Soil, or Hy	drology sign	nificantly dist	turbed?	Are "No	ormal Circumstances"	present?	Yes ⊠ N	lo 🗌
Are Vegetation, Soil, or Hy				(If need	ed, explain any answe	ers in Rema	arks.)	
SUMMARY OF FINDINGS - At								atures, etc.
Hydrophytic Vegetation Present?	Yes ☐ No ☒							
Hydric Soil Present?	Yes ☐ No ☒			he Sampled		7 N 57		
Wetland Hydrology Present?	Yes ☐ No ⊠		Witi	hin a Wetlaı	nd? Yes L] No ⊠		
Remarks: Assessments completed 199	4, 2005-2008, sprin	g 2012, spr	ing 2013,	summer-fall	2018, fall/winter 2021	/2022		
upland in central portion of site. once m	nanaged pasture no	w overgrowi	ing					
VEGETATION – Use scientific	names of plant	ts.						
				t Indicator	Dominance Test w	orksheet:		
Tree Stratum (Plot size: 15ft radius)		% Cover			Number of Domina That Are OBL, FAC			(4)
Alnus rubra Thuja plicata		<u>10</u> <u>40</u>			That Are OBL, FAC	W, OI FAC.	<u> </u>	(A)
3			-		Total Number of Do Species Across All		4	(B)
4					'		<u>-T</u>	(5)
-	_	50	= Total (Cover	Percent of Dominar That Are OBL, FAC		50%	(A/B)
Sapling/Shrub Stratum (Plot size: 15ft	,							(' ' /
1. Rubus laciniatus			•		Prevalence Index			, by:
Acer cricinatum					OBL species			
4			-		FACW species			
5					FAC species			
		60%	= Total (Cover	FACU species		x 4 =	
Herb Stratum (Plot size: 15ft radius)					UPL species			
			yes	<u>FACU</u>	Column Totals:		(A)	(B)
2 3					Prevalence In	dex = B/A	=	
4					Hydrophytic Vege			
5					☐ Rapid Test for I	- - - - - - - - - - - - - - - - - - -	Vegetation	I
6.					☐ Dominance Tes	t is >50%		
7					☐ Prevalence Inde	ex is ≤3.0 ¹		
8					☐ Morphological A data in Rem			
9					☐ Wetland Non-V	ascular Pla	nts¹	
10 11					☐ Problematic Hy	drophytic V	egetation¹ (Explain)
		20	= Total (Cover	¹ Indicators of hydric be present, unless			
Woody Vine Stratum (Plot size: 15ft ra								
2.					Hydrophytic Vegetation			
_			= Total (Cover	Present?	Yes 🗌 🛚 I	No 🛛	
% Bare Ground in Herb Stratum <u>%</u>								
Remarks: once managed pasture now	overgrown							

Profile Desc					_					,
Depth (inches)	Matrix Color (moist)	%	— Colo	Redo or (moist)	<u>x Features</u> %		Loc ²	Texture	÷	Remarks
0-3	10YR 3/2	100		ii (iiioiot)		1,750				
					-	-	-	-		gravelly sandy loam
3-22	10YR 4/3	100	- —							gravelly sandy loam
		_								
	-									
	oncentration, D=De						ed Sand G			cation: PL=Pore Lining, M=Matrix.
-	Indicators: (Appl	icable to				a.)				ors for Problematic Hydric Soils ³ :
☐ Histosol	(A1) pipedon (A2)			Sandy Redox (S Stripped Matrix				님		n Muck (A10) Parent Material (TF2)
☐ Histic Ep				Loamy Mucky N	` '	(except	MLRA 1	,		Shallow Dark Surface (TF12)
	n Sulfide (A4)			Loamy Gleyed I		, (cateopa	,		-	er (Explain in Remarks)
	d Below Dark Surfa	ce (A11)		Depleted Matrix				_		,
☐ Thick Da	ark Surface (A12)			Redox Dark Su	rface (F6)			³ ln	dicato	ors of hydrophytic vegetation and
1	lucky Mineral (S1)			Depleted Dark S	•	7)				nd hydrology must be present,
	Sleyed Matrix (S4)			Redox Depress	ions (F8)				unles	s disturbed or problematic.
Type:	Layer (if present):									
Depth (in	ches):			-						
, ,	,			-				Hydric	Soil	Present? Yes ☐ No ☒
Remarks: No	O prominent field in	idicators (of hydric	soils.						
HYDROLO	GY									
HYDROLO Wetland Hy	GY drology Indicators	s:								
Wetland Hy			iired; ch	eck all that appl	ly)				Secor	ndary Indicators (2 or more required)
Wetland Hy	drology Indicators		iired; ch	eck all that app	• • • • • • • • • • • • • • • • • • • •	s (B9) (e	xcept ML			ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2
Wetland Hy Primary India ☐ Surface	drology Indicators		iired; ch	☐ Water-Stai	• • • • • • • • • • • • • • • • • • • •	s (B9) (e	xcept ML			
Wetland Hy Primary India ☐ Surface	drology Indicators cators (minimum of Water (A1) tter Table (A2)		iired; ch	☐ Water-Stai	ined Leave A, and 4B)	s (B9) (e	xcept ML		□ W	/ater-Stained Leaves (B9) (MLRA 1, 2
Wetland Hy Primary India □ Surface □ High Wa □ Saturatio	drology Indicators cators (minimum of Water (A1) tter Table (A2)		ired; ch	☐ Water-Stai	ned Leave A, and 4B) (B11)		xcept ML	RA	□ W	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hy Primary India Surface High Wa Saturatio Water M	drology Indicators cators (minimum of Water (A1) Iter Table (A2) on (A3)		iired; ch	☐ Water-Stai 1, 2, 4/	ined Leave A, and 4B) (B11) vertebrates	(B13)	xcept ML	RA	W Di	vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen	drology Indicators cators (minimum of Water (A1) Inter Table (A2) In (A3) In (B1)		ired; cho	☐ Water-State 1, 2, 4, ☐ Salt Crust ☐ Aquatic Inv	ined Leave A, and 4B) (B11) vertebrates Sulfide Odd	(B13) or (C1)		RA	□ W □ Di □ Di □ Si	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen Drift Dep	drology Indicators cators (minimum of Water (A1) hter Table (A2) on (A3) arks (B1) ht Deposits (B2)		tired; che	Water-Stai 1, 2, 4 Salt Crust Aquatic Inv	ined Leave A, and 4B) (B11) vertebrates Sulfide Odo Rhizosphere	(B13) or (C1) es along	Living Roo	RA ots (C3)	☐ W ☐ Di ☐ Di ☐ Si ☐ G	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma	drology Indicators cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3)		iired; chi	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F	ined Leave A, and 4B) (B11) vertebrates Sulfide Ode Rhizosphere of Reduced	(B13) or (C1) es along I Iron (C4	Living Roo	RA ots (C3)	□ W □ Di □ Di □ Si □ G	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma	drology Indicators cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4)		nired; che	Water-Stai 1, 2, 4 Salt Crust Aquatic Inv Hydrogen Oxidized F Presence	ned Leave A, and 4B) (B11) vertebrates Sulfide Odd Rhizosphere of Reduced n Reductio	(B13) or (C1) es along I Iron (C4 n in Tille	Living Roo l) d Soils (Co	RA ots (C3)	W Di Di Sa Si Si Si Si Ra	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface	drology Indicators cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (B1) Introduction (B2) Introduction (B2) Introduction (B3) Introduction (B4) Introduction (B4) Introduction (B5) Introduction (B6) In	one requ	(B7)	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence C Recent Iro	ined Leave A, and 4B) (B11) vertebrates Sulfide Odd Rhizosphere of Reduced n Reductio Stressed F	(B13) or (C1) es along I Iron (C4) n in Tille	Living Roo l) d Soils (Co	RA ots (C3)	W Di Di Sa Si Si Si Si Ra	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio	drology Indicators cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concar	one requ	(B7)	Water-Stai 1, 2, 4 Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Stunted or	ined Leave A, and 4B) (B11) vertebrates Sulfide Odd Rhizosphere of Reduced n Reductio Stressed F	(B13) or (C1) es along I Iron (C4) n in Tille	Living Roo l) d Soils (Co	RA ots (C3)	W Di Di Sa Si Si Si Si Ra	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	drology Indicators cators (minimum of Water (A1) Iter Table (A2) In (A3) In Deposits (B2) In Occits (B3) In or Crust (B4) In Occits (B5) Soil Cracks (B6) In Visible on Aerial In Vegetated Concaverations:	one required in the second sec	(B7) e (B8)	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence C Recent Iro Stunted or Other (Exp	ined Leave A, and 4B) (B11) vertebrates Sulfide Odd Rhizosphere of Reduced n Reductio Stressed F olain in Ren	(B13) or (C1) es along I Iron (C ² n in Tiller Plants (D narks)	Living Roo l) d Soils (Co	RA ots (C3)	W Di Di Sa Si Si Si Si Ra	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser	drology Indicators cators (minimum of Water (A1) Iter Table (A2) In (A3) In Deposits (B2) In Deposits (B3) In or Crust (B4) In Original (B5) In Visible on Aerial In Vegetated Concautations: Iter Present?	one required in the second sec	(B7) e (B8) No □	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp	ined Leave A, and 4B) (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reductio Stressed Folain in Ren	(B13) or (C1) es along I Iron (C ² n in Tillee Plants (D narks)	Living Roo l) d Soils (Co	RA ots (C3)	W Di Di Sa Si Si Si Si Ra	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	drology Indicators cators (minimum of Water (A1) Iter Table (A2) In (A3) In Deposits (B2) In Deposits (B3) In or Crust (B4) In Original (B5) In Visible on Aerial In Vegetated Concautations: Iter Present?	one required in the second sec	(B7) e (B8)	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence C Recent Iro Stunted or Other (Exp	ined Leave A, and 4B) (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reductio Stressed Folain in Ren	(B13) or (C1) es along I Iron (C ² n in Tillee Plants (D narks)	Living Roo l) d Soils (Co	RA ots (C3)	W Di Di Sa Si Si Si Si Ra	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P	drology Indicators cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B1) Intro Deposits (B2) Intro Crust (B4) Intro Crust (B4) Intro Crust (B4) Intro Crust (B6) Intro	one required in the second sec	(B7) e (B8) No □	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp	ined Leave A, and 4B) (B11) vertebrates Sulfide Odd Rhizosphere of Reduced n Reductio Stressed F olain in Ren	(B13) or (C1) es along I Iron (C ² n in Tiller Plants (D narks)	Living Roo i) d Soils (Co 1) (LRR A	ots (C3) 6)	☐ W ☐ Di ☐ Si ☐ Gi ☐ Si ☐ Fr	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes cap	drology Indicators cators (minimum of Water (A1) Iter Table (A2) In (A3) In Deposits (B2) In Ocitic (B3) In or Crust (B4) In Ocitic (B5) In Visible on Aerial In Vegetated Concavitations: Iter Present? Itersent? Itersent. Iters	Imagery ve Surfac Yes Yes Yes Yes Yes Yes Yes	(B7) e (B8) No No No No No No No No	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp	ined Leave A, and 4B) (B11) vertebrates Sulfide Odd Rhizosphere of Reduced n Reductio Stressed F olain in Ren s): s):	(B13) or (C1) es along I Iron (C ² n in Tillee Plants (D narks)	Living Roots d Soils (Color) (LRR A	ots (C3) 6) A)	☐ W ☐ Di ☐ Si ☐ G ☐ Si ☐ F/ ☐ Ri ☐ Fr	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes cap	drology Indicators cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B1) Intro Deposits (B2) Intro Crust (B4) Intro Crust (B4) Intro Crust (B4) Intro Crust (B6) Intro	Imagery ve Surfac Yes Yes Yes Yes Yes Yes Yes	(B7) e (B8) No No No No No No No No	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp	ined Leave A, and 4B) (B11) vertebrates Sulfide Odd Rhizosphere of Reduced n Reductio Stressed F olain in Ren s): s):	(B13) or (C1) es along I Iron (C ² n in Tillee Plants (D narks)	Living Roots d Soils (Color) (LRR A	ots (C3) 6) A)	☐ W ☐ Di ☐ Si ☐ G ☐ Si ☐ F/ ☐ Ri ☐ Fr	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes cap Describe Re	drology Indicators cators (minimum of Water (A1) Iter Table (A2) In (A3) In Deposits (B2) In Toust (B4) In Or Crust (B4) In Osits (B5) Soil Cracks (B6) In Visible on Aerial In Vegetated Concar Vations: Iter Present? Iter Present Present? Iter Present Present Present? Iter Present	Imagery ve Surfac Yes Yes Yes Yes m gauge,	(B7) e (B8) No No No No monitor	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence C Recent Iro Stunted or Other (Exp Depth (inches Depth (inches	ined Leave A, and 4B) (B11) vertebrates Sulfide Odd Rhizosphere of Reduced n Reductio Stressed F olain in Ren s): s): photos, pre	(B13) or (C1) es along I Iron (C ² n in Tillee Plants (D narks)	Living Roots d Soils (Color) (LRR A	ots (C3) 6) A)	☐ W ☐ Di ☐ Si ☐ G ☐ Si ☐ F/ ☐ Ri ☐ Fr	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes cap Describe Re	drology Indicators cators (minimum of Water (A1) Iter Table (A2) In (A3) In Deposits (B2) In Ocitic (B3) In or Crust (B4) In Ocitic (B5) In Visible on Aerial In Vegetated Concavitations: Iter Present? Itersent? Itersent. Iters	Imagery ve Surfac Yes Yes Yes Yes m gauge,	(B7) e (B8) No No No No monitor	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence C Recent Iro Stunted or Other (Exp Depth (inches Depth (inches	ined Leave A, and 4B) (B11) vertebrates Sulfide Odd Rhizosphere of Reduced n Reductio Stressed F olain in Ren s): s): photos, pre	(B13) or (C1) es along I Iron (C ² n in Tillee Plants (D narks)	Living Roots d Soils (Color) (LRR A	ots (C3) 6) A)	☐ W ☐ Di ☐ Si ☐ G ☐ Si ☐ F/ ☐ Ri ☐ Fr	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes cap Describe Re	drology Indicators cators (minimum of Water (A1) Iter Table (A2) In (A3) In Deposits (B2) In Toust (B4) In Or Crust (B4) In Osits (B5) Soil Cracks (B6) In Visible on Aerial In Vegetated Concar Vations: Iter Present? Iter Present Present? Iter Present Present Present? Iter Present	Imagery ve Surfac Yes Yes Yes Yes m gauge,	(B7) e (B8) No No No No monitor	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence C Recent Iro Stunted or Other (Exp Depth (inches Depth (inches	ined Leave A, and 4B) (B11) vertebrates Sulfide Odd Rhizosphere of Reduced n Reductio Stressed F olain in Ren s): s): photos, pre	(B13) or (C1) es along I Iron (C ² n in Tillee Plants (D narks)	Living Roots d Soils (Color) (LRR A	ots (C3) 6) A)	☐ W ☐ Di ☐ Si ☐ G ☐ Si ☐ F/ ☐ Ri ☐ Fr	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)

