Attachment 3
Cheasty Greenspace North Loop Trail Critical
Areas Study and Conceptual Mitigation Plan



CHEASTY GREENSPACE TRAIL

Critical Areas Study and Conceptual Mitigation Plan

Prepared for City of Seattle Parks and Recreation

Updated December 2022





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Acronyms and Abbreviations

ATV all-terrain vehicle

BMPs best management practices
Corps U.S. Army Corps of Engineers
dbh diameter at breast height

DNS Determination of Non-Significance

DP data plot

Ecology Washington State Department of Ecology

ESA Environmental Science Associates

FWHCA Fish and Wildlife Habitat Conservation Area

GIS geographic information system
GMA Growth Management Act
HPA Hydraulic Project Approval

IMBA International Mountain Bicycling Association NRCS Natural Resources Conservation Service

NWI National Wetlands Inventory
OHWM ordinary high water mark

SPR Seattle Parks and Recreation Department

PHS Priority Habitats and Species RCW Revised Code of Washington

SDCI Seattle Department of Construction and Inspections

SEPA State Environmental Policy Act

SMC Seattle Municipal Code

USFWS United States Fish and Wildlife Service WAC Washington Administrative Code

WDFW Washington Department of Fish and Wildlife

WRIA Water Resource Inventory Area

1.0 INTRODUCTION

The Seattle Parks and Recreation Department (SPR) has constructed the south loop portion of a pilot trail project in the Cheasty Greenspace on Beacon Hill in Seattle, Washington (Figures 1 and 2); the north loop portion is proposed to be constructed. The southern loop, which constitutes phase 1, was completed in October of 2022. The layout of the proposed trail system consists of a two-loop, trail system for use by bicycles and pedestrians. A bridge is proposed where the trail would cross a watercourse; the trail would not cross any wetlands. The bicycle trail would be designed for beginner cyclists. Six entry points are proposed along the perimeter of the greenspace to allow public access to the trail system. The trail is intended as a neighborhood park rather than a destination park and thus no parking would be provided. The bicycle trail would be soft surface, with native mineral soils and the pedestrian trail would be crushed gravel.

In 2014 and early 2015, Environmental Science Associates (ESA) conducted a wetland reconnaissance and a wildlife habitat assessment to provide a baseline of existing conditions, inform the project design process, and determine potential regulatory requirements. The City used the Wetland Reconnaissance and Wildlife Habitat Assessment Memorandum (ESA, 2015) to support preparation of the State Environmental Policy Act (SEPA) Checklist. The City SEPA Official issued a Determination of Non-Significance (DNS) on August 17, 2015. This determination was successfully appealed on January 26, 2016. The Hearing Examiner concluded that the "City did not consider all environmental factors" to comply with the procedural requirements of SEPA. The proposed trail alignment was reconfigured from the 2015 proposal to avoid the large wetland complex and steep slope area in the middle of the greenspace. A SEPA DNS was issued on October 15, 2018, for the two-loop trail system (north and south loops), however, was appealed on November 5, 2018. Subsequently, settlement discussions and mediation led to the Department reducing the proposal to one loop on the south end of the greenspace. Following these changes, the DNS was affirmed for the south loop on November 4, 2019. The SEPA determination for the north loop trail project is anticipated in early 2023. The intent of this Critical Areas Study and Conceptual Mitigation Plan is to provide the City with sufficient information to meet the requirements of SEPA and Seattle Municipal Code (SMC) 25.09 with regards to critical areas.

In 2022, this Critical Areas Study was updated to reflect current conditions. ESA conducted a wetland reconnaissance of the previous evaluation area and the features previously identified in 2014-2015 Critical Areas Study. Additionally, an inventory of exceptional trees was conducted (SMC 25.11.020) for those located in the vicinity of the proposed alignment.

2.0 PROJECT HISTORY AND DESCRIPTION

The Cheasty Greenspace is a 28-acre parcel within the Cedar River-Lake Washington watershed in Water Resource Inventory Area (WRIA) 8, Cedar-Sammamish. The greenspace is near the western boundary of the watershed, which drains to Lake Washington. Land use in the watershed is highly urbanized, with residential and commercial uses dominating the area surrounding the greenspace. The Cheasty Greenspace contains one of the few areas of undeveloped forest in the vicinity. It is predominantly deciduous trees and includes some invasive species, although removal of invasive species and replanting with native species have been ongoing in the greenspace for many years. There are no official trails; however, there are social trails or trails developed for restoration work throughout the greenspace. Three narrow Seattle Housing Authority properties abut the greenspace to the east; the majority of these parcels are forested and function as an extension of the greenspace.

In 2012, a group of neighbors proposed the development of pedestrian and mountain bike trails at Cheasty Greenspace as a project through the Parks and Green Spaces Levy Opportunity Fund process. The Opportunity Fund is funded through the 2008 Parks and Green Spaces Levy approved by voters and allows the community to initiate park projects in neighborhoods. The project was contrary to SPR's bicycle policy, and thus the original project was not successful in the Opportunity Fund process. However, there was significant community interest for the trails project, with the North Beacon Hill Community Council voting to support it. Additionally, the North Beacon Hill Neighborhood Plan, in the Comprehensive Plan (City of Seattle, 2016a), includes policy NBH-P34: Consider the development of pedestrian and bicycle trails through publicly owned greenbelts throughout North Beacon Hill. In 2013, the group Friends of Cheasty Greenspace at Mountain View secured funding through the Department of Neighborhoods. The group used this funding to hire a landscape architect to develop a preliminary trail design.

The Board of Park Commissioners discussed and deliberated on the 2013 proposal at public meetings on November 14, 2013, and January 9, 2014. Their final recommendation to the SPR Superintendent was that SPR should initiate a pilot project to allow soft-surface mountain bike trails to be built at Cheasty Greenspace, in conjunction with restoration and foot trails. On May 28, 2015, the Board of Park Commissioners approved a pilot project for the pedestrian and bicycle trail. The SEPA Official issued a DNS on August 3, 2015. The SEPA decision was successfully appealed, with a decision made by the Hearing Examiner on January 26, 2016. ESA was retained by SPR to conduct wetland delineations, a wildlife assessment, and redesign the trail to minimize impacts to critical areas.

The original project design was a pedestrian and bicycle perimeter loop trail, with six entry points, primarily separated except near wetlands and steep slopes. The initial trail was redesigned to avoid impacts to wetlands, wetland buffers, the riparian watercourse, and reduce impacts to the riparian management area. The proposed redesigned trail is a two-loop trail system but still has six entry points to allow public access (Figure 2). The two loops can be joined by traveling on 28th Ave S to the east of the greenspace and Cheasty Boulevard to the west. Cheasty Boulevard is proposed as a Neighborhood Greenway, a residential street with low motorized traffic volumes and speeds that is designated and designed to give people walking and biking safe and pleasant travel priority. Generally, the east-west portions of the trail would be multi-use with 4-foot wide standard park design trails. The remaining portions of the trails would be 3-foot wide one-way mountain bike trails. A bridge is proposed where the trail would cross a watercourse. The shared and one-way bicycle trail would each be approximately 1.2 miles in length, with a total of approximately 2.4 miles of trail. The use of the trails for mountain bikes would be a 15-month pilot trail project. Should trail use for mountain bikes be deemed unsuitable after 15 months by SPR, the bicycle portions of the trail would be repurposed for pedestrians only, with no trail redesign. Evaluating the suitability of the trail after 15 months is outside the scope of this report.

The bicycle portion of the trail would have no special mountain bike trail features (e.g., jumps) and would be appropriate for beginner mountain bicyclists. Trail guidelines from the International Mountain Bicycling Association (IMBA) that minimize trail footprint were followed in trail design. The grade was kept to 10 percent or less on the trail and followed the "half-rule": that a trail's grade should never exceed half the grade of its side slope. Any trail construction would use full bench-cut construction cutting from the existing slopes and would outslope the tread of the trail so that rainfall drains easily off of the side of the trail rather than along it. Trail location has avoided what little flat areas were available to prevent any resulting collection basins for water. Existing social trails on the site would be used where feasible.

3.0 METHODS

3.1 Review of Existing Information

Prior to conducting the field investigations, ESA ecologists reviewed existing literature, maps, and other materials to identify wetlands, streams, vegetation types, and wildlife habitats in the Cheasty Greenspace and vicinity. Key data sources included the following:

- National Wetlands Inventory (NWI) (U.S. Fish and Wildlife Service [USFWS], 2017, 2018)
- Priority Habitats and Species (PHS) (Washington Department of Fish and Wildlife [WDFW], 2017, 2018)
- King County iMap (King County, 2017, 2018)
- SalmonScape (WDFW, 2016, 2018)
- City of Seattle geographic information system (GIS) data (City of Seattle, 2017, 2018)
- City of Seattle water and sewer map (City of Seattle, 2016b)
- Historic and current aerial imagery
- eBird data (Cornell Lab of Ornithology, 2017)

Potential wetlands and streams were identified using the above sources, and wildlife habitat was preliminarily mapped through the interpretation of aerial photographs. In addition to the list above, multiple literature sources were reviewed and are listed in Section 8.0, *References*, of this document.

3.2 Wetland Delineation and Watercourse Identification

Field investigations for wetlands and streams were performed over 4 days (October 19, 20, and 31, 2016; and April 5, 2017. Wetlands were identified based on conditions at the time of the field visits by applying the wetland determination method described in the Regional Supplement (Western Mountains, Valleys, and Coast) to the Corps of Engineers (Corps) 1987 Wetland Delineation Manual Corps (Corps, 2010). Wetland investigations were conducted during the growing season as recommended by the Corps manual. In the Seattle area, the growing season varies from year to year; however, it is generally accepted to be from February or March to October or November. Climate Analysis for Wetlands Tables (WETS) from the Natural Resources Conservation Service (NRCS) show the growing season to be February 7 to December 10 (NRCS, 2017). Both hydrophytic vegetation and hydric soil indicators depend on the growing season. 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. Hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Corps, 2010).

The boundaries of wetlands were flagged with plastic survey tape marked "WETLAND DELINEATION," and the locations will be professionally surveyed by SPR [Note: not yet surveyed, impacts and mitigation based on GPS'ed wetlands]. Data plots (DP) were also established for all wetlands and potential wetland areas. The methods used to identify and delineate wetlands and determine the ordinary high water mark (OHWM) of streams are described in further detail in Appendix A. Wetland determination data sheets are presented in Appendix B.

Wetlands were classified according to the Washington State Department of Ecology's (Ecology) Wetland Rating System for Western Washington (Hruby, 2014). A description of the wetland rating system along

with the completed Wetland Rating Forms for all wetlands described in this document are included in Appendix C.

3.3 Wildlife Habitat Assessment and Survey

Wildlife habitat and wildlife species use in the Cheasty Greenspace and vicinity were evaluated in the field during 3 days over the winter and spring seasons (December 19, 2016; April 4 and May 4, 2017). The purpose of the field visits was to characterize habitats, further assess habitat quality, and conduct surveys to observe wildlife species using the greenspace and vicinity. ESA ecologists applied the assessment methods described in *Wildlife Habitat Relationships in Oregon and Washington* (Johnson and O'Neil, 2001) to describe and evaluate common habitat types in the study area. The Johnson and O'Neil study was developed with input from a panel of regional wildlife experts and information collected from more than 12,000 pertinent publications.

ESA ecologists recorded observations of wildlife use during the winter and spring field surveys. Wildlife species (primarily birds) were observed both aurally and visually along informal walking transects across different habitat types and vegetation communities. Animal tracks and sign such as scat, pellets, or excavations were also recorded. Surveys commenced within 1 hour of sunrise and lasted approximately 3 hours. Wildlife habitat in the greenspace was characterized and mapped on aerial photographs.

ESA also conducted a literature review of current wildlife science relevant to pedestrian and bicycle trail impacts on birds to inform impact assessment and mitigation planning.

4.0 FINDINGS

The following sections describe the results of the background review and field investigations for wetlands, streams, and wildlife.

4.1 Existing Information

The City of Seattle GIS data (City of Seattle, 2017) show no streams and six wetlands in the Cheasty Greenspace and on the Seattle Housing Authority properties to the east. The NWI data show the same six wetlands, and also depict a seventh wetland just north of Andover Street and just outside of the Cheasty Greenspace (USFWS, 2017, 2018). A wetland reconnaissance conducted in 2003 found one riparian wetland with an associated stream and a second stream in the study area (Sheldon & Associates, 2003). The wetland-stream complex corresponds to one of the wetlands in the City's GIS database, while the other does not correspond with the City or NWI mapping.

According to the WDFW PHS database, the majority of the Cheasty Greenspace is a considered "Biodiversity Areas and Corridors" (WDFW, 2017, 2018). No occurrences of threatened or endangered or other sensitive species have been documented on the site. No soil survey data are available for the study area.

No streams are documented in the WDFW SalmonScape database (2016) or on the City of Seattle GIS database in Cheasty Greenspace, nor up- or downslope of the site. Seattle's drainage map (City of Seattle, 2016b) shows that a combined (storm and sewer) main drains into a number of culverts along Cheasty Boulevard, including the culvert that feeds Watercourse 1 (described in Section 4.3 below).

4.2 Wetlands

ESA identified a total of 10 wetlands in Cheasty Greenspace (Figure 2; see Photographs). All of these wetlands, except for Wetland 12, were identified in the wetland reconnaissance conducted by ESA in December 2014. These 10 wetlands (Wetlands 1, 2, 3, 4, 5, 6, 8, 9, 11, and 12) are described below. Table 1 summarizes the characteristics of each wetland. Two other potential wetlands that were identified during the wetland reconnaissance (Potential Wetlands 7 and 10) were revisited and determined not to meet wetland criteria; data sheets for these sites are included in Appendix B.

4.2.1 Wetland 1

Wetland 1 is a depressional/slope wetland on the south boundary of Cheasty Greenspace (Photograph 1). It is a forested wetland with a canopy of black cottonwood, and understory vegetation of Himalayan blackberry, soft rush, and English ivy. It also has a large unvegetated area that is seasonally ponded; the unvegetated area is quite hard (compacted) and may have been previously disturbed. The hydrology of Wetland 1 appears to be supported primarily by groundwater (hillside seeps) and precipitation. In October 2016, hydrology indicators observed in the wetland were surface soil cracks and sparsely vegetated concave surface. In April 2017, the wetland was saturated to the surface, and there was ponding of approximately 3 inches in the area that was sparsely vegetated. Soils within the wetland met hydric soil indicator A11 (Depleted Below Dark Surface). Data plots W1, DP-1 and W1, DP-2 characterize this wetland and adjacent upland, respectively. Habitat functions are low due to the lack of diversity in vegetation communities and habitats and poor access to habitat.

The buffer to the north is forested with bigleaf maple, black cottonwood, and beaked hazelnut, with an understory of sword fern and English ivy. This wetland is on the edge of the greenspace and two houses within the buffer to the south would reduce the buffer function. However, the overall functions, values, and protection provided by the buffer are moderate as it is forested and relatively undisturbed for an urban park. Ongoing restoration work in the south portion of the park is improving habitat quality by the removal of invasive species.

Table 1. Summary of Wetlands in Cheasty Greenspace

Wetland ID	Total Wetland Area (square feet) ^a	Hydrogeomorphic Class	Cowardin Class
1	977	Depressional/Slope	Forested
2	2,523	Slope	Emergent and Forested
3	23,949	Slope	Scrub-shrub and Forested
4	92,768	Depressional/Slope	Scrub-shrub and Forested
5	790	Slope	Scrub-shrub
6	1,099	Slope	Scrub-shrub
8	874	Depressional/Slope	Emergent
9	132	Slope	Scrub-shrub
11	795+	Slope	Scrub-shrub
12	3,884	Slope	Scrub-shrub

^aWetland 11 was not fully delineated as it is re-forming; see description in Section 4.2.8.

4.2.2 Wetland 2

Wetland 2 is a slope, palustrine emergent and forested wetland in the southeast portion of Cheasty Greenspace, upslope of S Columbian Way (Photograph 2). Vegetation within Wetland 2 includes an emergent community dominated by giant horsetail and common ladyfern, and a forested community dominated by black cottonwood. The hydrology of Wetland 2 appears to be supported primarily by groundwater (hillside seeps) and precipitation. Hydrology indicators observed in the wetland include soil saturation to the surface and a high groundwater table. Soils within the wetland met hydric soil indicator F3 (Depleted Matrix). Data plots W2, DP-1 and W2, DP-2 characterize this wetland and adjacent upland, respectively.

The buffer of Wetland 2 is forested with bigleaf maple, black cottonwood, and beaked hazelnut with an understory of sword fern and English ivy. The overall functions, values, and protection provided by buffer are moderate as it is forested and relatively undisturbed for an urban park. Ongoing restoration work in the south portion of the park is improving habitat quality by the removal of invasive species. Wetland 2 is close to S Columbian Way (less than 100 feet), which is a busy and noisy roadway.

4.2.3 Wetland 3

Wetland 3 is a slope, palustrine mostly scrub-shrub wetland with a forested area at its east edge; it is located in the southeast corner of the park (Photograph 3). The wetland continues off the park property to the east and under the deck of an adjacent house. The scrub-shrub community is dominated by

salmonberry and red alder. The forested portion is dominated by red alder and non-native cedar (likely planted). Emergent vegetation is dominated by giant horsetail, common ladyfern, and English Ivy. English Ivy is quite invasive in this area of the park, including in the wetlands. The hydrology is supported primarily by groundwater (hillside seeps) as well as precipitation. A small channel is located within the boundaries of the wetland (Figure 2). The channel is approximately 1 to 2 feet wide and incised; it has concrete culvert placed in some areas, and it ends within the wetland where the slope flattens out. Additionally, a storm drain is immediately to the south of the wetland, which likely drains the wetland away from the downslope houses. Hydrology indicators observed in the wetland were a high groundwater table and soil saturated to the surface. There was also surface flow in the stream channel. Soils within the wetlands met hydric soil indicator F3 (Depleted Matrix). Data plots W3, DP-3 and W3, DP-4 characterize this wetland and adjacent upland, respectively.

The wetland buffer consists primarily of bigleaf maple with an understory of Indian plum and sword fern. The overall functions, values, and protection provided by the buffer are moderate as it is forested and relatively undisturbed for an urban park. Houses and a residential street are immediately adjacent to the east edge of the wetland, limiting the buffer in this location.

4.2.4 Wetland 4

Wetland 4 is the largest wetland in the Cheasty Greenspace; it is located in middle of the park in a natural valley, stretching from the west to the east edges of the park (Figure 2; Photograph 4). It is a slope-depressional, palustrine scrub-shrub and forested wetland. Vegetation is dominated salmonberry, black cottonwood, giant horsetail, and Himalayan blackberry. Hydrology is supported primarily by a high groundwater table and hillside seeps. Water also comes from the west under Cheasty Boulevard, but no culverts were found. There is a channel that begins within the wetland and is culverted at its downstream end, where it is channelized into a storm drain at the east edge of the greenspace. Hydrology indicators observed in the wetland include soil saturation to the surface, a high groundwater table, and seeps from adjacent slopes. Standing water was observed in the wetland during the December 2014 site visit, but not in October 2016. Soils in the wetland met hydric soil indicator A4 (Hydrogen Sulfide) and F6 (Redox Dark Surface). Data plots W4, DP-1 and W4, DP-2 characterize this wetland and adjacent upland, respectively. The wetland has a moderate habitat function as it has more than one plant structure, hydroperiod, and habitat types.

The buffer of Wetland 4 to the north and south is forested (primarily bigleaf maple), with sword fern, beaked hazelnut, cherry laurel, and English ivy in the understory. A portion of the southern wetland boundary and the buffer of the wetland had been modified by illegal activities, and it has since been restored; the restored portion was regraded and planted with native vegetation in 2015 and 2016. The buffer to the southwest is quite steep, in particular adjacent to the SPR work yard, which is 100–150 feet south of Wetland 4. The overall functions provided by the buffer are moderate as it is forested, but there is minimal buffer to the west and east outside of the park.

4.2.5 Wetlands 5 and 6

Wetlands 5 and 6 are small slope, palustrine scrub-shrub wetlands in shallow east-facing ravines. Wetland 5 is dominated by Himalayan blackberry, common ladyfern, and youth-on-age. Wetland 6 is dominated by Himalayan blackberry and red alder (Photograph 5). Hydrology in both wetlands is supported groundwater and precipitation. Soils within both wetlands meet hydric soil indicator F3 (Depleted Matrix); Wetland 5 also meets the criteria for F6 (Redox Dark Surface). Data plots W5, DP-1 and W6, DP1 characterize these wetlands, and W5, DP-2 and W6, DP-2 describe the adjacent uplands.

Habitat functions are low due to the dominance of invasive species and lack of diversity in vegetation communities, hydroperiods, and habitats.

The buffers immediately adjacent to Wetlands 5 and 6 are dense Himalayan blackberry; farther away, the buffers are dominated by bigleaf maple with sword fern and Oregon grape. No regulatory buffer is required for Wetland 5 due to its size (less than 1,000 square feet) and Category IV rating. The buffers provide moderate protection as they are forested, despite the invasive species in the immediate vicinity.

4.2.6 Wetland 8

Wetland 8 is a depressional slope, palustrine emergent wetland on the north end of the greenspace (Photograph 6). It is dominated by an understory of buttercup and red alder saplings. The hydrology of the wetland is supported by a high groundwater table and precipitation. Hydrology indicators observed in the wetlands included soil saturation to the surface, a high groundwater table, and some surface ponding. Soils met hydric soil indicator A11 (Depleted Below Dark Surface). Data plots W8, DP-1 and W8, DP-2 characterize this wetland and adjacent upland, respectively. Habitat functions are moderate because of the landscape potential and proximity to priority habitats.

The buffer of Wetland 8 is forested, dominated by bigleaf maple and black cottonwood, with swordfern and some Himalayan blackberry in the understory. A cleared transmission corridor approximately 5 feet wide crosses the buffer of Wetland 8from east to west along the Andover Street right-of-way. Also see Photograph 7.

4.2.7 Wetland 9

Wetland 9 is a slope, palustrine scrub-shrub wetland in the north of the greenspace on the east edge, upslope of the Rainer Vista Dakota W P-Patch Community Gardens (Photograph 8). Subsurface hydrology likely continues downslope to the east outside of the Cheasty Greenspace but does not appear to be connected to Watercourse 1. Vegetation is dominated by Himalayan blackberry and red alder. The hydrology of the wetland is supported by a high groundwater table and precipitation. It is close to the watercourse but is not likely connected hydrologically because of its location in the landscape. Soils met hydric soil indicator F3 (Depleted Matrix). Data plots W9, DP-1 and W9, DP-2 characterize this wetland and adjacent upland, respectively.

Similar to Wetlands 5 and 6, the buffer adjacent to Wetland 9 is dense Himalayan blackberry, and farther away the buffer is dominated by bigleaf maple with swordfern. The overall functions, values, and protection provided by this buffer are moderate as it is forested, despite the prevalence of invasive species. No regulatory buffer is required for Wetland 9 due to its size (less than 1,000 square feet) and Category IV rating.

4.2.8 Wetland 11

Wetland 11 is a slope, palustrine scrub-shrub wetland in the middle of Cheasty Greenspace (Photograph 9). Wetland 11 has been substantially modified by illegal activities. It is difficult to determine what preexisting conditions were, but it appears that the east portion of the wetland was excavated or filled. It has since been regraded and restored with native vegetation. However, the majority of the plants used in the restoration are upland plants, some of which are not healthy as the wetland appears to be reforming due to the presence of a high groundwater table. Additionally, a small surface channel runs through the restored area. The restored portion of the wetland was not delineated as it is reforming and the trail is not proposed in this area; however, it was considered when rating the wetland. Vegetation is dominated by salmonberry. Hydrology indicators observed in the wetland included soil saturation to the

ESA December 2022 surface and a high groundwater table, and surface flow (channel forming). Soils within the wetland met hydric soil indicators F3 (Depleted Matrix) and F6 (Redox Dark Surface). Data plots W11, DP1 and W11, DP2 characterize the wetland and adjacent uplands, respectively. Testplot B also shows an upland area downslope of the wetland and is the approximately east edge of the reforming wetland.

The buffer area of Wetland 11 consists primarily of patches of Himalayan blackberry and bigleaf maple. There is also a large open area that has been restored to the south of the wetland. The overall functions, values, and protection provided by the buffer are moderate as it is primarily forested despite the invasive species.

4.2.9 Wetland 12

Wetland 12 is a slope, scrub-shrub wetland near the south boundary of Cheasty Greenspace. It is dominated by hardhack with some salmonberry (Photograph 10). Based on its position in the landscape, it may drain to Wetland 1, although no surface or subsurface connections were observed. A social trail crosses the north edge of the wetland, and this area has little vegetation. Some trees have been planted in the wetland buffer to the northeast and a little within the wetland. Hydrology indicators from the April 2017 site visit were saturation to the surface and a high water table. Soils met hydric soil indicator A11 (Depleted Below Dark Surface). Data plots W12, DP1 and W12, DP2 characterize the wetland and adjacent uplands, respectively. Testplot A is also in Wetland 12, but in October 2016, no hydrology indicators were found.

The buffer is forested with bigleaf maple, black cottonwood, and beaked hazelnut with an understory of sword fern. This wetland is on the edge of the greenspace, and Wetland 1 is within the buffer. Ongoing restoration work in the south portion of the park has improved habitat quality by the removal of invasive species.

4.2.10 Potential Wetlands 7 and 10

Potential Wetlands 7 and 10 were identified as needing further investigation in the wetland reconnaissance conducted in late 2014/early 2015 because these areas had some wetland vegetation and hydrology indicators, but lacked indicators of hydric soil to meet the definition of a wetland. Both potential wetlands were revisited and determined to not meet the wetland criteria; see data plot PW7, DP1 in Appendix B.

4.2.11 Wetland Ratings and Buffer Requirements

Under the SMC, wetlands must be classified using Ecology's 2014 Wetland Rating System for Western Washington (SMC 25.09.160) (Hruby, 2014). According to SMC 25.09.160.B, the buffer width required for a wetland depends on the wetland rating, size, and scores for habitat function. Category IV wetlands that are less than 1,000 square feet in area require no buffer according to the SMC.

The ratings and City-required buffer widths for wetlands within the study area are presented in Table 2. Wetland rating forms are included in Appendix C.

Table 2. Summary of 2014 Wetland Ratings and Buffers

Wetland ID	Wetland Category (2014 Wetland Rating System)	2014 Habitat Score	Standard Buffer Width (feet) ^a
1	III	4 (low)	60
2	IV	4 (low)	50
3	III	5 (moderate)	110
4	III	5 (moderate)	110
5	IV	4 (low)	0 (<1,000 sq ft)
6	IV	5 (moderate)	50
8	IV	4 (low)	0 (<1,000 sq ft)
9	IV	4 (low)	0 (<1,000 sq ft)
11	IV	4 (low)	50
12	IV	4 (low)	50

^a Buffers as per SMC (25.09.160.B). No buffer required on Category IV wetlands less than 1,000 square feet in size.

4.3 Watercourses

4.3.1 Watercourse 1

One watercourse (Watercourse 1) is present in the study area; it flows west to east and extends across the north portion of the greenspace (Figure 2, Photograph 11). Water flows into the watercourse from a culvert under Cheasty Boulevard. The watercourse has a distinct bed and bank, and the OHWM is 1–2 feet wide. Channel depth varies greatly, ranging from non-distinct to quite incised, approximately 4 feet in some spots. A corrugated 12-inch plastic pipe has been placed in the channel and extends from Cheasty Boulevard to approximately three-quarters of the length of the watercourse. The watercourse flows both through and around the pipe; the pipe is not joined to the culvert at Cheasty Boulevard and is not continuous (i.e., there are breaks in pipe). It would be non-fish bearing and is likely seasonal. Riparian vegetation consists predominantly of bigleaf maple, cherry laurel, hawthorn, sword fern, horsetail, English holly, Himalayan blackberry, and Indian plum. The watercourse is in a small natural ravine and may have supported a natural watercourse pre-development. The OHWM of Watercourse 1 was flagged and GPS'ed in the field and surveyed by SPR.

4.3.2 Watercourse Rating and Buffer Requirements

Although no up- or downstream connections were found, the watercourse conservatively meets the criteria of a Type Ns Water. Type Ns streams include all segments of natural waters within the bankfull width of the defined channels that are not Type S, F, or Np Waters. These are seasonal, nonfish habitat streams in which surface flow is not present for at least some portion of a year of normal rainfall and are not located downstream from any stream reach that is a Type Np Water. Type Ns Waters must be physically connected by an above-ground channel system to Type S, F, or Np Waters.

Under SMC 25.09.012, the watercourse would be regulated as a riparian watercourse. "A riparian watercourse is the watercourse of Type F, Np, and Ns waters defined in Washington Administrative Code (WAC) 222-16-030 and 222-16-031 that have fish or wildlife habitat. Pipes, culverts, flow control

facilities, water quality facilities, and stormwater conveyances are not regulated as riparian watercourses." The riparian management area is the area within 100 feet of the riparian watercourse measured from the OHWM of riparian watercourses (together these are called a riparian corridor).

4.4 Wildlife Habitat Types

The Cheasty Greenspace contains three major habitat types as described by Johnson and O'Neil (2001): westside lowland conifer-hardwood forest; westside riparian wetlands; and herbaceous wetlands. Figure 3 shows the extent of habitat types in the study area. Riparian and herbaceous wetlands are combined on the figure (the majority of wetland area meets the definition of riparian wetland habitat type rather than herbaceous). Other habitat types in the vicinity of the greenspace include open water and urban/mixed environs.

Westside lowland conifer-hardwood forest, or mixed forest, is the most common habitat type on the site, accounting for over 80 percent of the area (Figure 3). The tree canopy is composed of mostly deciduous broadleaf species with red alder, black cottonwood, and bigleaf maple as the dominant species in the study area (Photographs 11 and 15). Only a few coniferous trees, such as western red cedar, are present. A few mature Pacific madrone are also present. The trees are medium to large, averaging 12 to 24 inches diameter breast height (dbh) with a few large black cottonwood trees measuring over 36 inches dbh (Photograph 13). Understory plants include vine maple, salmonberry, red alder, and Himalayan blackberry. The herbaceous layer contains sword fern, salal, Oregon grape, and trailing blackberry. The tree canopy is mostly multistoried and closed across the greenspace with only a few gaps. Habitat elements observed include snags, downed logs, stumps, moss and lichens, leaf litter, and pockets of forested or emergent wetland.

Westside riparian wetlands include palustrine forested and palustrine scrub-shrub wetlands (Photographs 13 and 14). These habitats in the greenspace are described previously, as well as herbaceous, or palustrine emergent wetlands. See Section 4.2 above.

In general, the forested and wetland habitats in the study area provide substantial wildlife habitat. Interruptions to connectivity are limited within the greenspace, and the habitats are well interspersed. Threats to habitat integrity include the dumping of refuse and multiple species of invasive or nonnative plants, including Himalayan blackberry, English ivy, and English holly, as well as escaped cultivated species such as English laurel (Photograph 17). However, activities to remove these species from the site have been highly successful in recent years, and planted native vegetation is becoming established. In the vicinity of the greenspace, other patches of deciduous or coniferous forest occur in patches disrupted by residential development, roads, and utilities. Habitat connectivity between the greenspace and landscaped habitats on the adjacent golf course (on the west side of the greenspace) exists in some areas. The greenspace is also adjacent to smaller undeveloped patches of forest on the east-facing slopes on both sides of Cheasty Boulevard to the northwest.

4.5 Wildlife Observations

The forested and wetland habitats contain a diverse community of trees and shrubs that provide food and shelter for a number of songbirds and woodpeckers, amphibians, and small mammals. Bird species observed during the winter field investigation included Steller's jay, northern flicker, downy woodpecker, American robin, golden-crowned kinglet, black-capped chickadee, Bewick's and Pacific wren, song sparrow, and Anna's hummingbird (Table 3). Pileated woodpecker excavations were

encountered in multiple trees and snags across the greenspace. These bird species are considered common residents in Puget Sound lowlands.

Bird observations during the spring field investigations included additional migratory species such as Wilson's warbler, Pacific flycatcher, vireo species, and Swainson's thrush. Several bird species were confirmed as nesting on the site during field investigations. Evidence of nesting included nest building, territorial behavior, and incubating birds on a nest. Confirmed breeders on the site included Cooper's hawk, red-breasted sapsucker, American crow, song sparrow, and European starling. Other species likely breeding in or in the vicinity of the greenspace include American robin, Bewick's wren, and spotted towhee.

Except for eastern gray squirrel, no mammals or amphibians were observed during field investigation. Species expected to be present in the greenspace include Northern raccoon, Virginia opossum, coyote, Pacific chorus frog, garter snake, and potentially deer.

General observations of wildlife use on the site were recorded during all field visits. Table 3 is a list of wildlife species observed and expected to occur, and includes both the winter and spring surveys. Field survey data sheets are included in Appendix D.

Table 3. Summary of Bird Species Observed and Expected in Cheasty Greenspace

Species Name	Observed	Expected (Resident or Seasonal)	Confirmed Nesting	Probable Nesting	Transient/ Migratory*
Canada Goose	Х				X
Common Nighthawk					X
Vaux's Swift		Х			
Anna's Hummingbird	Χ			Χ	
Rufous Hummingbird		Х		Χ	
Glaucous-winged Gull	Χ				X
Double-crested Cormorant	Χ				Χ
Bald Eagle	Χ				X
Sharp-shinned Hawk		X			
Cooper's Hawk	Χ		Χ		
Red-tailed Hawk	Χ				
Western Screech-Owl		X			
Barred Owl		Х			
Northern Saw-whet Owl		X			
Red-breasted Sapsucker	X		X		
Downy Woodpecker	Χ			X X	
Northern Flicker	Х			X	
Pileated Woodpecker	Χ				
Merlin		X			
Olive-sided Flycatcher		X			
Western Wood-Pewee		X			
Willow Flycatcher					X
Hammond's Flycatcher					Χ
Pacific Flycatcher	Х			X	
Vireo sp.	X		-		
Cassin's Vireo		X			
Warbling Vireo	<u>-</u>	X		·	
Red-eyed Vireo		X			
Steller's Jay	X			Х	
California Scrub-Jay		X			
American Crow	X		X		

Species Name	Observed	Expected (Resident or Seasonal)	Confirmed Nesting	Probable Nesting	Transient/ Migratory*
Tree Swallow		Х		Х	
Violet-green Swallow		Х		Х	
Barn Swallow		X			
Black-capped Chickadee	X			X	
Chestnut-backed	Х				
Chickadee					
Bushtit	X			Χ	
Red-breasted Nuthatch	Х			Х	
Brown Creeper	X				
Pacific Wren	X			X	
Bewick's Wren	Χ			X	
Golden-crowned Kinglet	X				
Ruby-crowned Kinglet	X				
Swainson's Thrush	Х			X	
Hermit Thrush		Χ			X
American Robin	Х			X	
Varied Thrush	Χ				
European Starling	Χ		Χ		
Bohemian Waxwing					Х
Cedar Waxwing		X			Х
House Finch	Х			Х	
Purple Finch		X			
Pine Siskin		Х			
American Goldfinch	X				
Orange-crowned Warbler		X		X	
Nashville Warbler					X
MacGillivray's Warbler					X
Yellow Warbler		X		X	
Yellow-rumped Warbler	X				
Black-throated Gray					X
Warbler					
Townsend's Warbler					X
Wilson's Warbler	X			X	
Spotted Towhee	X			X	
Chipping Sparrow					X
Fox Sparrow		Х			
Song Sparrow	X		Χ		
Lincoln's Sparrow					X
White-crowned Sparrow		X			
Golden-crowned Sparrow					X
Dark-eyed Junco	X				
Western Tanager		X			
Black-headed Grosbeak		X			
Brown-headed Cowbird		X		X	

^{*} Includes "flyover" and migratory species not associated with the habitats provided in Cheasty Greenspace.

4.6 Trees

In spring 2018, SPR arborists inventoried all trees greater than 6-inches diameter at breast height (DBH) within 6 feet on either side of the center line of the trail (12 feet total). In 2022, ESA biologists used an updated north trail alignment to document exceptional trees using the same standards. In total, three hundred and eighty-one trees were documented. (See Figure 2 and Appendix E for list of inventoried trees). A tree can be rare or exceptional by virtue of its size, species, condition, cultural/historic importance, age, and/or contribution as part of grove of trees as determined by the method outlined in the Director's Rule 16-2008. The majority of the trees inventoried were Bigleaf Maple (*Acer macrophyllum*) which are exceptional if they are larger than 30-inches DBH. Also found were red alder (*Alnus rubra*), black cottonwood (*Populus balsamifera ssp. trichocarpa*), and bitter cherry (*Prunus emarginata*) which are only exceptional as part of a grove. A grove is a group of 8 or larger than 12-inches DBH that form a continuous canopy. As Cheasty Greenspace is mainly forested with trees larger than 12-inches, it was assumed that inventoried trees larger than 12-inches were part of a grove. Trees that fail to meet the risk criteria, are not exceptional. See Table 4 for a summary of exceptional trees.

Table 4. Summary of Exceptional Trees near the Trail

2018 Inventory	Exceptional				
	Size	Grove	Total		
Acer macrophyllum	33	61	94		
Alnus rubra	0	4	4		
Malus sp.	1	0	1		
Populus balsamifera ssp. trichocarpa	0	5	5		
Prunus emarginata	0	1	1		
2022 Inventory					
Acer macrophyllum	75	170	245		
Alnus rubra	12	0	12		
Arbutus menziesii	2	0	2		
Crataegus monogyna	2	0	2		
Fraxinus latifolia	1	0	1		
Populus balsamifera ssp. trichocarpa	2	0	2		
Salix sp.	8	0	8		
Thuja plicata	4	0	4		
Total	140	241	381		

4.7 Literature Review

ESA also conducted a literature review of current wildlife science relevant to pedestrian and bicycle trail impacts on birds to inform planning for impact assessment and mitigation. All of the studies found that looked at different types of recreation (e.g., mountain biking, walking) were conducted in large national parks or wilderness areas with quite different habitat and wildlife than found in an urban park such as the Cheasty Greenspace. Only one study was found that included effects of mountain biking specifically on birds (Miller & Knight, 1998). That study concluded that recreational use changed species composition, but it did not examine differences between types of recreation activities. For other wildlife species, studies by Taylor and Knight (2003), Wisdom et al. 2004, and Herrero & Herrero (2000) were the only studies found that distinguished between impacts from mountain biking and other recreation types (usually hiking) on animal behavior. Taylor and Knight (2003) studied bison, mule deer, and pronghorn antelope in Antelope Island State Park, Utah and concluded that there was no significant difference between the response of wildlife to mountain biking and hiking. Wisdom et al. (2004) looked at the

effects of off-road recreation (all-terrain vehicles [ATVs], mountain biking, horseback riding, and hiking) on mule deer and elk. They concluded that movement rates and probabilities of flight for elk were higher for ATV and mountain bike riding than for horseback riding and hiking, although elk did not flee about a third of the time. Mule deer showed little measureable response to off-road recreation. Herrero and Herrero (2000) showed that grizzly bear encounters were more common with mountain bikers than hikers along the Highline Trail in Banff National Park. They attributed this to the speed and relative silence of mountain bikes, which allowed mountain bikers to get closer to bears before being detected by the bear. A literature review conducted for Parks Canada in Quinn and Chernoff (2010) looked at the ecological effects of mountain biking on soils, vegetation, water, and wildlife. They found that available published literature indicates that trail-based mountain biking results in similar environmental effects as other forms of summer season trail use. However, they also identified significant data gaps. Many studies have been conducted on large mammals in large wilderness areas, and often did not distinguish between impacts from different recreation types. Erosion and compaction from mountain bikes were the most commonly studied issues; these studies found that soil type, terrain, and technique were all factors in impacts. They found little research on mountain bikes being a vector for the spread of invasive plants, and it was assumed to be similar to hiking and horseback riding. They were not able to find published research on the effects of mountain biking on water quality.

5.0 REGULATORY CONTEXT

The proposed trails have been designed to avoid impacts to wetlands, wetland buffers, and reduce impacts to the watercourse and its buffer, and exceptional trees. There would be no wetland fill, shading of wetlands, work within the OHWM of the watercourse, or removal of exceptional trees. However, the project would result in impacts to the riparian management area (stream buffer) (see Section 6.0 for details). This section summarizes the regulatory context for federal, state, and local authorities likely to require permits or approvals.

5.1.1 U.S. Army Corps of Engineers and Section 404

Wetlands are regulated at the federal and state levels by the Corps and Ecology, respectively. At a federal level, the Corps regulates wetlands and streams (i.e., Waters of the U.S.) under the Clean Water Act through the Section 404 permit process (also known as a Department of the Army permit). The trail would not cross any wetlands and thus avoid wetland shading and wetland fill. As there would be no fill, a Section 404 permit would not be required. See the additional discussion in Section 6.0 below.

5.1.2 Washington State Department of Ecology

Ecology regulates wetlands under Section 401 of the Clean Water Act, which is triggered by the Section 404 permit. Issuance of a 401 Certification means that Ecology has reasonable assurance that the applicant's project will comply with state water quality standards and other aquatic resource protection requirements under Ecology's authority. The trail would not cross any wetlands and thus avoid wetland shading and wetland fill. As there would be no fill or shading, a Section 401 Certification would not be required. See the additional discussion in Section 6.0 below.

5.1.3 Washington State Department of Fish and Wildlife

There would be no work within the OHWM of the watercourse, and thus no Hydraulic Project Approval (HPA) is expected to be required (pending confirmation by WDFW). Only projects that use, divert, obstruct, or change the natural bed or flow of state waters require an HPA from WDFW. The HPA permit is authorized through Chapter 77.55 Revised Code of Washington (RCW), and administered through rules in WAC.

5.1.4 City of Seattle

Critical Areas

The City regulates critical areas under SMC 25.09, *Regulations for Environmentally Critical Areas*. The City updated and adopted changes to their critical areas regulations in early 2017. This section summarizes regulations applicable to the project, but the reader is referred to SMC 25.09 for the complete regulations. Within the Cheasty Greenspace, multiple areas are designated critical areas including a Fish and Wildlife Habitat Conservation Area (FWHCA), wetlands, and geologic hazard areas (Figures 2 and 4).

SMC 25.09.045.H.3.f states that public projects are exempt from SMC 25.09

"if the purpose is to benefit the public's passive enjoyment of the environmentally critical area, such as, but not limited to, walking trails providing access to a creek or wetland area, when located and designed to minimize environmental disturbance and adverse impacts to the environmentally critical area and buffer. The applicant shall protect vegetation and trees pursuant to a tree and

vegetation plan consistent with best management practices (BMPs). The plan shall be prepared by a qualified environmental professional with experience related to the type of environmentally critical area or buffer where work will occur. In landslide-prone areas, the plan shall also be approved by a geotechnical engineer licensed in Washington with experience in analyzing geological hazards related to slope stability and tree and vegetation removal on steep slope erosion hazard areas. Trail projects shall be:

- 1. Limited to pervious surface or raised boardwalk, using non-treated wood or other non-toxic material;
- 2. No more than 5 feet wide;
- 3. For pedestrian use only;
- 4. Located in the outer 25 percent of the wetland buffer area; and
- 5. Located to avoid removal of trees."

Because the proposed trail includes mountain bike use, this exemption does not apply.

Wetlands. Wetland buffer averaging and buffer reductions are allowed under SMC 25.09.160. E. Buffers can be reduced to no less than 75 percent of required buffer widths as long as it will not reduce functions or values and the area is the same as would be required with a standard buffer. Buffers of Category I, II, and III wetlands can be reduced by 20 percent if a vegetated corridor at least 100 feet wide is protected between the wetland buffer and any other priority habitats defined by WDFW. Buffers can be reduced for Category IV wetlands if they do not meet criteria for buffer averaging or for granting a variance.

Fish and Wildlife Habitat Conservation Areas (FWHCAs). The Cheasty Greenspace is mapped and designated by the WDFW as biodiversity areas and corridors; thus, the entire greenspace meets the criteria for an FWHCA. The riparian watercourse together with its riparian management area (i.e., buffer) are a riparian corridor, which is also regulated as an FWHCA. The riparian management area is 100 feet from the top of bank or OHWM (see SMC 25.09.012). Review of proposed development impacts on FWHCA is required under SMC 25.09.200. Development is prohibited within or over the watercourse, and within the riparian management area unless it can be demonstrated that no other access is available; access is provided by a freestanding structure that maintains the natural channel and floodway of the watercourse; that disturbance of the riparian watercourse and corridor is kept to a minimum; and durable and non-toxic materials are used for construction of structures.

Geologic Hazard Areas. Development is allowed on steep slope erosion hazard areas if the applicant demonstrates that all other provisions of SMC 25.09 and all applicable provisions of Title 23 and Chapters 22.800 through 22.808 are met (SMC 25.09.090). No adverse impact on the stability or erosion potential of the steep slope erosion hazard areas may result. The development must also meet criteria outlined in SMC 25.09.090. The Director may require a geotechnical report to verify site conditions and to evaluate the impacts of the development in the steep slope erosion hazard area. A geotechnical report was conducted by HWA Geosciences (2015), and updated based on the redesigned trail in 2018.

Tree Protection

The City regulates trees under SMC 25.11, *Tree Protection*. Per SMC 25.11.040, there are restrictions on tree removal and topping, except as provided in SMC 25.11.030.

The Director's Rule 16-2008 clarifies the definition of "exceptional tree" in SMC 25.11.020. This rule also clarifies the SEPA Plants and Animals Policy (SMC 25.05.675.N.2.c) for the purpose of determining the

value of "rare, uncommon, unique or exceptional" trees on sites undergoing environmental review, in order to establish appropriate tree protection mitigating measures. The Director's Rule states that an exceptional tree is a tree that:

- Is designated as a heritage tree by the City; or
- Is rare or exceptional by virtue of its size, species, condition, cultural/historic importance, age, and/or contribution as part of grove of trees as determined by the method outlined in the Director's Rule 16-2008.

A tree that meets the size threshold or grove definition is not considered exceptional if it should be removed based on a risk assessment produced by a qualified professional.

State Environmental Policy Act

SEPA Rules are outlined in SMC 25.05, *Environmental Policies and Procedures*. The SPR is the lead SEPA agency for the project. A SEPA analysis is required for any proposal that requires a state or local agency decision to license, fund, or undertake a project. SEPA requires governmental agencies to consider the environmental impacts before project approval. The SEPA Official issued a Determination of Non-Significance (DNS) on August 3, 2015, but the determination was successfully appealed on January 26, 2016. Since the appeal, the proposed trail alignment was reconfigured from the 2015 proposal to avoid the large wetland complex and steep slope area in the middle of the greenspace. The design changed to individual perimeter loops, one on the south side and one on the north side of the site to avoid critical areas. A SEPA DNS was issued on October 15, 2018, for the two-loop trail system (north and south loops). The two-loop updated design was appealed on November 5, 2018. Following the appeal, settlement discussions and mediation led to SPR reducing the proposal to one loop on the south end of the greenspace. Following these changes, the DNS was affirmed for the south loop on November 4, 2019. The SEPA determination for the north loop trail project is anticipated in early 2023. This Critical Areas Study has been prepared to support the SEPA analysis for the north loop trail project.

6.0 PROJECT IMPACTS AND CONCEPTUAL MITIGATION APPROACH

SPR has designed the proposed trails to avoid and minimize impacts to wetlands and watercourses and their buffers in accordance with the following preferred sequence of mitigation (SMC 25.09.065):

- a. Avoiding the impact altogether by not taking a certain action or parts of an action.
- b. Minimizing the impact by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, BMPs, and/or by taking affirmative steps to avoid or reduce impact.
- c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- d. Reducing or eliminating the impact over time by preservation and maintenance operations.
- e. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments.
- f. Monitoring the impact and the compensation projects and taking appropriate corrective measures.

The following sections describe each step of the mitigation sequence for the project.

6.1 Avoidance

SPR has redesigned the proposed trail alignment to avoid wetlands and their buffers, the watercourse, and steep slopes to the greatest extent possible. The redesign considered the wetland and watercourse delineation results, geotechnical input, and community input. The new proposed trail alignment includes two independent loops instead of a single perimeter loop inside the greenspace.

The new proposed trail alignment now avoids all wetland crossings, including Wetlands 4 and 11 (which would have been crossed with the previous trail design). The new alignment would avoid several areas with steep slopes, including the area near the SPR work yard east of Cheasty Boulevard. The trail would still cross the watercourse and its riparian management area. The crossing of the watercourse would be via a bridge and would not be within the OHWM of the watercourse. No exceptional trees would be removed within the wetland or the watercourse buffer.

6.2 Minimization

The redesigned trail alignment also eliminates impacts to wetlands and their buffers in comparison to the previous design. The preliminary trail designs called for separate pedestrian and bicycle trails, while the new proposed trail design includes more shared portions of trail, decreasing the total footprint of disturbed area for the trails. Existing social trails would also be used where possible. For example, the proposed Andover Entry would use an existing social trail and transmission line right-of-way to provide access to the greenspace from the northwest corner instead of the creation of a new trail. The trail was designed with the IMBA trail guidelines and the principle of minimizing trail footprint. The grade was kept to 10 percent or less and follows the "half-rule" that a trail's grade should never exceed half the grade of its side slopes. The trail would be constructed using full bench-cut, cutting from the existing slopes so that rainfall drains off the side of the trail rather than along it. In addition, flat areas would be avoided to prevent creating collection basins for water. Where possible, the trail would use pre-existing trail on the site. These trails will have no special mountain bike trail features (e.g., jumps). Additionally, exceptional trees will be avoided.

Appropriate BMPs would be used for pollution, sediment, and erosion control during construction. Erosion and sediment control measures include mulching, matting, netting, and filter fabric fencing. Significant short- or long-term water quality impacts are not expected if erosion control BMPs are properly implemented, monitored, and maintained during construction.

6.3 Unavoidable Project Impacts

Although impacts have been avoided and minimized, the project would result in unavoidable impacts to a riparian management area (i.e., watercourse buffer). Project impacts are based on the 90 percent trail design plans (Appendix F). No temporary impacts are anticipated; wetlands, wetland buffers, the watercourse, and the riparian management area would be clearly marked to avoid disturbance during trail construction. We have assumed that no impacts to the watercourse would occur; however, this will need to be verified by WDFW, through the HPA process during permitting. Potential impacts are as follows and shown in Appendix F, Trail Design, Sheet L-1:

- The one-way 3-foot wide mountain bike trail would cross the width of the riparian management area of Watercourse 1. This would impact 3,111 square feet of buffer.
- Watercourse 1 would be crossed with a bridge approximately 4 feet wide and at least 6 feet long; no footings would be placed within the OHWM.

Watercourse 1 crosses most of the width of Cheasty Greenspace from west to east. Crossing Watercourse 1 with the trail is avoided on the downstream (eastern) edge of the watercourse, but it is not possible to avoid crossing it on the upstream side. There would be no impacts to the watercourse itself, and it would be crossed with a bridge approximately 4 feet wide. The watercourse is 1–2 feet wide, and the bridge would be at least 6 feet long and thus outside of the OHWM.

6.4 Compensatory Mitigation Approach

SPR plans to provide compensatory mitigation to offset unavoidable impacts the riparian management area (3,111 square feet). Mitigation concepts were developed in accordance with the City's critical areas mitigation plan information standards (SMC 25.09.065).

The proposed concept for compensatory mitigation for unavoidable impacts includes the following:

- Removal of invasive species from at least 3,111 square feet of the buffer of Watercourse 1.
- Planting of the area with native trees and shrubs including but not limited to sword fern, Douglas fir, and salmonberry.

Native vegetation would improve and riparian functions for wildlife and provide additional protection to the adjacent watercourse. In addition, watercourse buffers reduce sediment and nutrients from entering the wetlands and streams, moderate temperatures, increase plant species diversity, provide wildlife habitat, and deter human disturbance of these resources.

6.5 Mitigation Goals, Objectives, and Performance Standards

The overall goal of the conceptual mitigation plan is to replace the habitats and functions lost or altered as a result of the proposed trail project.

6.5.1 Mitigation Goals

Specific mitigation goals include the following:

• Enhance 3,111 square feet of the buffer of Watercourse 1 through the removal of invasive species and the planting of native trees and shrubs.

6.5.2 Objectives and Performance Standards

Objective 1: Establish native shrub cover in the watercourse buffer areas.

Performance Standard 1a: Year 1—100 percent survival of installed native trees and shrubs species within 1 year of mitigation installation. Survival will be determined by total counts as the area is small.

Performance Standard 1b: Year 2—At least 20 percent coverage of native species in all areas (installed and desirable volunteer).

Performance Standard 1c: Year 3—At least 30 percent coverage by native plant species in all areas (installed and desirable volunteer).

Performance Standard 1d: Year 5—At least 80 percent survival of new trees and shrubs in buffer mitigation areas.

Objective 2: Remove non-native, invasive vegetation in watercourse buffer mitigation areas.

Performance Standard 2: Himalayan blackberry, Englishivy, and other invasive species will not exceed 20 percent coverage in all planting areas throughout the 5-year monitoring period.

6.6 Maintenance and Monitoring

The main objective for mitigation monitoring is to document the level of success in meeting the project's performance standards. The following describes the monitoring and maintenance approach for 5 years, as required by SMC 25.09.065.

6.6.1 Schedule

An initial stem count of the installed vegetation will be conducted following construction (an as-built count). Monitoring of mitigation areas will continue annually for 5 years post-construction. A qualified biologist or landscape designer will conduct the monitoring. The as-built plan will be used as the basis for monitoring of plant survival. Monitoring will begin the first full growing season after construction is complete and the plants have been installed.

6.6.2 Data Collection

Shrub and tree cover will be evaluated both quantitatively and qualitatively 1 year after construction, as well as in Years 2, 3, 4, and 5. Data collection will occur during the late summer (i.e., July–September). The following information will be recorded during each of the monitoring site visits:

- Survival rates of installed vegetation during plant warranty period based on total counts.
- General plant health assessment and plant aerial coverage from established sampling total counts.

- Presence of undesirable plants (weedy and/or non-native species) with estimated percent cover.
- Photo documentation of site conditions from established photo points.
- Impacts to the wetland and watercourse buffer from human use (e.g., dumping of debris, bicycle use).
- Signs of wildlife use.

6.6.3 Reporting

Monitoring reports will be prepared by a qualified biologist or landscape designer for review and approval by SPR and the Seattle Department of Construction and Inspections (SDCI) during monitoring Years 1, 2, 3, 4, and 5. The reports will compare the performance standards described in the mitigation plan to the field observations during monitoring, and will recommend species replacements or other maintenance activities, if necessary (see *Maintenance* section below). Reports will present data collected during the site visits and document success in meeting specific performance standards. Photographs will illustrate and document site conditions. Monitoring reports will be submitted by the end of each monitoring year to SPR and the SDCI.

6.7 Maintenance

Maintenance of the mitigation area will begin after completion of the project and continue, as needed, for 5 years. After the initial planting acceptance by the project biologist, the landscaping contractor (or SPR if planted by volunteers) will be responsible for plant survival for a period of 1 year. If the mitigation area is planted by volunteers, the plant survival requirement would not apply. SPR will provide maintenance to the mitigation site, as necessary. Maintenance could include, but may not be limited to, the following:

- Irrigate during dry periods.
- Remove non-native or invasive plant species.
- Add soil amendments and/or mulch.
- Install fencing around woody plants to prevent animal damage.
- Construct fencing to prevent vandalism or damage caused by humans.
- Install supplemental plantings as needed.

Based on monitoring results, SPR will implement the required maintenance and determine how corrective measures will be addressed should they be necessary.

6.8 Contingency

If any portion of the mitigation is not successful, a contingency plan will be implemented. Such plans are prepared on a case-by-case basis to remedy aspects of the mitigation that do not meet the performance standards. The plan, if required, would be developed in cooperation with the regulating agencies.

6.9 Site Protection

Mitigation areas would be protected from future use (except for the purposes of enhancing or restoring the mitigation associated with this project). Development on and any disturbance of them would be

prohibited.

6.10 Conceptual Mitigation Project Team

The conceptual mitigation plan for the project was developed by ESA biologists and landscape architects. SPR will be responsible for the implementation and monitoring of the mitigation project.

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7.0 LIMITATIONS

Within the limitations of schedule, budget, scope-of-work, and seasonal constraints, ESA warrants that this study was conducted in accordance with generally accepted environmental science practices, including the technical guidelines and criteria in effect at the time this study was performed, as outlined in the Methods section (Appendix A). The results and conclusions of this study represent the authors' best professional judgment, based on information provided by the project proponent in addition to that obtained during the course of this study. No other warranty, expressed or implied, is made.

8.0 REFERENCES

- City of Seattle . 2016a . Seattle 2035 Comprehensive Plan : Managing Growth to Become an Equitable and Sustainable City (2015 2035). November 2016. Available : http://www.seattle.gov/dpd/cityplanning/completeprojectslist/comprehensiveplan/documents/default.htm.
- City of Seattle. 2016b. Development Services Office. Water and Sewer Map. Accessed November 30, 2016. Available at: http://gisrevprxv.seattle.gov/wab_ext/DSOResearch_Ext/.
- City of Seattle . 2017 . DPD GIS data . Accessed June 8 , 2017 and May 22 , 2018 . Available at:

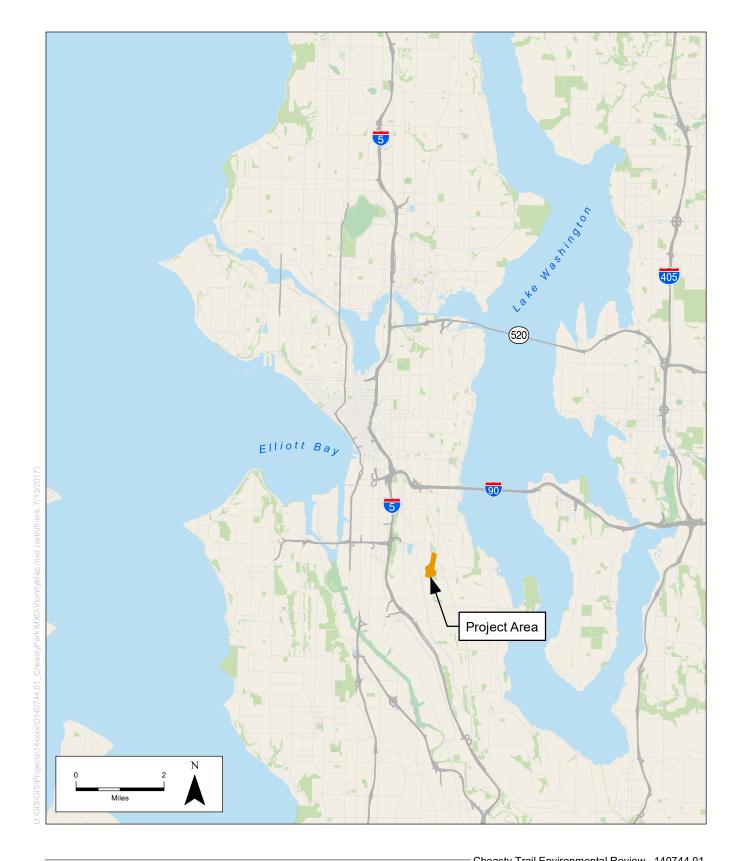
 http://seattlecitygis.maps.arcgis.com/apps/webappviewer/index.html?id=f822b2c6498c4163b0cf908e22
 41e9c2.
- Cornell Lab of Ornithology. 2017. eBird data. Accessed May 2017. Available at: http://ebird.org/ebird/explore.
- Corps (U.S. Army Corps of Engineers). 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region. Version 2. Wetlands Regulatory Assistance Program. May 2010. ERDC/EL TR-10-3. http://www.usace.army.mil/CECW/Documents/cecwo/reg/west_mt_finalsupp.pdf.
- Ecology (Washington State Department of Ecology), Corps (U.S. Army Corps of Engineers Seattle District), and EPA (U.S. Environmental Protection Agency, Region 10). 2006. Wetland Mitigation in Washington State Part 2: Developing Mitigation Plans (Version 1). Washington State Department of Ecology Publication #06-06-011b. Olympia, WA. Available at: https://fortress.wa.gov/ecy/publications/documents/0606011b.pdf. Accessed: June 13, 2017.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.
- ESA (Environmental Science Associates). 2015. Wetland Reconnaissance and Wildlife Habitat Assessment Memorandum. Prepared for City of Seattle Parks and Recreation Department. January 22, 2015.
- HWA Geosciences. 2015. Geotechnical Engineering Investigation Cheasty Trail Pilot Project. Prepared for ESA and City of Seattle Parks Department. January.
- HWA Geosciences. 2022. Draft Geotechnical Engineering Report Cheasty Greenspace Mountain Bike Trail.

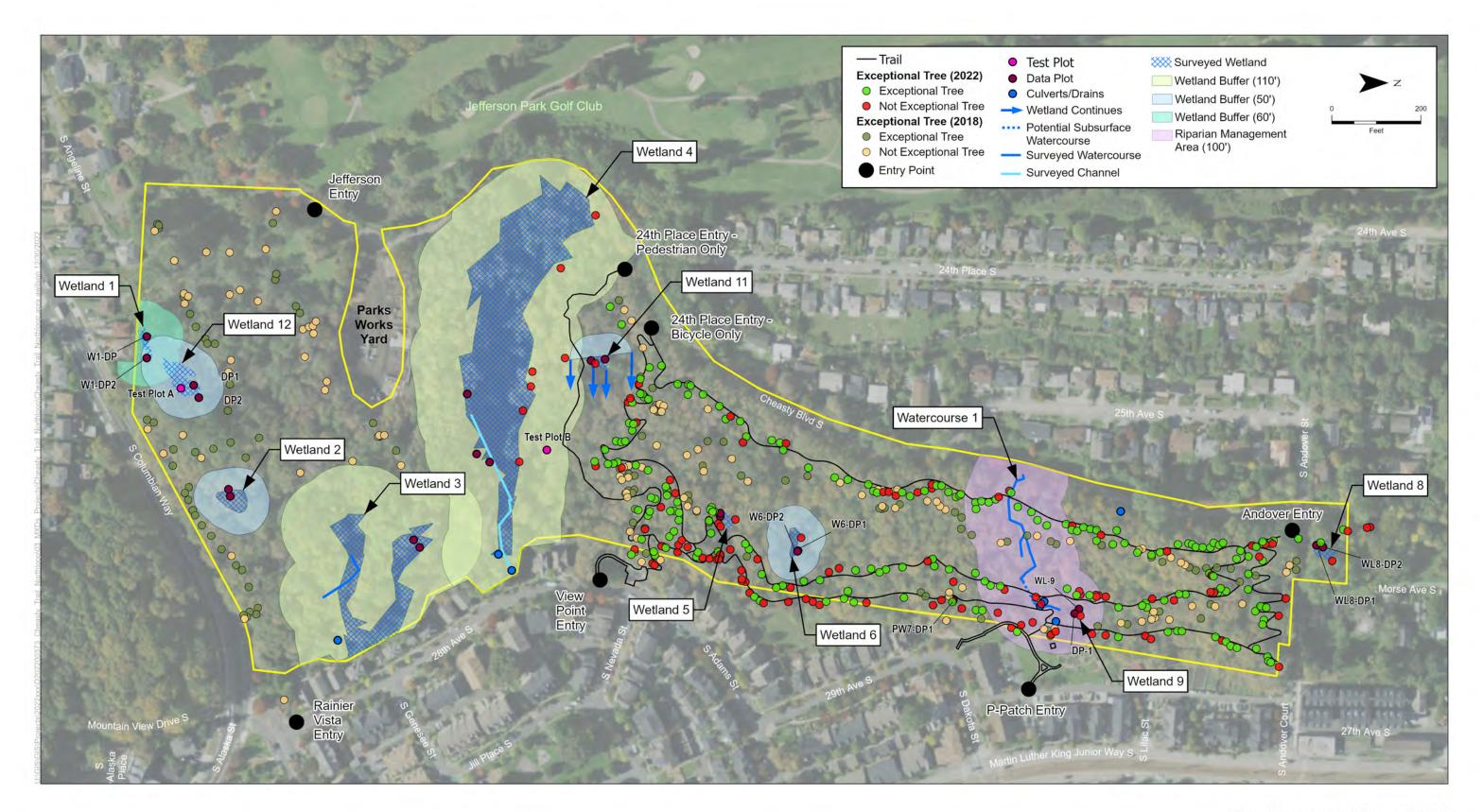
 Prepared for ESA and City of Seattle Parks Department. December 2022.
- Herrero, J., and S. Herrero. 2000. Management Options for the Moraine Lake Highline Trail: Grizzly Bears and Cyclists. Parks Canada.
- Hruby, T. 2014. Washington State Wetland Rating System for Western Washington: 2014 Update. Publication #14-06-029. Olympia, WA.
- Johnson, D.H., and T.A. O'Neil. 2001. *Wildlife Habitat Relationships in Oregon and Washington*. Oregon State University Press, Corvallis, Oregon.
- King County. 2017. King County iMap, Interactive Mapping Tool. Accessed May 2017. Available at: http://www.kingcounty.gov/services/gis/Maps/imap.aspx.
- Miller, S.G., and R.L. Knight. 1998. Influence of Recreational Trails on Breeding Bird Communities. Department of Fishery and Wildlife Biology, Colorado State University. 31pp.

- NAIP (National Agriculture Imagery Program). 2015. NAIP Imagery website. Available: https://www.fsa.usda.gov/programs-and-services/aerial-photography/imagery-programs/naip-imagery/.
- NRCS (Natural Resources Conservation Service). 2017. Climate Analysis for Wetlands Tables (WETS). Station Seattle Tacoma Airport. Accessed May 2017. Available at:

 https://www.wcc.nrcs.usda.gov/climate/navigate_wets.html.
- OSM (OpenStreetMap). 2014 and 2016. Map data copyrighted OpenStreetMap contributors and available from: https://www.openstreetmap.org.
- Quinn, M., and G. Chernoff. 2010. Mountain Biking: A Review of the Ecological Effects. A Literature Review for Parks Canada National Office (Visitor Experience Branch). Final Report. February.
- Sheldon & Associates. 2003. DRAFT Cheasty Greenspace Vegetation Management Plan. Prepared for City of Seattle Department of Parks & Recreation.
- Taylor, A.R., and R.L. Knight. 2003. Wildlife Responses to Recreation and Associated Visitor Perceptions. Ecological Applications, 13(4), 2003, pp. 951–963.
- USFWS (U.S. Fish and Wildlife Service). 2017. National Wetlands Inventory Wetland Mapper. Accessed June 8, 2017. May 1, 2017 and May 22, 2018. Available at: http://www.fws.gov/wetlands/Data/Mapper.html.
- WDFW (Washington Department of Fish and Wildlife). 2016. SalmonScape fish database and mapping application. Accessed November 30, 2016, and May 22, 2018. Available at: http://apps.wdfw.wa.gov/salmonscape/map.html.
- WDFW (Washington Department of Fish and Wildlife). 2017. Priority Habitats and Species on the Web. Accessed May 1, 2017, and May 22, 2018. Available at: http://wdfw.wa.gov/mapping/phs/.
- Wisdom, M.J., A.A. Ager, H.K. Preisler, N.J. Cimon, and B.K. Johnson. 2004. Effects of off-road recreation on mule deer and elk. Transactions of the North American Wildlife and Natural Resource Conference 69: 531–550.