Project/Site: Parcel 0217036009	!	City/Co	ounty	: City of Ro	ру	Samp	ling Date: <u>many</u>	
Applicant/Owner:					State: WA.	Samp	ling Point: SP8	
Investigator(s): Habitat Technologies				Section, To	ownship, Range:			
Landform (hillslope, terrace, etc.): terrace		_Local	relie	f (concave	, convex, none): rolling		Slope (%):
Subregion (LRR): A	_ Lat:				Long:		Datum:	
Soil Map Unit Name: Everette					NWI classifica	tion: we	ell	
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ar? Yes	s 🏻	No ☐ (I	lf no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology sign	nificantly dis	turbed	?	Are "No	ormal Circumstances" pres	ent? `	Yes ⊠ No □	
Are Vegetation, Soil, or Hydrology natu	urally probler	matic?		(If need	ed, explain any answers in	Rema	ırks.)	
SUMMARY OF FINDINGS – Attach site map	showing	samp	oling	g point l	ocations, transects,	impo	ortant feature	es, etc.
Hydrophytic Vegetation Present? Yes ⊠ No □				_				
Hydric Soil Present? Yes ⊠ No □				e Sampled in a Wetlaı		۰ –		
Wetland Hydrology Present? Yes ⊠ No □		'	WILIII	in a vveuai	nd? Yes ⊠ N	υП		
Remarks: Assessments completed 1994, 2005-2008, sprir	ng 2012, spr	ing 201	13, s	ummer-fall	2018, fall/winter 2021/202	2		
excavated pond in very southeastern corner of site								
VEGETATION – Use scientific names of plan	ts.							
-	Absolute				Dominance Test works	heet:		
Tree Stratum (Plot size: 15ft radius)	% Cover				Number of Dominant Sp			
1. Pyrus fusca					That Are OBL, FACW, o	r FAC:	2	(A)
2 3					Total Number of Domina		2	(B)
4					Species Across All Strat	а.	2	(D)
Sapling/Shrub Stratum (Plot size: 15ft radius)	40				Percent of Dominant Sp That Are OBL, FACW, o		100%	(A/B)
1. Cornus stolonifera	60	yes		FACW	Prevalence Index work	sheet:		
2					Total % Cover of:		Multiply by:	
3					OBL species			
4					FACW species			
5					FAC species			
Herb Stratum (Plot size: 15ft radius)	60%	= Tot	al Co	over	FACU species UPL species			
1					Column Totals:			
2					Column Totals.	\		(b)
3					Prevalence Index			
4					Hydrophytic Vegetatio			
5					Rapid Test for Hydro		Vegetation	
6					□ Dominance Test is > □			
7					Prevalence Index is		1 (Duanida anna	
8					☐ Morphological Adap data in Remarks			
9					☐ Wetland Non-Vascu	lar Plar	nts ¹	
10 11					☐ Problematic Hydropl	nytic Ve	egetation¹ (Expla	ain)
		= Tot	al Co	over	¹ Indicators of hydric soil			must
Woody Vine Stratum (Plot size: 15ft radius)					be present, unless distu	rbea or	problematic.	
1					Hydrophytic			
2			 al C		Vegetation Present? Yes	s 🖂 N	No □	
% Bare Ground in Herb Stratum <u>%</u>		- 101	ai C	J V C I	100	<u> </u>	ப	
Remarks: excavated pond								

Depth	•		•						nce of indicators.)
l ,, ', \	Matrix	2/			<u>x Feature</u>		. 2		
(inches)	Color (moist)	%	Colo	r (moist)	%	Type	Loc ²	Texture	Remarks
0-3	10YR 2/1	100			_				gravelly sandy loam
3-22	10YR 4/1	90	10YF	R 4/6	10	С	<u>M</u>		gravelly sandy loam
		-							
		_			_				
		_							
		_			_				
	oncentration, D=De						ed Sand Gra		² Location: PL=Pore Lining, M=Matrix.
-	Indicators: (Applic	cable to				ed.)			cators for Problematic Hydric Soils ³ :
Histosol	· ·			Sandy Redox (2 cm Muck (A10)
	ipedon (A2)			Stripped Matrix	` '	1) (MI DA 4\		Red Parent Material (TF2)
☐ Black His	n Sulfide (A4)			.oamy Mucky N .oamy Gleyed			(WILKA 1)		/ery Shallow Dark Surface (TF12) Other (Explain in Remarks)
	ii Suilide (A4) I Below Dark Surfac	ρ(Δ11)		Depleted Matrix		.)			Differ (Explain in Remarks)
	irk Surface (A12)	e (ATT)		Redox Dark Su				³ Indi	cators of hydrophytic vegetation and
	lucky Mineral (S1)			Depleted Dark	. ,				retland hydrology must be present,
	leyed Matrix (S4)			Redox Depress	•	.,			nless disturbed or problematic.
	Layer (if present):			· · · · · · · · · · · · · · · · · · ·	()				'
Type:									
Depth (inc	ches):							Hydric	Soil Present? Yes ⊠ No □
Remarks: nr	rominent field indica	tors of hy	ıdric soi	le				1 ,	
rtomanto. pi	ommone nord marca	1010 01 11)	, and con						
HYDROLO	GY								
Wetland Hy	drology Indicators	:							
Primary India	cators (minimum of	one requi	ired; che	eck all that app	ly)			Se	econdary Indicators (2 or more required)
☐ Surface \	Water (A1)			☐ Water-Sta	ined I eav	es (B9) (e	xcept MLR		Water-Stained Leaves (B9) (MLRA 1, 2,
	ter Table (A2)				A, and 4B			_	4A, and 4B)
☐ Saturation	,			☐ Salt Crust	•	,			Drainage Patterns (B10)
☐ Water Ma	` '			☐ Aquatic In	` '	s (B13)			Dry-Season Water Table (C2)
	it Deposits (B2)			☐ Hydrogen		` '			Saturation Visible on Aerial Imagery (C9)
	oosits (B3)						Living Root	ts (C3) □	Geomorphic Position (D2)
	t or Crust (B4)			☐ Presence		_	_	(00) <u> </u>	Shallow Aquitard (D3)
	osits (B5)					•	t) d Soils (C6)	, –	FAC-Neutral Test (D5)
	Soil Cracks (B6)						1) (LRR A)		Raised Ant Mounds (D6) (LRR A)
	on Visible on Aerial	lmagery ((B7)	Other (Exp			1) (L IXIX A)		Frost-Heave Hummocks (D7)
	Vegetated Concav				, , , , , , , , , , , , , , , , , , ,	mamoj			Treat reave riammente (57)
Field Obser		- Carrace	(50)						
Surface Water		∕es ⊠	No 🗌	Denth (inche	e).				
		_		Depth (inche					
	riesent?		No 🗌	Depth (inche	,				Is my Duncanto V M N D
Water Table			No 🗌	Depth (inche	s):		wetia	ana Hyaro	logy Present? Yes ⊠ No □
Water Table Saturation P		∕es ⊠	_						
Water Table Saturation P	oillary fringe)			ing well, aerial	photos, p	revious in	spections), i	if available	:
Water Table Saturation P				ing well, aerial	photos, p	revious ins	spections), i	if available	:
Water Table Saturation P (includes cap Describe Re	oillary fringe) corded Data (strean	n gauge,	monitor						:
Water Table Saturation P (includes cap Describe Re	oillary fringe)	n gauge,	monitor						:
Water Table Saturation P (includes cap Describe Re	oillary fringe) corded Data (strean	n gauge,	monitor						:
Water Table Saturation P (includes cap Describe Rec	oillary fringe) corded Data (strean	n gauge,	monitor						:

Project/Site: Parcel 0217036009	City/County: <u>City of Roy</u> Sampling Date: <u>many</u>					
Applicant/Owner:				State: WA.	Sampling Point: SP9	
Investigator(s): Habitat Technologies			Section, To	ownship, Range:		
Landform (hillslope, terrace, etc.): terrace		_Local reli	ef (concave	, convex, none): rolling	Slope (%):	
Subregion (LRR): A	Lat:			Long:	Datum:	
Soil Map Unit Name: Everette				NWI classifica	tion: well	
Are climatic / hydrologic conditions on the site typical for thi						
Are Vegetation, Soil, or Hydrology sig	•		•	ormal Circumstances" pres		
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers ir		
SUMMARY OF FINDINGS – Attach site map			`	, ,	,	
Hydrophytic Vegetation Present? Yes ☐ No ☒		le ti	ne Sampled	LAroa	_	
Hydric Soil Present? Yes ☐ No ☒			nin a Wetlaı		o 🕅	
Wetland Hydrology Present? Yes ☐ No ☒				_	_	
Remarks: Assessments completed 1994, 2005-2008, spri	ng 2012, spr	ring 2013,	summer-fall	2018, fall/winter 2021/202	2	
southern portion of site						
VEGETATION – Use scientific names of plan	ts.					
	Absolute	Dominan	t Indicator	Dominance Test works	sheet:	
Tree Stratum (Plot size: 15ft radius) 1	% Cover			Number of Dominant Sp That Are OBL, FACW, o		
2				Total Number of Domina	ant	
3				Species Across All Strat	a: <u>2</u> (B)	
4		= Total 0		Percent of Dominant Sp That Are OBL, FACW, o		
Sapling/Shrub Stratum (Plot size: 15ft radius)						
1. Alnus rubra	10			Prevalence Index work		
2. Oemleria cerasiformis	<u>10</u>			Total % Cover of:	<u>Multiply by:</u> x 1 =	
Acer circinatum Rubus armeniacus	<u>10</u> 35				x 2 =	
Rubus laciniatus	35				x 3 =	
- Constant in the contract of	100%			·	x 4 =	
Herb Stratum (Plot size: 15ft radius)				UPL species	x 5 =	
1				I and the second	(A) (B)	
2				Dravalance Index	= B/A =	
3				Hydrophytic Vegetatio		
4				Rapid Test for Hydro		
5				Dominance Test is >	. ,	
6				☐ Prevalence Index is		
7 8				☐ Morphological Adap	tations ¹ (Provide supporting	
9.				data in Remarks	or on a separate sheet)	
10				Wetland Non-Vascu		
11.				-	hytic Vegetation¹ (Explain)	
Woody Vine Stratum (Plot size: 15ft radius)		= Total (Cover	¹Indicators of hydric soil be present, unless distu	and wetland hydrology must rbed or problematic.	
1				Lhadron books		
2				Hydrophytic Vegetation		
		= Total C	Cover	•	s □ No ⊠	
% Bare Ground in Herb Stratum <u>%</u> Remarks: once managed pasture now overgrowing						
Training of Public Homosoff Comming						

Depth	Matrix (mariet)	%		Redox Features r (moist) % Ty	pe¹Loc²	T	Develop
(inches)	Color (moist)					rexture	
0-18	10YR 3/2	<u>100</u>	_				gravelly sandy loam
<u>18-22</u>	10YR 4/4	<u> 100</u>					gravelly sandy loam
			_				
		_	_	· · · · · · · · · · · · · · · · · · ·			
			_				
				uced Matrix, CS=Covered or			² Location: PL=Pore Lining, M=Matrix.
_		cable to		s, unless otherwise noted.)			dicators for Problematic Hydric Soils ³ :
Histosol	, ,			Sandy Redox (S5)			2 cm Muck (A10)
	pipedon (A2)			Stripped Matrix (S6) ₋oamy Mucky Mineral (F1) (e)	voont MI DA 1		Red Parent Material (TF2) Very Shallow Dark Surface (TF12)
	istic (A3) en Sulfide (A4)			Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2)	xcept wilka 1,) <u> </u>	, ,
	d Below Dark Surfac	ce (A11)		Depleted Matrix (F3)		Ш	Other (Explain in Remarks)
	ark Surface (A12)	JC (A11)		Redox Dark Surface (F6)		³ In	dicators of hydrophytic vegetation and
	Mucky Mineral (S1)			Depleted Dark Surface (F7)			wetland hydrology must be present,
	Gleyed Matrix (S4)			Redox Depressions (F8)			unless disturbed or problematic.
Restrictive	Layer (if present):						
Type:							
Depth (ir	nches):					Hydri	c Soil Present? Yes ☐ No ⊠
Remarks: N	IO prominent field in	dicators	of hydric	soils.			
_	drology Indicators		irod, ob	and all that apply)			Secondary Indicators (2 or more required)
Wetland Hy	drology Indicators icators (minimum of		uired; che		20) / ava art MI		Secondary Indicators (2 or more required)
Wetland Hy Primary Indi ☐ Surface	ydrology Indicators icators (minimum of Water (A1)		uired; che	☐ Water-Stained Leaves (B	39) (except ML		☐ Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi Surface High Wa	ydrology Indicators icators (minimum of Water (A1) ater Table (A2)		uired; che	☐ Water-Stained Leaves (B 1, 2, 4A, and 4B)	39) (except ML	RA	☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hy Primary Indi ☐ Surface ☐ High Wa ☐ Saturation	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3)		uired; che	☐ Water-Stained Leaves (B 1, 2, 4A, and 4B) ☐ Salt Crust (B11)		RA	 Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Wetland Hy Primary Indi Surface High Wa Saturati Water M	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1)		uired; che	☐ Water-Stained Leaves (B 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B1	13)	RA	 Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimen	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)		uired; cho	☐ Water-Stained Leaves (B 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B1 ☐ Hydrogen Sulfide Odor (6	13) C1)	RA	 Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift De	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)		uired; che	 Water-Stained Leaves (B 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B1 Hydrogen Sulfide Odor (C Oxidized Rhizospheres a 	13) C1) along Living Ro	RA ots (C3)	 □ 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)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimet Drift Dep	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		uired; che	 Water-Stained Leaves (B 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B1 Hydrogen Sulfide Odor (C Oxidized Rhizospheres a Presence of Reduced Iro 	13) C1) along Living Roon (C4)	RA ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Dep Algal Ma	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		uired; che	 □ Water-Stained Leaves (B 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B1 □ Hydrogen Sulfide Odor (C □ Oxidized Rhizospheres at □ Presence of Reduced Iro □ Recent Iron Reduction in 	13) C1) along Living Roo on (C4) ı Tilled Soils (C	RA ots (C3)	 □ 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)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	one requ		 □ Water-Stained Leaves (B 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B1 □ Hydrogen Sulfide Odor (C □ Oxidized Rhizospheres a □ Presence of Reduced Iro □ Recent Iron Reduction in □ Stunted or Stressed Plan 	13) C1) along Living Roo on (C4) Tilled Soils (Conts (D1) (LRR A	RA ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial	one requ	(B7)	 □ Water-Stained Leaves (B 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B1 □ Hydrogen Sulfide Odor (C □ Oxidized Rhizospheres at □ Presence of Reduced Iro □ Recent Iron Reduction in 	13) C1) along Living Roo on (C4) Tilled Soils (Conts (D1) (LRR A	RA ots (C3)	 □ 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)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimel Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial y Vegetated Concav	one requ	(B7)	 □ Water-Stained Leaves (B 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B1 □ Hydrogen Sulfide Odor (C □ Oxidized Rhizospheres a □ Presence of Reduced Iro □ Recent Iron Reduction in □ Stunted or Stressed Plan 	13) C1) along Living Roo on (C4) Tilled Soils (Conts (D1) (LRR A	RA ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial y Vegetated Concav rvations:	Imagery	(B7) e (B8)	Water-Stained Leaves (B	13) C1) along Living Roon (C4) i Tilled Soils (Cints (D1) (LRR A	RA ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely Field Obser	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial y Vegetated Concav rvations: tter Present?	Imagery	(B7) de (B8) No ⊠	Water-Stained Leaves (B	13) C1) along Living Room (C4) a Tilled Soils (Conts (D1) (LRR A	RA ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimel Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Water Table	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial y Vegetated Concav rvations: ater Present?	Imagery re Surface Yes Yes Yes	(B7) te (B8) No ⊠ No ⊠	Water-Stained Leaves (B	13) C1) along Living Room on (C4) Tilled Soils (Conts (D1) (LRR A	ots (C3) 6)	 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)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Wa Water Table Saturation F	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial y Vegetated Concav rvations: ater Present? Present?	Imagery	(B7) de (B8) No ⊠	Water-Stained Leaves (B	13) C1) along Living Room on (C4) Tilled Soils (Conts (D1) (LRR A	ots (C3) 6)	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obset Surface Wa Water Table Saturation F (includes ca	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial y Vegetated Concaverations: ater Present? Present? Present? apillary fringe)	Imagery re Surface Yes Yes Yes Yes Yes	(B7) ee (B8) No ⊠ No ⊠ No ⊠	Water-Stained Leaves (B	13) C1) along Living Roon (C4) Tilled Soils (Conts (D1) (LRR A	ots (C3) 6) A)	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obset Surface Wa Water Table Saturation F (includes ca	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial y Vegetated Concaverations: ater Present? Present? Present? apillary fringe)	Imagery re Surface Yes Yes Yes Yes Yes	(B7) ee (B8) No ⊠ No ⊠ No ⊠	Water-Stained Leaves (B	13) C1) along Living Roon (C4) Tilled Soils (Conts (D1) (LRR A	ots (C3) 6) A)	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely Field Obser Surface Water Table Saturation F (includes can Describe Re	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial y Vegetated Concaverations: ater Present? Present? Present? apillary fringe)	Imagery ye Surfac Yes Yes Yes Yes The gauge	(B7) se (B8) No ⊠ No ⊠ No ⊠ No ⊠		13) C1) along Living Roon (C4) Tilled Soils (Conts (D1) (LRR A	ots (C3) 6) A)	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Water Table Saturation F (includes ca	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial y Vegetated Concav rvations: ater Present? Present? Present? apillary fringe) ecorded Data (strean	Imagery ye Surfac Yes Yes Yes Yes The gauge	(B7) se (B8) No ⊠ No ⊠ No ⊠ No ⊠		13) C1) along Living Roon (C4) Tilled Soils (Conts (D1) (LRR A	ots (C3) 6) A)	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Water Table Saturation F (includes ca	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial y Vegetated Concav rvations: ater Present? Present? Present? apillary fringe) ecorded Data (strean	Imagery ye Surfac Yes Yes Yes Yes The gauge	(B7) se (B8) No ⊠ No ⊠ No ⊠ No ⊠		13) C1) along Living Roon (C4) Tilled Soils (Conts (D1) (LRR A	ots (C3) 6) A)	Water-Stained Leaves (B9) (MLRA 1, 2,