FIGURES AND PHOTOGRAPHS







SOURCE: NAIP, 2015, ESA 2017, OSM 2014

Cheasty Trail Environmental Review

Figure 3 Wildlife Habitat Map





SOURCE: NAIP, 2022, King County, 2014, OSM 2014, ESA 2023

Cheasty Trail Environmental Review . 220373.00

Figure 4 Geologic Hazard Areas





Photograph 1. Wetland 1, ponding in April 2017



Photograph 2. Wetland 2, December 2015



Photograph 3. Wetland 3, October 2016



Photograph 4. Wetland 4, April 2017



Photograph 5. Wetland 6, October 2016



Photograph 6. Wetland 8, April 2017

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Photograph 7. Wetland 8 buffer (facing west, toward Cheasty Boulevard), April 2017



Photograph 8. Wetland 9, October 2016



Photograph 9. Wetland 11, April 2017



Photograph 10. Wetland 12, April 2017



Photograph 11. Watercourse 1, October 2016



Photograph 12. Example of Westside Lowland Mixed Forest Habitat Type



Photograph 13. Snags and black cottonwood in Westside Lowland Mixed Forest Habitat Type



Photograph 14. Example of Westside Riparian Wetland Habitat Type



Photograph 15. Example of Westside Riparian Wetland Habitat Type



Photograph 16. Large bigleaf maples in Westside Lowland Mixed Forest Habitat Type

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Photograph 17. Invasive species in Westside Lowland Mixed Forest Habitat Type

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APPENDIX A: METHODS

WETLAND DEFINITION AND DELINEATION

Wetlands are formally defined by the U.S. Army Corps of Engineers (Corps) (Federal Register 1982), the Environmental Protection Agency (EPA) (Federal Register 1988), the Washington Shoreline Management Act (SMA) of 1971, and the Washington State Growth Management Act (GMA) as follows:

... those 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. Wetlands generally include swamps, marshes, bogs, and similar areas (Federal Register, 1982, 1986).

In addition, the SMA and the GMA definitions add:

Wetlands do not include those artificial wetlands intentionally created from non-wetland site, 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 artificially created wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands.

Methods defined in the Western Mountains, Valleys, and Coast Regional Supplement (Corps, 2010) to the U.S. Army Corps of Engineers 1987 Wetlands Delineation Manual (Manual) were used to determine the presence and extent of wetlands in the study area. These methods are also consistent with state requirements in WAC 173-22-035.

The methodology outlined in the manuals is based on three essential characteristics of wetlands: (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Field indicators of these three characteristics must all be present in order to determine that an area is a wetland (unless problem areas or atypical situations are encountered). These characteristics are described below.

The "routine on-site determination method" was used to determine wetland boundaries that had not been previously delineated. Formal data plots were established where information regarding each of the three wetland parameters (vegetation, soils, and hydrology) was recorded. This information was used to distinguish wetlands from non-wetlands. If wetlands were determined to be present within the study area, wetland boundaries were delineated with sequentially numbered colored pin flags or flagging. Data plot locations were also marked with colored flagging. Data sheets for each of the formal data plots evaluated for this Project are provided in Appendix B.

Vegetation

Plants must be specially adapted for life under saturated or anaerobic conditions to grow in wetlands. The U.S. Fish and Wildlife Service (USFWS) has determined the estimated probability of each plant species' occurrence in wetlands and has accordingly assigned a "wetland indicator status" (WIS) to each species. Plants are categorized as obligate (OBL), facultative wetland (FACW), facultative (FAC), facultative upland (FACU), and upland (UPL). Definitions for each indicator status are listed below. Species with an indicator status of OBL, FACW, or FAC are considered adapted for life in saturated or anaerobic soil conditions. Such species are referred to as "hydrophytic" vegetation.

Key to Wetland Indicator Status codes:

- OBL <u>Obligate</u>: species that always occur in standing water or in saturated soils.
- FACW <u>Facultative wetland</u>: species that nearly always occur in areas of prolonged flooding or require standing water or saturated soils but may, on rare occasions, occur in non-wetlands.
- FAC <u>Facultative</u>: species that occur in a variety of habitats, including wetland and mesic to xeric non-wetland habitats but commonly occur in standing water or saturated soils.
- FACU <u>Facultative upland</u>: species that typically occur in xeric or mesic non-wetland habitats but may frequently occur in standing water or saturated soils.
- UPL Upland: species that rarely occur in water or saturated soils.

Areas of relatively homogeneous vegetative composition can be characterized by "dominant" species. The indicator status of the dominant species within each vegetative stratum is used to determine if the plant community may be characterized as hydrophytic. The vegetation of an area is considered to be hydrophytic if more than 50 percent of the dominant species have an indicator status of OBL, FACW, or FAC. The Regional Supplement provides additional tests for evaluating the presence of hydrophytic vegetation communities including the prevalence index, morphological adaptations, and wetland non-vascular plants. The Supplement also addresses difficult situations where hydrophytic vegetation indicators are not present but hydric soils and wetland hydrology are observed.

Soils

Hydric soils are indicative of wetlands. Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile (Federal Register, 1994). The Natural Resources Conservation Service (NRCS), in cooperation with the National Technical Committee for Hydric Soils, has compiled lists of hydric soils (NRCS, 1995). These lists identify soil series mapped by the NRCS that meet hydric soil criteria. It is common, however, for a map unit of non-wetland (non-hydric) soil to have inclusions of hydric soil, and vice versa. Therefore, field examination of soil conditions is important to determine if hydric soil conditions exist.

The NRCS has developed a guide for identifying field indicators of hydric soils (NRCS, 2010). This list of hydric soil indicators is considered to be dynamic; revisions are anticipated to occur on a regular basis as a result of ongoing studies of hydric soils. In general, anaerobic conditions create certain characteristics in hydric soils, collectively known as "redoximorphic features," that can be observed in the field (Vepraskas, 1999). Redoximorphic features include high organic content, accumulation of sulfidic material (rotten egg odor), greenish- or bluish-gray color (gley formation), spots or blotches of different color interspersed with the dominant or matrix color (mottling), and dark soil colors (low soil chroma)

(NRCS, 2010; Vepraskas, 1999). Soil colors are described both by common color name (for example, "dark brown") and by a numerical description of their hue, value, and chroma (for example, 10YR 2/2) as identified on a Munsell soil color chart (Munsell Color, 2000). Soil color is determined from a moist soil sample.

The Regional Supplement provides methods for difficult situations where hydric soil indicators are not observed, but indicators of hydrophytic vegetation and wetland hydrology are present.

Hydrology

Water must be present for wetlands to exist; however, it need not be present throughout the entire year. Wetland hydrology is considered to be present when there is permanent or periodic inundation or soil saturation at or near the soil surface for more than 12.5 percent of the growing season (typically 2 weeks in lowland Pacific Northwest areas). Areas that are inundated or saturated for between 5 percent and 12.5 percent of the growing season in most years may or may not be wetlands. Areas inundated or saturated for less than 5 percent of the growing season are non-wetlands (Ecology, 1997).

Indicators of wetland hydrology include observation of ponding or soil saturation, water marks, drift lines, drainage patterns, sediment deposits, oxidized rhizospheres, water-stained leaves, and local soil survey data. Where positive indicators of wetland hydrology are observed, it is assumed that wetland hydrology occurs for a sufficient period of the growing season to meet the wetland criteria, as described by Ecology (1997). The Regional Supplement provides methods for evaluating situations in wetlands that periodically lack indicators of wetland hydrology but where hydric soils and hydrophytic vegetation are present.

CLASSIFYING WETLANDS

Two classification systems are commonly used to describe wetlands. The hydrogeomorphic (HGM) system describes wetlands in terms of their position in the landscape and the movement of water in the wetland (Brinson, 1993). The USFWS classification system (Cowardin et al., 1979) describes wetlands in terms of their vegetation communities; these include, for example, emergent, scrub-shrub, and forested community types.

ASSESSING WETLAND FUNCTIONS

The City of Seattle specifies the use of Ecology's Washington State Wetland Rating System for Western Washington—Revised (Hruby, 2014) for rating wetlands. This rating system was developed by Ecology to differentiate wetlands based on their sensitivity to disturbance, their significance, their rarity, our ability to replace them, and the beneficial functions they provide to society. Although this system is designed to rate wetlands, it is based on whether a particular wetland performs a particular function and the relative level to which the function is performed. An assessment of wetland functions is inherent in the rating system. Appendix C provides additional information about the rating system wetland categories and completed rating forms for the Project.

The rating system was designed to differentiate between wetlands based on their sensitivity to disturbance, their significance, their rarity, our ability to replace them, and the functions they provide. In addition to rating a particular wetland, the rating system also provides a qualitative assessment of several wetland functions, including water quality improvement, flood flow alteration, and wildlife habitat. Wetlands are given points based on a series of questions regarding water quality, hydrologic, and habitat functions, and then scored into four categories: Category I (highest score) through Category

IV (lowest score). Because detailed scientific knowledge of wetland functions is limited, evaluations of the functions of individual wetlands are somewhat qualitative and dependent upon professional judgment.

IDENTIFYING STREAMS

ESA marked the locations of the ordinary high water mark (OHWM) of the watercourse in the study area with blue flagging. For purposes of determining its lateral jurisdiction under the Clean Water Act (33 CFR 328.3(e)), the Corps defines the OHWM as: "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (Corps, 2005). Other physical characteristics that are used to determine the OHWM include wracking; vegetation matted down, bent, or absent; sediment sorting; leaf litter disturbed or washed away; scour; deposition; multiple observed flow events; bed and banks; water staining; and a change in plant community (Corps, 2005).

REFERENCES

- Brinson, M. 1993. *A Hydrogeomorphic Classification for Wetlands*. U.S. Army Corps of Engineers, Wetlands Research Program. August.
- Corps (U.S. Army Corps of Engineers). 2005. Regulatory Guidance Letter No. 05-05: Ordinary High Water Mark Identification. December 7, 2005.
- Corps. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region. Version 2. Wetlands Regulatory Assistance Program. May 2010. ERDC/ELTR-10-3. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1046494.pdf.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. FWS/OBS-79/31. U.S. Fish and Wildlife Service.
- Ecology (Washington State Department of Ecology). 1997. Washington State Wetlands Identification and Delineation Manual. Publication No. 96-94. Olympia, WA.
- Federal Register. 1982. *Title 33: Navigation and Navigable Waters; Chapter II, Regulatory Programs of the Corps of Engineers*. Vol. 47, No. 138, p. 31810. U.S. Government Printing Office, Washington, DC.
- Federal Register. 1986. 33 CFR Parts 320 through 330: Regulatory Programs of the Corps of Engineers; Final Rule. Vol. 51, No. 219, pp. 41206-41260. U.S. Government Printing Office, Washington, DC.
- Federal Register. 1988. 40 CFR Part 230. Guidelines for Specification of Disposal Sites for Dredged or Fill Material. Vol. 45, No. 249, Pages 85336-85357. U.S. Government Printing Office, Washington, DC.
- Federal Register. 1994. Changes in Hydric Soils of the United States. July 13. Washington, DC.
- Hruby, T. 2014. Washington State Wetland Rating System for Western Washington Revised. August 2014. Ecology publication number 04-06-029. Olympia, WA.
- Munsell Color. 2000. Munsell Soil Color Charts. GretagMacbeth, New Windsor, New York.

- NRCS (Natural Resources Conservation Service). 1995. *Hydric Soils List for Washington*. Revised December 15, 1995.
- NRCS. 2010. Field Indicators of Hydric Soils in the United States A Guide for Identifying and Delineating Hydric Soils. Version 7.0, 2010.
 - http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_050723.pdf.
- Vepraskas, M.J. 1999. *Redoximorphic Features for Identifying Aquic Conditions*. Technical Bulletin 301. North Carolina Agricultural Research Service, North Carolina State University, Raleigh, North Carolina.

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APPENDIX	R· WFTI		DETERMI	NATION	DATA	SHEETS
AFFLINDIA	D. VVLIL	AIIU			DAIA	SIILLIS

Depth	cription: (Describe Matrix	to the de		dox Features	cator or	confirn	n the abse	nce of indicato	ors.)
(inches)	Color (moist)	%	Color (moist)		/pe ¹ l	_oc²	Texture	_	Remarks
0-9	10YR 2/1	100					loam		
9-14	10YR 3/1	98	7.5 YR 4/4	2			loam		
14-21	10YR 3/1& 2.5Y 4/6	35&60	7.5YR 4/6				loam w/ c	obble mixed m	natrix
	10111 0/10 2.01 1/0	00000	7.0110 1/0				ioain w, o	<u>IIIIXOG II</u>	Iddin
							-		
							-		
	-								
	-								
	_								
¹Type: C=C	oncentration, D=Dep	oletion, RM	=Reduced Matrix,	CS=Covered or	Coated	Sand G	rains.	² Location: PL=	Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to al	l LRRs, unless oth	nerwise noted.)			Indi	cators for Prob	olematic Hydric Soils ³ :
Histosol	• •		☐ Sandy Redox					cm Muck (A10	'
	pipedon (A2)		☐ Stripped Matr	, ,				Red Parent Mat	• •
☐ Black Hi☐ Hydroge	stic (A3) n Sulfide (A4)		☐ Loamy Mucky	Mineral (F1) (ex	xcept M	LRA 1)		/ery Shallow Da Other (Explain i	ark Surface (TF12)
	d Below Dark Surface	e (A11)	☐ Depleted Mat					otrier (⊏xpiaiii i	i Remarks)
	ark Surface (A12)	<i>(</i> , (,)	☐ Redox Dark S	, ,			³ Indi	cators of hydro	ohytic vegetation and
	lucky Mineral (S1)			k Surface (F7)				•	yy must be present,
-	Bleyed Matrix (S4)		☐ Redox Depre	ssions (F8)			u	nless disturbed	or problematic.
	Layer (if present):								
Type:	- L \								
	ches):						Hydric	Soil Present?	Yes □ No ⊠
Remarks: lo	wer layer doesn't sta	rt within 12	2 inches						
HYDROLO	GY								
Wetland Hy	drology Indicators:								
Primary Indi	cators (minimum of o	one require	ed; check all that ap	pply)			<u>S</u>	econdary Indica	tors (2 or more required)
☐ Surface	Water (A1)		☐ Water-S	tained Leaves (E	39) (exc e	pt MLF	RA 🗆] Water-Staine	d Leaves (B9) (MLRA 1, 2,
-	iter Table (A2)			4A, and 4B)				4A, and 4	•
Saturation Saturation			Salt Crus	, ,				Drainage Pat	, ,
	arks (B1)			Invertebrates (B					Vater Table (C2)
	nt Deposits (B2)			n Sulfide Odor (sible on Aerial Imagery (C9)
	posits (B3)			Rhizospheres a	-	ing Roo	` ′ _	•	` ,
	at or Crust (B4)			e of Reduced Iro		-: - (00		Shallow Aqui	` '
-	oosits (B5) Soil Cracks (B6)			ron Reduction in or Stressed Plar		`	, –	FAC-Neutral	ounds (D6) (LRR A)
	on Visible on Aerial I	magery (R		xplain in Remarl		LINN A	, L		Hummocks (D7)
	Vegetated Concave	0 , (,	Apiaiii iii i (Ciriaii	K3)		<u> </u>	1 103t-11cave	Turrinooks (D1)
Field Obser						1			
Surface Wat		′es □ N	o 🛛 Depth (inch	ies):					
Water Table			o ☐ Depth (inch						
Saturation P			o ☐ Depth (inch	, 		Wetl	and Hydro	logy Present?	Yes ⊠ No □
(includes ca	pillary fringe)						-		
Describe Re	corded Data (stream	n gauge, m	onitoring well, aeria	al photos, previo	ous inspe	ctions),	if available	:	
Remarks: ra	iny October on recor	d, heavy r	ain over night and ı	until about 9:30a	am				

Project/Site: Cheasty Trail Pilot Project		City/Co	ounty:	Seattle, k	King	Sampling Date: Oct 31, 2016
Applicant/Owner: City of Seattle Parks					State: WA	Sampling Point: PW7 DP1
Investigator(s): Claire Hoffman, Jessica Redman			§	Section, To	ownship, Range: <u>SE-16-24</u>	-4
Landform (hillslope, terrace, etc.): slope		_ Local	l relief	(concave	, convex, none): concave	Slope (%): <u>10</u>
Subregion (LRR): LRR A						
Soil Map Unit Name: na					=	
Are climatic / hydrologic conditions on the site typical for th						
Are Vegetation, Soil, or Hydrology sig	•			,	ormal Circumstances" pres	ent? Yes⊠ No □
Are Vegetation, Soil, or Hydrology nat					ed, explain any answers in	- -
SUMMARY OF FINDINGS – Attach site map				•		•
Hydrophytic Vegetation Present? Yes ☐ No ☒						
Hydric Soil Present? Yes ☐ No ☒				Sampled		- 57
Wetland Hydrology Present? Yes ⊠ No □			withii	n a Wetlaı	nd? Yes ☐ No) 🛚
Remarks:						
VEGETATION – Use scientific names of plan	nte					
VEGETATION - 636 36lentine names of plan	Absolute	Domi	inant	Indicator	Dominance Test works	heet:
Tree Stratum (Plot size: 30)	% Cover				Number of Dominant Spe	
Acer macrophyllum					That Are OBL, FACW, or	r FAC: <u>2</u> (A)
2					Total Number of Domina	
3.					Species Across All Strata	a: <u>5</u> (B)
4					Percent of Dominant Spe	
Sapling/Shrub Stratum (Plot size: 10)	<u>85</u>	_ = 10	ital Co	ver	That Are OBL, FACW, or	r FAC: <u>40</u> (A/B)
1. Corylus cornuta	20	У		FACU	Prevalence Index work	sheet:
2					Total % Cover of:	Multiply by:
3						x 1 =
4					· ·	x 2 = 40
5					·	x 3 = 180
Herb Stratum (Plot size: 5)	20	_ = To	ital Co	ver		x 4 = 520 x 5 =
1. Polystichum munitum	<u>25</u>	У		FACU	Column Totals: 210	
2. Equisetum telmateia					Column Totals. 210	(A) 140 (B)
3					Prevalence Index	= B/A = <u>3.52</u>
4					Hydrophytic Vegetation	
5		-			Rapid Test for Hydro	. ,
6					☐ Dominance Test is >	
7					☐ Prevalence Index is:	sations¹ (Provide supporting
8						or on a separate sheet)
9					☐ Wetland Non-Vascul	ar Plants ¹
10 11					☐ Problematic Hydroph	nytic Vegetation¹ (Explain)
11.	45		tal Co		¹ Indicators of hydric soil be present, unless distur	and wetland hydrology must
Woody Vine Stratum (Plot size: 5)					be present, unless distur	bed of problematic.
1. Rubus armeniacus		У		FAC	Hydrophytic	
2					Vegetation	□ N - N
% Bare Ground in Herb Stratum	60	_	ital Co	ver	Present? Yes	□ No ⊠
Remarks:					1	

Profile Des	cription: (Describ	e to the d	epth ne	eded to docu	ment the i	indicator	or confire	n the al	bsence of indicators.)
Depth	Matrix			Redo	ox Feature				
(inches)	Color (moist)	%	Colo	r (moist)	%	Type ¹	Loc ²	Textu	<u>re</u> <u>Remarks</u>
0-12	10YR 2/2	100						gravel	lly <u>loamy sand</u>
12-18	2.5Y 4/3 & 10YR 2/2	80&20	10Y	R 3/6	trace			gravell	y <u>loamy sand, some cobbles</u>
								Ü	,
		_							
	concentration, D=De						ed Sand G		² Location: PL=Pore Lining, M=Matrix.
_	Indicators: (Appl	icable to a				ed.)			ndicators for Problematic Hydric Soils ³ :
Histosol	` '			Sandy Redox (_	2 cm Muck (A10)
	pipedon (A2)			Stripped Matrix) /	MI DA 4)		Red Parent Material (TF2)
	istic (A3) en Sulfide (A4)			.oamy Mucky N .oamy Gleyed			WILKA 1)	L	☐ Very Shallow Dark Surface (TF12)☐ Other (Explain in Remarks)
_ , ,	d Below Dark Surfa	ce (Δ11)		Depleted Matrix)		L	Other (Explain in Remarks)
	ark Surface (A12)	00 (/ (/ / /		Redox Dark Su	. ,			3	Indicators of hydrophytic vegetation and
	/lucky Mineral (S1)			Depleted Dark	, ,	7)			wetland hydrology must be present,
-	Gleyed Matrix (S4)		F	Redox Depress	ions (F8)	,			unless disturbed or problematic.
Restrictive	Layer (if present):								
Type:									
Depth (ir	nches):							Hyd	ric Soil Present? Yes □ No ⊠
Remarks:									
HYDROLC)GY								
Wetland Hy	drology Indicators	s:							
_	cators (minimum of		red; che	eck all that app	ly)				Secondary Indicators (2 or more required)
☐ Surface	·	•	,	☐ Water-Sta		es (B9) (e :	xcept MLI	RA	☐ Water-Stained Leaves (B9) (MLRA 1, 2,
	ater Table (A2)				A, and 4B				4A, and 4B)
☐ Saturation	,			☐ Salt Crust		,			☐ Drainage Patterns (B10)
	larks (B1)			☐ Aquatic In	` '	s (B13)			☐ Dry-Season Water Table (C2)
	nt Deposits (B2)			☐ Hydrogen					☐ Saturation Visible on Aerial Imagery (C9)
	posits (B3)			Oxidized F			Livina Roc	ots (C3)	
	at or Crust (B4)			Presence		_	_	(,	☐ Shallow Aquitard (D3)
_	posits (B5)			☐ Recent Iro		,	,	3)	FAC-Neutral Test (D5)
-	Soil Cracks (B6)			☐ Stunted or			-		☐ Raised Ant Mounds (D6) (LRR A)
	on Visible on Aerial	Imagery (B7)	Other (Exp			, (,	☐ Frost-Heave Hummocks (D7)
	y Vegetated Conca			_ ` ` '		,			_
Field Obse			,						
Surface Wa	ter Present?	Yes ⊠	No 🗌	Depth (inche	s)· <1 inch				
Water Table		_	No ⊠	Depth (inche	,				
					<i>,</i>		Wet	land Uv	rdrology Brocent? Voc ⊠ No □
Saturation F (includes ca	resent? pillary fringe)	Yes ⊠	No 🗌	Depth (inche	∍). <u>∠</u>		vvet	iaiiu Hy	rdrology Present? Yes ⊠ No □
	ecorded Data (strea	m gauge,	monitor	ing well, aerial	photos, pr	evious ins	pections),	if availa	able:
Remarks: W	/ater flowing on surf	face, seep	ing a fe	w inches belov	v surface b	ut no wat	er table pr	esent. E	Excessively raining night before and morning of
	heet flow on surface						•		, 3 3
This is just s	south-east of the are	ea disturbe	ed and r	estored, and ju	ıst south-e	ast of the	area that	may pot	tentially form into wetland 11.

Project/Site: Cheasty Trail Pilot Project		City/Co	ounty: <u>Seattle, k</u>	King	Sampling Date: Oct 20, 2016
Applicant/Owner: City of Seattle Parks				State: WA	_ Sampling Point: test plot B
Investigator(s): Claire Hoffman, Jessica Redman			Section, To	ownship, Range: <u>SE-16-2</u>	24-4
Landform (hillslope, terrace, etc.):flat		_ Local	relief (concave	, convex, none): <u>flat</u>	Slope (%): 0
Subregion (LRR): <u>LRR A</u>	Lat: 47.7	7548 <u> </u>		_ Long:122.2997	Datum: NAD1983
Soil Map Unit Name: <u>na</u>				NWI classific	cation: none
Are climatic / hydrologic conditions on the site typical	for this time of yea	ar? Ye	s 🛛 No 🗌 (lf no, explain in Remarks.	.)
Are Vegetation, Soil, or Hydrology	_ significantly dis	sturbed	? Are "N	ormal Circumstances" pre	esent? Yes ☐ No ☒
Are Vegetation, Soil, or Hydrology				ed, explain any answers	in Remarks.)
SUMMARY OF FINDINGS – Attach site r					•
Hydrophytic Vegetation Present? Yes ⊠ N	<u> </u>				
Hydric Soil Present? Yes N			Is the Sampled		=
Wetland Hydrology Present? Yes ⊠ N			within a Wetla	nd? Yes □	No ⊠
Remarks: Test plot B is just east of the eastern/lowe previously extended to the east. To the east and sou plants, has occurred.	uth east of the deli	that ha	ad been excava I portion of Wetl	ted/disturbed and restore and 11 restoration and re	d. Wetland 11 may have planting, primarily with upland
VEGETATION – Use scientific names of	•	Domi	nant Indicator	Dominance Test wor	kehoot:
<u>Tree Stratum</u> (Plot size: <u>30</u>)			ies? Status	Number of Dominant S	
1				That Are OBL, FACW,	or FAC: <u>2</u> (A)
2				Total Number of Domii	nant
3				Species Across All Stra	rata: <u>3</u> (B)
4				Percent of Dominant S	
Sapling/Shrub Stratum (Plot size: 10)	·	10	lai Covei	That Are OBL, FACW,	or FAC: <u>67</u> (A/B)
1. Hedera helix	10	У	FACU	Prevalence Index wo	rksheet:
2				Total % Cover of:	Multiply by:
3				OBL species	x 1 =
4					x 2 =
5					x 3 =
Herb Stratum (Plot size: 5)	<u>10</u>	_ = To	tal Cover	· -	x 4 =
1. Ranucus repens	40	V	FAC	UPL species	
2				Column Totals.	(A) (B)
3.				Prevalence Index	x = B/A =
4				Hydrophytic Vegetati	on Indicators:
5				☐ Rapid Test for Hyd	drophytic Vegetation
6				□ Dominance Test is	
7				Prevalence Index i	
8					aptations¹ (Provide supporting ks or on a separate sheet)
9				☐ Wetland Non-Vaso	
10					phytic Vegetation¹ (Explain)
11	40			¹ Indicators of hydric so	oil and wetland hydrology must
Woody Vine Stratum (Plot size: 5)	<u>-t0</u>	_ 10	00701	be present, unless dist	urbed or problematic.
1. Rubus armeniacus		У	<u>FAC</u>	Hydrophytic	
2			tal Cause:	Vegetation	es ⊠ No □
% Bare Ground in Herb Stratum <u>0</u>	<u>60</u>	_ = 10	iai Cover	rieseilt 16	73 M MU∐
Remarks:				1	

Profile Desc	ription: (Describ	e to the	depth ne			or confirm	n the ab	sence of indicators.)
Depth	Matrix				ox Features	. 2	- .	5
<u>(inches)</u>	Color (moist)	%	Colc	or (moist)	% Type ¹	Loc ²	<u>Textur</u>	
0-11	10YR 2/2	<u>100</u>					sandy l	loam_
<u>11-16</u>	10YR 2/2	<u>85</u>	<u>10Y</u>	R 3/6	15		loamy s	sand_
<u>16-19</u>	10YR 4/4	100					sand	
								
	-							
		•			S=Covered or Coate	ed Sand Gr	rains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appl	icable to	all LRR	ts, unless othe	rwise noted.)		In	idicators for Problematic Hydric Soils ³ :
☐ Histosol	· ,			Sandy Redox (•			2 cm Muck (A10)
	ipedon (A2)			Stripped Matrix	` '			Red Parent Material (TF2)
☐ Black His	stic (A3) n Sulfide (A4)				Mineral (F1) (except	MLRA 1)		Very Shallow Dark Surface (TF12)
_ , ,	n Sullide (A4) I Below Dark Surfa	re (Δ11)		Loamy Gleyed Depleted Matrix			<u> </u>	Other (Explain in Remarks)
	rk Surface (A12)	icc (A11)		Redox Dark Su	, ,		³ lr	ndicators of hydrophytic vegetation and
	ucky Mineral (S1)			Depleted Dark	, ,			wetland hydrology must be present,
-	leyed Matrix (S4)			Redox Depress	ions (F8)			unless disturbed or problematic.
Restrictive	Layer (if present):	:						
Type:								
Depth (in	ches):			-			Hydri	ic Soil Present? Yes 🗌 No 🛛
Remarks:							•	
HYDROLO	GY							
	drology Indicator							
_	cators (minimum o		iirod: ch	ock all that ann	lv)			Secondary Indicators (2 or more required)
-	*	i one requ	ineu, cir		ined Leaves (B9) (e	voont MI E		☐ Water-Stained Leaves (B9) (MLRA 1, 2,
	Water (A1) ter Table (A2)				A, and 4B)	xcept with	\A	4A, and 4B)
☐ Saturation				☐ Salt Crust	•			☐ Drainage Patterns (B10)
	arks (B1)				vertebrates (B13)			☐ Dry-Season Water Table (C2)
_	t Deposits (B2)				Sulfide Odor (C1)			☐ Saturation Visible on Aerial Imagery (C9)
	osits (B3)				Rhizospheres along	Livina Roo	ts (C3)	Geomorphic Position (D2)
	t or Crust (B4)				of Reduced Iron (C4	_	()	☐ Shallow Aquitard (D3)
-	osits (B5)				n Reduction in Tille	-	5)	☐ FAC-Neutral Test (D5)
-	Soil Cracks (B6)				Stressed Plants (D	-		Raised Ant Mounds (D6) (LRR A)
☐ Inundation	on Visible on Aeria	l Imagery	(B7)	☐ Other (Exp	olain in Remarks)			☐ Frost-Heave Hummocks (D7)
☐ Sparsely	Vegetated Conca	ve Surfac	e (B8)					
Field Obser	vations:							
Surface Wat	er Present?	Yes 🗌	No 🛛	Depth (inche	s):			
Water Table	Present?	Yes 🗌	No 🛛	Depth (inche	s):			
Saturation P		Yes 🗌	No 🛛	Depth (inche	s):	Wetl	and Hyd	drology Present? Yes ☐ No ⊠
(includes cap	oillary fringe)	m gallac	monito	ring wall parial	photos, previous ins	enections)	if availal	hla:
Describe Re	corucu Data (Střež	ını yauye	, monitor	ınıy well, aerial	priotos, previous ins	ppeclions),	ıı avallal	JIG.
Domester	oo of ourfees sky.	t flour := : :	n plet ^	1 in she = = f	ton on ourfees and		lina	
rtemarks: ar	ea oi suriace snee	t now nea	ιι ριοί, υ	- i inches of wa	ter on surface, and s	some pond	ıırıg	

Project/Site: Cheasty Trail Pilot Project	(City/Count	y: <u>Seattle, K</u>	ling	Sampling Date: Oct 31, 2016	3
Applicant/Owner: City of Seattle Parks				State: WA	Sampling Point: testplot A	
Investigator(s): Claire Hoffman, Jessica Redman			Section, To	ownship, Range: <u>SE-16-24</u>	-4	
Landform (hillslope, terrace, etc.): <u>flat</u>		Local reli	ef (concave,	convex, none): flat	Slope (%): <u>0</u>	
Subregion (LRR): <u>LRR A</u>	Lat: 47.75	525		Long: -122.3002	Datum: NAD1983	,
Soil Map Unit Name: na						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sign	-		-	ormal Circumstances" pres	ent? Yes⊠ No□	
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in		
SUMMARY OF FINDINGS – Attach site map s			•	•	,	tc.
Hydrophytic Vegetation Present? Yes ⊠ No □						
Hydric Soil Present? Yes ☐ No ☒			ne Sampled		- M	
Wetland Hydrology Present? Yes ☐ No ☒		witr	nin a Wetlar	nd? Yes □ No	o 🕅	
Remarks: restoration on north side of Spirea patch, blackb	erries cleare	ed and rep	lanting has	occurred, large patch of Sp	piraea.	
VEGETATION – Use scientific names of plant						
Tree Stratum (Plot size: 30)	Absolute % Cover			Dominance Test works		
1. Populus balsamifera				Number of Dominant Sp That Are OBL, FACW, o		
2						
3.				Total Number of Domina Species Across All Strat		
4.						
	25			Percent of Dominant Spe That Are OBL FACW of	ecies r FAC: <u>75 </u>)
Sapling/Shrub Stratum (Plot size: 10)						
1. Spiraea douglasii				Prevalence Index work		
2. <u>Ilex aquifolium</u>	trace				Multiply by:	
3					x1=	
4					x 2 = x 3 =	
5	90			*	x 4 =	
Herb Stratum (Plot size: 5)	90	- Total C	ovei		x 5 =	
1. Polystichum munitum	5	у	FACU		(A) (B))
2						
3					= B/A =	
4				Hydrophytic Vegetation		
5				Rapid Test for Hydro	· ·	
6				☐ Dominance Test is >		
7				Prevalence Index is		
8					tations ¹ (Provide supporting or on a separate sheet)	
9				☐ Wetland Non-Vascul	lar Plants ¹	
10				☐ Problematic Hydroph	nytic Vegetation¹ (Explain)	
11		= Total C			and wetland hydrology must	
Woody Vine Stratum (Plot size: <u>5</u>)	<u>J</u>	- Total C	ovei	be present, unless distu	bed or problematic.	
1. Rubus armeniacus	10	у	FAC	I le reluce in her et l'e		
2. Hedera helix	trace		FACU_	Hydrophytic Vegetation		
0/ Para Crayand in Harb Strations 40	<u>10</u>	= Total C	Cover	Present? Yes	s⊠ No □	
% Bare Ground in Herb Stratum 10 Remarks:						
Tomano.						

Depth	Matrix			Redox Features			
(inches)	Color (moist)	%	Colc		Loc ²	Texture	Remarks
0-12	10YR 2/2	100				sandy loa	<u> </u>
12-18	10YR 3/2	50	10YF	R 4/6 &10YR 5/4 50	M	sandy lo	am_
							<u> </u>
		<u> </u>				-	
17 0.0							2
7 1				uced Matrix, CS=Covered or Coates, unless otherwise noted.)	ed Sand Gr		² Location: PL=Pore Lining, M=Matrix. icators for Problematic Hydric Soils ³ :
☐ Histosol				Sandy Redox (S5)			2 cm Muck (A10)
	pipedon (A2)			Stripped Matrix (S6)			Red Parent Material (TF2)
	istic (A3)			_oamy Mucky Mineral (F1) (except	t MLRA 1)		Very Shallow Dark Surface (TF12)
☐ Hydroge	en Sulfide (A4)			_oamy Gleyed Matrix (F2)	,		Other (Explain in Remarks)
-	d Below Dark Surfa	ce (A11)		Depleted Matrix (F3)			
	ark Surface (A12)			Redox Dark Surface (F6)			icators of hydrophytic vegetation and
-	Mucky Mineral (S1)			Depleted Dark Surface (F7)			vetland hydrology must be present,
-	Gleyed Matrix (S4)		ш	Redox Depressions (F8)		1	unless disturbed or problematic.
Type:	Layer (if present):						
	nches):					l	
Remarks:				•		Hydric	Soil Present? Yes ☐ No ☒
HYDROLO	OGY						
Wetland Hy	drology Indicator						
Wetland Hy Primary Indi	drology Indicators		uired; che			_	Secondary Indicators (2 or more required)
Wetland Hy Primary Indi	ydrology Indicators icators (minimum of Water (A1)		uired; che		xcept MLR	_	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; cho	Water-Stained Leaves (B9) (e 1, 2, 4A, and 4B)	xcept MLR	RA [Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hy Primary Indi Surface High Wa	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3)		uired; che	☑ Water-Stained Leaves (B9) (e1, 2, 4A, and 4B)☐ Salt Crust (B11)	xcept MLR	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 (B9) (e 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13) 	xcept MLR	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 (B9) (e 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13) ☐ Hydrogen Sulfide Odor (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; cho	 Water-Stained Leaves (B9) (e 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres along 	Living Root	EA [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 Sedimel 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)		uired; che	Water-Stained Leaves (B9) (e	Living Root	EA [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)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimel 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; cho	Water-Stained Leaves (B9) (e	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)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Dep Algal Ma Iron Dep 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)	f one requ		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 Tille Stunted or Stressed 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)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimel Drift Dep Algal Ma Iron Dep 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	f one requ	(B7)	Water-Stained Leaves (B9) (e	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)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimel Drift Dep Algal Ma Iron Dep 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 y Vegetated Concar	f one requ	(B7)	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 Tille Stunted or Stressed 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)
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 Concar	f one requ I Imagery ve Surfac	(B7) le (B8)	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 Tille Stunted or Stressed 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)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Algal Ma Iron Dep Surface Inundati Sparsely Field Obset	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?	f one requirements of the second sec	(B7) te (B8) No 🖂	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 Tille Stunted or Stressed 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)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimel 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 Concar rvations: ater Present?	i Imagery ve Surfac Yes □ Yes ⊠	(B7) te (B8) No \(\textsq\)	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 Tille Stunted or Stressed Plants (D Other (Explain in Remarks) Depth (inches): Depth (inches): 15 inches	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)
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Project/Site: Cheasty Trail Pilot Project		City/Cou	unty: <u>Seattle, k</u>	King	Sampling Date: April 5, 2017
Applicant/Owner: City of Seattle Parks				State: WA	Sampling Point: W12 DP2
Investigator(s): Claire Hoffman, Michael Muscari			Section, To	ownship, Range: <u>SE-16-2</u> 4	1-4
Landform (hillslope, terrace, etc.): at base of slope					
Subregion (LRR): <u>LRR A</u>					
Soil Map Unit Name: <u>na</u>				=	
Are climatic / hydrologic conditions on the site typical for t					
Are Vegetation, Soil, or Hydrology s	•		•	ormal Circumstances" pre	
Are Vegetation, Soil, or Hydrology na				ed, explain any answers in	
SUMMARY OF FINDINGS – Attach site ma			•		,
Lludranhutia Vagatatian Pracant2 Vag 🗆 Na 🗆					
Hydrophytic Vegetation Present? Yes ☐ No ☐ Hydric Soil Present? Yes ☐ No ☐ N			the Sampled		_
Wetland Hydrology Present? Yes ☐ No ☐	_	w	rithin a Wetlaı	nd? Yes □ N	lo 🛚
Remarks: likely disturbed in the past	<u>-</u>				
VEGETATION – Use scientific names of pla	nts.				
Tree Stratum (Plot size: 30)			ant Indicator	Dominance Test work Number of Dominant Sp	
1. Populus balsamifera	30	У	FAC	That Are OBL, FACW, of	
2. Thuja plicata (Planted)	_ 5	<u>n</u>	FAC	Total Number of Domin	ant
3. Alnus rubra	20	у	FAC	Species Across All Stra	
Tsuga heterophylla (planted)	trace	<u>n</u>	<u>FACU</u>	Percent of Dominant Sp	pecies
Sapling/Shrub Stratum (Plot size: 10)	55	_ = Tota	al Cover		or FAC: 33% (A/B)
1.Ribes sanguineum_	15	У	FACU	Prevalence Index worl	
Oemleria cerasiformis		У	<u>FACU</u>		Multiply by:
3. Ribes lacustre (planted)					x 1 =
4. Mahonia nervosa		У	<u>FACU</u>	· ·	x 2 =
5					x 3 =
Herb Stratum (Plot size: 5)	25	_ = lota	al Cover		x 4 = x 5 =
1. Polystichum munitum	5	У	FACU		(A) (B)
2				Column Totals.	(A) (B)
3				Prevalence Index	= B/A = 3.05
4	_		_	Hydrophytic Vegetation	n Indicators:
5	_			Rapid Test for Hydr	. ,
6				Dominance Test is	
7				☐ Prevalence Index is	
8					otations ¹ (Provide supporting sor on a separate sheet)
9				☐ Wetland Non-Vascu	ılar Plants ¹
10				☐ Problematic Hydrop	hytic Vegetation¹ (Explain)
11					and wetland hydrology must
Woody Vine Stratum (Plot size: 5)	<u> </u>	10ta	ii Covei	be present, unless distu	rbed or problematic.
1. Rubus armeniacus	trace	У	FAC	Hydrophytic	
2				Hydrophytic Vegetation	
0/ Para Cround in Harb Strature 20	trace	_ = Tota	al Cover		s □ No ⊠
% Bare Ground in Herb Stratum 20 Remarks: restoration (tree planting) nearby and part of the strategies.	he wetland w	as tramn	led as path go	es right along the edge of	the wetland
and part of the		amp			

(inches) (Color (moist)	%	Color (moist)	%	<u>rype</u>	Loc ²	Texture	<u>Remarks</u>
)-9 2	2.5Y 2.5/1	95	7.5YR 4/6	5	<u>C</u>		sandy loai	n
)-16 2	2.5Y 2.5/1	60	10YR 3/6	40	С	М	sandy loar	n
<u> </u>								·· <u>—</u>
								<u> </u>
							-	
				_				
			M=Reduced Matrix, III LRRs, unless of			ed Sand G		Location: PL=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
-		icable to a			otea.)			· · · · · · · · · · · · · · · · · · ·
] Histosol (A] Histic Epip	•		☐ Sandy Redo ☐ Stripped Mat					cm Muck (A10) led Parent Material (TF2)
Black Histi			☐ Loamy Muck		F1) (excent	t MI RA 1)		ery Shallow Dark Surface (TF12)
	Sulfide (A4)		☐ Loamy Gleye			t WILIXA I)		Other (Explain in Remarks)
	Below Dark Surfa	ce (A11)	☐ Depleted Ma		_,			CAPIGIT III Tromano)
•	k Surface (A12)	(* * * * *)	☐ Redox Dark	` '	6)		³ Indio	cators of hydrophytic vegetation and
	cky Mineral (S1)		☐ Depleted Da	-	-			etland hydrology must be present,
] Sandy Gle	eyed Matrix (S4)		☐ Redox Depre	essions (F8	3)		ur	nless disturbed or problematic.
estrictive La	ayer (if present):	:						
Type:								
Depth (inch	nes):						Hydric S	Soil Present? Yes ⊠ No □
emarks:								
emarks:	SY							
emarks: YDROLOG Vetland Hydr	SY rology Indicator	s:		opply)				
PROLOG Vetland Hydr	SY rology Indicator ators (minimum of	s:	red; check all that a		aves (B9) (e	excent MI	<u>S</u> e	condary Indicators (2 or more required)
PROLOGIES (PROLOGIES IN PROLOGIES IN PROLOGI	SY rology Indicator: ators (minimum of /ater (A1)	s:	red; check all that a ⊠ Water-S	Stained Lea	. , .	xcept ML	<u>S</u> e	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2
POROLOG Petland Hydromary Indicated Surface W. High Wate	orology Indicators ators (minimum of later (A1) er Table (A2)	s:	red; check all that a ⊠ Water-5 1, 2	Stained Lea	. , .	except ML	<u>S</u> e	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
PROLOGIES OF THE PROPERTY OF T	rology Indicators ators (minimum of ater (A1) er Table (A2)	s:	red; check all that a ⊠ Water-S 1, 2 ∐ Salt Cru	Stained Lead, 4A, and 4 ust (B11)	lB)	xcept ML	<u>S</u> e	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10)
*DROLOG Vetland Hydr rimary Indica	rology Indicators ators (minimum of /ater (A1) er Table (A2) i (A3) rks (B1)	s:	red; check all that a ⊠ Water-S 1, 2 □ Salt Cru □ Aquatic	Stained Lea , 4A , and 4 ust (B11) : Invertebra	tes (B13)	xcept ML	Se RA	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
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PROLOG Petland Hydromary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos	rology Indicators ators (minimum of ater (A1) er Table (A2) a (A3) rks (B1) Deposits (B2) esits (B3)	s:	red; check all that a Water-S 1, 2 Salt Cru Aquatic Hydrogu	Stained Lead, 4A, and 4 ust (B11) Invertebrate en Sulfide (d Rhizosph	tes (B13) Odor (C1) neres along	Living Roo	RA □	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C3) Geomorphic Position (D2)
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PROLOG Petland Hydr rimary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o I Iron Depos Surface So Inundation	rology Indicator: ators (minimum of /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) esits (B3) or Crust (B4) sits (B5) oil Cracks (B6) in Visible on Aeria	s: f one requi	red; check all that a Water-S 1, 2 Salt Cru Aquatic Hydrogo Oxidize Preseno Recent Stunted B7) Other (t	Stained Lea , 4A, and 4 ust (B11) Invertebra en Sulfide o d Rhizosph ce of Reduc	tes (B13) Odor (C1) neres along ced Iron (C4 ction in Tille ed Plants (D	Living Roo 4) d Soils (C6	Sera □ □ ots (C3) □ □ □ 0	water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C3 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
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/DROLOG //etland Hydr rimary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Surface So Inundation Sparsely W ield Observa urface Water //ater Table P aturation Pre ncludes capill rescribe Reco	ators (minimum of vater (A1) ar Table (A2) ar (A3) arks (B1) Deposits (B2) arits (B3) ar Crust (B4) arits (B5) ar Visible on Aeria arity a	s: I Imagery (I ve Surface Yes I Yes I Yes I im gauge, I	red; check all that a Water-S 1, 2 Salt Cru Aquatic Hydrog Oxidize Present Stunted Stunted (B8) No Depth (inc	Stained Leas, 4A, and 4 ust (B11) Invertebra en Sulfide of Rhizosphote of Reduction Reduction Reduction Stresse Explain in Function Stresses	tes (B13) Odor (C1) neres along ced Iron (C4 ction in Tille ad Plants (D Remarks) nes rface previous ins	Living Roo 4) d Soils (C6 1) (LRR A	SeRA	econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C3 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Project/Site: Cheasty Trail Pilot Project		City/Cou	unty: <u>Seattle, K</u>	King	Sampling Date: April 5, 2017
Applicant/Owner: City of Seattle Parks				State: WA	Sampling Point: W12 DP1
Investigator(s): Claire Hoffman, Michael Muscari			Section, To	ownship, Range: <u>SE-16-24</u> -	4
Landform (hillslope, terrace, etc.): at base of slope		_Local r	elief (concave	, convex, none): flat	Slope (%): <u>0</u>
Subregion (LRR): <u>LRR A</u>	Lat: 47.50	61068		Long: -122.300669	Datum: NAD1983
Soil Map Unit Name: na					
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology sign	•		,	ormal Circumstances" pres	ont? Vos ⊠ No □
				•	
Are Vegetation, Soil, or Hydrology natu SUMMARY OF FINDINGS – Attach site map			•	ed, explain any answers in ocations, transects,	,
				<u> </u>	
Hydrophytic Vegetation Present? Yes ⊠ No ☐ Hydric Soil Present? Yes ☐ No ☑		Is	the Sampled	l Area	
Wetland Hydrology Present? Yes ⊠ No □		W	ithin a Wetlar	nd? Yes⊠ No) <u> </u>
Remarks: likely disturbed in the past					
VEGETATION – Use scientific names of plan	ts.				
To a Obstance (District CO)	Absolute		ant Indicator	Dominance Test works	heet:
Tree Stratum (Plot size: 30)			es? Status	Number of Dominant Spo	
1. Populus balsamifera	trace		<u>FAC</u> FAC	That Are OBL, FACW, or	r FAC: 4 (A)
Thuja plicata Alnus rubra				Total Number of Domina	
4				Species Across All Strata	a: <u>5</u> (B)
7.	5		al Cover	Percent of Dominant Spe	
Sapling/Shrub Stratum (Plot size: 10)	<u> </u>	1012	ai Oovei	I nat Are OBL, FACW, of	FAC: <u>80</u> (A/B)
1. Spiraea douglasi	50	У	<u>FACW</u>	Prevalence Index work	sheet:
2. Rubus spectabilis	10	<u>n</u>	FAC	Total % Cover of:	Multiply by:
3				OBL species	x 1 =
4	-			FACW species	<u> </u>
5					x 3 =
Herb Stratum (Plot size: 5)	60	= Tota	al Cover		x 4 =
1. Juncus effusus	20	V	FACW		x 5 =
Polystichum munitum		-		Column Totals:	(A) (B)
3.Juncus ensifolius				Prevalence Index	= B/A = 3.05
4. Ranuanculus repens				Hydrophytic Vegetation	ı Indicators:
5. Agrostis sp.				☐ Rapid Test for Hydro	phytic Vegetation
6. Taraxacum officinale					50%
7				☐ Prevalence Index is :	≤3.0¹
8					ations¹ (Provide supporting or on a separate sheet)
9		·		☐ Wetland Non-Vascul	. ,
10				-	nytic Vegetation¹ (Explain)
11				, ,	and wetland hydrology must
Woody Vine Stratum (Plot size: 5)	35	= Tota	al Cover	be present, unless distur	
1. Rubus armeniacus	trace	У	FAC	Heading interests	
2				Hydrophytic Vegetation	
0/ Para Cround in Harb Stratum 20	trace	= Tota	al Cover		⊠ No □
% Bare Ground in Herb Stratum 30 Remarks: restoration (tree planting) nearby and part of the	wetland wa	as tramo	led as nath do	es right along the edge of t	he wetland
Transition (1000 planting) hearby and part of the	We	as damp	ao pani go	so figure along the ough of t	no monaria.

Depth (inches)	Matrix Color (moiet)	%	Color (moist)	edox Features		1.002	Tavtur	Damarka
(inches)	Color (moist)					LOC		e Remarks
<u>0-12</u>	10YR 3/2	_ 100					loam	
<u>12-18</u>	10YR4/3 & 10YR3/2	80&20	10YR 3/6	trace			loam	
							-	
	-							
	-						-	
	-						-	
	Concentration, D=De					d Sand G		² Location: PL=Pore Lining, M=Matrix.
Hydric Soi	I Indicators: (Appli	cable to al	II LRRs, unless of	therwise note	ed.)		Inc	dicators for Problematic Hydric Soils ³ :
☐ Histoso	` '		☐ Sandy Redo					2 cm Muck (A10)
	pipedon (A2)		☐ Stripped Mat					Red Parent Material (TF2)
	Histic (A3)		Loamy Muck			MLRA 1)		Very Shallow Dark Surface (TF12)
	en Sulfide (A4) ed Below Dark Surfac	co (Δ11)	☐ Loamy Gleye ☐ Depleted Ma				Ц	Other (Explain in Remarks)
•	oark Surface (A12)	~ (A11)	☐ Redox Dark	, ,			³ In	dicators of hydrophytic vegetation and
	Mucky Mineral (S1)			rk Surface (F7	7)			wetland hydrology must be present,
-	Gleyed Matrix (S4)		☐ Redox Depre	,	,			unless disturbed or problematic.
Restrictive	Layer (if present):							
Type:								
Depth (i	nches):						Hydri	c Soil Present? Yes □ No ⊠
Remarks:							<u> </u>	
LIVDDOL	00V							
Wetland H	ydrology Indicators		od shook all that a	opplu)				Secondary Indicators (2 or more required)
Wetland H	ydrology Indicators dicators (minimum of				- (DO) (-)			Secondary Indicators (2 or more required)
Wetland H Primary Inc	ydrology Indicators dicators (minimum of e Water (A1)		☐ Water-S	Stained Leave		ccept MLF		☐ Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland H Primary Inc Surface High W	ydrology Indicators dicators (minimum of e Water (A1) dater Table (A2)		☐ Water-9	Stained Leave , 4A, and 4B)		cept MLF	RA	☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland H Primary Inc Surface High W Saturat	ydrology Indicators dicators (minimum of e Water (A1) dater Table (A2) dion (A3)		☐ Water-S 1, 2 ☐ Salt Cru	Stained Leave , 4A, and 4B) ust (B11)		ccept MLF	RA	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)□ Drainage Patterns (B10)
Wetland H Primary Inc Surface High W Saturat Water N	ydrology Indicators dicators (minimum of Water (A1) Vater Table (A2) dicion (A3) Warks (B1)		☐ Water-5 1, 2 ☐ Salt Cru ☐ Aquatic	Stained Leave , 4A, and 4B) ust (B11) Invertebrates	s (B13)	ccept MLF	RA	 Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2)
Wetland H Primary Inc Surface High W Saturat Water N Sedime	ydrology Indicators dicators (minimum of Water (A1) Vater Table (A2) Lion (A3) Warks (B1) ent Deposits (B2)		☐ Water-S 1, 2 ☐ Salt Cru ☐ Aquatic ☐ Hydrog	Stained Leave , 4A , and 4B) ust (B11) Invertebrates en Sulfide Od	(B13) or (C1)		AS	 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 H Primary Inc Surface High W Saturat Water N Sedime	ydrology Indicators dicators (minimum of e Water (A1) dater Table (A2) dicion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		☐ Water-S 1, 2 ☐ Salt Cru ☐ Aquatic ☐ Hydrogu ☐ Oxidize	Stained Leave , 4A, and 4B) ust (B11) Invertebrates en Sulfide Od d Rhizosphere	(B13) or (C1) es along l	_iving Roo	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 H Primary Inc Surface High W Saturat Water N Sedime Drift De	ydrology Indicators dicators (minimum of e Water (A1) fater Table (A2) dicion (A3) Marks (B1) ent Deposits (B2) eposits (B3) fat or Crust (B4)		☐ Water-S 1, 2 ☐ Salt Cru ☐ Aquatic ☐ Hydrog ☐ Oxidize ☐ Presend	Stained Leave , 4A, and 4B) ust (B11) Invertebrates en Sulfide Od d Rhizosphere ce of Reduced	s (B13) or (C1) es along L d Iron (C4	_iving Roo)	RA ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland H Primary Inc Surface High W Saturat Water N Sedime Drift De	ydrology Indicators dicators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) dat or Crust (B4) eposits (B5)		☐ Water-S 1, 2 ☐ Salt Cru ☐ Aquatic ☐ Hydrog ☐ Oxidize ☐ Present ☐ Recent	Stained Leave , 4A, and 4B) ust (B11) Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reductio	s (B13) or (C1) es along I d Iron (C4 n in Tilled	_iving Roo) I Soils (C6	RA ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland H Primary Ind Surface High W Saturat Water N Sedime Drift De Algal M Iron De Surface	ydrology Indicators dicators (minimum of e Water (A1) /ater Table (A2) dicion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) e Soil Cracks (B6)	one require	☐ Water-S 1, 2 ☐ Salt Cru ☐ Aquatic ☐ Hydrog ☐ Oxidize ☐ Presend ☐ Recent ☐ Stunted	Stained Leave , 4A, and 4B) ust (B11) Invertebrates en Sulfide Od d Rhizosphero ce of Reduced Iron Reductio	i (B13) or (C1) es along l d Iron (C4 n in Tilled Plants (D1	_iving Roo) I Soils (C6	RA ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland H Primary Inc Surface High W Saturat Water N Sedime Drift De Algal M Iron De Surface	ydrology Indicators dicators (minimum of e Water (A1) later Table (A2) dicion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aerial	one require		Stained Leave , 4A, and 4B) ust (B11) Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reductio	i (B13) or (C1) es along l d Iron (C4 n in Tilled Plants (D1	_iving Roo) I Soils (C6	RA ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland H Primary Inc Surface High W Saturat Water N Sedime Drift De Algal M Iron De Surface Inundat Sparse	ydrology Indicators dicators (minimum of Water (A1) Vater Table (A2) Licion (A3) Warks (B1) Lent Deposits (B2) Leposits (B3) Lat or Crust (B4) Leposits (B5) Le Soil Cracks (B6) Licion Visible on Aerial Ly Vegetated Concav	one require		Stained Leave , 4A, and 4B) ust (B11) Invertebrates en Sulfide Od d Rhizosphero ce of Reduced Iron Reductio	i (B13) or (C1) es along l d Iron (C4 n in Tilled Plants (D1	_iving Roo) I Soils (C6	RA ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2,
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Wetland H Primary Ind Surface High W Saturat Water N Sedime Drift De Algal M Iron De Surface Inundat Sparse Field Obse Surface Water Tabl Saturation	ydrology Indicators dicators (minimum of e Water (A1) later Table (A2) dicion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aerial ly Vegetated Concavervations: ater Present? Present?	Imagery (Ere Surface (Yes \(\) N	Water-S	Stained Leave , 4A, and 4B) ust (B11) Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reductio I or Stressed F Explain in Ren	e (B13) or (C1) es along l d Iron (C4 n in Tilled Plants (D1 narks)	Living Roo) I Soils (C6 I) (LRR A)	ets (C3)	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland H Primary Ind Surface High W Saturat Water N Sedime Drift De Algal M Iron De Surface Inundat Sparse Field Obse Surface Water Tabl Saturation (includes ca	ydrology Indicators dicators (minimum of e Water (A1) /ater Table (A2) dicion (A3) Marks (B1) ent Deposits (B2) eposits (B3) dat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aerial ly Vegetated Concavervations: ater Present?	Imagery (E e Surface (Yes	Water-S	Stained Leave , 4A, and 4B) ust (B11) Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reductio I or Stressed F Explain in Ren hes): hes):	s (B13) or (C1) es along l d Iron (C4 n in Tilled Plants (D1 narks)	Living Roo) I Soils (C6 I) (LRR A) Wetl	ets (C3) i) and Hyd	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) rology Present? Yes □ No ☑
Primary Inc Surface High W Saturat Water N Sedime Drift De Algal M Iron De Surface Inundat Sparse Field Obse Surface Water Tabl Saturation (includes ca	ydrology Indicators dicators (minimum of e Water (A1) dater Table (A2) dicion (A3) Marks (B1) ent Deposits (B2) eposits (B3) dat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aerial ly Vegetated Concavervations: ater Present? e Present? present?	Imagery (E e Surface (Yes	Water-S	Stained Leave , 4A, and 4B) ust (B11) Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reductio I or Stressed F Explain in Ren hes): hes):	s (B13) or (C1) es along l d Iron (C4 n in Tilled Plants (D1 narks)	Living Roo) I Soils (C6 I) (LRR A) Wetl	ets (C3) i) and Hyd	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) rology Present? Yes □ No ☑
Wetland H Primary Inc Surface High W Saturat Water N Sedime Drift De Algal M Iron De Surface Inundat Sparse Field Obse Surface Water Tabl Saturation (includes ca	ydrology Indicators dicators (minimum of e Water (A1) dater Table (A2) dicion (A3) Marks (B1) ent Deposits (B2) eposits (B3) dat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aerial ly Vegetated Concavervations: ater Present? e Present? present?	Imagery (E re Surface (Yes	Water-S 1, 2 Salt Cru Aquatic Hydrog Oxidize Presenc Recent Stunted ST) Other (I (B8) Depth (inc	Stained Leave , 4A, and 4B) ust (B11) Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reductio I or Stressed F Explain in Ren hes): hes):	s (B13) or (C1) es along l d Iron (C4 n in Tilled Plants (D1 narks)	Living Roo) I Soils (C6 I) (LRR A) Wetl	ets (C3) i) and Hyd	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) rology Present? Yes □ No ☑
Wetland H Primary Ind Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparse Field Obse Surface Water Tabl Saturation (includes ca	ydrology Indicators dicators (minimum of e Water (A1) /ater Table (A2) dicion (A3) Marks (B1) ent Deposits (B2) eposits (B3) dat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aerial ly Vegetated Concavervations: ater Present? e Present? Present? apillary fringe) lecorded Data (strear	Imagery (E re Surface (Yes	Water-S 1, 2 Salt Cru Aquatic Hydrog Oxidize Presenc Recent Stunted ST) Other (I (B8) Depth (inc	Stained Leave , 4A, and 4B) ust (B11) Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reductio I or Stressed F Explain in Ren hes): hes):	s (B13) or (C1) es along l d Iron (C4 n in Tilled Plants (D1 narks)	Living Roo) I Soils (C6 I) (LRR A) Wetl	ets (C3) i) and Hyd	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) rology Present? Yes □ No ☑
Wetland H Primary Ind Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparse Field Obse Surface Water Tabl Saturation (includes ca	ydrology Indicators dicators (minimum of e Water (A1) /ater Table (A2) dicion (A3) Marks (B1) ent Deposits (B2) eposits (B3) dat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aerial ly Vegetated Concavervations: ater Present? e Present? Present? apillary fringe) lecorded Data (strear	Imagery (E re Surface (Yes	Water-S 1, 2 Salt Cru Aquatic Hydrog Oxidize Presenc Recent Stunted ST) Other (I (B8) Depth (inc	Stained Leave , 4A, and 4B) ust (B11) Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reductio I or Stressed F Explain in Ren hes): hes):	s (B13) or (C1) es along l d Iron (C4 n in Tilled Plants (D1 narks)	Living Roo) I Soils (C6 I) (LRR A) Wetl	ets (C3) i) and Hyd	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) rology Present? Yes □ No ☑

Project/Site: Cheasty Trail Pilot Project		City/Co	ounty: <u>Seattle,</u>	King	Sampling Date: Oct 20, 2016		
Applicant/Owner: City of Seattle Parks				Sampling Point: W11 DP2			
Investigator(s): Claire Hoffman, Jessica Redman	Section, Township, Range: <u>SE-16-24-4</u>						
Landform (hillslope, terrace, etc.):hillslope	Local relief (concave, convex, none): none Slope						
Subregion (LRR): LRR A NAD1983	_ Lat: <u>47.56</u> _	63803		Long: <u>-122.300527</u>	Datum:		
Soil Map Unit Name: na				NWI classifica	ation: <u>none</u>		
Are climatic / hydrologic conditions on the site typical for this	time of yea	ar? Yes	s ⊠ No □	(If no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology sign	ificantly dis	turbed?	? Are "N	Normal Circumstances" pres	sent? Yes ⊠ No □		
Are Vegetation, Soil, or Hydrology natu				ded, explain any answers ir	ո Remarks.)		
SUMMARY OF FINDINGS – Attach site map				locations, transects	, important features, etc.		
Hydrophytic Vegetation Present? Yes ☐ No ☒							
Hydric Soil Present? Yes ☐ No ☒			s the Sample		. 57		
Wetland Hydrology Present? Yes ☐ No ☒		'	within a Wetla	and? Yes □ N	0 ⊠		
Remarks:		ı					
VEGETATION – Use scientific names of plan	ts.						
Too Charles (District 20)			nant Indicator	Dominance Test work	sheet:		
Tree Stratum (Plot size: 30)			ies? Status	Number of Dominant Sp That Are OBL, FACW, of			
Ilex aquifolium Alnus rubra				That Are Obl., FACW, C) FAC. <u>2</u> (A)		
3				Total Number of Domina			
4.				Species Across All Stra	ta: <u>2</u> (B)		
	105			Percent of Dominant Sp That Are OBL, FACW, of			
Sapling/Shrub Stratum (Plot size: 10)							
1. <u>Oemleria cerasiformis</u>				Prevalence Index worl			
2. Rubus spectabilis			FAC		Multiply by:		
3. Hedera helix			<u>FACU</u>		x 1 = x 2 =		
4					x 3 = <u>165</u>		
5	20				x 4 = <u>360</u>		
Herb Stratum (Plot size: 5)			.a. 00701		x 5 =		
Polystichum munitum	30	<u>y</u>	<u>FACU</u>		(A) <u>525</u> (B)		
2					P/4 0 00		
3					= B/A = <u>3.62</u>		
4				Hydrophytic Vegetation Rapid Test for Hydro			
5				Dominance Test is:	. ,		
6				☐ Prevalence Index is			
7 8					stations ¹ (Provide supporting		
9.					or on a separate sheet)		
10				☐ Wetland Non-Vascu			
11.					hytic Vegetation¹ (Explain)		
Woody Vine Stratum (Plot size: 5)	30			¹ Indicators of hydric soil be present, unless distu	and wetland hydrology must irbed or problematic.		
1. Rubus ursinus	trace		FACU				
2				Hydrophytic Vegetation			
0/ Para Cround in Heat Stratum 5	trace	= Tot	al Cover		s □ No ⊠		
% Bare Ground in Herb Stratum <u>5</u> Remarks:							

			depth ne			r or confirm	the abse	ence of indicators.)
Depth (inches)	Matrix Color (moist)	%	Colc	r (moist)	ox Features % Type ¹	Loc ²	Texture	Remarks
0-9	10YR 2/1	100					sandy loa	
		97	7.5	() (4				
9-16	2.5Y 3/1	<u>91</u>	7.51	′ 3/4	3		<u>loamy sa</u>	<u> </u>
							-	
								_
								
						-		<u> </u>
	oncentration, D=D Indicators: (App					ited Sand Gr		² Location: PL=Pore Lining, M=Matrix. cators for Problematic Hydric Soils ³ :
-		iicabie to						
☐ Histosol	(A1) pipedon (A2)			Sandy Redox (Stripped Matrix				2 cm Muck (A10)
	stic (A3)				(So) Mineral (F1) (exce)	of MI DA 1)		Red Parent Material (TF2) Very Shallow Dark Surface (TF12)
	en Sulfide (A4)			Loamy Gleyed		DE WILIXA I)		Other (Explain in Remarks)
_ , ,	d Below Dark Surfa	ace (A11)		Depleted Matrix				Circi (Explain in Nomano)
•	ark Surface (A12)	,		Redox Dark Su	` '		³ Ind	icators of hydrophytic vegetation and
	lucky Mineral (S1)			Depleted Dark	. ,			vetland hydrology must be present,
☐ Sandy G	Sleyed Matrix (S4)			Redox Depress	sions (F8)		U	unless disturbed or problematic.
Restrictive	Layer (if present)	:						
Type:				_				
Depth (in	iches):			-			Hydric	Soil Present? Yes ⊠ No □
Remarks:								
HYDROLC	GY							
•	drology Indicator						_	
	cators (minimum c	f one requ	uired; ch					secondary Indicators (2 or more required)
	Water (A1)			☐ Water-Sta	ined Leaves (B9) (except MLR	RA [Water-Stained Leaves (B9) (MLRA 1, 2,
_	ater Table (A2)			1, 2, 4	A, and 4B)			4A, and 4B)
☐ Saturation	on (A3)			☐ Salt Crust	(B11)			Drainage Patterns (B10)
☐ Water M	larks (B1)				vertebrates (B13)			Dry-Season Water Table (C2)
☐ Sedimer	nt Deposits (B2)			☐ Hydrogen	Sulfide Odor (C1)			☐ Saturation Visible on Aerial Imagery (C9)
☐ Drift Dep	posits (B3)			☐ Oxidized F	Rhizospheres alon	g Living Root	ts (C3)	Geomorphic Position (D2)
☐ Algal Ma	at or Crust (B4)			☐ Presence	of Reduced Iron (0	C4)		☐ Shallow Aquitard (D3)
☐ Iron Dep	oosits (B5)			☐ Recent Iro	n Reduction in Till	ed Soils (C6)) [FAC-Neutral Test (D5)
☐ Surface	Soil Cracks (B6)			☐ Stunted or	Stressed Plants (D1) (LRR A)		Raised Ant Mounds (D6) (LRR A)
☐ Inundati	on Visible on Aeria	ıl Imagery	(B7)	☐ Other (Exp	olain in Remarks)			Frost-Heave Hummocks (D7)
☐ Sparsely	y Vegetated Conca	ve Surfac	e (B8)					
Field Obser	rvations:							
Surface Wa	ter Present?	Yes 🗌	No 🛛	Depth (inche	s):			
Water Table	Present?	Yes 🛚	No 🗌	Depth (inche	s): <u>5</u>			
Saturation F		Yes 🛛	No 🗌	Depth (inche	s): <u>surface</u>	Wetla	and Hydro	ology Present? Yes ⊠ No □
	pillary fringe)			da a vec-ti				
Describe Re	ecorded Data (strea	am gauge	, monitor	ring well, aerial	pnotos, previous i	nspections), i	ıt available	9:
Remarks:								