Project/Site: Parcel 0217036009		City/Cou	inty: City of Ro	ру	Sampling Date:many
Applicant/Owner:				State: WA.	Sampling Point: SP14
Investigator(s): Habitat Technologies			Section, To	ownship, Range:	
Landform (hillslope, terrace, etc.): terrace		Local re	elief (concave,	, convex, none): rolling	Slope (%):
Subregion (LRR): A					
Soil Map Unit Name: Everette					
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology sign	-		•	ormal Circumstances" pres	
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in	
SUMMARY OF FINDINGS – Attach site map					•
Hydrophytic Vegetation Present? Yes ☐ No ☒					
Hydric Soil Present? Yes □ No ☒			the Sampled		
Wetland Hydrology Present? Yes ☐ No ☒		w	ithin a Wetlar	nd? Yes □ N	3 <u>X</u>
Remarks: Assessments completed 1994, 2005-2008, sprin	ng 2012, spr	ing 2013	3, summer-fall	2018, fall/winter 2021/202	2
once pasture woodlot in northcentral part of site					
VEGETATION – Use scientific names of plan	ts.				
			ant Indicator	Dominance Test works	sheet:
Tree Stratum (Plot size: 15ft radius)			s? Status	Number of Dominant Sp	
Pseudotsuga menziesii			FACU_	That Are OBL, FACW, o	r FAC: <u>1</u> (A)
2. Quercus garryana			<u>UPL</u>	Total Number of Domina	
3				Species Across All Strat	a: <u>2</u> (B)
7.	100			Percent of Dominant Sp That Are OBL, FACW, o	
Sapling/Shrub Stratum (Plot size: 15ft radius)	<u></u>		. ••••	That Are OBL, PACW, 0	1 FAC. <u>50%</u> (A/B)
1. Corylus cornuts			<u>FACU</u>	Prevalence Index work	
2. Symphoricarpus albus				Total % Cover of:	
3					x 1 =
4. Rubus armeniacus			FAC		x 2 =
5. Rubus laciniatus	35 100%	_	<u>FACU</u>		x 3 = x 4 =
Herb Stratum (Plot size: 15ft radius)	100%	- 10ta	Cover	UPL species	
1				-	(A) (B)
2					
3					= B/A =
4				Hydrophytic Vegetation	
5				Rapid Test for Hydro	· ·
6				☐ Dominance Test is > ☐ Prevalence Index is	
7					tations¹ (Provide supporting
8					or on a separate sheet)
9 10				☐ Wetland Non-Vascu	lar Plants ¹
11.				☐ Problematic Hydropl	nytic Vegetation¹ (Explain)
			l Cover	¹ Indicators of hydric soil be present, unless distu	and wetland hydrology must
Woody Vine Stratum (Plot size: 15ft radius)				be present, unless distu	bed of problematic.
1				Hydrophytic	
2				Vegetation	. □ Na □
% Bare Ground in Herb Stratum <u>%</u>		= Tota	l Cover	Present? Yes	s □ No ⊠
Remarks: once managed pasture now overgrowing				I .	

	cription: (Describ	e to the	depth n				or confi	rm the ab	sence	of indicators.)
Depth (inches)	Matrix Color (moist)	%	— Colo	Redo or (moist)	ox Features %		Loc2	Textu	re	Remarks
0-6	10YR 3/2	100		or (moior)		1,750				
							-	_		gravelly sandy loam
6-22	10YR 4/4	100						-		gravelly sandy loam
	-							_		
	-									_
		_						_		
		_	_					_		
	oncentration, D=De						ed Sand			cation: PL=Pore Lining, M=Matrix.
-	Indicators: (Appl	icable to				a.)				ors for Problematic Hydric Soils ³ :
☐ Histosol	(A1) pipedon (A2)			Sandy Redox (Stripped Matrix				Ļ		n Muck (A10) l Parent Material (TF2)
Black Hi				Loamy Mucky N	` '	(except	MLRA 1	1) [y Shallow Dark Surface (TF12)
	n Sulfide (A4)			Loamy Gleyed		(CACC)		_	-	er (Explain in Remarks)
	d Below Dark Surfa	ce (A11)		Depleted Matrix				_	_	,
☐ Thick Da	ark Surface (A12)			Redox Dark Su	rface (F6)			3	ndicate	ors of hydrophytic vegetation and
	lucky Mineral (S1)			Depleted Dark	•	7)				and hydrology must be present,
	Gleyed Matrix (S4)			Redox Depress	ions (F8)				unles	ss disturbed or problematic.
Type:	Layer (if present):									
Depth (in	ches):			_						
, ,	,			_				Hydi	ic Soil	I Present? Yes □ No ⊠
Remarks: No	O prominent field ir	ndicators	of hydric	c soils.						
HYDROLO	GY									
Wetland Hy	drology Indicator	s:								
Primary Indi	cators (minimum of	one requ	uired; ch	eck all that app	ly)				Seco	ndary Indicators (2 or more required)
☐ Surface	Water (A1)			☐ Water-Sta	ined Leave	s (B9) (e	xcept M	LRA	□ W	Vater-Stained Leaves (B9) (MLRA 1, 2,
☐ High Wa	iter Table (A2)			1, 2, 4	A, and 4B)					4A, and 4B)
☐ Saturation	on (A3)			☐ Salt Crust	(B11)					rainage Patterns (B10)
☐ Water M	arks (B1)			☐ Aquatic In	vertebrates	(B13)				ry-Season Water Table (C2)
☐ Sedimer	nt Deposits (B2)			☐ Hydrogen	Sulfide Ode	or (C1)			□s	aturation Visible on Aerial Imagery (C9)
☐ Drift Dep	oosits (B3)			Oxidized F	Rhizosphere	es along	Living Ro	oots (C3)	□G	Seomorphic Position (D2)
☐ Algal Ma	at or Crust (B4)			☐ Presence	of Reduced	I Iron (C	1)		□ s	hallow Aquitard (D3)
☐ Iron Dep	oosits (B5)			☐ Recent Iro	n Reductio	n in Tille	d Soils (0	C6)	□ F.	AC-Neutral Test (D5)
	Soil Cracks (B6)			☐ Stunted or	Stressed F	Plants (D	1) (LRR	A)		taised Ant Mounds (D6) (LRR A)
	on Visible on Aeria			☐ Other (Exp	olain in Ren	narks)			□ F	rost-Heave Hummocks (D7)
	Vegetated Conca	ve Surfac	e (B8)							
Field Obser										
Surface Wat		Yes 🗌	No 🛚	Depth (inche						
Water Table	Present?	Yes 🗌	No 🛚	Depth (inche	s):					
Saturation P		Yes	No 🛚	Depth (inche	s):		We	etland Hy	drolog	y Present? Yes ☐ No ⊠
Describe Re	pillary fringe) corded Data (strea	m gauge	monito	ring well. aerial	photos, pre	vious ins	spections	s), if availa	ıble:	
		390	, c.mo	, aonai	,, pro		,	,,		
Remarks: N	O prominent field ir	ndicators	of wetla	nd hydrology						
	. ,			,						

Project/Site: Parcel 0217036009		City/Count	y: City of Ro	ру	Sampling Date:many
Applicant/Owner:				State: WA.	Sampling Point: SP15
Investigator(s): Habitat Technologies					
Landform (hillslope, terrace, etc.): terrace		Local reli	ef (concave,	convex, none): rolling	Slope (%):
Subregion (LRR): A					
Soil Map Unit Name: Spanaway gravelly sandy loam					
Are climatic / hydrologic conditions on the site typical for this					
	-		•		
Are Vegetation, Soil, or Hydrology sign				ormal Circumstances" pres	
Are Vegetation, Soil, or Hydrology natu	rally probler	natic?	(If need	ed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing	samplir	ig point l	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ☐ No ☐					
Hydric Soil Present? Yes ☐ No ☒			ne Sampled		_
Wetland Hydrology Present? Yes ☐ No ☒		with	nin a Wetlar	nd? Yes □ N	0 ⊠
Remarks: Assessments completed 1994, 2005-2008, sprir	ng 2012, spr	ing 2013,	summer-fall	2018, fall/winter 2021/202	2
once managed pasture in northwestern portion of site					
VEGETATION – Use scientific names of plan	ts.				
	Absolute	Dominan	t Indicator	Dominance Test works	sheet:
<u>Tree Stratum</u> (Plot size: <u>15ft radius</u>)	% Cover	Species?	Status	Number of Dominant Sp	ecies
1. Quercus garryana				That Are OBL, FACW, o	r FAC: <u>1</u> (A)
2				Total Number of Domina	ant
3				Species Across All Strat	a: <u>2</u> (B)
4				Percent of Dominant Sp	
Sapling/Shrub Stratum (Plot size: 15ft radius)	<10	= Total (Cover	That Are OBL, FACW, o	r FAC: <u>50%</u> (A/B)
1. Corylus cornuta	10	no	FACU	Prevalence Index work	sheet:
2. Symphoricarpus albus	10			Total % Cover of:	Multiply by:
3. Cytisus scorparius				OBL species	x 1 =
4. Rubus armeniacus	20	yes	FAC	FACW species	x 2 =
5				FAC species	x 3 =
Harl Otrature (Distains 45% and live)	60	= Total C	Cover	FACU species	x 4 =
Herb Stratum (Plot size: 15ft radius)			FAC		x 5 =
1. Poa spp.			FAC FAC	Column Totals:	(A) (B)
2. Festuca spp. 3. Lolium spp.			<u>FAC</u>	Prevalence Index	= B/A =
Lollum spp. Dactyolis glomerata			FACU	Hydrophytic Vegetatio	
5. Hypochaeris lanatum			FACU	☐ Rapid Test for Hydro	
6. <u>Taraxacum officinale</u>			FACU	☐ Dominance Test is >	50%
7. Bellis spp.				☐ Prevalence Index is	≤3.0 ¹
8. Plantago major			FACU		tations ¹ (Provide supporting
9. Holcus lanatus			FAC		or on a separate sheet)
10. Anthoxanthum oidoratum			<u>FACU</u>	☐ Wetland Non-Vascu	
11				-	hytic Vegetation¹ (Explain)
		= Total C	Cover	be present, unless distu	and wetland hydrology must rbed or problematic.
Woody Vine Stratum (Plot size: 15ft radius)				,	•
1				Hydrophytic	
2		= Total 0		Vegetation Present? Yes	i □ No ⊠
% Bare Ground in Herb Stratum <u>%</u>		- rotai C	JUVEI	. 1000111: 163	
Remarks: once managed pasture now overgrowing with bl	ackberries a	nd Scots	broom. No	dominate grasses/herbs	