Project/Site: Cheasty Trail Pilot Project	(City/County	Sampling Date: Oct 20, 2016				
Applicant/Owner: City of Seattle Parks			Sampling Point: W11 DP1				
Investigator(s): Claire Hoffman, Jessica Redman	Section, Township, Range: SE-16-24-4						
Landform (hillslope, terrace, etc.): slope		Slope (%): <u>3</u>					
Subregion (LRR): <u>LRR A</u>	Lat: 47.56	3888		Long: -122.300541	Datum: <u>NAD 1983</u>		
Soil Map Unit Name: <u>na</u>							
Are climatic / hydrologic conditions on the site typical for this							
Are Vegetation, Soil, or Hydrology sign	•		,	rmal Circumstances" pres	ent? Yes □ No ☒		
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				
Wetland Hydrology Present? Yes ⊠ No □		with	in a Wetlan	d? Yes ⊠ No	, □		
Remarks: Downslope/east of the delineated portion has been disturbly previously extended to the east. To the east and south east of the other delineated area, both as sheet flow and a small newly forming or present and some of the upland vegetation planted is not healthy. The wetland (normal circumstances in delineated portion). Eastern of VEGETATION – Use scientific names of plant	delineated por channel. Soil A stream cha extent of wetla	rtion restorat does not dis nnel or wetla	tion and replate play wetland of and may form	nting primarily with upland pla characteristics east of the delir over time. There was no distu	nts has occurred. Water flows from neated portion but hydric herbs are		
VEGETATION GGG GGIGHTHIO HAINGS OF PIANT	Absolute	Dominant	Indicator	Dominance Test works			
Tree Stratum (Plot size: 30) 1	% Cover	Species?	Status	Number of Dominant Sp			
2.							
3				Total Number of Domina Species Across All Strat			
4				·			
Outlies (Obrah Otschaus (Dish size 40)		= Total C	over	Percent of Dominant Sp That Are OBL, FACW, o	r FAC: <u>75</u> (A/B)		
Sapling/Shrub Stratum (Plot size: 10)	00	.,	FAC	Prevalence Index work	reheat:		
Rubus spectabilis Oemleria cerasiformis		-			Multiply by:		
3	trace				x 1 =		
4					x 2 =		
5					x 3 =		
		= Total C			x 4 =		
Herb Stratum (Plot size: 5)				UPL species	x 5 =		
1. Athyrium filix-femina	5		FAC	Column Totals:	(A) (B)		
2. Polystichum munitum		-	<u>FACU</u>	Daniel and Justice	D/A		
3. <u>Lysichiton americanus</u>			<u>OBL</u>	Hydrophytic Vegetatio	= B/A =		
4. Hedera helix	trace			Rapid Test for Hydro			
5				☐ Dominance Test is >			
6				☐ Prevalence Index is			
7 8				☐ Morphological Adapt	tations ¹ (Provide supporting		
9.					or on a separate sheet)		
10				Wetland Non-Vascu			
11				—	hytic Vegetation¹ (Explain)		
Woody Vine Stratum (Plot size: 5)		= Total C	over	present, unless disturbe	and wetland hydrology must be d or problematic.		
1. Rubus armeniacus	<u>15</u>	у	FAC	Usalnombusti -			
2				Hydrophytic Vegetation			
W. P. and Construction II. J. Cit. 1.	<u>15</u>	= Total C	over		s⊠ No □		
% Bare Ground in Herb Stratum 0 Remarks:							
Tromains.							

		e to the c	depth n				or confir	m the absence of indicators.)
Depth (inches)	Matrix Color (moist)	%	Cold	or (moist)	ox Feature %	<u>s</u> Type¹	Loc ²	Texture Remarks
0-11	10YR 2/2	100						sandy loam
11-16	10YR2/2 & 10YR3/		100	'R 4/6	trace	С		Sandy loam
						-		·
<u>16-18</u>	10YR4/2 & 10YR2/	2 //&20	7.51	7 K 4/6	3	<u>C</u>		loamy sand
¹Type: C=C	Concentration, D=De	pletion, F	RM=Rec	duced Matrix, C	S=Covere	d or Coat	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appl	cable to	all LRR	s, unless othe	rwise not	ed.)		Indicators for Problematic Hydric Soils ³ :
☐ Histosol	(A1)			Sandy Redox (S5)			☐ 2 cm Muck (A10)
-	pipedon (A2)			Stripped Matrix	` '			☐ Red Parent Material (TF2)
	istic (A3)			Loamy Mucky I			t MLRA 1)	
	en Sulfide (A4)	(* 4 4)		Loamy Gleyed	-)		☐ Other (Explain in Remarks)
	d Below Dark Surfa	ce (A11)		Depleted Matri	. ,			31 mali mada manafala manahan di manahan anah
	ark Surface (A12) Mucky Mineral (S1)			Redox Dark Su Depleted Dark	. ,			³ Indicators of hydrophytic vegetation and wetland hydrology must be present,
-	Gleyed Matrix (S4)			Redox Depress	•	1)		unless disturbed or problematic.
-	Layer (if present):			redox Depress	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			unicos distarbed of presidinatio.
Type:				_				
Depth (in	nches):			_				Hydric Soil Present? Yes □ No ⊠
Remarks:								
HYDROLO								
_	/drology Indicators				1 3			O considerable disasters (O company or mains 1)
	icators (minimum of	one requ	<u>ıırea; cn</u>			(DO) (-		Secondary Indicators (2 or more required)
	Water (A1)			☐ Water-Sta			xcept ML	
_	ater Table (A2)				A, and 4B)		4A, and 4B)
☐ Saturation				☐ Salt Crust	` '	- (D40)		☐ Drainage Patterns (B10)
	Marks (B1)			☐ Aquatic In		,		☐ Dry-Season Water Table (C2)
	nt Deposits (B2)			☐ Hydrogen				Saturation Visible on Aerial Imagery (C9)
-	posits (B3)			Oxidized I		_	_	
_	at or Crust (B4)			☐ Presence			•	Shallow Aquitard (D3)
· ·	posits (B5)			☐ Recent Iro			`	, – ,
	Soil Cracks (B6)	l	(DZ)	Stunted of		•	1) (LRR A	_
	ion Visible on Aerial y Vegetated Concav			☐ Other (Ex	piairi iri Ke	marks)		☐ Frost-Heave Hummocks (D7)
Field Obser		e Suriaci	e (DO)				1	
	ter Present?	Yes 🗌	No 🏻	Depth (inche	c):			
			_		•			
Water Table		Yes ⊠	No 🗌	Depth (inche	· —		141-4	Mand Hadrada and Bureau 40 Man Man Man
Saturation F (includes ca	resent? pillary fringe)	Yes ⊠	No 🗌	Depth (inche	s): <u>5</u>		wet	tland Hydrology Present? Yes ⊠ No □
	ecorded Data (strea	m gauge,	monito	ring well, aerial	photos, pi	evious in	spections)), if available:
Remarks: he	eavy rain overnight,	until abo	ut mid-n	norning.				

Project/Site: Cheasty Trail Pilot Project		City/Co	ounty: <u>Seattle,</u>	Sampling Date: Oct 20, 2016			
Applicant/Owner: City of Seattle Parks				Sampling Point: WL9 DP2			
Investigator(s): Claire Hoffman, Jessica Redman		Section, T	Township, Range: <u>SE-16-24-4</u>				
Landform (hillslope, terrace, etc.): slope		_ Local	relief (concave	e, convex, none): slope	Slope (%): <u>20</u>		
Subregion (LRR): LRR A	Lat: <u>47.5</u>	66806		Long: <u>-122.298311</u>	Datum: NAD1983		
Soil Map Unit Name: na				NWI classifica	ution: PFOB		
Are climatic / hydrologic conditions on the site typical for t	his time of yea	ar? Ye	s⊠ No⊡ ((If no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology s	-			lormal Circumstances" pres			
Are Vegetation, Soil, or Hydrology na				ded, explain any answers ir	າ Remarks.)		
SUMMARY OF FINDINGS - Attach site ma	showing	samı	oling point	locations, transects	, important features, etc.		
Hydrophytic Vegetation Present? Yes ⊠ No □	1						
Hydric Soil Present? Yes ☐ No ☑	_		Is the Sample		la 🗹		
Wetland Hydrology Present? Yes ⊠ No □]		within a Wetla	ınd? Yes ☐ N	0 🔀		
Remarks:							
VEGETATION – Use scientific names of pla							
Tree Stratum (Plot size: 30)	Absolute % Cover		nant Indicator ies? Status	Dominance Test works			
1. Alnus rubra				Number of Dominant Sp That Are OBL, FACW, o			
2. Acer macrophyllum							
3				Total Number of Domina Species Across All Strate			
4				Percent of Dominant Sp			
Sapling/Shrub Stratum (Plot size: 10)	<u>40</u>	_ = To	tal Cover		or FAC: <u>60</u> (A/B)		
				Prevalence Index work	csheet:		
1 2					Multiply by:		
3					x 1 =		
4.					x 2 =		
5				FAC species	x 3 =		
				FACU species	x 4 =		
Herb Stratum (Plot size: 5)				UPL species	x 5 =		
1. Equisetum telmateia				Column Totals:	(A) (B)		
2. Polystichum munitum				Prevalence Index	= B/A =		
3				Hydrophytic Vegetatio			
4. 5.				☐ Rapid Test for Hydro			
6					· ·		
7.				☐ Prevalence Index is	≤3.0 ¹		
8.					tations ¹ (Provide supporting		
9				□ Wetland Non-Vascu	or on a separate sheet)		
10				-	hytic Vegetation¹ (Explain)		
11	_			• •	and wetland hydrology must		
Woody Vine Stratum (Plot size: 5)	12	_ = To	tal Cover	be present, unless distu			
1. Rubus armeniacus	<u>8</u> 5	У	FAC				
2.				Hydrophytic Vegetation			
	85	= Tot	tal Cover		s⊠ No□		
% Bare Ground in Herb Stratum							
Remarks:							

Depth	cription: (Describ Matrix		aopui ili		k Feature		J. John III	aus	Silve of maleator	~ .,
(inches)	Color (moist)	%	Cold	or (moist)	%		Loc ²	Texture	<u> </u>	Remarks
0-5	10YR 2/2	100						sandy lo	am, roots	
5-18	5Y 4/1	85	7.5YR	4/4 & 7/5YR5/6	10&5	С		gravelly	sandy loam	
								3		
		_								
					-					
								-		
¹Type: C=C	oncentration, D=D	epletion,	RM=Red	luced Matrix, CS	=Covere	d or Coate	ed Sand Gr	rains.	² Location: PL=F	ore Lining, M=Matrix.
Hydric Soil	Indicators: (Appl	icable to	all LRR	s, unless other	wise not	ted.)		Inc	licators for Probl	ematic Hydric Soils ³ :
☐ Histosol	(A1)			Sandy Redox (S	5)				2 cm Muck (A10)	
	oipedon (A2)			Stripped Matrix (,				Red Parent Mate	, ,
☐ Black Hi	` '			Loamy Mucky M			MLRA 1)		Very Shallow Dar	, ,
	en Sulfide (A4)			Loamy Gleyed M		2)			Other (Explain in	Remarks)
	d Below Dark Surfa	ice (A11)		Depleted Matrix	. ,			31		
	ark Surface (A12) lucky Mineral (S1)			Redox Dark Surl	, ,					nytic vegetation and
•	Gleyed Matrix (S4)			Depleted Dark S Redox Depression	•	-7)			welland flydrology unless disturbed d	must be present,
	Layer (if present):			redux Depressi	5113 (1 0)				uniess disturbed t	problematic.
Type:										
Depth (in	ches):							Hydrid	Soil Present?	Yes ⊠ No □
Remarks:	,							Hydric	CONTROCTION.	
rtomanto.										
HYDROLO	GY									
_	drology Indicator									
Primary Indi	cators (minimum o	f one req	uired; ch	eck all that apply	/)					ors (2 or more required)
	Water (A1)			☐ Water-Stair			xcept MLR	RA		Leaves (B9) (MLRA 1, 2,
-	iter Table (A2)				, and 4B	3)			4A, and 4E	•
Saturation Saturation	on (A3)			☐ Salt Crust (B11)				☐ Drainage Patte	` '
	larks (B1)			☐ Aquatic Inv		, ,			☐ Dry-Season W	
	nt Deposits (B2)			Hydrogen S						ble on Aerial Imagery (C9)
	posits (B3)			Oxidized RI		_	_	ots (C3)	Geomorphic P	` '
_	at or Crust (B4)			Presence o		,	•		☐ Shallow Aquita	, ,
	oosits (B5)			Recent Iron			-	-	☐ FAC-Neutral T	
	Soil Cracks (B6)			☐ Stunted or			1) (LRR A)	.)		unds (D6) (LRR A)
	on Visible on Aeria			☐ Other (Expl	ain in Re	emarks)			☐ Frost-Heave H	ummocks (D7)
	/ Vegetated Conca	ve Surfa	ce (B8)							
Field Obser		· -	5	5						
Surface Wat		Yes 🗌	No ⊠	Depth (inches	,					
Water Table		Yes 🖂	No 🗌	Depth (inches						
Saturation P		Yes ⊠	No 🗌	Depth (inches): <u>surface</u>	<u> </u>	Wetl	land Hydi	ology Present?	Yes ⊠ No □
	pillary fringe) corded Data (strea	ım gauge	e, monitor	ring well, aerial p	hotos, p	revious ins	spections),	, if availab	le:	
	(5 5		J ,F	, [-		. //			
	ater flowing subsur	face her		warniaht until al	out mid	morning	Overland f	flow ~25fe	ot up from wotlon	d, flowing in to wetland.
Remarks: wa		Iace. IIe	avy rain d	overnight, until at	Jour IIIII 1-	-111011111111	Ovenano		et up from wenan	u. Howilla III to welland
Remarks: wa	ater nowing subsur	iace, rie	avy rain c	overnigni, uniii ai	Jour IIIIu-	-morning.	Overland	110W 2510	et up nom wettan	u, nowing in to wettand.
Remarks: w	ater nowing subsur	iace, ne	avy rain c	overnigni, unui ai	Jour IIIId-	-morning.	Ovenanu i	110W 2010	et up nom wedan	u, nowing in to wettand.
Remarks: wa	ater nowing subsur	iace, ried	avy rain c	overnight, unui ai	Jour mid-	-morning.	Overland i	110W 2010	et up nom wetan	u, nowing in to wettand.

Project/Site: Cheasty Trail Pilot Project			City/Cou	nty: <u>Seattle, K</u>	Sampling Date: Oct 31, 2016					
Applicant/Owner: City of Seattle Parks					Sampling Point: W9 DP1					
Investigator(s): Claire Hoffman, Jessica F	vestigator(s): Claire Hoffman, Jessica Redman									
Landform (hillslope, terrace, etc.): slope			_Local re	elief (concave	e, convex, none): concave Slope (%): 10					
Subregion (LRR): <u>LRR A</u>		_ Lat: <u>47.5</u>	66832		Long: <u>-122.298354</u>	Datum: <u>NAD1983</u>				
Soil Map Unit Name: <u>na</u>					NWI classific	ation: <u>PFOB</u>				
Are climatic / hydrologic conditions on the										
Are Vegetation, Soil, or Hyd		•		,	ormal Circumstances" pre					
Are Vegetation, Soil, or Hyd				(If need	ed, explain any answers i	n Remarks.)				
SUMMARY OF FINDINGS – Att				•		•				
Hydrophytic Vegetation Present?	Yes ⊠ No □			41 01	I A mara					
Hydric Soil Present?	Yes ⊠ No □			the Sampled ithin a Wetlar		ulo 🗆				
Wetland Hydrology Present?	Yes ⊠ No 🗆		W	illilli a vvellai	iu: ies 🖂 i	10 L				
Remarks:										
VEGETATION – Use scientific i	names of plant									
Tree Stratum (Plot size: 30)				int Indicator s? Status	Dominance Test work					
1. Alnus rubra					Number of Dominant S That Are OBL. FACW.	pecies or FAC: <u>4</u> (A)				
2.										
3.					Total Number of Domin Species Across All Stra					
4					Percent of Dominant S	nocios				
Continue/Obserts Observes (District 40)		30	= Total	Cover		or FAC: <u>100</u> (A/B)				
Sapling/Shrub Stratum (Plot size: 10)					Prevalence Index wor	ksheet:				
1 2						Multiply by:				
3						x 1 =				
4.						x 2 =				
5					FAC species	x 3 =				
			= Total	Cover		x 4 =				
Herb Stratum (Plot size: 5)		20	.,	FAC		x 5 =				
Athyrium filix-femina Equisetum telmateia		<u>20</u> <u>15</u>			Column Totals:	(A) (B)				
Urtica dioica					Prevalence Index	= B/A =				
4					Hydrophytic Vegetation	on Indicators:				
5.					☐ Rapid Test for Hydr	ophytic Vegetation				
6.					□ Dominance Test is	>50%				
7					☐ Prevalence Index is	; ≤3.0 ¹				
8						otations¹ (Provide supporting s or on a separate sheet)				
9					☐ Wetland Non-Vasci	'				
10					-	phytic Vegetation¹ (Explain)				
11					-	l and wetland hydrology must				
Woody Vine Stratum (Plot size: 5)		35	= Iotal	Cover	be present, unless distu	urbed or problematic.				
1. Rubus armeniacus		80	у	FAC						
2					Hydrophytic Vegetation					
		80	= Total	Cover		s⊠ No□				
% Bare Ground in Herb Stratum Remarks: Willows in buffer at bottom (e.	act) and of wotload									
Terriains. Willows III bullet at bottofff (e.	asi) ena di welland	•								

	<u>Matrix</u>			dox Featur				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc	Texture	<u> </u>
<u>0-4</u>	10YR 3/2	90	_ 10 YR 4/4	10%			silt loam	
4-16	10YR 5/1	60	7.5YR 4/6	40%	С	M	silt loam_	<u></u>
	-							<u></u>
								_
								<u> </u>
							-	
¹ Type: C=C	oncentration, D=D	epletion, R	M=Reduced Matrix, (CS=Covere	ed or Coate	d Sand G	rains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (App	licable to	all LRRs, unless oth	erwise no	ted.)		Indi	cators for Problematic Hydric Soils ³ :
☐ Histosol	` '		☐ Sandy Redox					2 cm Muck (A10)
	oipedon (A2)		Stripped Matri	. ,				Red Parent Material (TF2)
☐ Black Hi	, ,		Loamy Mucky	•		MLRA 1)		Very Shallow Dark Surface (TF12)
	en Sulfide (A4)	200 (111)	☐ Loamy Gleyed	-	2)		□ (Other (Explain in Remarks)
•	d Below Dark Surfa ark Surface (A12)	ace (ATT)	□ Depleted Matr □ Redox Dark S	. ,)		³ Indi	cators of hydrophytic vegetation and
	lucky Mineral (S1)		☐ Depleted Dark	-	-			vetland hydrology must be present,
-	Gleyed Matrix (S4)		Redox Depres	,	,			inless disturbed or problematic.
	Layer (if present)	:	·					·
Type:								
Depth (in	iches):						Hydric	Soil Present? Yes ⊠ No □
Remarks:								
HYDROLO								
-	drology Indicator							
-	•	fana raaii						
☐ Surface		one requi	ired; check all that ap	ply)			<u>s</u>	econdary Indicators (2 or more required)
		ir one requi	☐ Water-St	ained Leav		cept ML		Water-Stained Leaves (B9) (MLRA 1, 2,
_	ater Table (A2)	i one requi	☐ Water-St	ained Leav		cept ML	RA [Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Saturation	ater Table (A2) on (A3)	i one requi	☐ Water-St 1, 2, 4	ained Leav 4 A, and 4I et (B11)	3)	cept ML	RA [Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
☐ Saturatio	ater Table (A2) on (A3) larks (B1)	ii one requi	☐ Water-St 1, 2, ☐ Salt Crus ☐ Aquatic I	ained Leav 4A, and 4I st (B11) nvertebrate	B) es (B13)	cept ML	RA [Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
☐ Saturation☐ Water M☐ Sedimer	ater Table (A2) on (A3) larks (B1) nt Deposits (B2)	ii one requi	☐ Water-St 1, 2, ☐ Salt Crus ☐ Aquatic I ☐ Hydrogel	ained Leav 4A, and 4I st (B11) nvertebrate n Sulfide C	es (B13) Odor (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)
☐ Saturation ☐ Water M ☐ Sedimer ☐ Drift Dep	ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3)	ir one requi	☐ Water-St 1, 2, 4 ☐ Salt Crus ☐ Aquatic I ☐ Hydrogei ☐ Oxidized	ained Leaver ained Leaver 4A, and 4I of the teacher and the te	es (B13) Odor (C1) eres along L	iving Ro	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) Geomorphic Position (D2)
☐ Saturation ☐ Water M ☐ Sedimer ☐ Drift Dep ☐ Algal Ma	ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	ir one requi	☐ Water-St 1, 2, 4 ☐ Salt Crus ☐ Aquatic I ☐ Hydrogel ☐ Oxidized ☐ Presence	ained Leaver AA, and 4I at (B11) envertebrate Distribution Sulfide Control Rhizosphere of Reduc	es (B13) Odor (C1) eres along L ed Iron (C4)	Living Roo	RA C	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)
Saturation Water M Sedimer Drift Dep Algal Ma	ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	ir one requi	☐ Water-St 1, 2, 4 ☐ Salt Crus ☐ Aquatic I ☐ Hydrogel ☐ Oxidized ☐ Presence ☐ Recent Ir	ained Leaver 4A, and 4I and 4I (B11) and 4I	es (B13) dor (C1) eres along L ed Iron (C4 tion in Tilled	Living Roo) Soils (C6	Cots (C3) CC	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)
Saturation Water M Sedimen Drift Dep Algal Ma Iron Dep Surface	ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6)		☐ Water-St 1, 2, 4 ☐ Salt Crus ☐ Aquatic I ☐ Hydrogei ☐ Oxidized ☐ Presencei ☐ Recent Ir	ained Leav 4A, and 4I at (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct	es (B13) bdor (C1) eres along L ed Iron (C4) cion in Tilled	Living Roo) Soils (C6	Cots (C3) CC	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)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	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	ıl Imagery (Water-St	ained Leaver 4A, and 4I and 4I (B11) and 4I	es (B13) bdor (C1) eres along L ed Iron (C4) cion in Tilled	Living Roo) Soils (C6	Cots (C3) CC	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)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely	ater Table (A2) on (A3) larks (B1) nt Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca	ıl Imagery (Water-St	ained Leav 4A, and 4I at (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct	es (B13) bdor (C1) eres along L ed Iron (C4) cion in Tilled	Living Roo) Soils (C6	Cots (C3) CC	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)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely	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	ıl Imagery (ve Surface	Water-St	ained Leav 4A, and 4I it (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressed xplain in Re	es (B13) bdor (C1) eres along L ed Iron (C4 tion in Tilled d Plants (D1 emarks)	Living Roo) Soils (C6	Cots (C3) CC	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)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely Field Obser Surface Wat	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?	ıl Imagery (ive Surface Yes □	Water-St	ained Leavanne Andrews	es (B13) bdor (C1) eres along L ed Iron (C4 tion in Tilled d Plants (D1 emarks)	Living Roo) Soils (C6	Cots (C3) CC	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)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely Field Obser Surface Water Table	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?	Il Imagery (ive Surface Yes Yes Yes	Water-St 1, 2, 4 Salt Crus Aquatic I Hydrogel Oxidized Presence Recent Ir Stunted of (B7) Other (Exercise) (B8) No ☑ Depth (inch	ained Leaven AA, and 4I at (B11) invertebrate in Sulfide C Rhizosphe of Reduction Reduction Stressed explain in Reduction Stressed explain Stressed explain Stressed explain in Reduction Stressed explain Stress	es (B13) bdor (C1) eres along L ed Iron (C4 tion in Tilled d Plants (D1 emarks)	Living Roo) Soils (Co) (LRR A	Cots (C3) CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	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)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Water Table Saturation P	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?	Il Imagery (ive Surface Yes Yes Yes	Water-St	ained Leaven AA, and 4I at (B11) invertebrate in Sulfide C Rhizosphe of Reduction Reduction Stressed explain in Reduction Stressed explain Stressed explain Stressed explain in Reduction Stressed explain Stress	es (B13) bdor (C1) eres along L ed Iron (C4 tion in Tilled d Plants (D1 emarks)	Living Roo) Soils (Co) (LRR A	Cots (C3) CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	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)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Water Table Saturation P (includes car	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? pillary fringe)	Il Imagery (ove Surface Yes Yes Yes Yes	Water-St 1, 2, 4 Salt Crus Aquatic I Hydrogel Oxidized Presence Recent Ir Stunted of (B7) Other (Exercise) (B8) No ☑ Depth (inch	ained Leav 4A, and 4I at (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressed xplain in Re es):	es (B13) bdor (C1) eres along L ed Iron (C4) cion in Tilled d Plants (D1) emarks)	Living Roo) Soils (Ce) (LRR A	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) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Water Table Saturation P (includes car	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? pillary fringe)	Il Imagery (ove Surface Yes Yes Yes Yes	Water-St 1, 2, 4 Salt Crus Aquatic I Hydrogei Oxidized Presence Recent Ir Stunted of (B7) Other (Execute) (B8) No ☑ Depth (inch No ☑ Depth (inches	ained Leav 4A, and 4I at (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressed xplain in Re es):	es (B13) bdor (C1) eres along L ed Iron (C4) cion in Tilled d Plants (D1) emarks)	Living Roo) Soils (Ce) (LRR A	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) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca) Describe Re	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? pillary fringe)	Il Imagery (ove Surface Yes Yes Yes Yes	Water-St 1, 2, 4 Salt Crus Aquatic I Hydrogei Oxidized Presence Recent Ir Stunted of (B7) Other (Execute) (B8) No ☑ Depth (inch No ☑ Depth (inches	ained Leav 4A, and 4I at (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressed xplain in Re es):	es (B13) bdor (C1) eres along L ed Iron (C4) cion in Tilled d Plants (D1) emarks)	Living Roo) Soils (Ce) (LRR A	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) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Water Table Saturation P (includes car	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? pillary fringe)	Il Imagery (ove Surface Yes Yes Yes Yes	Water-St 1, 2, 4 Salt Crus Aquatic I Hydrogei Oxidized Presence Recent Ir Stunted of (B7) Other (Execute) (B8) No ☑ Depth (inch No ☑ Depth (inches	ained Leav 4A, and 4I at (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressed xplain in Re es):	es (B13) bdor (C1) eres along L ed Iron (C4) cion in Tilled d Plants (D1) emarks)	Living Roo) Soils (Ce) (LRR A	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) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca) Describe Re	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? pillary fringe)	Il Imagery (ove Surface Yes Yes Yes Yes	Water-St 1, 2, 4 Salt Crus Aquatic I Hydrogei Oxidized Presence Recent Ir Stunted of (B7) Other (Execute) (B8) No ☑ Depth (inch No ☑ Depth (inches	ained Leav 4A, and 4I at (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressed xplain in Re es):	es (B13) bdor (C1) eres along L ed Iron (C4) cion in Tilled d Plants (D1) emarks)	Living Roo) Soils (Ce) (LRR A	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) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca) Describe Re	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? pillary fringe)	Il Imagery (ove Surface Yes Yes Yes Yes	Water-St 1, 2, 4 Salt Crus Aquatic I Hydrogei Oxidized Presence Recent Ir Stunted of (B7) Other (Execute) (B8) No ☑ Depth (inch No ☑ Depth (inches	ained Leav 4A, and 4I at (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressed xplain in Re es):	es (B13) bdor (C1) eres along L ed Iron (C4) cion in Tilled d Plants (D1) emarks)	Living Roo) Soils (Ce) (LRR A	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) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Project/Site: Cheasty Trail Pilot Project		City/Cou	nty: <u>Seattle, K</u>	ing	Sampling Dat	te: April 5, 2017
Applicant/Owner: City of Seattle Parks				State: WA	Sampling Poi	nt: W8 DP2
Investigator(s): Claire Hoffman, Michael Muscari			_ Section, To	ownship, Range: <u>SE-16</u> -	-24-4	
Landform (hillslope, terrace, etc.): at base of slop	oe .	Local re	elief (concave,	convex, none): flat		Slope (%): <u>0</u>
Subregion (LRR): <u>LRR A</u>	Lat: <u>47.5</u>	61068		Long: <u>-122.300669</u>	Da	itum: <u>NAD1983</u>
Soil Map Unit Name: na				NWI classif	ication: none	
Are climatic / hydrologic conditions on the site ty	pical for this time of yea	ar? Yes	⊠ No □ (l	f no, explain in Remark	s.)	
Are Vegetation, Soil, or Hydrology	significantly dis	turbed?	Are "No	ormal Circumstances" p	resent? Yes ⊠	No 🗌
Are Vegetation, Soil, or Hydrology	naturally proble	matic?	(If neede	ed, explain any answers	s in Remarks.)	
SUMMARY OF FINDINGS - Attach s	ite map showing	sampli	ing point l	ocations, transect	ts, important	features, etc.
Hydrophytic Vegetation Present? Yes	 ⊠ No □					
	⊠ No □		the Sampled	_	5	
1	 □ No ⊠	Wi	thin a Wetlar	nd? Yes □	No ⊠	
Remarks:					-	-
VEGETATION – Use scientific name:	s of plants					
VEGETATION – Use scientific flames	Absolute	Domina	nt Indicator	Dominance Test wo	rksheet	
Tree Stratum (Plot size: 30)			s? Status	Number of Dominant		
Populus balsamifera	40	У	FAC	That Are OBL, FACW		(A)
2. Alnus rubra	20	. у	FAC	Total Number of Dom	inant	
3				Species Across All St	rata: <u>6</u>	(B)
4				Percent of Dominant	Species	
Sapling/Shrub Stratum (Plot size: 10)	60	= Total	Cover	That Are OBL, FACW	/, or FAC: 66%_	(A/B)
1. Rubus bifrons (R. armeniacus)	20	V	FAC	Prevalence Index we	orksheet:	
				Total % Cover of	: Mult	iply by:
2				OBL species	x 1 =	
3				FACW species	x 2 =	
4				FAC species	x 3 =	
5				FACU species		
Herb Stratum (Plot size: <u>5</u>)	0	= Total	Cover	UPL species		
1. Polystichum munitum	<u>25</u>	У	FACU	Column Totals:	(A)	(B)
2. Ranunculus repens				Prevalence Inde	ex = B/A = 3.05	
3			<u> </u>	Hydrophytic Vegeta	tion Indicators:	
4			_	☐ Rapid Test for Hy	drophytic Vegeta	tion
5				□ Dominance Test i	ıs >50%	
6				☐ Prevalence Index	is ≤3.0¹	
7				☐ Morphological Ad		
8				data in Remai	rks or on a separa	ate sneet)
9				☐ Problematic Hydr		n1 (Evaloin)
10				¹Indicators of hydric s	. , .	` ' '
11	35			be present, unless dis		
Woody Vine Stratum (Plot size: 5)	0 <u>5</u>	- Total	OOVCI			
1. Hedera helix	10	у	_ FACU	Hydrophytic Vegetation		
N/ Page Consumed to Units Object	<u>10</u>	= Total	Cover		res⊠ No 🗆	
% Bare Ground in Herb Stratum <u>0</u> Remarks: POBA – 18+ inches DBH likely 30 years	pare old					
Transand. 1 Oba – 101 mones Doi i meny 30 ye	Jai 3 Olu					