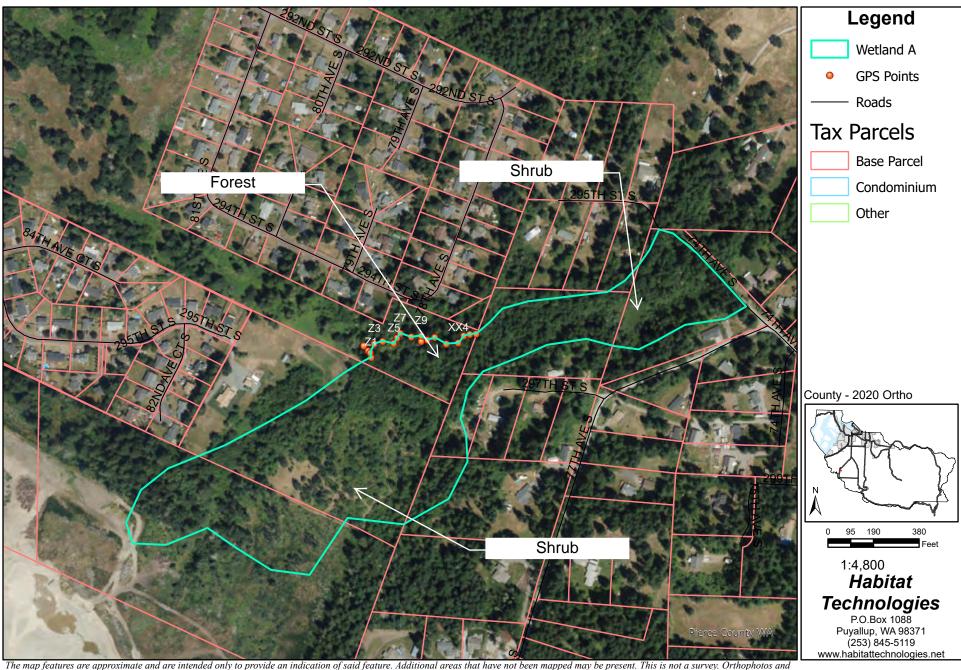
	cription: (Describ	e to the o	depth n				or confi	rm the a	bsence	of indicators.)
Depth (inches)	Matrix Color (moist)	%	— Colo	Redo or (moist)	ox Features %		Loc ²	Textu	ıre	Remarks
0-18	10YR 3/2	100		or (moiot)		1,700		<u> 10/44</u>		gravelly sandy loam
										•
18-22	10YR 3/3	<u>100</u>				-	-			gravelly sandy loam
								_		
	-									
	oncentration, D=De Indicators: (Appl						ed Sand			cation: PL=Pore Lining, M=Matrix. ors for Problematic Hydric Soils ³ :
Histosol		icable to		Sandy Redox (.u.,				n Muck (A10)
	oipedon (A2)			Stripped Matrix				ı [Parent Material (TF2)
☐ Black His			_	Loamy Mucky N	` '	(except	MLRA 1	I) [/ Shallow Dark Surface (TF12)
	n Sulfide (A4)			Loamy Gleyed						er (Explain in Remarks)
☐ Depleted	d Below Dark Surfa	ce (A11)		Depleted Matrix	(F3)					
	ark Surface (A12)			Redox Dark Su	. ,			3		ors of hydrophytic vegetation and
	lucky Mineral (S1)			Depleted Dark	,	7)				and hydrology must be present,
	Sleyed Matrix (S4) Layer (if present):			Redox Depress	ions (F8)				unles	ss disturbed or problematic.
Type:	Layer (II present).									
Depth (in				_				Llvd	ria Sail	Present? Yes □ No ⊠
, ,	,	!! - 4	. f . la lada					пуи	ric Soii	Present? res No
Remarks. N	O prominent field ir	idicators	or riyana	S SOIIS.						
HYDROLO	GY									
Wetland Hy	drology Indicator	s:								
Primary Indi	cators (minimum of	f one requ	ıired; ch		• • • • • • • • • • • • • • • • • • • •					ndary Indicators (2 or more required)
l —	Water (A1)			☐ Water-Sta	ined Leave	s (B9) (e	xcept MI	LRA	\square W	/ater-Stained Leaves (B9) (MLRA 1, 2,
l	iter Table (A2)				A, and 4B)					4A, and 4B)
Saturatio	` '			Salt Crust	` '					rainage Patterns (B10)
	arks (B1)			☐ Aquatic In		. ,				ry-Season Water Table (C2)
	nt Deposits (B2)			Hydrogen		` '				aturation Visible on Aerial Imagery (C9)
	posits (B3)				Rhizosphere	_	_	oots (C3)		eomorphic Position (D2)
_	at or Crust (B4)			☐ Presence				20)		hallow Aquitard (D3)
1	osits (B5)			☐ Recent Iro						AC-Neutral Test (D5)
	Soil Cracks (B6)	Ilmaganı	(D7)		Stressed F	•	1) (LRR	A)		aised Ant Mounds (D6) (LRR A)
	on Visible on Aeria Vegetated Conca			☐ Other (Ext	olain in Ren	narks)				rost-Heave Hummocks (D7)
Field Obser		ve Suriac	е (Бо)							
Surface Wat		Yes 🗌	No ⊠	Donth (incho	a).					
Water Table				Depth (inches						
		Yes □	No ⊠	Depth (inches	•		10/0	Aland Us	مامداه	v Bresent3 Ves 🗆 Ne M
Saturation P	resent? pillary fringe)	Yes 🗌	No ⊠	Depth (inches	s):		vve	etiano Hy	/arolog	y Present? Yes ☐ No ⊠
Describe Re	corded Data (strea	m gauge,	monito	ring well, aerial	photos, pre	evious ins	spections), if avail	able:	
Remarks: No	O prominent field ir	ndicators	of wetla	nd hydrology.						
I										

Project/Site: Parcel 0217036009	(City/Count	y: City of Ro	ру	Sampling Date:many
Applicant/Owner:				State: WA.	Sampling Point: SP17
Investigator(s): Habitat Technologies			Section, To	ownship, Range:	
Landform (hillslope, terrace, etc.): terrace		Local relie	ef (concave,	convex, none): rolling	Slope (%):
Subregion (LRR): A					
Soil Map Unit Name: Spanaway gravelly sandy loam					
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology sign	-		•	ormal Circumstances" pres	
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in	
SUMMARY OF FINDINGS – Attach site map					•
Hydrophytic Vegetation Present? Yes ☐ No ☒					
Hydric Soil Present? Yes ☐ No ☒			e Sampled	<u> </u>	_
Wetland Hydrology Present? Yes ☐ No ☒		with	in a Wetlar	nd? Yes □ N	o 🛚
Remarks: Assessments completed 1994, 2005-2008, sprir	ng 2012, spr	ing 2013, s	summer-fall	2018, fall/winter 2021/202	2
once managed pasture in southwestern portion of site					
VEGETATION – Use scientific names of plan	ts.				
	Absolute			Dominance Test works	heet:
Tree Stratum (Plot size: 15ft radius) 1	% Cover			Number of Dominant Sp That Are OBL, FACW, o	
2				Total Number of Domina	ant
3				Species Across All Strat	
4				Percent of Dominant Sp	ecies
Sapling/Shrub Stratum (Plot size: 15ft radius)		= Total C	over	That Are OBL, FACW, o	r FAC: (A/B)
1				Prevalence Index work	sheet:
2				Total % Cover of:	Multiply by:
3. Cytisus scorparius				OBL species	x 1 =
4				FACW species	x 2 =
5				FAC species	x 3 =
Harb Stratum (Diet eizer 15ft radius)	20	= Total C	over		x 4 =
Herb Stratum (Plot size: 15ft radius) 1. Poa spp.			FAC		x 5 =
2. Festuca spp.			FAC	Column Totals:	(A) (B)
3. Lolium spp.				Prevalence Index	= B/A =
4. Dactyolis glomerata			FACU	Hydrophytic Vegetatio	n Indicators:
5. Hypochaeris lanatum			FACU	☐ Rapid Test for Hydro	ophytic Vegetation
6. Taraxacum officinale			FACU	☐ Dominance Test is >	·50%
7. Bellis spp.				☐ Prevalence Index is	≤3.0 ¹
8. Plantago major			FACU		tations¹ (Provide supporting or on a separate sheet)
9. Holcus lanatus			FAC	□ Wetland Non-Vascu	, ,
10. Anthoxanthum oidoratum			FACU		hytic Vegetation¹ (Explain)
11. Phleum pratense			<u>FACU</u>	-	and wetland hydrology must
Woody Vine Stratum (Plot size: 15ft radius)		= Total C		be present, unless distu	
1				Hydrophytic	
2				Vegetation	. □ No □
% Bare Ground in Herb Stratum %		= Total C	over	Present? Yes	s □ No ⊠
Remarks: once managed pasture now overgrowing with S	cots broom.	No domir	nate grasses	⊥ s/herbs more FACU than F	AC

Depth					confirm		
(inches)	Matrix Color (moist)	%	— Colo	Redox Features or (moist) % Type ¹	l oc²	Texture	Remarks
0-12		100		77 11900		TOXIGIO	sandy loam
	•						
13-22	10YR 4/3	100	_				sandy loam
							