Depth	Matrix			dox Features	- 1	. 2	- .	5
(inches)	Color (moist)	<u>%</u>	Color (moist)		lype'	Loc	Texture	<u>Remarks</u>
0-8	2.5Y 3/1	95	10 YR 6/8	5			sandy loam	· · · · · · · · · · · · · · · · · · ·
<u>8-16</u>	10YR 5/1	45%	7.5YR 4/6	50%		_	silt loam	compacted soil layer
	5Y 5/1	5%						
	-		-					· · · · · · · · · · · · · · · · · · ·
	-		-				-	
			M=Reduced Matrix,			Sand G		cation: PL=Pore Lining, M=Matrix.
_		licable to a	II LRRs, unless oth		.)			ors for Problematic Hydric Soils ³ :
Histosol	, ,		☐ Sandy Redox					m Muck (A10)
	pipedon (A2)		☐ Stripped Matr ☐ Loamy Mucky		ovoont M	LDA 1\		Parent Material (TF2)
	istic (A3) en Sulfide (A4)		Loamy Gleye		except ivi	LKA 1)		y Shallow Dark Surface (TF12) er (Explain in Remarks)
	d Below Dark Surfa	ace (A11)	☐ Depleted Mate					er (Explain in Remaiks)
	ark Surface (A12)	(,	☐ Redox Dark S	, ,			³ Indicat	ors of hydrophytic vegetation and
☐ Sandy N	Mucky Mineral (S1))	☐ Depleted Darl	k Surface (F7)			wetla	and hydrology must be present,
	Gleyed Matrix (S4)		☐ Redox Depres	ssions (F8)			unle	ss disturbed or problematic.
	Layer (if present)):						
,	_compacted silt							
Depth (ir	nches):_8- 16+ inc	nes		_			Hydric Soi	I Present? Yes ⊠ No □
Remarks:								
HYDROLO	OGY							
		rs:						
Wetland Hy	/drology Indicator		ed; check all that ap	(ylgo			Seco	endary Indicators (2 or more required)
Wetland Hy	drology Indicator		ed; check all that ap ⊠ Water-Si		(B9) (exc	ept MLF		ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi ☑ Surface	drology Indicator icators (minimum o Water (A1)		⊠ Water-S	tained Leaves ((B9) (exc	ept MLF		Vater-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi ☑ Surface	rdrology Indicator icators (minimum o Water (A1) ater Table (A2)		⊠ Water-S	tained Leaves ((B9) (exc	ept MLF	RA U	· · · · · · · · · · · · · · · · · · ·
Wetland Hy Primary Indi ☐ Surface ☐ High Wa	rdrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3)		⊠ Water-Si 1, 2, □ Salt Crus	tained Leaves (ept MLF	RA U	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hy Primary Indi Surface High Wa Saturati Water M	rdrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3)		⊠ Water-Si 1, 2, □ Salt Crus □ Aquatic I	tained Leaves (4A, and 4B) st (B11)	B13)	ept MLF	AA	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimen	rdrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) farks (B1)		⊠ Water-Si 1, 2, □ Salt Crus □ Aquatic I □ Hydroge	tained Leaves (4A, and 4B) st (B11) nvertebrates (E	B13) (C1)		RA V	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimen Drift Dep	rdrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2)		✓ Water-Si1, 2,✓ Salt Crus✓ Aquatic I✓ Hydroge✓ Oxidized	tained Leaves (4A, and 4B) st (B11) nvertebrates (E n Sulfide Odor	B13) (C1) along Liv		RA	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Staturation Visible on Aerial Imagery (C9)
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Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Wa Water Table Saturation F (includes ca	rdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria by Vegetated Conca rvations: ter Present? Present? publicators (minimum of present (A2) posits (B3) at or Crust (B4) posits (B6) posits (B5) Soil Cracks (B6) posits (B6) posits (B7) present? present?	al Imagery (Eave Surface Yes ☑ N Yes ☑ N Yes ☑ N	Water-Si 1, 2, Salt Crus Aquatic I Hydroge Oxidized Presence Recent I Stunted (Stunted ((B8)) Depth (inches)	tained Leaves (4A, and 4B) st (B11) Invertebrates (E In Sulfide Odor I Rhizospheres I Reduced Ir I Roman Reduction i I or Stressed Pla I xplain in Rema I es): 2 inches p I es): surface I surface	B13) (C1) along Liv ron (C4) in Tilled S ants (D1) arks)	ing Roo soils (C6 (LRR A)	RA	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Seomorphic Position (D2) Shallow Aquitard (D3) CAC-Neutral Test (D5) Staised Ant Mounds (D6) (LRR A) Orainage Patterns (B10) Ory-Season Water Table (C2) Season Water Table (C
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimel Drift Del Algal Ma Iron Dep Surface Inundati Sparsely Field Obsel Surface Wa Water Table Saturation F (includes ca	rdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria by Vegetated Conca rvations: ter Present? Present? publicators (minimum of present (A2) posits (B3) at or Crust (B4) posits (B6) posits (B5) Soil Cracks (B6) posits (B6) posits (B7) present? present?	al Imagery (Eave Surface Yes ☑ N Yes ☑ N Yes ☑ N	Water-Si 1, 2, Salt Crus Aquatic I Hydroge Oxidized Presence Recent I Stunted (Stunted ((B8)) Depth (inches)	tained Leaves (4A, and 4B) st (B11) Invertebrates (E In Sulfide Odor I Rhizospheres I Reduced Ir I Roman Reduction i I or Stressed Pla I xplain in Rema I es): 2 inches p I es): surface I surface	B13) (C1) along Liv ron (C4) in Tilled S ants (D1) arks)	ing Roo soils (C6 (LRR A)	RA	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Seomorphic Position (D2) Shallow Aquitard (D3) CAC-Neutral Test (D5) Staised Ant Mounds (D6) (LRR A) Orainage Patterns (B10) Ory-Season Water Table (C2) Season Water Table (C
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Wa Water Table Saturation F (includes ca	rdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria by Vegetated Conca rvations: ter Present? Present? publicators (minimum of present (A2) posits (B3) at or Crust (B4) posits (B6) at or Crust (B4) posits (B5) Soil Cracks (B6) are Vegetated Conca rvations: ter Present? Present?	al Imagery (Eave Surface Yes ☑ N Yes ☑ N Yes ☑ N	Water-Si 1, 2, Salt Crus Aquatic I Hydroge Oxidized Presence Recent I Stunted (Stunted ((B8)) Depth (inches)	tained Leaves (4A, and 4B) st (B11) Invertebrates (E In Sulfide Odor I Rhizospheres I Reduced Ir I Roman Reduction i I or Stressed Pla I xplain in Rema I es): 2 inches p I es): surface I surface	B13) (C1) along Liv ron (C4) in Tilled S ants (D1) arks)	ing Roo soils (C6 (LRR A)	RA	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Seomorphic Position (D2) Shallow Aquitard (D3) CAC-Neutral Test (D5) Staised Ant Mounds (D6) (LRR A) Orainage Patterns (B10) Ory-Season Water Table (C2) Season Water Table (C

Project/Site: Cheasty Trail Pilot Project			City/Coun	ty: <u>Seattle, K</u>	(ing	Sampling Date: April 5, 2017	
Applicant/Owner: City of Seattle Parks					State: WA	Sampling Point: W8 DP1	
Investigator(s): Claire Hoffman, Michael Musca							
Landform (hillslope, terrace, etc.): at base of s	lope		Local rel	ief (concave,	, convex, none): flat	Slope (%): <u>0</u>	
Subregion (LRR): <u>LRR A</u>							
Soil Map Unit Name: na					NWI classifica	ation: none	
Are climatic / hydrologic conditions on the site							
Are Vegetation, Soil, or Hydrolog	• •	•		•	ormal Circumstances" pre		
Are Vegetation, Soil, or Hydrolog					ed, explain any answers i		
SUMMARY OF FINDINGS - Attach					-	•	c.
Hydrophytic Vegetation Present? Ye	s⊠ No□						
	s ⊠ No □			he Sampled hin a Wetlar		Io [
Wetland Hydrology Present? Ye	s 🛛 No 🗌		WIL	iiii a vvetiai	iu! Tes 🔼 N	10 []	
Remarks:							
VEGETATION – Use scientific nam	es of plant						
Tree Stratum (Plot size: 30)		Absolute <u>% Cover</u>		nt Indicator ? Status	Dominance Test work		
1. Alnus rubra					Number of Dominant Sp That Are OBL, FACW, of	or FAC: 4 (A)	
2					Total Number of Domin	ant	
3					Species Across All Stra		
4					Percent of Dominant Sp	pecies	
Sapling/Shrub Stratum (Plot size: 10)		10	= Total	Cover		or FAC: 100% (A/B)	
1. Rubus bifrons (R. armeniacus)		20	V	FAC	Prevalence Index wor	ksheet:	_
2					Total % Cover of:	Multiply by:	
3					OBL species	x 1 =	
4					FACW species	x 2 =	
5						x 3 =	
Herb Stratum (Plot size: 5)		20	= Total	Cover		x 4 =	
1.Equisetum hyemale		2	n	FACW		x 5 =	
Ranunculus repens					Column Totals:	(A) (B)	
3.Agrostis sp					Prevalence Index	= B/A = 3.05	
4				_	Hydrophytic Vegetation	n Indicators:	
5					☐ Rapid Test for Hydr	1 , 0	
6					Dominance Test is		
7					☐ Prevalence Index is		
8						otations¹ (Provide supporting s or on a separate sheet)	
9					☐ Wetland Non-Vascu		
10.					☐ Problematic Hydrop	ohytic Vegetation¹ (Explain)	
11		82				l and wetland hydrology must	
Woody Vine Stratum (Plot size: 5)		<u> </u>	rotar	COVCI	be present, unless distu	irbed or problematic.	
1					Hydrophytic		
2		-			Vegetation		
% Bare Ground in Herb Stratum 0		0	= Total	Cover	Present? Yes	s ⊠ No □	
Remarks:					<u> </u>		_

/: I \	Matrix	%	0.1	Redox Feat		12	T t	D
(inches)	Color (moist)		Color (m	<u> </u>	Type ¹	Loc ²		e Remarks
<u>0-5</u>	10YR 3/3	100					loam	
<u>5-18</u>	10YR 3/3	97	10YR 3/6	3			clay loa	m, charcoal in layer
	-							
			_					
			_			-	-	
						-	-	
	-							
	oncentration, D=D					ed Sand G		² Location: PL=Pore Lining, M=Matrix.
-	Indicators: (App	licable to			notea.)			dicators for Problematic Hydric Soils ³ :
☐ Histosol☐ Histic Ep	(A1) pipedon (A2)			ly Redox (S5) ped Matrix (S6)				2 cm Muck (A10) Red Parent Material (TF2)
☐ Black His				ny Mucky Mineral	(F1) (except	t MLRA 1)		Very Shallow Dark Surface (TF12)
	en Sulfide (A4)			ny Gleyed Matrix		,		Other (Explain in Remarks)
	d Below Dark Surfa	ace (A11)		eted Matrix (F3)	` ,			,
	ark Surface (A12)			ox Dark Surface (•		³ In	dicators of hydrophytic vegetation and
-	Mucky Mineral (S1)			eted Dark Surface	` '			wetland hydrology must be present,
	Gleyed Matrix (S4) Layer (if present)		☐ Redo	x Depressions (F	-8)			unless disturbed or problematic.
	Layer (II present)							
	ches):						Lludei	c Soil Present? Yes ☐ No ⊠
Remarks:							пуш	C SOII Fresent? Fes NO
ixemaiks.								
HYDROLO	GY							
	<u> </u>							
-	drology Indicator							
Primary Indi	drology Indicator							Secondary Indicators (2 or more required)
Primary India	drology Indicator cators (minimum o Water (A1)			Water-Stained Le		xcept MLF	RA	☐ Water-Stained Leaves (B9) (MLRA 1, 2
Primary India Surface High Wa	drology Indicator cators (minimum o Water (A1) ater Table (A2)			Water-Stained Le		xcept MLF	RA	☐ Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
Primary India Surface High Wa Saturation	cators (minimum o Water (A1) ater Table (A2) on (A3)			Water-Stained Le 1, 2, 4A, and Salt Crust (B11)	4B)	xcept MLF	RA	Water-Stained Leaves (B9) (MLRA 1, 24A, and 4B)□ Drainage Patterns (B10)
Primary India Surface High Wa Saturation Water M	cators (minimum o Water (A1) ater Table (A2) on (A3) larks (B1)			Water-Stained Le 1, 2, 4A, and Salt Crust (B11) Aquatic Invertebr	4B) rates (B13)	xcept MLF		 Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2)
Primary India Surface High Wa Saturatic Water M Sedimen	cators (minimum o Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2)			Water-Stained Le 1, 2, 4A, and Salt Crust (B11) Aquatic Invertebr Hydrogen Sulfide	4B) rates (B13) re Odor (C1)			 Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C
Primary India Surface High Wa Saturatio Water M Sedimer	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2) onosits (B3)			Water-Stained Le 1, 2, 4A, and Salt Crust (B11) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizos	ates (B13) Odor (C1) Oheres along	Living Roc		 Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2)
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) oosits (B3) at or Crust (B4)			Water-Stained Le 1, 2, 4A, and Salt Crust (B11) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red	ates (B13) Odor (C1) Oheres along uced Iron (C4	Living Roc 4)	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 (C Geomorphic Position (D2) Shallow Aquitard (D3)
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	rdrology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5)			Water-Stained Le 1, 2, 4A, and Salt Crust (B11) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Red	ates (B13) Odor (C1) Oheres along uced Iron (C4 uction in Tille	Living Roc 4) d Soils (C6	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 (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Primary India Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface	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)	of one requi		Water-Stained Le 1, 2, 4A, and Salt Crust (B11) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Stunted or Stress	ates (B13) c Odor (C1) cheres along uced Iron (C4 uction in Tille sed Plants (D	Living Roc 4) d Soils (C6	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria	of one requi	(B7)	Water-Stained Le 1, 2, 4A, and Salt Crust (B11) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Red	ates (B13) c Odor (C1) cheres along uced Iron (C4 uction in Tille sed Plants (D	Living Roc 4) d Soils (C6	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 (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	cators (minimum of water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria	of one requi	(B7)	Water-Stained Le 1, 2, 4A, and Salt Crust (B11) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Stunted or Stress	ates (B13) c Odor (C1) cheres along uced Iron (C4 uction in Tille sed Plants (D	Living Roc 4) d Soils (C6	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio	drology Indicator cators (minimum of water (A1) ater Table (A2) on (A3) ater Balance (B2) posits (B1) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria (Vegetated Concarvations:	of one requi	(B7) (B8)	Water-Stained Le 1, 2, 4A, and Salt Crust (B11) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redi Stunted or Stress Other (Explain in	ates (B13) c Odor (C1) cheres along uced Iron (C4 uction in Tille sed Plants (D Remarks)	Living Roc 4) d Soils (C6	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	drology Indicator cators (minimum of water (A1) ater Table (A2) on (A3) darks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria v Vegetated Concarvations:	of one requi	(B7)	Water-Stained Le 1, 2, 4A, and Salt Crust (B11) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Stunted or Stress Other (Explain in	ates (B13) c Odor (C1) cheres along uced Iron (C4 uction in Tille sed Plants (D Remarks)	Living Roc 4) d Soils (C6	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table	cators (minimum of water (A1) ater Table (A2) on (A3) aters (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar crustions: ter Present?	of one requi	(B7)	Water-Stained Le 1, 2, 4A, and Salt Crust (B11) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Stunted or Stress Other (Explain in	ates (B13) c Odor (C1) cheres along uced Iron (C4 uction in Tille sed Plants (D Remarks)	Living Roo 4) d Soils (C6 1) (LRR A	ots (C3) 3))	 Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Wat Water Table Saturation P (includes car	cators (minimum of water (A1) ater Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar vations: ter Present? Present? pillary fringe)	al Imagery (ave Surface Yes Yes Yes Yes Yes Yes Xes	(B7)	Water-Stained Le 1, 2, 4A, and Salt Crust (B11) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Stunted or Stress Other (Explain in ppth (inches): ppth (inches): ppth (inches): 14	ates (B13) c Odor (C1) cheres along uced Iron (C4 uction in Tille sed Plants (D Remarks)	Living Roo 4) d Soils (C6 1) (LRR A	ots (C3) S)) land Hyd	Water-Stained Leaves (B9) (MLRA 1, 2
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Wat Water Table Saturation P (includes car	cators (minimum of water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar creations: ter Present?	al Imagery (ave Surface Yes Yes Yes Yes Yes Yes Xes	(B7)	Water-Stained Le 1, 2, 4A, and Salt Crust (B11) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Stunted or Stress Other (Explain in ppth (inches): ppth (inches): ppth (inches): 14	ates (B13) c Odor (C1) cheres along uced Iron (C4 uction in Tille sed Plants (D Remarks)	Living Roo 4) d Soils (C6 1) (LRR A	ots (C3) S)) land Hyd	Water-Stained Leaves (B9) (MLRA 1, 2
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	cators (minimum of water (A1) ater Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar vations: ter Present? Present? pillary fringe)	al Imagery (ave Surface Yes Yes Yes Yes Yes Yes Xes	(B7)	Water-Stained Le 1, 2, 4A, and Salt Crust (B11) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Stunted or Stress Other (Explain in ppth (inches): ppth (inches): ppth (inches): 14	ates (B13) c Odor (C1) cheres along uced Iron (C4 uction in Tille sed Plants (D Remarks)	Living Roo 4) d Soils (C6 1) (LRR A	ots (C3) S)) land Hyd	Water-Stained Leaves (B9) (MLRA 1, 2
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Wat Water Table Saturation P (includes car	cators (minimum of water (A1) ater Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar vations: ter Present? Present? pillary fringe)	al Imagery (ave Surface Yes Yes Yes Yes Yes Yes Xes	(B7)	Water-Stained Le 1, 2, 4A, and Salt Crust (B11) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Stunted or Stress Other (Explain in ppth (inches): ppth (inches): ppth (inches): 14	ates (B13) c Odor (C1) cheres along uced Iron (C4 uction in Tille sed Plants (D Remarks)	Living Roo 4) d Soils (C6 1) (LRR A	ots (C3) S)) land Hyd	Water-Stained Leaves (B9) (MLRA 1, 2
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	cators (minimum of water (A1) ater Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar vations: ter Present? Present? pillary fringe)	al Imagery (ave Surface Yes Yes Yes Yes Yes Yes Xes	(B7)	Water-Stained Le 1, 2, 4A, and Salt Crust (B11) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Stunted or Stress Other (Explain in ppth (inches): ppth (inches): ppth (inches): 14	ates (B13) c Odor (C1) cheres along uced Iron (C4 uction in Tille sed Plants (D Remarks)	Living Roo 4) d Soils (C6 1) (LRR A	ots (C3) S)) land Hyd	Water-Stained Leaves (B9) (MLRA 1, 2
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	cators (minimum of water (A1) ater Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar vations: ter Present? Present? pillary fringe)	al Imagery (ave Surface Yes Yes Yes Yes Yes Yes Xes	(B7)	Water-Stained Le 1, 2, 4A, and Salt Crust (B11) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Stunted or Stress Other (Explain in ppth (inches): ppth (inches): ppth (inches): 14	ates (B13) c Odor (C1) cheres along uced Iron (C4 uction in Tille sed Plants (D Remarks)	Living Roo 4) d Soils (C6 1) (LRR A	ots (C3) S)) land Hyd	Water-Stained Leaves (B9) (MLRA 1, 2

Project/Site: Cheasty Trail Pilot Project		City/Co	unty: <u>Seattle</u>	, King	Sampling Date: Oct 31, 2016
Applicant/Owner: City of Seattle Parks				State: WA	Sampling Point: W6 DP2
				Township, Range: SE-16-24	
Landform (hillslope, terrace, etc.): slope		Local	relief (conca	ve, convex, none): concave	Slope (%): <u>20</u>
Subregion (LRR): LRR A					
Soil Map Unit Name: none				NWI classifica	tion: none
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology sign	•			'Normal Circumstances" pres	ent? Yes⊠ No □
Are Vegetation, Soil, or Hydrology natu				eded, explain any answers in	<u> </u>
SUMMARY OF FINDINGS – Attach site map					·
Hydrophytic Vegetation Present? Yes ☐ No ☒					
Hydric Soil Present? Yes ☐ No ☒			s the Sampl		. 🖂
Wetland Hydrology Present? Yes ☐ No ☒		'	within a Wet	land? Yes ☐ No	o 🔀
Remarks:		•			
VEGETATION – Use scientific names of plan	te				
VEGETATION – Use scientific flames of plan		Domin	nant Indicato	or Dominance Test works	sheet:
<u>Tree Stratum</u> (Plot size: <u>30</u>)			es? Status		
1. Acer macrophyllum	30	У	FACU		
2				I Total Number of Dominia	ant
3				_ Species Across All Strate	a: <u>4</u> (B)
4				Percent of Dominant Spe	
Sapling/Shrub Stratum (Plot size: 10)	30	= lota	al Cover	That Are OBL, FACW, o	r FAC: <u>50</u> (A/B)
1. Alnus rubra	20	У	FAC	Prevalence Index work	sheet:
2				Total % Cover of:	Multiply by:
3				OBL species	x 1 =
4				-	x 2 =
5				-	x 3 =
Herb Stratum (Plot size: 5)	20	= 100	al Cover		x 4 = x 5 =
1. Polystichum munitum	10	У	FACU		(A) (B)
2				_	
3				=	= B/A =
4				Hydrophytic Vegetation	
5					, , ,
6				Dominance Test is >	
7				- 🚍	≤3.0 tations¹ (Provide supporting
8					or on a separate sheet)
9 10				☐ Wetland Non-Vascul	ar Plants ¹
11.				Problematic Hydroph	nytic Vegetation¹ (Explain)
	10		al Cover	¹ Indicators of hydric soil be present, unless distur	and wetland hydrology must
Woody Vine Stratum (Plot size: 5)				be present, unless distar	bed of problematic.
1. Rubus armeniacus	100	У	<u>FAC</u>	Hydrophytic	
2	400		-10	- Vegetation Present? Yes	. □ No ⊠
% Bare Ground in Herb Stratum	100	= 10ta	ai Cover	Fleselit! 168	s □ No ⊠
Remarks:					

Depth	Matrix			Redox Featur	<u>es</u>		T the absence	or maloutors.,
(inches)	Color (moist)	<u>%</u>	Color (moist) %	Type ¹	Loc ²	<u>Texture</u>	Remarks
<u>0-5</u>	10YR 2/1	100	· -				loam	saturated
<u>5-18</u>	10YR 4/2	93	10YR 3/6	7			loam	not saturated
				-				
		_						·
		_					•	·
								. <u></u>
¹Type C=C	oncentration, D=De	epletion RI	M=Reduced M	atrix CS=Cover	ed or Coate	ed Sand Gr	rains ² l c	ocation: PL=Pore Lining, M=Matrix.
	Indicators: (Appl							ors for Problematic Hydric Soils ³ :
Histosol	(A1)		☐ Sandy F	ledox (S5)			☐ 2 cr	m Muck (A10)
☐ Histic Ep	pipedon (A2)		☐ Stripped	Matrix (S6)			☐ Red	Parent Material (TF2)
☐ Black His	• •		-	/lucky Mineral (F		MLRA 1)		y Shallow Dark Surface (TF12)
	n Sulfide (A4)		-	Bleyed Matrix (F	2)		☐ Oth	er (Explain in Remarks)
•	Below Dark Surfa	ce (A11)	•	d Matrix (F3)	.,		31 11 (
	ark Surface (A12) lucky Mineral (S1)			ark Surface (F6 d Dark Surface (-			ors of hydrophytic vegetation and and and and hydrology must be present,
	licky Milleral (S1)			epressions (F8	,			ss disturbed or problematic.
	Layer (if present):			repressions (i o	/		dillo	oo distance of problematic.
_								
	ches):						Hydric Soi	I Present? Yes ⊠ No □
Remarks:							Tiyano oo.	111030HL 103 A 110 L
rtomanto.								
HYDROLO								
_	drology Indicators							
-	cators (minimum of	one requir						ondary Indicators (2 or more required)
☐ Surface			☐ Wa	ter-Stained Lea		xcept MLR	RA 🗆 V	Vater-Stained Leaves (B9) (MLRA 1, 2,
_	ter Table (A2)			1, 2, 4A, and 4	B)			4A, and 4B)
	` '			t Crust (B11)				Prainage Patterns (B10)
☐ Water M				uatic Invertebrat	-			9ry-Season Water Table (C2)
	nt Deposits (B2)			drogen Sulfide (, ,			Saturation Visible on Aerial Imagery (C9)
-	oosits (B3)			dized Rhizosph	_	_	` ′	Geomorphic Position (D2)
_	it or Crust (B4)			sence of Reduc		-		Shallow Aquitard (D3)
-	osits (B5)			cent Iron Reduc				AC-Neutral Test (D5)
	Soil Cracks (B6)			nted or Stresse	,	1) (LRR A)		Raised Ant Mounds (D6) (LRR A)
	on Visible on Aerial		•	er (Explain in R	lemarks)		□F	rost-Heave Hummocks (D7)
	Vegetated Concav	/e Surface	(B8)					
Field Obser								
Surface Wat				(inches):				
Water Table			•	(inches):				
Saturation P	resent? pillary fringe)	Yes 🛛 1	No ☐ Depth	(inches): <u>5</u>		Wetla	and Hydrolog	gy Present? Yes ⊠ No 🗌
	corded Data (strea	m gauge, r	monitoring well	, aerial photos,	previous ins	spections),	if available:	
	,	5 5 ,	J		,	. "		
l								
Remarks: W	ater coming in from	side of nit	t, at 5 inches h	out not saturated	below Po	ssibly nerch	hed water tabl	e.
Remarks: W	ater coming in from	side of pi	t, at 5 inches, t	out not saturated	l below. Po	ssibly perch	hed water tabl	e.
Remarks: W	ater coming in from	n side of pit	t, at 5 inches, t	out not saturated	I below. Po	ssibly percl	hed water tabl	e.
Remarks: W	ater coming in from	n side of pi	t, at 5 inches, t	out not saturated	I below. Po	ssibly percl	hed water tab	e.

Project/Site: Cheasty Trail Pilot Project		City/Co	unty: <u>Seattle, k</u>	King	Sampling Date: Oct 31, 2016
Applicant/Owner: City of Seattle Parks				State: WA	Sampling Point: W6 DP1
Investigator(s): Claire Hoffman, Jessica Redman			Section, To	ownship, Range: <u>SE-16-24</u>	-4
Landform (hillslope, terrace, etc.): hillslope		Local	relief (concave	, convex, none): concave	Slope (%): <u>5</u>
Subregion (LRR): LRR A	Lat: <u>47.5</u>	65097		Long: <u>-122.298835</u>	Datum: NAD1983
Soil Map Unit Name: na				NWI classifica	tion: PFOB
Are climatic / hydrologic conditions on the site typical for the	nis time of yea	ar? Yes	s⊠ No□ (I	If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology si	-		-	ormal Circumstances" pres	ent? Yes ⊠ No □
Are Vegetation, Soil, or Hydrology na				ed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map			oling point l	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ⊠ No □	1				
Hydric Soil Present? Yes ⊠ No □			s the Sampled within a Wetlar		<u>,</u> П
Wetland Hydrology Present? Yes ⊠ No □		"	vitiiii a vvetiai	iiu: ies⊠ ivi	, L
Remarks:					
VEGETATION – Use scientific names of pla	nts.				
[Domin	nant Indicator	Dominance Test works	heet:
<u>Tree Stratum</u> (Plot size: <u>30</u>)			es? Status	Number of Dominant Sp	
1. Salix sitchensis				That Are OBL, FACW, o	r FAC: 5 (A)
2				Total Number of Domina	
3				Species Across All Strat	a: <u>6</u> (B)
4	10			Percent of Dominant Sp	
Sapling/Shrub Stratum (Plot size: 10)	10	100	ai Covei	That Are OBL, FACW, o	r FAC: <u>83</u> (A/B)
1. Alnus rubra	35	У	<u>FAC</u>	Prevalence Index work	sheet:
2. Rubus spectabilis	trace		FAC	Total % Cover of:	Multiply by:
3				OBL species	x 1 =
4				*	x 2 =
5				· ·	x 3 =
Herb Stratum (Plot size: 5)	35	_ = Tota	al Cover		x 4 =
1. Athyrium filix-femina	15	٧	FAC		x 5 = (A) (B)
2. Tolmiea menziesii				Column Totals.	(A) (B)
3. Polystichum munitum				Prevalence Index	= B/A =
4	_		<u> </u>	Hydrophytic Vegetatio	n Indicators:
5				☐ Rapid Test for Hydro	
6	_			□ Dominance Test is > □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	
7				☐ Prevalence Index is	
8					tations ¹ (Provide supporting or on a separate sheet)
9				☐ Wetland Non-Vascu	. ,
10				☐ Problematic Hydroph	nytic Vegetation¹ (Explain)
11					and wetland hydrology must
Woody Vine Stratum (Plot size: <u>5</u>)	<u>45</u>	_ = 100	ai Covei	be present, unless distu	bed or problematic.
1. Rubus armeniacus	100	У	<u>FAC</u>	Livednombysie	
2				Hydrophytic Vegetation	
% Bare Ground in Horb Stratum	100	= Tota	al Cover	Present? Yes	No □
% Bare Ground in Herb Stratum					

Depth								
	Matrix Color (moist)	%	Color (mois	Redox Fea		Loc ²	Texture	<u>Remarks</u>
0-9	10YR 2/1	100					sandy loam	
	10YR 4/3 & 10YR 2/1	358.65					sandy loam	-
9-10	101K 4/3 & 101K 2/1	33003					Sandy Idam	-
			-					
								·
¹Tvpe: C=Coi	ncentration, D=Dep	oletion. RM	/=Reduced M	latrix. CS=Co	ered or Coat	ed Sand G	rains. ² Lo	ocation: PL=Pore Lining, M=Matrix.
	ndicators: (Applic							ors for Problematic Hydric Soils³:
☐ Histosol (A	A1)		☐ Sandy I	Redox (S5)			☐ 2 cı	m Muck (A10)
☐ Histic Epip	pedon (A2)		☐ Strippe	d Matrix (S6)			☐ Red	d Parent Material (TF2)
☐ Black Hist	` '		-	Mucky Minera		MLRA 1)		y Shallow Dark Surface (TF12)
☐ Hydrogen		(* ()		Gleyed Matrix	(F2)		☐ Oth	er (Explain in Remarks)
	Below Dark Surfac	e (A11)		d Matrix (F3)	(EC)		31	ana af lauduau laudia wa watati an anad
	k Surface (A12) icky Mineral (S1)			Dark Surface d Dark Surfac	٠,			ors of hydrophytic vegetation and and and and hydrology must be present,
-	eyed Matrix (S4)		•	Depressions (, ,			ess disturbed or problematic.
-	ayer (if present):			1 \	- /			'
Type:								
Depth (incl	hes):						Hydric So	il Present? Yes □ No ⊠
Remarks: dep	oleted matrix is only	/ 35% in se	econd laver. r	ot sufficient to	meet criteria	for A11.		
	-							
HYDROLOG	GY							
HYDROLOG								
Wetland Hyd	rology Indicators:		ed: check all l	hat apply)			Seco	ondary Indicators (2 or more required)
Wetland Hyd	rology Indicators: ators (minimum of o				eaves (B9) (e	xcept MI F		ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MI RA 1 2
Wetland Hyd Primary Indica ☐ Surface W	rology Indicators: ators (minimum of o Vater (A1)			ater-Stained L		xcept MLF		Vater-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hyd Primary Indica ☐ Surface W ☐ High Wate	rology Indicators: ators (minimum of o Vater (A1) er Table (A2)		□ W	ater-Stained L 1, 2, 4A, and	i 4B)	xcept MLF	RA U	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hyd Primary Indica ☐ Surface W ☐ High Wate ☐ Saturation	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3)		□ W	ater-Stained L 1, 2, 4A, and It Crust (B11)	i 4B)	xcept MLF	RA	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10)
Wetland Hyd Primary Indica □ Surface W ⊠ High Wate ⊠ Saturation □ Water Mal	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) rks (B1)		□ Wa	ater-Stained L 1, 2, 4A, and It Crust (B11) uatic Inverteb	1 4B) rates (B13)	xcept MLF	AS V	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2)
Wetland Hyd Primary Indica ☐ Surface W ☐ High Wate ☐ Saturation ☐ Water Mai ☐ Sediment	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2)		□ Wa	ater-Stained L 1, 2, 4A, and It Crust (B11) uatic Inverteb drogen Sulfid	rates (B13) e Odor (C1)		RA	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hyd Primary Indica □ Surface W □ High Wate □ Saturation □ Water Mate □ Sediment □ Drift Depo	rology Indicators: ators (minimum of ovater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3)		□ W □ Sa □ Ac □ Hy □ Ox	ater-Stained L 1, 2, 4A, and It Crust (B11) uatic Inverteb drogen Sulfid idized Rhizos	rates (B13) e Odor (C1) pheres along	Living Roo	RA	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
Wetland Hyd Primary Indica □ Surface W □ High Wate □ Saturation □ Water Mate □ Sediment □ Drift Depo	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4)		W Sa Ad Hy O> Pr	ater-Stained L 1, 2, 4A, and It Crust (B11) uatic Inverteb drogen Sulfid	rates (B13) e Odor (C1) pheres along duced Iron (C4	Living Roo I)	RA	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hyd Primary Indica □ Surface W □ High Wate □ Saturation □ Water Mat □ Sediment □ Drift Depo □ Algal Mat □ Iron Depo	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4)		W Sa Ac Hy O> Pr Re	ater-Stained L 1, 2, 4A, and It Crust (B11) uatic Inverteb drogen Sulfid idized Rhizos esence of Rec	rates (B13) e Odor (C1) pheres along duced Iron (C4 uction in Tille	Living Roo I) d Soils (C6	RA	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3)
Wetland Hyd Primary Indica □ Surface W □ High Wate □ Saturation □ Water Mate □ Sediment □ Drift Depo □ Algal Mat □ Iron Depo □ Surface S	rology Indicators: ators (minimum of ovater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) esits (B5)	one require	□ W. □ Sa □ Ac □ Hy □ Ox □ Pr □ Re □ St	ater-Stained L 1, 2, 4A, and It Crust (B11) uatic Inverteb drogen Sulfid idized Rhizos esence of Recocent Iron Rec	rates (B13) e Odor (C1) pheres along duced Iron (C4 uction in Tille sed Plants (D	Living Roo I) d Soils (C6	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) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Wetland Hyd Primary Indica Surface W High Wate Saturation Water Man Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation	rology Indicators: ators (minimum of or vater (A1) er Table (A2) er (A3) rks (B1) Deposits (B2) esits (B3) or Crust (B4) esits (B5) ooil Cracks (B6)	one require	Walter Walter Walter Walter Walter Walter Walter Acc A	ater-Stained L 1, 2, 4A, and It Crust (B11) uatic Inverteb drogen Sulfid didized Rhizos esence of Rec cent Iron Rec unted or Stres	rates (B13) e Odor (C1) pheres along duced Iron (C4 uction in Tille sed Plants (D	Living Roo I) d Soils (C6	RA	Vater-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)
Wetland Hyd Primary Indica Surface W High Wate Saturation Water Man Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) foil Cracks (B6) n Visible on Aerial I	one require	Walter Walter Walter Walter Walter Walter Walter Acc A	ater-Stained L 1, 2, 4A, and It Crust (B11) uatic Inverteb drogen Sulfid didized Rhizos esence of Rec cent Iron Rec unted or Stres	rates (B13) e Odor (C1) pheres along duced Iron (C4 uction in Tille sed Plants (D	Living Roo I) d Soils (C6	RA	Vater-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)
Wetland Hyd Primary Indica Surface W High Wate Saturation Water Mai Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely V	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) ioil Cracks (B6) n Visible on Aerial I Vegetated Concave	one require magery (E e Surface (W. Sa Ac Ac Hy O	ater-Stained L 1, 2, 4A, and It Crust (B11) uatic Inverteb drogen Sulfid didized Rhizos esence of Rec cent Iron Rec unted or Stres	rates (B13) e Odor (C1) pheres along duced Iron (C4 uction in Tille sed Plants (D n Remarks)	Living Roo I) d Soils (C6	RA	Vater-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)
Wetland Hyd Primary Indica ☐ Surface W ☐ High Wate ☐ Saturation ☐ Water Mat ☐ Sediment ☐ Drift Depo ☐ Algal Mat ☐ Iron Depo ☐ Surface S ☐ Inundatior ☐ Sparsely W	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) soil Cracks (B6) n Visible on Aerial I Vegetated Concave ations: r Present?	magery (E e Surface (Wall Sa Sa Acc Acc Hy Ox Pr Re St St GB8 Cot	ater-Stained L 1, 2, 4A, and It Crust (B11) uatic Inverteb drogen Sulfid idized Rhizos esence of Rec ecent Iron Rec unted or Stres her (Explain in	rates (B13) e Odor (C1) pheres along duced Iron (C4 uction in Tille sed Plants (D	Living Roo I) d Soils (C6	RA	Vater-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)
Wetland Hyd Primary Indica Surface W High Water Saturation Water Man Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely W Field Observers	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) poil Cracks (B6) n Visible on Aerial I Vegetated Concave vations: r Present?	magery (E e Surface (∕es □ N ⁄es ⊠ N	William William William William William William Acc Hy Ob Pr Rec St St St St Ob Ob Ob Ob Ob Ob Ob O	ater-Stained L 1, 2, 4A, and It Crust (B11) uatic Inverteb drogen Sulfid didized Rhizos esence of Rec ecent Iron Rec unted or Stres her (Explain in	rates (B13) e Odor (C1) pheres along duced Iron (C4 uction in Tille sed Plants (D	Living Roo I) d Soils (C6 1) (LRR A)	ts (C3)	Vater-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)
Wetland Hyd Primary Indica Surface W High Water Saturation Water Man Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely W Field Observ Surface Water Water Table F Saturation Pre (includes capi	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) in (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4) isits (B5) isits (B5) in Visible on Aerial I Vegetated Concave rations: r Present?	magery (Ee Surface (/es \bigs \bi	William Will	ater-Stained L 1, 2, 4A, and It Crust (B11) uatic Inverteb drogen Sulfid didized Rhizos esence of Rec ecent Iron Rec unted or Stres her (Explain in n (inches): n (inches): 4 n (inches): 2	rates (B13) e Odor (C1) pheres along duced Iron (C4 uction in Tille sed Plants (D n Remarks)	Living Roo I) d Soils (C6 1) (LRR A)	ts (C3) C C C C C C C C C C C C C C C C C C C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-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 Hyd Primary Indica Surface W High Water Saturation Water Man Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely W Field Observ Surface Water Water Table F Saturation Pre (includes capi	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6) n Visible on Aerial I Vegetated Concave ations: r Present?	magery (Ee Surface (/es \bigs \bi	William Will	ater-Stained L 1, 2, 4A, and It Crust (B11) uatic Inverteb drogen Sulfid didized Rhizos esence of Rec ecent Iron Rec unted or Stres her (Explain in n (inches): n (inches): 4 n (inches): 2	rates (B13) e Odor (C1) pheres along duced Iron (C4 uction in Tille sed Plants (D n Remarks)	Living Roo I) d Soils (C6 1) (LRR A)	ts (C3) C C C C C C C C C C C C C C C C C C C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-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 Hyd Primary Indica Surface W High Water Saturation Water Man Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely W Field Observ Surface Water Water Table F Saturation Pre (includes capi	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) in (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4) isits (B5) isits (B5) in Visible on Aerial I Vegetated Concave rations: r Present?	magery (Ee Surface (/es \bigs \bi	William Will	ater-Stained L 1, 2, 4A, and It Crust (B11) uatic Inverteb drogen Sulfid didized Rhizos esence of Rec ecent Iron Rec unted or Stres her (Explain in n (inches): n (inches): 4 n (inches): 2	rates (B13) e Odor (C1) pheres along duced Iron (C4 uction in Tille sed Plants (D n Remarks)	Living Roo I) d Soils (C6 1) (LRR A)	ts (C3) C C C C C C C C C C C C C C C C C C C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-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 Hyd Primary Indica Surface W High Water Saturation Water Man Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely W Field Observ. Surface Water Water Table F Saturation Pre (includes capical	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) in (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4) isits (B5) isits (B5) in Visible on Aerial I Vegetated Concave rations: r Present?	magery (Ee Surface (/es \bigs \bi	William Will	ater-Stained L 1, 2, 4A, and It Crust (B11) uatic Inverteb drogen Sulfid didized Rhizos esence of Rec ecent Iron Rec unted or Stres her (Explain in n (inches): n (inches): 4 n (inches): 2	rates (B13) e Odor (C1) pheres along duced Iron (C4 uction in Tille sed Plants (D n Remarks)	Living Roo I) d Soils (C6 1) (LRR A)	ts (C3) C C C C C C C C C C C C C C C C C C C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-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 Hyd Primary Indica Surface W High Water Saturation Water Man Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely W Field Observ. Surface Water Water Table F Saturation Pre (includes capical	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) in (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4) isits (B5) isits (B5) in Visible on Aerial I Vegetated Concave rations: r Present?	magery (Ee Surface (/es \bigs \bi	William Will	ater-Stained L 1, 2, 4A, and It Crust (B11) uatic Inverteb drogen Sulfid didized Rhizos esence of Rec ecent Iron Rec unted or Stres her (Explain in n (inches): n (inches): 4 n (inches): 2	rates (B13) e Odor (C1) pheres along duced Iron (C4 uction in Tille sed Plants (D n Remarks)	Living Roo I) d Soils (C6 1) (LRR A)	ts (C3) C C C C C C C C C C C C C C C C C C C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-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: Cheasty Trail Pilot Project		City/Co	ounty:	Seattle, K	King	Sampling Date: Oct	20, 2016
Applicant/Owner: City of Seattle Parks					State: WA	Sampling Point: W5	DP2
Investigator(s): Claire Hoffman, Jessica Redman			§	Section, To	ownship, Range: <u>SE-16-24</u>	-4	
Landform (hillslope, terrace, etc.): slope		Local	relief	f (concave,	, convex, none): concave	Slope (%): <u>20</u>
Subregion (LRR): LRR A	Lat: 47.5	64615			Long: -122.299161	Datum: N	IAD 1983
Soil Map Unit Name: n/a							
Are climatic / hydrologic conditions on the site typical for th							
Are Vegetation, Soil, or Hydrology sig	•			,	ormal Circumstances" pres	ent? Yes⊠ No.F	٦
Are Vegetation, Soil, or Hydrology nat					ed, explain any answers in		_
SUMMARY OF FINDINGS – Attach site map				`		,	ıres, etc.
Hydrophytic Vegetation Present? Yes ☐ No ☒							
Hydric Soil Present? Yes ☐ No ☒				Sampled		5 7	
Wetland Hydrology Present? Yes ⊠ No □		'	withii	n a Wetlar	nd? Yes ☐ No) 🛚	
Remarks:		ı					
VEGETATION – Use scientific names of plan	nts.						
	Absolute				Dominance Test works	heet:	
Tree Stratum (Plot size: 30)	% Cover				Number of Dominant Sp		(4)
1. Acer macrophyllum					That Are OBL, FACW, or	r FAC: 2	_ (A)
2					Total Number of Domina		(D)
3					Species Across All Strata	a: <u>5</u>	(B)
4	30				Percent of Dominant Spe		(4.45)
Sapling/Shrub Stratum (Plot size: 10)	30	_ 100	lai CO) v e i	That Are OBL, FACW, or	r FAC: 4 <u>0</u>	_ (A/B)
1. Alnus rubra	5	У		FAC	Prevalence Index work	sheet:	
2. <u>Ilex aquifolium</u>	10	У		<u>FACU</u>	Total % Cover of:	Multiply by:	<u>-</u>
3	<u> </u>				OBL species	x 1 =	
4	<u> </u>				FACW species	x 2 =	
5					FAC species		
Harb Stratum (Diet size, E)	<u>15</u>	= Tot	tal Co	over	FACU species		
Herb Stratum (Plot size: 5)	30	.,		EACH	UPL species		
1. Polystichum munitum					Column Totals:	(A)	(B)
2					Prevalence Index	= B/A =	
4					Hydrophytic Vegetation		
5					☐ Rapid Test for Hydro	phytic Vegetation	
6					☐ Dominance Test is >	50%	
7.					☐ Prevalence Index is:	≤3.0 ¹	
8	· ·				☐ Morphological Adapt data in Remarks	ations¹ (Provide support or on a separate she	
9					☐ Wetland Non-Vascul	ar Plants¹	
10					☐ Problematic Hydroph	ıytic Vegetation¹ (Exp	olain)
11	30				¹ Indicators of hydric soil be present, unless distur		yy must
Woody Vine Stratum (Plot size: <u>5</u>) 1. Rubus armeniacus 2		У		FAC	Hydrophytic		
% Bare Ground in Herb Stratum <u>5</u>	70	= Tot	tal Co	over	Vegetation Present? Yes	□ No ⊠	
Remarks:					1		

			depth ne		ment the indicator	or confirm	the absen	nce of indicators.)
Depth (inches)	Matrix Color (moist)	%	Colo	r (moist)	ox Features % Type ¹	Loc ²	Texture	Remarks
0-9	10YR 2/1	100						m
		95	7.5\	/D 4/6			-	
<u>9-18</u>	10YR 2/1	95	<u> 7.51</u>	<u>′R 4/6</u>	5		sandy loar	<u> </u>
								 -
	-							_
	-							
	Concentration, D=D Indicators: (App				S=Covered or Coat	ed Sand Gr		CLocation: PL=Pore Lining, M=Matrix. Cators for Problematic Hydric Soils ³ :
-		iicabie ic						·
☐ Histosol	` '			Sandy Redox (Stripped Matrix				com Muck (A10)
	pipedon (A2) istic (A3)				. (56) Mineral (F1) (excep	+ MI DA 1)		Red Parent Material (TF2) /ery Shallow Dark Surface (TF12)
	en Sulfide (A4)			Loamy Gleyed		CIVILITY I)		Other (Explain in Remarks)
	d Below Dark Surfa	ce (A11)		Depleted Matrix				The (Explain in Remains)
•	ark Surface (A12)	,		Redox Dark Su	` '		³ Indic	cators of hydrophytic vegetation and
	Mucky Mineral (S1)			Depleted Dark	Surface (F7)		We	etland hydrology must be present,
	Gleyed Matrix (S4)			Redox Depress	sions (F8)		ur	nless disturbed or problematic.
Restrictive	Layer (if present)	:						
Type:								
Depth (in	nches):			-			Hydric S	Soil Present? Yes ⊠ No □
Remarks:							1	
LIVEDOL C	201							
HYDROLC								
•	/drology Indicator icators (minimum o		uirod: ch	ock all that ann	lv)		90	econdary Indicators (2 or more required)
	•	i one req	ulleu, chi	• •		voont MI D		
Surface					ined Leaves (B9) (e	except wick	. А ⊔	Water-Stained Leaves (B9) (MLRA 1, 2,
_	ater Table (A2)			1, 2, 4	A, and 4B)			4A, and 4B) Drainage Patterns (B10)
	` '				` ,			Dry-Season Water Table (C2)
	Marks (B1)				vertebrates (B13) Sulfide Odor (C1)			Saturation Visible on Aerial Imagery (C9)
	nt Deposits (B2)				` '	Living Doot	_	
	posits (B3)				Rhizospheres along	_		Geomorphic Position (D2)
_	at or Crust (B4)				of Reduced Iron (C	-		Shallow Aquitard (D3)
	posits (B5)				n Reduction in Tille	, ,		FAC-Neutral Test (D5)
	Soil Cracks (B6) on Visible on Aeria	Limogon	(P7)		⁻ Stressed Plants (D plain in Remarks)	/		Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
	y Vegetated Conca		, ,	☐ Other (EX	Dialit ili Relliaiks)		Ш	Flost-neave nullillocks (D1)
Field Obser		ve Suriac	е (во)					
rieid Obsei		Vac 🏹	No 🗆	Donth (inche	a). O 1			
Curfoso Mo		Yes 🖂	No 🗌	. ,	s): <u>0-1</u>			
Surface Wa					s):			
Water Table	e Present?	Yes	No ⊠					
Water Table	e Present? Present?		No ⊠ No □		s): surface	Wetla	and Hydrol	logy Present? Yes ⊠ No □
Water Table Saturation F (includes ca	e Present? Present? apillary fringe)	Yes ☐ Yes ⊠	No 🗌	Depth (inche				
Water Table Saturation F (includes ca	e Present? Present? apillary fringe)	Yes ☐ Yes ⊠	No 🗌	Depth (inche	s): surface			
Water Table Saturation F (includes ca Describe Re	e Present? Present? apillary fringe) ecorded Data (strea	Yes □ Yes ⊠ am gauge	No .	Depth (inche	s): surface			
Water Table Saturation F (includes ca Describe Re	e Present? Present? apillary fringe)	Yes □ Yes ⊠ am gauge	No .	Depth (inche	s): surface			
Water Table Saturation F (includes ca Describe Re	e Present? Present? apillary fringe) ecorded Data (strea	Yes □ Yes ⊠ am gauge	No .	Depth (inche	s): surface			

Project/Site: Cheasty Trail Pilot Project			City/Cou	nty: <u>Seattle, ł</u>	King	Sampling Date: Oct 20, 2016
Applicant/Owner: City of Seattle Parks					State: WA	Sampling Point: W5 DP1
Investigator(s): <u>Claire Hoffman, Jessica I</u>	Redman			_ Section, To	ownship, Range: <u>SE-16-24</u>	-4
Landform (hillslope, terrace, etc.): <u>hillslo</u> p	ре		Local re	elief (concave	, convex, none): concave	Slope (%): <u>20</u>
Subregion (LRR): <u>LRR A</u>		Lat: <u>47.5</u> 6	64616		Long: <u>-122.299131</u>	Datum: <u>NAD1983</u>
Soil Map Unit Name: na Are climatic / hydrologic conditions on the Are Vegetation, Soil, or Hy Are Vegetation, Soil, or Hy SUMMARY OF FINDINGS – At	e site typical for this t drology signif drology natura	time of yea icantly dis	ar? Yes turbed?	⊠ No □ (l Are "N∈ (If need	If no, explain in Remarks.) ormal Circumstances" pres ed, explain any answers in	ent? Yes ⊠ No □ Remarks.)
Hydrophytic Vegetation Present?	Yes ⊠ No □		Is	the Sampled	l Area	
Hydric Soil Present?	Yes ⊠ No 🗌			ithin a Wetla		οΠ
Wetland Hydrology Present?	Yes 🛛 No 🗌					
VEGETATION – Use scientific	•	Absolute		nt Indicator	Dominance Test works	sheet:
Tree Stratum (Plot size: 30) 1					Number of Dominant Sp That Are OBL, FACW, o	
2					Total Number of Domina Species Across All Strat	
4					Percent of Dominant Sp That Are OBL, FACW, o	
1. Corylus cornuta		10	V	FACU	Prevalence Index work	sheet:
2.					Total % Cover of:	Multiply by:
3.					OBL species	x 1 =
4					FACW species	x 2 =
5					FAC species	x 3 =
		10	= Total	Cover	FACU species	x 4 =
Herb Stratum (Plot size: <u>5</u>)		40		FAC	UPL species	 ····
Athyrium filix-femina Tolmiea menziesii		<u>40</u>			Column Totals:	(A) (B)
Carex obnupta		30 trace			Prevalence Index	= B/A =
4. <u>Urtica dioica</u>		trace			Hydrophytic Vegetatio	
5					☐ Rapid Test for Hydro	phytic Vegetation
6					□ Dominance Test is >	50%
7.					☐ Prevalence Index is	≤3.0 ¹
8					data in Remarks	tations ¹ (Provide supporting or on a separate sheet)
10					☐ Wetland Non-Vascu	
11						nytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size: 5)		70			¹ Indicators of hydric soil be present, unless distu	and wetland hydrology must rbed or problematic.
Rubus armeniacus L		60	у	<u>FAC</u>	Hydrophytic Vegetation	
% Bare Ground in Herb Stratum <u>0</u>		60	= Total	Cover		No 🗆
Remarks:						

				_				
Depth (inches)	Matrix Color (moist)	% Col	Redox or (moist)	<u>x Features</u> % Type¹	Loc ²	Textur	e	Remarks
0-6	10YR 3/2 &10YR 4/1			5%_				- r.co.r.co.r.co
6-18	10YR 2/1 95		′R 4/6	5	M	silt loam		
0-10	101K 2/1 95	<u> </u>	K 4/0	<u>5</u>	IVI	SIIL IOAII	<u> </u>	
							 -	
¹Type: C=Co	oncentration, D=Deple	tion, RM=Re	duced Matrix, CS	=Covered or Coated	d Sand Gr	rains.	² Location: PL=	Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applicat	ole to all LRF	Rs, unless other	wise noted.)		ln	dicators for Pro	blematic Hydric Soils ³ :
☐ Histosol	` '		Sandy Redox (S	5)			2 cm Muck (A1	,
	ipedon (A2)		Stripped Matrix (,			Red Parent Ma	
☐ Black His	` '			ineral (F1) (except l	MLRA 1)			ark Surface (TF12)
	n Sulfide (A4) I Below Dark Surface (Loamy Gleyed M	, ,			Other (Explain	in Remarks)
	irk Surface (A12)	, _	Depleted Matrix (Redox Dark Surf	• ,		3lr	ndicators of hydro	phytic vegetation and
	lucky Mineral (S1)		Depleted Dark S				•	gy must be present,
-	leyed Matrix (S4)		Redox Depression	` '			unless disturbed	
Restrictive I	Layer (if present):		-	· · ·				•
Type:			_					
Depth (in	ches):		_			Hydri	c Soil Present?	Yes ⊠ No □
Remarks:						I		
HADBOLO	GY							
HYDROLO								
Wetland Hy	drology Indicators:	- v- viv- d. al		Δ			Carandamiladia	
Wetland Hyd	drology Indicators: cators (minimum of one	e required; ch		•	and MI F		-	ators (2 or more required)
Wetland Hyder Primary India	drology Indicators: cators (minimum of one Water (A1)	e required; ch	☐ Water-Stain	ed Leaves (B9) (ex	cept MLF	RA	☐ Water-Staine	ed Leaves (B9) (MLRA 1, 2,
Wetland Hyden Primary India ☐ Surface Note High Wa	drology Indicators: cators (minimum of one Water (A1) ter Table (A2)	e required; ch	☐ Water-Stain	ed Leaves (B9) (ex , and 4B)	cept MLR	RA	☐ Water-Staine	ed Leaves (B9) (MLRA 1, 2,
Wetland Hyden Primary India ☐ Surface Note High Watter Staturation	drology Indicators: cators (minimum of one Water (A1) ter Table (A2) on (A3)	e required; ch	☐ Water-Stain 1, 2, 4A ☐ Salt Crust (I	ned Leaves (B9) (ex , and 4B) B11)	cept MLF	RA	☐ Water-Staine 4A, and	ed Leaves (B9) (MLRA 1, 2, 4B) tterns (B10)
Wetland Hyd Primary India □ Surface N □ High Wa □ Saturatio □ Water M	drology Indicators: cators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1)	e required; cł	☐ Water-Stain 1, 2, 4A ☐ Salt Crust (I	ned Leaves (B9) (ex , and 4B) B11) ertebrates (B13)	cept MLF	RA	Water-Staine 4A, and Drainage Pa	ed Leaves (B9) (MLRA 1, 2, 4B) tterns (B10) Water Table (C2)
Wetland Hyd Primary India □ Surface V □ High Wa □ Saturatio □ Water M □ Sedimen	drology Indicators: cators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) it Deposits (B2)	e required; ch	☐ Water-Stain 1, 2, 4A ☐ Salt Crust (I ☐ Aquatic Inve	ned Leaves (B9) (ex , and 4B) B11) ertebrates (B13) sulfide Odor (C1)			Water-Staine 4A, and Drainage Pa Dry-Season Saturation Vi	ed Leaves (B9) (MLRA 1, 2, 4B) tterns (B10) Water Table (C2) sible on Aerial Imagery (C9)
Wetland Hyd Primary India □ Surface M □ High Wa □ Saturatio □ Water M □ Sedimen □ Drift Dep	drology Indicators: cators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) tt Deposits (B2) oosits (B3)	e required; ch	Water-Stain 1, 2, 4A Salt Crust (I Aquatic Inve	ned Leaves (B9) (ex , and 4B) B11) Pertebrates (B13) Fulfide Odor (C1) nizospheres along L	iving Roo		Water-Staine 4A, and Drainage Pa Dry-Season Saturation Vi Geomorphic	ed Leaves (B9) (MLRA 1, 2, 4B) tterns (B10) Water Table (C2) sible on Aerial Imagery (C9) Position (D2)
Wetland Hyderimary India Surface High Wa Saturation Water Main Sediment Drift Dep Algal Main	drology Indicators: cators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) t or Crust (B4)	e required; ch	Water-Stain 1, 2, 4A Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of	ed Leaves (B9) (ex, and 4B) B11) ertebrates (B13) sulfide Odor (C1) nizospheres along L f Reduced Iron (C4)	iving Roo	its (C3)	Water-Staine 4A, and Drainage Pa Dry-Season Saturation Vi Geomorphic Shallow Aqui	ed Leaves (B9) (MLRA 1, 2, 4B) Itterns (B10) Water Table (C2) Isible on Aerial Imagery (C9) Position (D2) Itterd (D3)
Wetland Hydeliand Hydeliand Hydeliand Warfardio ☐ Surface Warfardio ☐ High Wa ☐ Saturatio ☐ Water Mater Ma	drology Indicators: cators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) t or Crust (B4) osits (B5)	e required; ch	Water-Stain 1, 2, 4A Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	red Leaves (B9) (ex , and 4B) B11) ertebrates (B13) sulfide Odor (C1) nizospheres along L f Reduced Iron (C4) Reduction in Tilled	iving Roo Soils (C6	its (C3)	Water-Staine 4A, and Drainage Pa Dry-Season Saturation Vi Geomorphic Shallow Aqui FAC-Neutral	ed Leaves (B9) (MLRA 1, 2, 4B) tterns (B10) Water Table (C2) isible on Aerial Imagery (C9) Position (D2) itard (D3) Test (D5)
Wetland Hyderimary India Surface Surface High Wa Saturatio Water Marcon Drift Dep Algal Marcon Iron Dep Surface Surf	drology Indicators: cators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6)		Water-Stain 1, 2, 4A Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S	led Leaves (B9) (ex, and 4B) B11) ertebrates (B13) fulfide Odor (C1) hizospheres along L f Reduced Iron (C4) Reduction in Tilled Stressed Plants (D1	iving Roo Soils (C6	its (C3)	Water-Staine 4A, and Drainage Pa Dry-Season Saturation Vi Geomorphic Shallow Aqu FAC-Neutral Raised Ant M	ed Leaves (B9) (MLRA 1, 2, 4B) Itterns (B10) Water Table (C2) isible on Aerial Imagery (C9) Position (D2) itard (D3) Test (D5) Mounds (D6) (LRR A)
Wetland Hyderimary India Surface High Wa Saturation Water Marcon Drift Dep Algal Ma Iron Dep Surface Inundation Inundation Inundation Inundation Inundation Inundation Inundation Primary Inundation Inunda	drology Indicators: cators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) assits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial Ima	agery (B7)	Water-Stain 1, 2, 4A Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S	red Leaves (B9) (ex , and 4B) B11) ertebrates (B13) sulfide Odor (C1) nizospheres along L f Reduced Iron (C4) Reduction in Tilled	iving Roo Soils (C6	its (C3)	Water-Staine 4A, and Drainage Pa Dry-Season Saturation Vi Geomorphic Shallow Aqu FAC-Neutral Raised Ant M	ed Leaves (B9) (MLRA 1, 2, 4B) tterns (B10) Water Table (C2) isible on Aerial Imagery (C9) Position (D2) itard (D3) Test (D5)
Wetland Hyderimary India Surface High Wa Saturation Water Marcon Drift Dep Algal Ma Iron Dep Surface Inundation Inundation Inundation Inundation Inundation Inundation Inundation Primary Inundation Inunda	drology Indicators: cators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial Ima	agery (B7)	Water-Stain 1, 2, 4A Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S	led Leaves (B9) (ex, and 4B) B11) ertebrates (B13) fulfide Odor (C1) hizospheres along L f Reduced Iron (C4) Reduction in Tilled Stressed Plants (D1	iving Roo Soils (C6	its (C3)	Water-Staine 4A, and Drainage Pa Dry-Season Saturation Vi Geomorphic Shallow Aqu FAC-Neutral Raised Ant M	ed Leaves (B9) (MLRA 1, 2, 4B) Itterns (B10) Water Table (C2) isible on Aerial Imagery (C9) Position (D2) itard (D3) Test (D5) Mounds (D6) (LRR A)
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Wetland Hyderimary India Surface Surface High Wa Saturatio Water Mark Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P (includes caped Describe Researce Describe Researce Primary Describe Primary Describe Researce Primary Describe Re	drology Indicators: cators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial Ima vegetated Concave S vations: er Present? Present? Yes resent? Yes pillary fringe)	agery (B7) Surface (B8) s □ No ⊠ s ⊠ No □	Water-Stain 1, 2, 4A Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain Depth (inches) Depth (inches)	led Leaves (B9) (ex., and 4B) B11) ertebrates (B13) sulfide Odor (C1) nizospheres along L f Reduced Iron (C4) Reduction in Tilled Stressed Plants (D1 ain in Remarks) b: b: 11 c: surface	iving Roo Soils (C6) (LRR A)	ts (C3)	Water-Staine 4A, and Drainage Pa Dry-Season Saturation Vi Geomorphic Shallow Aqu FAC-Neutral Raised Ant N Frost-Heave	ed Leaves (B9) (MLRA 1, 2, 4B) Itterns (B10) Water Table (C2) Isible on Aerial Imagery (C9) Position (D2) Itard (D3) Test (D5) Mounds (D6) (LRR A) Hummocks (D7)

Project/Site: Cheasty Trail Pilot Project	(City/Count	y: <u>Seattle/Ki</u>	ng County	Sampling Date: April 5	5, 2017
Applicant/Owner: City of Seattle				State: WA	Sampling Point: W4- [DP3
Investigator(s): Claire Hoffman, Michael Muscari			Section, To	wnship, Range: <u>SE-16-24-</u>	-4	
Landform (hillslope, terrace, etc.): slope, flat		Local reli	ef (concave,	convex, none): concave	Slope (%): <u>40</u>
Subregion (LRR): LRR A	_ Lat: <u>47.56</u>	3111		Long: -122.299658	Datum: NA	D 1983
Soil Map Unit Name: no data available						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sign	-		•	ormal Circumstances" prese	ent? Yes⊠ No□	
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in		
SUMMARY OF FINDINGS – Attach site map			`		,	es, etc.
Hydrophytic Vegetation Present? Yes ☐ No ☒						
Hydric Soil Present? Yes ☒ No ☐			ne Sampled			
Wetland Hydrology Present? Yes ⊠ No □		with	nin a Wetlan	nd? Yes ⊠ No) ∐	
Remarks: buffer and southern edge of wetland had been d	isturbed by	human ac	tivity. The ar	ea has been restored and	replanted.	
VEGETATION – Use scientific names of plant	ts.					
	Absolute			Dominance Test works	heet:	
Tree Stratum (Plot size: <u>30</u>)	% Cover			Number of Dominant Spe		
1.Alnus rubra				That Are OBL, FACW, or	r FAC: 3	(A)
2	-			Total Number of Domina		
3				Species Across All Strata	a: 4	(B)
4				Percent of Dominant Spe		
Sapling/Shrub Stratum (Plot size: 10)	5	- Total C	Jover	That Are OBL, FACW, or	r FAC: 75	(A/B)
1. Rubus spectabilis	80	у	FAC	Prevalence Index works	sheet:	
2. Oemleria cerasiformis	trace			Total % Cover of:	Multiply by:	
3				OBL species	x 1 =	_
4				FACW species	x 2 =	_
5				FAC species	x 3 =	_
	80	= Total C	Cover	FACU species		
Herb Stratum (Plot size: 5)	.		ODI	UPL species		
1.Lysichiton americanus_				Column Totals:	(A)	(B)
Equisetum telmateia Athyrium filix-femina				Prevalence Index :	= B/A =	
				Hydrophytic Vegetation		
4 5				☐ Rapid Test for Hydro		
6.				☐ ☐ Dominance Test is >		
7				☐ Prevalence Index is s	≤3.0 ¹	
8				│	ations¹ (Provide suppo	rting
9					or on a separate sheet	.)
10.				Wetland Non-Vascula		
11.				1	nytic Vegetation¹ (Expla	•
Woody Vine Stratum (Plot size: 5)	95			¹ Indicators of hydric soil a be present, unless distur		must
1. Rubus armeniacus	10	<u>n</u>	<u>FA</u> C			
2. Hedera helix	60			Hydrophytic Vegetation		
	70				⊠ No □	
% Bare Ground in Herb Stratum <u>0</u>						
Remarks:						