-		_			.		
		_					
				duced Matrix, CS=Covered or Coated as, unless otherwise noted.)	Sand Gra		cation: PL=Pore Lining, M=Matrix. ors for Problematic Hydric Soils ³ :
-		cable to					•
☐ Histosol	oipedon (A2)			Sandy Redox (S5) Stripped Matrix (S6)			n Muck (A10) I Parent Material (TF2)
☐ Black Hi			_	Loamy Mucky Mineral (F1) (except M	LRA 1)		y Shallow Dark Surface (TF12)
	n Sulfide (A4)			Loamy Gleyed Matrix (F2)	,		er (Explain in Remarks)
	d Below Dark Surfac	ce (A11)		Depleted Matrix (F3)			,
•	ark Surface (A12)	, ,		Redox Dark Surface (F6)		³ Indicat	ors of hydrophytic vegetation and
☐ Sandy M	lucky Mineral (S1)			Depleted Dark Surface (F7)		wetla	and hydrology must be present,
	Bleyed Matrix (S4)			Redox Depressions (F8)		unle	ss disturbed or problematic.
	Layer (if present):						
Type:							
Depth (in	ches):			-		Hydric Soi	l Present? Yes ☐ No ⊠
Remarks: N	O prominent field in	dicators	of hydric	soils.		•	
HYDROLO	icv						
	drology Indicators						
-		,.					
-		one real	uired: ch	eck all that apply)		Seco	ndary Indicators (2 or more required)
	Water (A1)	one requ	uired; ch	eck all that apply) Water-Stained Leaves (B9) (exc.	ent MI R		ndary Indicators (2 or more required)
	Water (A1)	one requ	uired; ch	☐ Water-Stained Leaves (B9) (exc	ept MLR		Vater-Stained Leaves (B9) (MLRA 1, 2,
☐ High Wa	iter Table (A2)	one requ	uired; ch	☐ Water-Stained Leaves (B9) (excellent 1, 2, 4A, and 4B)	ept MLR	A □ V	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ High Wa	nter Table (A2) on (A3)	one requ	uired; ch	☐ Water-Stained Leaves (B9) (exceeding 1, 2, 4A, and 4B) ☐ Salt Crust (B11)	ept MLR	A	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) brainage Patterns (B10)
☐ High Wa☐ Saturatio	ater Table (A2) on (A3) larks (B1)	one requ	uired; ch	☐ Water-Stained Leaves (B9) (exceeding 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13)	ept MLR	A	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2)
☐ High Wa☐ Saturation☐ Water M☐ Sedimer	on (A3) larks (B1) nt Deposits (B2)	one requ	uired; ch	☐ Water-Stained Leaves (B9) (exceed 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13) ☐ Hydrogen Sulfide Odor (C1)		A	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) Praturation Visible on Aerial Imagery (C9)
☐ High Wa☐ Saturatio☐ Water M☐ Sedimer☐ Drift Dep	on (A3) larks (B1) nt Deposits (B2) posits (B3)	one requ	uired; ch	Water-Stained Leaves (B9) (exceed 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv		A	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Parainage Patterns (B10) Pry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
☐ High Wa ☐ Saturatic ☐ Water M ☐ Sedimer ☐ Drift Dep ☐ Algal Ma	on (A3) larks (B1) on Deposits (B2) posits (B3) at or Crust (B4)	one requ	uired; ch	Water-Stained Leaves (B9) (exceeding 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Live Presence of Reduced Iron (C4)	ring Root	A	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Parainage Patterns (B10) Pry-Season Water Table (C2) Paturation Visible on Aerial Imagery (C9) Recomorphic Position (D2) Phallow Aquitard (D3)
☐ High Wa ☐ Saturatio ☐ Water M ☐ Sedimer ☐ Drift Dep ☐ Algal Ma ☐ Iron Dep	on (A3) arks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5)	one requ	uired; ch	Water-Stained Leaves (B9) (excess 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S	ring Root	A	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Varianage Patterns (B10) Vary-Season Water Table (C2) Vaturation Visible on Aerial Imagery (C9) Vaturation Position (D2) Value Aquitard (D3) Vary-Season Water Table (C2) Value Table (C2) Value Table (C3) Vary-Season Water Table (C3)
☐ High Wa ☐ Saturatio ☐ Water M ☐ Sedimer ☐ Drift Dep ☐ Algal Ma ☐ Iron Dep ☐ Surface	on (A3) larks (B1) on t Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6)			Water-Stained Leaves (B9) (excess 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Live Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Second Stunted or Stressed Plants (D1)	ring Root	A	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) Praturation Visible on Aerial Imagery (C9) Promorphic Position (D2) Praillow Aquitard (D3) Praillow Aquitard (D3) Praillow Aquitard (D5) Praillow And Mounds (D6) (LRR A)
High Wall Saturation Water M Sedimer Drift Dep Algal Mall Iron Dep Surface Inundation	on (A3) larks (B1) on (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aerial	lmagery	(B7)	Water-Stained Leaves (B9) (excess 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S	ring Root	A	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Varianage Patterns (B10) Vary-Season Water Table (C2) Vaturation Visible on Aerial Imagery (C9) Vaturation Position (D2) Value Aquitard (D3) Vary-Season Water Table (C2) Value Table (C2) Value Table (C3) Vary-Season Water Table (C3)
High Wall Saturation Water M Sedimer Drift Dep Algal Mall Iron Dep Surface Inundation Sparsely	ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concav	lmagery	(B7)	Water-Stained Leaves (B9) (excess 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Live Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Second Stunted or Stressed Plants (D1)	ring Root	A	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) Praturation Visible on Aerial Imagery (C9) Promorphic Position (D2) Praillow Aquitard (D3) Praillow Aquitard (D3) Praillow Aquitard (D5) Praillow And Mounds (D6) (LRR A)
High Wall Saturation Water Male Sedimer Drift Dep Algal Male Iron Dep Surface Inundation Sparsely Field Obser	on (A3) larks (B1) on (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concavervations:	Imagery re Surfac	(B7) be (B8)	Water-Stained Leaves (B9) (excess	ring Root	A	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) Praturation Visible on Aerial Imagery (C9) Promorphic Position (D2) Praillow Aquitard (D3) Praillow Aquitard (D3) Praillow Aquitard (D5) Praillow And Mounds (D6) (LRR A)
High Wall Saturation Water M Sedimer Drift Dep Algal Mall Iron Dep Surface Inundation Sparsely Field Obser Surface Water	on (A3) larks (B1) on (A3) larks (B1) on (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concaveryations: lar Present?	Imagery ve Surfac Yes □	(B7) de (B8) No 🖂	Water-Stained Leaves (B9) (excess 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Live Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Second Stunted or Stressed Plants (D1) Other (Explain in Remarks) Depth (inches):	ring Root	A	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) Praturation Visible on Aerial Imagery (C9) Promorphic Position (D2) Praillow Aquitard (D3) Praillow Aquitard (D3) Praillow Aquitard (D5) Praillow And Mounds (D6) (LRR A)
High Wall Saturation Water M Sedimer Drift Dep Algal Mall Iron Dep Surface Inundation Sparsely Field Obser Surface Water Table	ter Table (A2) on (A3) larks (B1) on t Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concave vations: ter Present?	Imagery re Surfac Yes ☐ Yes ☐	(B7) se (B8) No ⊠ No ⊠	Water-Stained Leaves (B9) (excess	ring Root	A	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Parainage Patterns (B10) Pary-Season Water Table (C2) Paturation Visible on Aerial Imagery (C9) Pateomorphic Position (D2) Pathallow Aquitard (D3) Pathallow Aquitard (D5) Patised Ant Mounds (D6) (LRR A) Patron Stained Ant Mounds (D7)
High Wall Saturation Water M Sedimer Drift Dep Algal Mall Iron Dep Surface Inundation Sparsely Field Obser Surface Water Table Saturation P	ter Table (A2) on (A3) larks (B1) on Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concaverations: ter Present? Present?	Imagery ve Surfac Yes □	(B7) de (B8) No 🖂	Water-Stained Leaves (B9) (excess 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Live Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Second Stunted or Stressed Plants (D1) Other (Explain in Remarks) Depth (inches):	ring Root	A	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) Praturation Visible on Aerial Imagery (C9) Promorphic Position (D2) Praillow Aquitard (D3) Praillow Aquitard (D3) Praillow Aquitard (D5) Praillow And Mounds (D6) (LRR A)
High Wall Saturation Water M Sedimer Drift Dep Algal Mall Iron Dep Surface Inundation Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	atter Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concaverations: leter Present? Present?	Imagery ve Surfac Yes ☐ Yes ☐ Yes ☐	(B7) ee (B8) No ⊠ No ⊠ No ⊠	Water-Stained Leaves (B9) (excess	Fring Roots Goils (C6) (LRR A)	A V	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Parainage Patterns (B10) Pary-Season Water Table (C2) Paturation Visible on Aerial Imagery (C9) Pateomorphic Position (D2) Pathallow Aquitard (D3) Pathallow Aquitard (D5) Patised Ant Mounds (D6) (LRR A) Patron Stained Ant Mounds (D7)
High Wall Saturation Water M Sedimer Drift Dep Algal Mall Iron Dep Surface Inundation Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	atter Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concaverations: leter Present? Present?	Imagery ve Surfac Yes ☐ Yes ☐ Yes ☐	(B7) ee (B8) No ⊠ No ⊠ No ⊠	Water-Stained Leaves (B9) (excess 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Live Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Second Stunted or Stressed Plants (D1) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	Fring Roots Goils (C6) (LRR A)	A V	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Parainage Patterns (B10) Pary-Season Water Table (C2) Paturation Visible on Aerial Imagery (C9) Pateomorphic Position (D2) Pathallow Aquitard (D3) Pathallow Aquitard (D5) Patised Ant Mounds (D6) (LRR A) Patron Stained Ant Mounds (D7)
High Wall Saturation Saturation Water M Sedimer Drift Dep Algal Mall Iron Dep Surface Inundation Sparsely Field Obser Surface Wat Water Table Saturation P (includes can Describe Re	atter Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concaverations: leter Present? Present?	Imagery re Surfac Yes ☐ Yes ☐ Yes ☐	(B7) se (B8) No ⊠ No ⊠ No ⊠ No ⊠	Water-Stained Leaves (B9) (excert, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Live Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Second Stunted or Stressed Plants (D1) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches):	Fring Roots Goils (C6) (LRR A)	A V	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Parainage Patterns (B10) Pary-Season Water Table (C2) Paturation Visible on Aerial Imagery (C9) Pateomorphic Position (D2) Pathallow Aquitard (D3) Pathallow Aquitard (D5) Patised Ant Mounds (D6) (LRR A) Patron Stained Ant Mounds (D7)
High Waler Mater Table Saturation Pater Mater Ma	atter Table (A2) on (A3) larks (B1) on t Deposits (B2) losits (B3) at or Crust (B4) losits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concaverations: liter Present? Present? Present? literaction of the present of the p	Imagery re Surfac Yes ☐ Yes ☐ Yes ☐	(B7) se (B8) No ⊠ No ⊠ No ⊠ No ⊠	Water-Stained Leaves (B9) (excert, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Live Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Second Stunted or Stressed Plants (D1) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches):	Fring Roots Goils (C6) (LRR A)	A V	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Parainage Patterns (B10) Pary-Season Water Table (C2) Paturation Visible on Aerial Imagery (C9) Pateomorphic Position (D2) Pathallow Aquitard (D3) Pathallow Aquitard (D5) Patised Ant Mounds (D6) (LRR A) Patron Stained Ant Mounds (D7)
High Wall Saturation Saturation Water M Sedimer Drift Dep Algal Mall Iron Dep Surface Inundation Sparsely Field Obser Surface Wat Water Table Saturation P (includes can Describe Re	atter Table (A2) on (A3) larks (B1) on t Deposits (B2) losits (B3) at or Crust (B4) losits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concaverations: liter Present? Present? Present? literaction of the present of the p	Imagery re Surfac Yes ☐ Yes ☐ Yes ☐	(B7) se (B8) No ⊠ No ⊠ No ⊠ No ⊠	Water-Stained Leaves (B9) (excert, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Live Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Second Stunted or Stressed Plants (D1) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches):	Fring Roots Goils (C6) (LRR A)	A V	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Parainage Patterns (B10) Pary-Season Water Table (C2) Paturation Visible on Aerial Imagery (C9) Pateomorphic Position (D2) Pathallow Aquitard (D3) Pathallow Aquitard (D5) Patised Ant Mounds (D6) (LRR A) Patron Stained Ant Mounds (D7)

APPENDIX B – Wetland Rating Worksheets

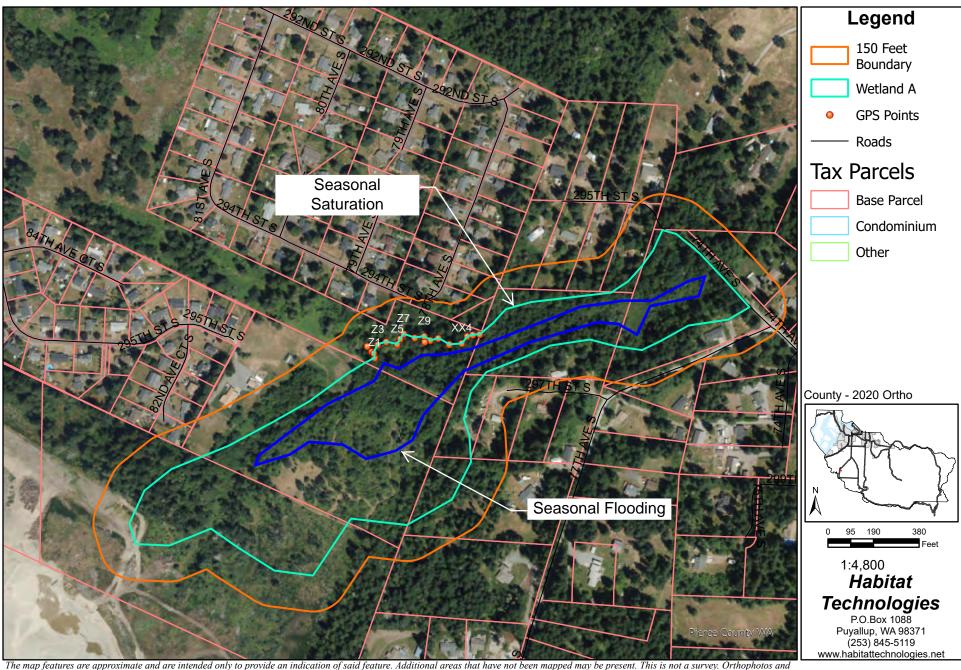
Figure A1



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.

Date: 4/20/2022 11:40 AM

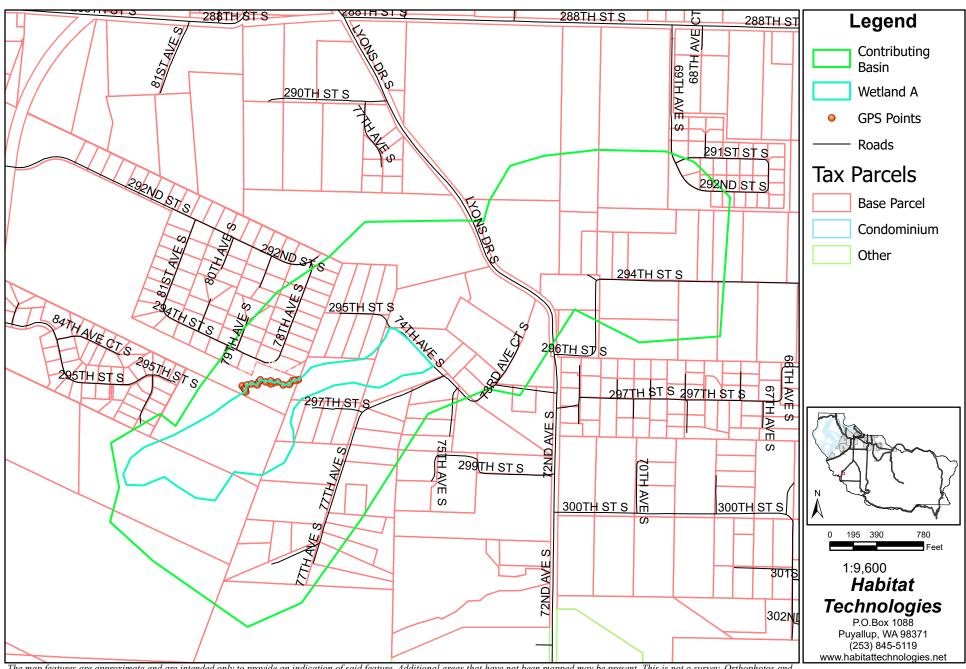
Figure A2



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.

Date: 4/20/2022 11:42 AM

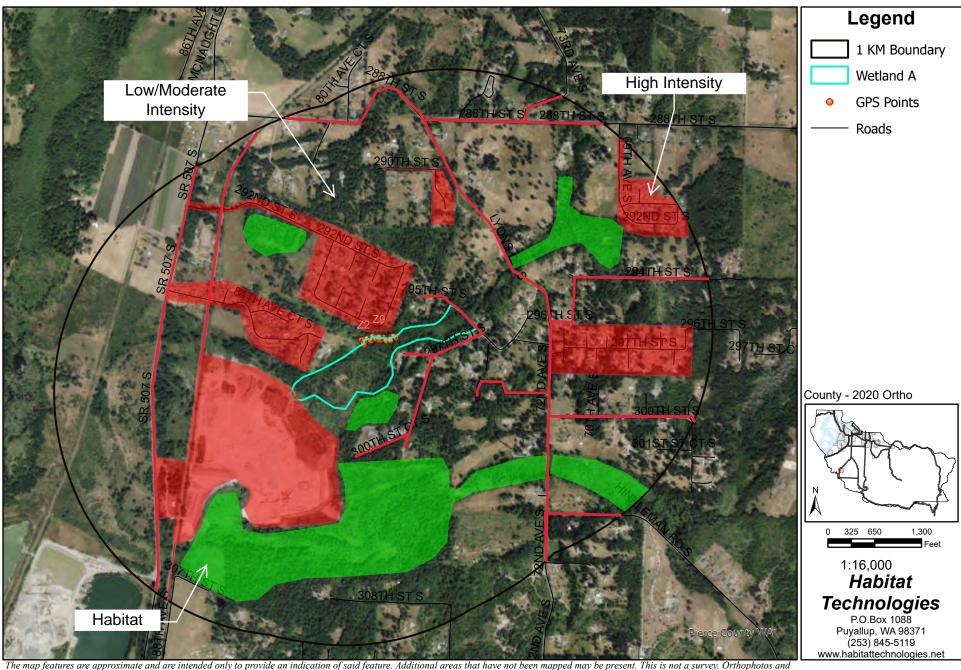
Figure A3



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.

Date: 4/20/2022 11:49 AM

Figure A4



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.

Date: 4/20/2022 11:43 AM

Figure W1



Assessed Water/Sediment

Water

Category 5 - 303d

V Category 4C

Category 4B

Category 4A

Category 2

Category 1

Sediment

ZZZZ Category 5 - 303d

ZZZ Category 4C

ZZZZ Category 4B

ZZZ Category 2

WQ Improvement Projects

Approved

In Development

Subbasins (12 digit HUCs)

HUC boundary





RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland A	Date of site visit: 20 APR 2022
Rated by Habitat Technologies Train	ned by Ecology?x YesNo Date of training 2014_
HGM Class used for rating Depressional	Wetland has multiple HGM classes?Y _x_N
NOTE: Form is not complete without the Source of base aerial photo/map Pie	e figures requested (figures can be combined). rce County GIS
OVERALL WETLAND CATEGORY 3 (1	pased on functions x or special characteristics)

1. Category of wetland based on FUNCTIONS

	Category I — Total score = 23 - 27
	Category II — Total score = 20 - 22
X	Category III - Total score = 16 - 19
	Category IV – Total score = 9 - 15

FUNCTION		mprov iter Qເ	_	Ну	ydrolo	gic		Habit	at	
					Circle 1	the ap	propr	iate ro	ntings	
Site Potential	Н	М	L	H	М	L	Н	М	L	
Landscape Potential	Н	M	L	Н	M	L	Н	M	L	
Value	Н	М	L	Н	M	L	Н	М		TOTAL
Score Based on Ratings		6			7			5		18

Score for each function based on three ratings (order of ratings is not *important)* 9 = H,H,H8 = H,H,M7 = H,H,L 7 = H,M,M6 = H,M,L6 = M,M,M5 = H,L,L 5 = M,M,L4 = M, L, L3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATE	GORY
Estuarine	I	II
Wetland of High Conservation Value		I
Bog		I
Mature Forest		I
Old Growth Forest		I
Coastal Lagoon	I	II
Interdunal	I II	III IV
None of the above)	(

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	A1
Hydroperiods	D 1.4, H 1.2	A2
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	A2
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	A2
Map of the contributing basin	D 4.3, D 5.3	A3
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	A4
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	W1
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	W1

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	N/A
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	\forall

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	\wedge
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	N/A
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	$\overline{}$

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	Λ
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (can be added to figure above)	S 4.1	N/A
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	V

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1.	Are the water	levels in th	ne entire u	ınit usuallv	controlled	by tides	except di	uring f	loods?

NO – go to 2

YES – the wetland class is **Tidal Fringe** – go to 1.1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO - Saltwater Tidal Fringe (Estuarine)

YES - Freshwater Tidal Fringe

If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to score functions for estuarine wetlands.

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

NO – go to 3

YES - The wetland class is Flats

If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.

- 3. Does the entire wetland unit **meet all** of the following criteria?
 - __The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;
 - __At least 30% of the open water area is deeper than 6.6 ft (2 m).

NO – go to 4

YES – The wetland class is **Lake Fringe** (Lacustrine Fringe)

- 4. Does the entire wetland unit **meet all** of the following criteria?
 - ___The wetland is on a slope (*slope can be very gradual*),
 - ____The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,
 - ___The water leaves the wetland **without being impounded**.

NO – go to 5

YES - The wetland class is **Slope**

NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

- 5. Does the entire wetland unit **meet all** of the following criteria?
 - ___The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,
 - ___The overbank flooding occurs at least once every 2 years.

Wetland name or number A

NO – go to 6

YES – The wetland class is **Riverine**

NOTE: The Riverine unit can contain depressions that are filled with water when the river is not flooding

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? *This means that any outlet, if present, is higher than the interior of the wetland.*

NO - go to 7

YES – The wetland class is **Depressional**

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit	HGM class to
being rated	use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream	Depressional
within boundary of depression	
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other	Treat as
class of freshwater wetland	ESTUARINE

If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.

DEPRESSIONAL AND FLATS WETLANDS Water Quality Functions - Indicators that the site functions to improve water quality	
D 1.0. Does the site have the potential to improve water quality?	
D 1.1. Characteristics of surface water outflows from the wetland:	
Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). points = 3	
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2	3
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 1 Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1	
D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). Yes = 4 No = 0	0
D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):	
Wetland has persistent, ungrazed, plants > 95% of area points = 5	
Wetland has persistent, ungrazed, plants > ½ of area points = 3	3
Wetland has persistent, ungrazed plants $> \frac{1}{10}$ of area points = 1	
Wetland has persistent, ungrazed plants $< \frac{1}{10}$ of area points = 0	
D 1.4. Characteristics of seasonal ponding or inundation:	
This is the area that is ponded for at least 2 months. See description in manual.	
Area seasonally ponded is > ½ total area of wetland points = 4	2
Area seasonally ponded is > 1/4 total area of wetland points = 2	
Area seasonally ponded is < ¼ total area of wetland points = 0	0
Total for D 1 Add the points in the boxes above	8
Rating of Site Potential If score is:12-16 = HX6-11 = M0-5 = L	age
D 2.0. Does the landscape have the potential to support the water quality function of the site?	
D 2.1. Does the wetland unit receive stormwater discharges? Yes = 1 No = 0	0
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? Yes = 1 No = 0	1
D 2.3. Are there septic systems within 250 ft of the wetland? Yes = 1 No = 0	1
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3?	0
Source Yes = 1 No = 0	
Total for D 2 Add the points in the boxes above	2
Rating of Landscape Potential If score is:3 or 4 = HX _1 or 2 = M0 = L Record the rating on the fi	rst page
D 3.0. Is the water quality improvement provided by the site valuable to society?	_
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? Yes = 1 No = 0	0
D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list? Yes = 1 No = 0	1
D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (answer YES if there is a TMDL for the basin in which the unit is found)? Yes = 2 No = 0	0
Total for D 3 Add the points in the boxes above	1
Rating of Value If score is:2-4 = HX_1 = M0 = L	•

DEPRESSIONAL AND FLATS WETLANDS			
Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation			
D 4.0. Does the site have the potential to reduce flooding and erosion?			
D 4.1. Characteristics of surface water outflows from the wetland:			
Wetland is a depression or flat depression with no surface water leaving it (no outlet) points = 4 Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outletpoints = 2 Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch points = 1 Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 0	4		
D 4.2. <u>Depth of storage during wet periods:</u> <i>Estimate the height of ponding above the bottom of the outlet. For wetlands</i>			
with no outlet, measure from the surface of permanent water or if dry, the deepest part. Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7 Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5 Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3 The wetland is a "headwater" wetland points = 3 Wetland is flat but has small depressions on the surface that trap water points = 1 Marks of ponding less than 0.5 ft (6 in) points = 0	3		
D 4.3. Contribution of the wetland to storage in the watershed: Estimate the ratio of the area of upstream basin			
contributing surface water to the wetland to the area of the wetland unit itself. The area of the basin is less than 10 times the area of the unit points = 5 The area of the basin is 10 to 100 times the area of the unit points = 3 The area of the basin is more than 100 times the area of the unit Entire wetland is in the Flats class points = 5	5		
Total for D 4 Add the points in the boxes above	12		
Rating of Site Potential If score is: x 12-16 = H 6-11 = M 0-5 = L Record the rating on the	first page		
D 5.0. Does the landscape have the potential to support hydrologic functions of the site?			
D 5.1. Does the wetland receive stormwater discharges? Yes = 1 No = 0	0		
D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? Yes = 1 No = 0	1		
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? Yes = 1 No = 0	0		
Total for D 5 Add the points in the boxes above	1		
Rating of Landscape Potential If score is: 3 = H x 1 or 2 = M 0 = L Record the rating on the	first page		
D 6.0. Are the hydrologic functions provided by the site valuable to society?			
D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met. The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds): • Flooding occurs in a sub-basin that is immediately down-gradient of unit. points = 2 • Surface flooding problems are in a sub-basin farther down-gradient. points = 1 Flooding from groundwater is an issue in the sub-basin. points = 1 The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why points = 0 There are no problems with flooding downstream of the wetland.	1		
There are no problems with flooding downstream of the wetland. points = 0 D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?	0		
Yes = 2 No = 0	U		
Total for D.6.	4		

Rating of Value If score is: $_2$ -4 = H $_{\underline{X}}$ 1 = M $_{\underline{0}}$ 0 = L

Record the rating on the first page

These questions apply to wetlands of all HGM classes. **HABITAT FUNCTIONS** - Indicators that site functions to provide important habitat H 1.0. Does the site have the potential to provide habitat? H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. Aquatic bed 4 structures or more: points = 4 __Emergent 3 structures: points = 2 2 X Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 X Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: X The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon H 1.2. Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (see text for descriptions of hydroperiods). Permanently flooded or inundated 4 or more types present: points = 3 X Seasonally flooded or inundated 3 types present: points = 2 1 Occasionally flooded or inundated 2 types present: points = 1 X Saturated only 1 type present: points = 0 __Permanently flowing stream or river in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Lake Fringe wetland 2 points Freshwater tidal wetland 2 points H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name 2 the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 5 - 19 species points = 1 points = 0 < 5 species H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. None = 0 points Moderate = 2 points Low = 1 point All three diagrams in this row are **HIGH** = 3points

H 1.5. Special habitat features:		
Check the habitat features that are present in the wetland. The number of checks is the number of points. X Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). X Standing snags (dbh > 4 in) within the wetland Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered where wood is exposed) X At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) X Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of	4	
strata)		
Total for H 1 Add the points in the boxes above	10	
Rating of Site Potential If score is:15-18 = HX_7-14 = M0-6 = L		
H 2.0. Does the landscape have the notential to support the habitat functions of the site?		

H 2.0. Does the landscape have the potential to support the habitat functions of the site?	
H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit).	
Calculate: % undisturbed habitat $\frac{1}{1}$ + [(% moderate and low intensity land uses)/2] $\frac{3}{1}$ = $\frac{4}{1}$ %	
If total accessible habitat is:	
$> \frac{1}{3}$ (33.3%) of 1 km Polygon points = 3	0
20-33% of 1 km Polygon points = 2	
10-19% of 1 km Polygon points = 1	
< 10% of 1 km Polygon points = 0	
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.	
Calculate: % undisturbed habitat 12 + [(% moderate and low intensity land uses)/2] 36 = 48 %	
Undisturbed habitat > 50% of Polygon points = 3	
Undisturbed habitat 10-50% and in 1-3 patches points = 2	1
Undisturbed habitat 10-50% and > 3 patches points = 1	
Undisturbed habitat < 10% of 1 km Polygon points = 0	
H 2.3. Land use intensity in 1 km Polygon: If	
> 50% of 1 km Polygon is high intensity land use points = (-2)	0
≤ 50% of 1 km Polygon is high intensity points = 0	
Total for H 2 Add the points in the hoves above	1

Rating of Landscape Potential If score is: ___4-6 = H $_{\underline{X}}$ 1-3 = M ___< 1 = L

Record the rating on the first page

H 3.0. Is the habitat provided by the site valuable to society?	<u>-</u>
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score that applies to the wetland being rated. Site meets ANY of the following criteria: points = 2 — It has 3 or more priority habitats within 100 m (see next page) — It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)	0
 It is mapped as a location for an individual WDFW priority species It is a Wetland of High Conservation Value as determined by the Department of Natural Resources It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan Site has 1 or 2 priority habitats (listed on next page) within 100 m 	U
Site does not meet any of the criteria above points = 0	

Rating of Value If score is: 2 = H 1 = M X 0 = L

Record the rating on the first page

WDFW Priority Habitats

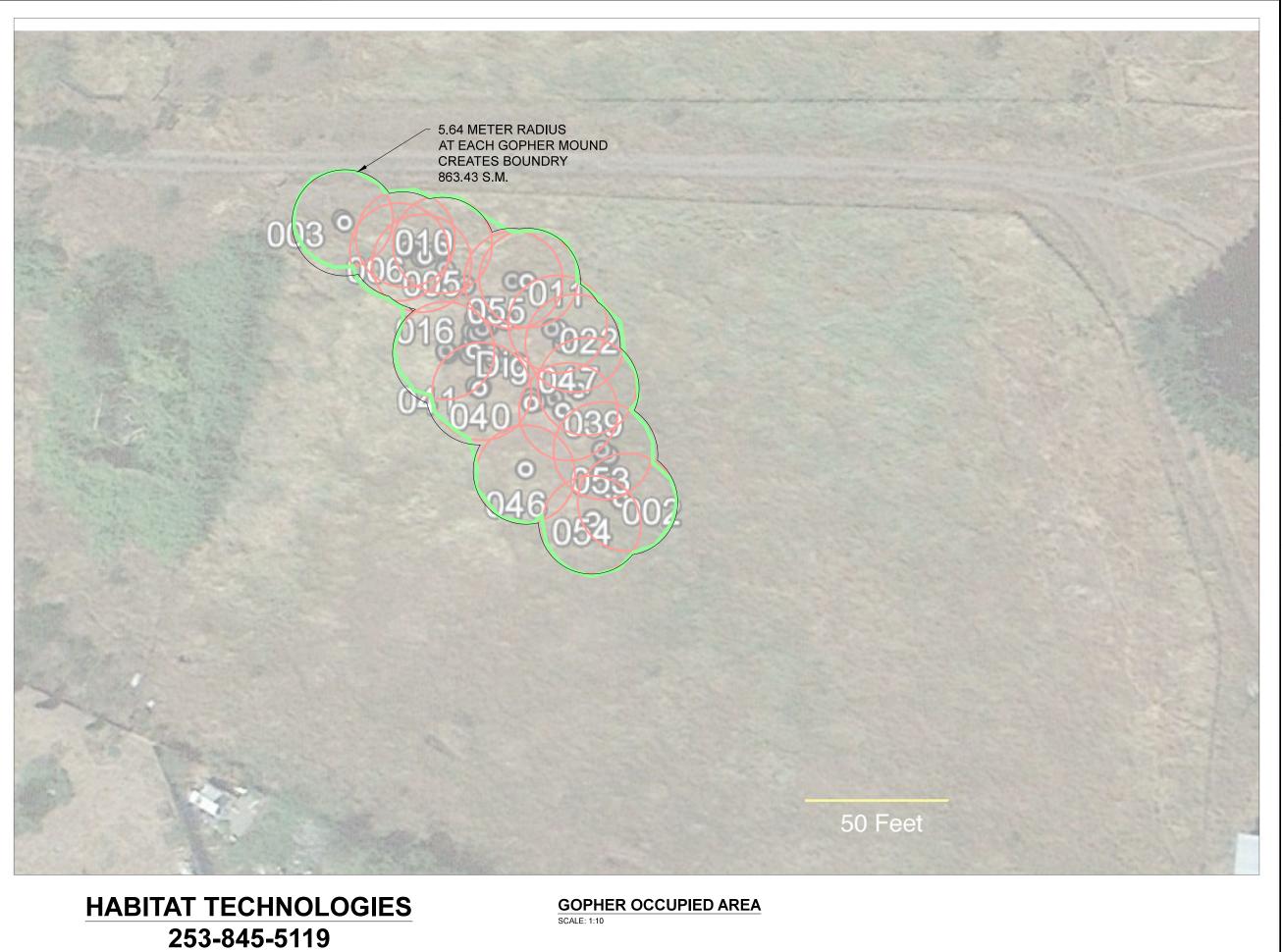
<u>Priority habitats listed by WDFW</u> (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdfw.wa.gov/publications/00165/wdfw00165.pdf or access the list from here: http://wdfw.wa.gov/conservation/phs/list/)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: *NOTE:* This question is independent of the land use between the wetland unit and the priority habitat.

- **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- **Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).
- **Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock.
- Old-growth/Mature forests: Old-growth west of Cascade crest Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 see web link above*).
- **Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 see web link above*).
- **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.
- **Nearshore**: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report see web link on previous page*).
- **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- **Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- **Talus:** Homogenous areas of rock rubble ranging in average size 0.5 6.5 ft (0.15 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- **Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

APPENDIX C – 2008 Gopher Occupied Area



Nature By Design
Landscape Architecture

253.460.6067

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Y GOPHER LINIATION Roy, Wa

Habitat 7 P.O.

PRO

PRAWING ISSUED FOR: AGENCY REVIEW

DATE: NOVEMBER 13, 2



KATHERINE OWENS CERTIFICATE NO. 692

 PROJECT NO.:
 1363

 FILE NAME:
 1363WLA

 X-REFS:
 CIVIL

 DRAWN BY:
 KLO

 CHECKED BY:
 KLO

 PLOT SCALE:
 1:1

 DRAWING SCALES:
 1:10

DRAWING CONTENTS:
GOPHER MOUND
OCCUPIED AREA
PLAN

RAWING NO.



PHOTOS



Prior managed pasture in the southwestern portion of the project site.



Prior managed pasture in the southwestern portion of the project site.