	Matrix			Redox Fea				
(inches)	Color (moist)	%	Color (mo	oist) <u>9</u>	6 Type¹	Loc ²	<u>Texture</u>	Remarks
<u>0-14</u>	10YR 2/2	100					sandy loa	<u> </u>
14-21	2.5Y 4/2	70	7.5YR 4/6	<u>30</u>	RM	M	loamy sa	nd
				•	 -		-	
							-	
			<u> </u>	•				
							-	
¹Type: C=C	oncentration, D=D	epletion, R	M=Reduced	l Matrix, CS=Co	vered or Coat	ed Sand G	rains.	² Location: PL=Pore Lining, M=Matrix.
	Indicators: (App							cators for Problematic Hydric Soils ³ :
☐ Histosol	(A1)		☐ Sand	y Redox (S5)				2 cm Muck (A10)
	oipedon (A2)			oed Matrix (S6)				Red Parent Material (TF2)
☐ Black Hi	, ,			ny Mucky Minera		t MLRA 1)		Very Shallow Dark Surface (TF12)
	en Sulfide (A4)	(8.4.4)		y Gleyed Matrix			Ш	Other (Explain in Remarks)
	d Below Dark Surfa ark Surface (A12)	ace (A11)	•	eted Matrix (F3) x Dark Surface			3Ind	icators of hydrophytic vegetation and
	lucky Mineral (S1)			eted Dark Surface				vetland hydrology must be present,
	Gleyed Matrix (S4)			x Depressions (` '			inless disturbed or problematic.
-	Layer (if present)				X - 7			
_								
Depth (in	iches):						Hvdric	Soil Present? Yes □ No ⊠
Remarks:							•	
HYDROLO	GY							
Wetland Hy								
	drology Indicator	rs:						
Primary Indi	drology Indicator cators (minimum c		red; check a	ıll that apply)			<u>S</u>	econdary Indicators (2 or more required)
Primary Indi	cators (minimum c			ıll that apply) Water-Stained I	_eaves (B9) (€	xcept MLF		econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,
Surface	cators (minimum c					xcept MLF		· · · · · · · · · · · · · · · · · · ·
Surface	cators (minimum o Water (A1) ater Table (A2)			Water-Stained L	d 4B)	xcept MLF	RA [Water-Stained Leaves (B9) (MLRA 1, 2,
☐ Surface ☐ High Wa	cators (minimum o Water (A1) ater Table (A2) on (A3)			Water-Stained L	d 4B)	xcept MLF	RA [Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Surface High Wa Saturatio	cators (minimum o Water (A1) ater Table (A2) on (A3)			Water-Stained L 1, 2, 4A, and Salt Crust (B11)	d 4B)) prates (B13)	xcept MLF	RA [Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Surface High Wa Saturatio Water M Sedimer	cators (minimum c Water (A1) ater Table (A2) on (A3) larks (B1)			Water-Stained L 1, 2, 4A, an Salt Crust (B11) Aquatic Inverteb	d 4B) orates (B13) le Odor (C1)		- AS	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Surface High Wa Saturatio Water M Sedimer Drift Dep	cators (minimum c Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2)			Water-Stained I 1, 2, 4A, an Salt Crust (B11) Aquatic Invertet Hydrogen Sulfic	d 4B) orates (B13) le Odor (C1) spheres along	Living Roo	- AS	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	cators (minimum c Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3)			Water-Stained I. 1, 2, 4A, and Salt Crust (B11) Aquatic Inverted Hydrogen Sulfic Oxidized Rhizos	d 4B) orates (B13) le Odor (C1) spheres along duced Iron (C-	Living Roo 4)	RA C	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)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	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)	of one requi		Water-Stained L 1, 2, 4A, and Salt Crust (B11) Aquatic Inverted Hydrogen Sulfico Oxidized Rhizos Presence of Re Recent Iron Recotunted or Street	d 4B)) prates (B13) le Odor (C1) spheres along duced Iron (Cduction in Tille ssed Plants (D	Living Roo 4) d Soils (C6	RA C	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)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	cators (minimum of 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	of one requi	B7)	Water-Stained L 1, 2, 4A, and Salt Crust (B11) Aquatic Inverted Hydrogen Sulfice Oxidized Rhizos Presence of Recent Iron Rece	d 4B)) prates (B13) le Odor (C1) spheres along duced Iron (Cduction in Tille ssed Plants (D	Living Roo 4) d Soils (C6	RA C	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)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	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 y Vegetated Conca	of one requi	B7)	Water-Stained L 1, 2, 4A, and Salt Crust (B11) Aquatic Inverted Hydrogen Sulfico Oxidized Rhizos Presence of Re Recent Iron Recotunted or Street	d 4B)) prates (B13) le Odor (C1) spheres along duced Iron (Cduction in Tille ssed Plants (D	Living Roo 4) d Soils (C6	RA C	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)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) ont Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concarrations:	of one requi	B7) (B8)	Water-Stained L 1, 2, 4A, and Salt Crust (B11) Aquatic Invertet Hydrogen Sulfice Oxidized Rhizos Presence of Re Recent Iron Recent Iron Recent Iron Recent Other (Explain i	d 4B) orates (B13) le Odor (C1) spheres along duced Iron (Ciduction in Tille ssed Plants (Cin Remarks)	Living Roo 4) d Soils (C6	RA C	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)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser	cators (minimum of 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 of Vegetated Concar rvations: ter Present?	of one requi		Water-Stained L 1, 2, 4A, and Salt Crust (B11) Aquatic Inverted Hydrogen Sulfice Oxidized Rhizos Presence of Re Recent Iron R	d 4B)) prates (B13) le Odor (C1) spheres along duced Iron (C- duction in Tille ssed Plants (C n Remarks)	Living Roo 4) d Soils (C6	RA C	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)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	cators (minimum of 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 of Vegetated Concar rvations: ter Present?	of one requi		Water-Stained L 1, 2, 4A, and Salt Crust (B11) Aquatic Invertet Hydrogen Sulfice Oxidized Rhizos Presence of Re Recent Iron Recent Iron Recent Iron Recent Other (Explain i	d 4B)) prates (B13) le Odor (C1) spheres along duced Iron (C- duction in Tille ssed Plants (C n Remarks)	Living Roo 4) d Soils (C6	RA C	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)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P	cators (minimum of 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 of Vegetated Concarvations: ter Present? Present?	al Imagery (ave Surface Yes Yes Yes	B7) De No \(De \)	Water-Stained L 1, 2, 4A, and Salt Crust (B11) Aquatic Inverted Hydrogen Sulfice Oxidized Rhizos Presence of Re Recent Iron R	d 4B) prates (B13) le Odor (C1) spheres along duced Iron (Ciduction in Tille ssed Plants (Din Remarks)	Living Roo 4) d Soils (C6 1) (LRR A	Cots (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)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P (includes ca	cators (minimum of 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 of Vegetated Concarvations: ter Present?	al Imagery (ave Surface Yes Yes Yes Yes Yes Yes Yes	B7)	Water-Stained L 1, 2, 4A, and Salt Crust (B11) Aquatic Inverted Hydrogen Sulfice Oxidized Rhizos Presence of Reference of Referent Iron Recont Iron Iron Iron Iron Iron Iron Iron Iron	d 4B)) prates (B13) le Odor (C1) spheres along duced Iron (C- duction in Tille ssed Plants (C n Remarks)	Living Roo 4) d Soils (C6 1) (LRR A	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) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
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	cators (minimum of 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 of Vegetated Concarvations: ter Present? Present? Present? pillary fringe)	al Imagery (ave Surface Yes Yes Yes Yes Yes Yes Yes	B7)	Water-Stained L 1, 2, 4A, and Salt Crust (B11) Aquatic Inverted Hydrogen Sulfice Oxidized Rhizos Presence of Reference of Referent Iron Recont Iron Iron Iron Iron Iron Iron Iron Iron	d 4B)) prates (B13) le Odor (C1) spheres along duced Iron (C- duction in Tille ssed Plants (C n Remarks)	Living Roo 4) d Soils (C6 1) (LRR A	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) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P (includes ca	cators (minimum of 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 of Vegetated Concarvations: ter Present? Present? Present? pillary fringe)	al Imagery (ave Surface Yes Yes Yes Yes Yes Yes Yes	B7)	Water-Stained L 1, 2, 4A, and Salt Crust (B11) Aquatic Inverted Hydrogen Sulfice Oxidized Rhizos Presence of Reference of Referent Iron Recont Iron Iron Iron Iron Iron Iron Iron Iron	d 4B)) prates (B13) le Odor (C1) spheres along duced Iron (C- duction in Tille ssed Plants (C n Remarks)	Living Roo 4) d Soils (C6 1) (LRR A	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) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
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	cators (minimum of 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 of Vegetated Concarvations: ter Present? Present? Present? pillary fringe)	al Imagery (ave Surface Yes Yes Yes Yes Yes Yes Yes	B7)	Water-Stained L 1, 2, 4A, and Salt Crust (B11) Aquatic Inverted Hydrogen Sulfice Oxidized Rhizos Presence of Reference of Referent Iron Recont Iron Iron Iron Iron Iron Iron Iron Iron	d 4B)) prates (B13) le Odor (C1) spheres along duced Iron (C- duction in Tille ssed Plants (C n Remarks)	Living Roo 4) d Soils (C6 1) (LRR A	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) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
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	cators (minimum of 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 of Vegetated Concarvations: ter Present? Present? Present? pillary fringe)	al Imagery (ave Surface Yes Yes Yes Yes Yes Yes Yes	B7)	Water-Stained L 1, 2, 4A, and Salt Crust (B11) Aquatic Inverted Hydrogen Sulfice Oxidized Rhizos Presence of Reference of Referent Iron Recont Iron Iron Iron Iron Iron Iron Iron Iron	d 4B)) prates (B13) le Odor (C1) spheres along duced Iron (C- duction in Tille ssed Plants (C n Remarks)	Living Roo 4) d Soils (C6 1) (LRR A	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) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Project/Site: Cheasty Trail Pilot Project		City/Count	y: <u>Seattle, K</u>	(ing	Sampling Date: Oct 19, 2016
Applicant/Owner: City of Seattle Parks				State: WA	Sampling Point: W4 DP2
Investigator(s): Claire Hoffman, Michael Muscari					
Landform (hillslope, terrace, etc.): slope		Local relie	ef (concave	, convex, none): none	Slope (%): <u>40</u>
Subregion (LRR): <u>LRR A</u>					
Soil Map Unit Name: none				=	
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology sign	•		•	ormal Circumstances" pres	ent? Yes⊠ No □
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 ☒			ie Sampled iin a Wetlar		• M
Wetland Hydrology Present? Yes ☐ No ☒		With	iiii a vvetiai	iu: Tes 🗌 Ti	<i>7</i> 🖸
Remarks:					
VEGETATION – Use scientific names of plan	ts.				_
	Absolute	Dominant		Dominance Test works	heet:
Tree Stratum (Plot size: 30)	% Cover			Number of Dominant Sp	
1. Prunus laurocerasus				That Are OBL, FACW, o	r FAC: <u>0</u> (A)
2				Total Number of Domina	
3				Species Across All Strate	a: <u>4</u> (B)
		= Total C		Percent of Dominant Spe That Are OBL, FACW, o	ecies r FAC: <u>0</u> (A/B)
Sapling/Shrub Stratum (Plot size: 10)					
1. Corylus cornuta		У		Prevalence Index work	Sneet: Multiply by:
Rubus spectabilis Ilex aquifolium					x 1 =
4. Hedera helix					x 2 =
5	<u> </u>	<i></i>	17.00	•	x 3 =
	170	= Total C	over		x 4 =
Herb Stratum (Plot size: <u>5</u>)				UPL species	x 5 =
1. Polystichum munitum			FACU_	Column Totals:	(A) (B)
2. Equisetum telmateia			FACW	Prevalence Index	= B/A =
3				Hydrophytic Vegetation	
4. 5.				☐ Rapid Test for Hydro	
6.				☐ Dominance Test is >	50%
7				☐ Prevalence Index is	≤3.0 ¹
8.					tations ¹ (Provide supporting or on a separate sheet)
9				☐ Wetland Non-Vascul	• • • • • • • • • • • • • • • • • • • •
10				-	nytic Vegetation¹ (Explain)
11				-	and wetland hydrology must
Woody Vine Stratum (Plot size: <u>5</u>)	65	= Total C	over	be present, unless distur	bed or problematic.
1				Hydrophytic	
2				Vegetation	- -
% Bare Ground in Herb Stratum		= Total C	over	Present? Yes	No ⊠
Remarks: plot on relatively steep slope				1	

		to the de	pth needed to	document the indicator	or confirm	the abs	ence of indica	ators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Redox Features	Loc ²	Texture	<u> </u>	Remarks
0-7	10YR 2/1	100		0		silty san	dy loam	
7-24	10YR 2/1 & 2.5Y 3/				М	siltv sand	dy loam	
	-							
				<u> </u>				
-								
4-								
	oncentration, D=Dep Indicators: (Applic			rix, CS=Covered or Coat	ed Sand Gr			L=Pore Lining, M=Matrix. oblematic Hydric Soils³:
Histosol		able to al					2 cm Muck (A	
	ipedon (A2)		☐ Sandy Re☐ Stripped N				Red Parent M	,
☐ Black His				ıcky Mineral (F1) (excep	t MLRA 1)			Dark Surface (TF12)
	n Sulfide (A4)			eyed Matrix (F2)	,		Other (Explain	
	Below Dark Surface	e (A11)		Matrix (F3)				
	rk Surface (A12)			rk Surface (F6)			•	rophytic vegetation and
-	ucky Mineral (S1)			Dark Surface (F7)				ogy must be present,
	leyed Matrix (S4) Layer (if present):		☐ Redox De	pressions (F8)			uniess disturbe	ed or problematic.
Type:	Layer (ii present).							
, , <u> </u>	ches):					Hydric	Soil Present?	? Yes⊠ No□
Remarks:	,					Hydric	John Fresent	· res 🖂 No 🗆
itemarks.								
11)/22201.0								
HYDROLO								
	drology Indicators:							
	cators (minimum of c	ne require					-	cators (2 or more required)
Surface	` '			er-Stained Leaves (B9) (except MLR	RA [ned Leaves (B9) (MLRA 1, 2,
_	ter Table (A2)			, 2, 4A, and 4B)			4A, and	•
⊠ Saturatio	` '			Crust (B11)		l	☐ Drainage P	
_	arks (B1)			tic Invertebrates (B13)		l	_ ,	Water Table (C2)
	t Deposits (B2)		•	ogen Sulfide Odor (C1) zed Rhizospheres along	Living Doot	l 1000 ot		Visible on Aerial Imagery (C9)
-	osits (B3) t or Crust (B4)			ence of Reduced Iron (C	_	ıs (C3) - [☐ Shallow Aq	c Position (D2)
_	osits (B5)			ent Iron Reduction in Tille	•	۱ ۱	☐ FAC-Neutra	` '
-	Soil Cracks (B6)			ted or Stressed Plants (D	` '	,		Mounds (D6) (LRR A)
	on Visible on Aerial I	magery (B		r (Explain in Remarks)) (Litt A)	·		e Hummocks (D7)
	Vegetated Concave		-	(=xpram m remaine)		•		5a
Field Obser			,					
Surface Wat	er Present? Y	es □ N	lo 🛛 Depth (i	nches):				
Water Table				nches): <u>12, seep at 4"</u>				
Saturation P				nches): surface	Wetla	and Hvdr	ology Present	t? Yes⊠ No □
(includes ca	oillary fringe)							
Describe Re	corded Data (stream	gauge, m	nonitoring well, a	aerial photos, previous in	spections),	if availab	le:	
Remarks:								
I								

Project/Site: Cheasty Trail Pilot Project		City/Co	ounty: <u>Seattle/Ki</u>	ing County	Sampling Date: Oct 19, 2016
Applicant/Owner: <u>City of Seattle</u>				State: WA	Sampling Point: W4- DP1
Investigator(s): Claire Hoffman, Michael Muscari			Section, To	ownship, Range: <u>SE-16-24</u>	1-4
Landform (hillslope, terrace, etc.): slope, flat		Local	relief (concave,	, convex, none): concave	Slope (%): <u>40</u>
Subregion (LRR): <u>LRR A</u>	Lat: 47.5	63111		Long: -122.299658	Datum: NAD 1983
Soil Map Unit Name: <u>no data available</u>					
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology sign	•		,	ormal Circumstances" pres	
				ed, explain any answers ir	
Are Vegetation, Soil, or Hydrology natu SUMMARY OF FINDINGS – Attach site map				, ,	,
OUMMANT OF TINDINGS - Attach site map	Silowing	Samp	ning point i	ocations, transects	miportant leatures, etc.
Hydrophytic Vegetation Present? Yes ☐ No ☐		ı	s the Sampled	Area	
Hydric Soil Present? Yes ⊠ No ☐		١	within a Wetlar	nd? Yes⊠ N	ю 🗌
Wetland Hydrology Present? Yes ⊠ No □	Pakada al las		- Cale The -		Incompared Distinguished the
Remarks: buffer and southern edge of wetland had been of the wetland boundary, vegetation doesn't meet because					replanted. Plot is on the edge
VEGETATION – Use scientific names of plan	ıts.				
<u> </u>		Domir	nant Indicator	Dominance Test works	sheet:
<u>Tree Stratum</u> (Plot size: <u>30</u>)	% Cover	Speci	es? Status	Number of Dominant Sp	pecies
1. Sorbus aucuparia	5	У	<u>UPL</u>	That Are OBL, FACW, o	or FAC: 2 (A)
2. Prunus laurocerasus	5	У	<u>FACU</u>	Total Number of Domina	ant
3				Species Across All Strat	
4				Percent of Dominant Sp	necies
Sapling/Shrub Stratum (Plot size: 10)	<u>10</u>	= Tot	al Cover		or FAC: <u>33</u> (A/B)
1. Rubus spectabilis	50	V	FAC	Prevalence Index work	sheet:
Corylus cornuta			FACU		Multiply by:
3. <u>Oemleria cerasiformis</u>			FACU		x 1 =
4. Hedera helix			FACU		x 2 = 30
5	<u></u>			*	x 3 = <u>150</u>
	130	= Tot	al Cover		x 4 = <u>360</u>
Herb Stratum (Plot size: <u>5</u>)					x 5 =
Equisetum telmateia	15	у	FACW	Column Totals: 155	
2. Polystichum munitum	5	У	<u>FACU</u>		
3				Prevalence Index	<u>-</u>
4				Hydrophytic Vegetatio	
5				Rapid Test for Hydro	. , .
6				Dominance Test is	
7				☐ Prevalence Index is	
8					tations¹ (Provide supporting sor on a separate sheet)
9				☐ Wetland Non-Vascu	, ,
10				☐ Problematic Hydrop	hytic Vegetation¹ (Explain)
11					and wetland hydrology must
Woody Vine Stratum (Plot size: 5)	<u>20</u>	= Tot	al Cover	be present, unless distu	
1. Rubus armeniacus	trace	n	FAC		
2.				Hydrophytic	
, 	trace			Vegetation Present? Yes	s □ No ⊠
% Bare Ground in Herb Stratum <u>0</u>	·	•			
Remarks: Acer macrophylum is upslope of the plot, rooted	outside of t	the plot	, thus excluded	. Hedera helix is invasive	cover 80-100% of the ground

Remarks: Acer macrophylum is upslope of the plot, rooted outside of the plot, thus excluded. Hedera helix is invasive (cover 80-100% of the ground in buffer which stretches into the fringe of the wetland), it is not found in the wetter areas of the wetland. The area has been restored and replanted. Plot is on the edge of the wetland boundary, on a steep slope and thus vegetation from upland is included in the plot.

Profile Description: (Description Ma			Redo	x Features	3						
(inches) Color (moist)	%	Colo	or (moist)	<u>%</u>		Loc ²	Texture	<u> </u>		Remark	<u>s</u>
)-9 <u>10YR 2/2</u>	100	<u> </u>							sandy loa	ım	
9-20 10YR 3/3	100								gravelly s	andy loam	
									9.4.75	and is an	
									-		
									-		
									-		
	Dl. eti		la cara di NA atribia. Os					21	-#: DI	Daniel Linia	NA NA-4-t
Type: C=Concentration, D Hydric Soil Indicators: (A			•			ed Sand Gi					ng, M=Matrix. Hydric Soils³:
☐ Histosol (A1)	ppoub.io to		Sandy Redox (, u.,				Muck (A1		iyano cono i
☐ Histic Epipedon (A2)			Stripped Matrix				H		`	o) iterial (TF2)
Black Histic (A3)			Loamy Mucky N	` ') (except	MLRA 1)	H			ark Surfac	,
☐ Hydrogen Sulfide (A4)			Loamy Gleyed I	•		,				in Remark	, ,
Depleted Below Dark S	urface (A11)		Depleted Matrix								•
☐ Thick Dark Surface (A1:	2)		Redox Dark Su	rface (F6)			³In	dicato	rs of hydro	phytic veg	etation and
☐ Sandy Mucky Mineral (S			Depleted Dark S	Surface (F7	7)			wetla	nd hydrolo	gy must be	e present,
☐ Sandy Gleyed Matrix (S	,		Redox Depress	ions (F8)				unles	s disturbed	d or proble	matic.
Restrictive Layer (if prese	nt):										
Type:											
							Hydrid	c Soil	Present?	Yes 🗌	No 🛛
Depth (inches):Remarks:											
Remarks:											
Remarks: YDROLOGY Wetland Hydrology Indica											
Remarks:		uired; ch		-							more required)
YDROLOGY Wetland Hydrology Indica Primary Indicators (minimur Surface Water (A1)		uired; ch	eck all that appl ☐ Water-Stai	-	s (B9) (e	xcept MLF			ater-Staine	ed Leaves	more required) (B9) (MLRA 1, 2
YDROLOGY Wetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2)		uired; ch	☐ Water-Stai	ined Leave A, and 4B)	, , ,	xcept MLF	RA	□ W	ater-Staine	ed Leaves 4B)	(B9) (MLRA 1, 2
YDROLOGY Wetland Hydrology Indica Primary Indicators (minimur Surface Water (A1)		uired; ch	☐ Water-Stai	ined Leave A, and 4B)	, , ,	xcept MLF	RA	□ W	ater-Staine 4A, and rainage Pa	ed Leaves 4B) tterns (B10	(B9) (MLRA 1, 2
YDROLOGY Wetland Hydrology Indicate Primary Indicators (minimuration Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	n of one req	uired; ch	☐ Water-Stain 1, 2, 4,4 ☐ Salt Crust ☐ Aquatic Inv	ined Leave A, and 4B) (B11) vertebrates	s (B13)	xcept MLF	RA	□ W □ Dr	ater-Staine 4A, and ainage Pa y-Season	ed Leaves 4B) tterns (B10 Water Tab	(B9) (MLRA 1, 2 0) le (C2)
YDROLOGY Wetland Hydrology Indicate Primary Indicators (minimurations) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	n of one req	uired; ch	Water-Stai 1, 2, 4,4 Salt Crust Aquatic Inv	ined Leave A, and 4B) (B11) vertebrates Sulfide Od	(B13) or (C1)	·	RA	□ W □ Dr □ Dr □ Sa	ater-Staine 4A, and rainage Pary-Season aturation V	ed Leaves 4B) tterns (B10 Water Tab isible on A	(B9) (MLRA 1, 2 0)) le (C2) erial Imagery (C9
YDROLOGY Vetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	n of one req	uired; ch	Water-Stai 1, 2, 4,4 Salt Crust Aquatic Inv Hydrogen Oxidized F	ined Leave A, and 4B) (B11) vertebrates Sulfide Od	s (B13) or (C1) es along	Living Roo	RA ots (C3)	☐ W ☐ Dr ☐ Dr ☐ Sa	ater-Staine 4A, and rainage Pa ry-Season aturation V eomorphic	ed Leaves 4B) tterns (B10 Water Tab isible on A Position (I	(B9) (MLRA 1, 2 0)) le (C2) erial Imagery (C9
YDROLOGY Wetland Hydrology Indicators (minimur) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	n of one req	uired; ch	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F	ined Leave A, and 4B) (B11) vertebrates Sulfide Od Rhizosphere of Reduced	s (B13) or (C1) es along d Iron (C4	Living Roo	rts (C3)	☐ W ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ St	ater-Staine 4A, and rainage Pa ry-Season aturation V eomorphic nallow Aqu	ed Leaves 4B) tterns (B10 Water Tab isible on A Position (I itard (D3)	(B9) (MLRA 1, 2 0)) le (C2) erial Imagery (C9
YDROLOGY Vetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	n of one req	uired; ch	Water-Stai 1, 2, 4 Salt Crust Aquatic Inv Hydrogen Oxidized F Presence o	ined Leave A, and 4B) (B11) vertebrates Sulfide Od Rhizospher of Reduced n Reductio	s (B13) or (C1) es along d Iron (C4 n in Tilled	Living Roo I) d Soils (C6	ets (C3)	☐ W ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ St	ater-Staine 4A, and rainage Pa ry-Season aturation V reomorphic hallow Aqu AC-Neutral	ed Leaves 4B) tterns (B10 Water Tab isible on A Position (I itard (D3) Test (D5)	(B9) (MLRA 1, 2 0) le (C2) erial Imagery (CS 02)
Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	n of one req		Water-Stai 1, 2, 4 Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro	ined Leave A, and 4B) (B11) vertebrates Sulfide Od Rhizosphero of Reduced n Reductio Stressed I	i (B13) or (C1) es along d Iron (C4 n in Tilled	Living Roo I) d Soils (C6	ets (C3)	☐ W ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ St ☐ FA	ater-Staine 4A, and rainage Pa ry-Season aturation V eomorphic nallow Aqu AC-Neutral aised Ant N	ed Leaves 4B) tterns (B10 Water Tab isible on A Position (I itard (D3) Test (D5) Mounds (D	(B9) (MLRA 1, 2 0) le (C2) erial Imagery (C9 02)
YDROLOGY Wetland Hydrology Indicators (minimur) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6	n of one req	· (B7)	Water-Stai 1, 2, 4 Salt Crust Aquatic Inv Hydrogen Oxidized F Presence o	ined Leave A, and 4B) (B11) vertebrates Sulfide Od Rhizosphero of Reduced n Reductio Stressed I	i (B13) or (C1) es along d Iron (C4 n in Tilled	Living Roo I) d Soils (C6	ets (C3)	☐ W ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ St ☐ FA	ater-Staine 4A, and rainage Pa ry-Season aturation V eomorphic nallow Aqu AC-Neutral aised Ant N	ed Leaves 4B) tterns (B10 Water Tab isible on A Position (I itard (D3) Test (D5)	(B9) (MLRA 1, 2 0) le (C2) erial Imagery (C9 02)
Proposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6	n of one req	· (B7)	Water-Stai 1, 2, 4 Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro	ined Leave A, and 4B) (B11) vertebrates Sulfide Od Rhizosphero of Reduced n Reductio Stressed I	i (B13) or (C1) es along d Iron (C4 n in Tilled	Living Roo I) d Soils (C6	ets (C3)	☐ W ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ St ☐ FA	ater-Staine 4A, and rainage Pa ry-Season aturation V eomorphic nallow Aqu AC-Neutral aised Ant N	ed Leaves 4B) tterns (B10 Water Tab isible on A Position (I itard (D3) Test (D5) Mounds (D	(B9) (MLRA 1, 2 0) le (C2) erial Imagery (C9 02)
Primary Indicators (minimur) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6 Sparsely Vegetated Cor	n of one req) erial Imagery ncave Surfac	r (B7) ce (B8)	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 Od Rhizospher of Reduced n Reductio Stressed I	or (B13) or (C1) es along d Iron (C ² n in Tiller Plants (D narks)	Living Roo I) d Soils (C6	ets (C3)	☐ W ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ St ☐ FA	ater-Staine 4A, and rainage Pa ry-Season aturation V eomorphic nallow Aqu AC-Neutral aised Ant N	ed Leaves 4B) tterns (B10 Water Tab isible on A Position (I itard (D3) Test (D5) Mounds (D	(B9) (MLRA 1, 2 0) le (C2) erial Imagery (C9 02)
YDROLOGY Wetland Hydrology Indicators (minimumous) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6 Sparsely Vegetated Confield Observations: Surface Water Present?	n of one req	r (B7) ce (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 Od Rhizospher of Reduced n Reductio Stressed I blain in Rer	s (B13) or (C1) es along d Iron (C ² n in Tiller Plants (D narks)	Living Roo I) d Soils (C6	ets (C3)	☐ W ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ St ☐ FA	ater-Staine 4A, and rainage Pa ry-Season aturation V eomorphic nallow Aqu AC-Neutral aised Ant N	ed Leaves 4B) tterns (B10 Water Tab isible on A Position (I itard (D3) Test (D5) Mounds (D	(B9) (MLRA 1, 2 0) le (C2) erial Imagery (C9 02)
Primary Indicators (minimur) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6 Sparsely Vegetated Cor	n of one req) erial Imagery ncave Surfac	r (B7) ce (B8)	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 Od Rhizospher of Reduced n Reductio Stressed I blain in Rer	s (B13) or (C1) es along d Iron (C ² n in Tiller Plants (D narks)	Living Roo I) d Soils (C6	ets (C3)	☐ W ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ St ☐ FA	ater-Staine 4A, and rainage Pa ry-Season aturation V eomorphic nallow Aqu AC-Neutral aised Ant N	ed Leaves 4B) tterns (B10 Water Tab isible on A Position (I itard (D3) Test (D5) Mounds (D	(B9) (MLRA 1, 2 0) le (C2) erial Imagery (C9 02)
YDROLOGY Wetland Hydrology Indicators (minimur) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6 Sparsely Vegetated Confield Observations: Surface Water Present? Water Table Present?	n of one req	r (B7) ce (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 Od Rhizosphen of Reduced n Reductio Stressed I blain in Rer	s (B13) or (C1) es along d Iron (C4 n in Tilled Plants (D narks)	Living Roo l) d Soils (C6 1) (LRR A)	ets (C3)	☐ W ☐ Dr ☐ Sa ☐ Ge ☐ Sr ☐ FA	ater-Staine 4A, and rainage Pa ry-Season aturation V eomorphic nallow Aqu AC-Neutral aised Ant N ost-Heave	ed Leaves 4B) tterns (B10 Water Tab isible on A Position (I itard (D3) Test (D5) Mounds (D	(B9) (MLRA 1, 2 D) le (C2) erial Imagery (CS D2) 6) (LRR A) is (D7)
YDROLOGY Wetland Hydrology Indicators (minimur) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6 Sparsely Vegetated Confield Observations: Surface Water Present? Water Table Present?	of one requestion of one requestion of one requestion of one requestion of the reque	v (B7) ce (B8) 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 Od Rhizosphero of Reduced n Reductio Stressed I olain in Rer s):	s (B13) or (C1) es along d Iron (C4 n in Tilled Plants (D narks)	Living Roo I) d Soils (C6 1) (LRR A)	ets (C3)	☐ W ☐ Dr ☐ Dr ☐ Se ☐ Ge ☐ St ☐ FA ☐ Re ☐ Fr	ater-Staine 4A, and rainage Pa ry-Season aturation V eomorphic nallow Aqu AC-Neutral aised Ant N ost-Heave	ed Leaves 4B) tterns (B10 Water Tab isible on A Position (I itard (D3) Test (D5) Mounds (D Hummock	(B9) (MLRA 1, 2 D) le (C2) erial Imagery (CS D2) 6) (LRR A) is (D7)
YDROLOGY Wetland Hydrology Indicators (minimur) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6 Sparsely Vegetated Confield Observations: Surface Water Present? Water Table Present? Saturation Present? Saturation Present?	of one requestion of one requestion of one requestion of one requestion of the reque	v (B7) ce (B8) 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 Od Rhizosphero of Reduced n Reductio Stressed I olain in Rer s):	s (B13) or (C1) es along d Iron (C4 n in Tilled Plants (D narks)	Living Roo I) d Soils (C6 1) (LRR A)	ets (C3)	☐ W ☐ Dr ☐ Dr ☐ Se ☐ Ge ☐ St ☐ FA ☐ Re ☐ Fr	ater-Staine 4A, and rainage Pa ry-Season aturation V eomorphic nallow Aqu AC-Neutral aised Ant N ost-Heave	ed Leaves 4B) tterns (B10 Water Tab isible on A Position (I itard (D3) Test (D5) Mounds (D Hummock	(B9) (MLRA 1, 2 D) le (C2) erial Imagery (CS D2) 6) (LRR A) is (D7)
YDROLOGY Wetland Hydrology Indicators (minimur) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6 Sparsely Vegetated Confield Observations: Surface Water Present? Water Table Present? Saturation Present? Saturation Present?	of one requestion of one requestion of one requestion of one requestion of the reque	v (B7) ce (B8) 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 Od Rhizosphero of Reduced n Reductio Stressed I olain in Rer s):	s (B13) or (C1) es along d Iron (C4 n in Tilled Plants (D narks)	Living Roo I) d Soils (C6 1) (LRR A)	ets (C3)	☐ W ☐ Dr ☐ Dr ☐ Se ☐ Ge ☐ St ☐ FA ☐ Re ☐ Fr	ater-Staine 4A, and rainage Pa ry-Season aturation V eomorphic nallow Aqu AC-Neutral aised Ant N ost-Heave	ed Leaves 4B) tterns (B10 Water Tab isible on A Position (I itard (D3) Test (D5) Mounds (D Hummock	(B9) (MLRA 1, 2 D) le (C2) erial Imagery (CS D2) 6) (LRR A) is (D7)
YDROLOGY Wetland Hydrology Indicators (minimur) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6 Sparsely Vegetated Confield Observations: Surface Water Present? Water Table Present? Saturation Present? Includes capillary fringe) Describe Recorded Data (st	of one requestion of one requestion of one requestion of one requestion of the reque	v (B7) ce (B8) 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 Od Rhizosphero of Reduced n Reductio Stressed I olain in Rer s):	s (B13) or (C1) es along d Iron (C4 n in Tilled Plants (D narks)	Living Roo I) d Soils (C6 1) (LRR A)	ets (C3)	☐ W ☐ Dr ☐ Dr ☐ Se ☐ Ge ☐ St ☐ FA ☐ Re ☐ Fr	ater-Staine 4A, and rainage Pa ry-Season aturation V eomorphic nallow Aqu AC-Neutral aised Ant N ost-Heave	ed Leaves 4B) tterns (B10 Water Tab isible on A Position (I itard (D3) Test (D5) Mounds (D Hummock	(B9) (MLRA 1, 2 D) le (C2) erial Imagery (CS D2) 6) (LRR A) is (D7)

Project/Site: Cheasty Trail Pilot Project		City/County	y: <u>Seattle, K</u>	(ing	Sampling Date: Oct 19, 2016
Applicant/Owner: City of Seattle Parks				State: WA	Sampling Point: W3-DP4
Investigator(s): Claire Hoffman, Michael Muscari					
Landform (hillslope, terrace, etc.): slope		Local relie	ef (concave,	, convex, none): concave	Slope (%): <u>20</u>
Subregion (LRR): <u>LRR A</u>					
Soil Map Unit Name: na					
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology sign	•		•	ormal Circumstances" pres	ent? Yes⊠ No □
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		57
Wetland Hydrology Present? Yes ☐ No ☒		with	in a Wetlar	nd? Yes ☐ No	
Remarks:		l .			
VEGETATION – Use scientific names of plant	te				
VEGETATION - OSC SCIENTING HAINES OF Plant	Absolute	Dominant	Indicator	Dominance Test works	heet:
<u>Tree Stratum</u> (Plot size: <u>30</u>)	% Cover			Number of Dominant Spe	
Acer macrophylum	70	<u>у</u>	FACU	That Are OBL, FACW, or	r FAC: <u>1</u> (A)
2. Prunus laurocerasus				Total Number of Domina	
3				Species Across All Strata	a: <u>5</u> (B)
4				Percent of Dominant Spe	
Sapling/Shrub Stratum (Plot size: 10)	<u>75 </u>	= Total C	over	That Are OBL, FACW, or	r FAC: <u>20</u> (A/B)
1. Corylus cornuta	5		FACU	Prevalence Index work	sheet:
2. Oemleria cerasiformis	30	у	FACU	Total % Cover of:	Multiply by:
3. Mahonia aquifolium	trace		FACU	OBL species	x 1 =
4. Hedera helix	50	у	<u>FACU</u>	· ·	x 2 =
5					x 3 =
Herb Stratum (Plot size: 5)	65	= Total C	over		x 4 =
1. Equisetum telmateia	trace		FACW		x 5 =
Polystichum munitum		У		Column rotals.	(A) (B)
3				Prevalence Index	= B/A =
4				Hydrophytic Vegetation	ı Indicators:
5				☐ Rapid Test for Hydro	, , ,
6				☐ Dominance Test is >	
7				☐ Prevalence Index is :	
8					ations ¹ (Provide supporting or on a separate sheet)
9				☐ Wetland Non-Vascul	. ,
10				☐ Problematic Hydroph	nytic Vegetation¹ (Explain)
11		= Total C			and wetland hydrology must
Woody Vine Stratum (Plot size: <u>5</u>)	<u> </u>	- Total C	Ovei	be present, unless distur	bed or problematic.
1. Rubus armeniacus	trace	у	FAC	Hydrophytic	
2				Vegetation	
% Bare Ground in Herb Stratum	trace	= Total C	over	Present? Yes	□ No ⊠
Remarks: included RUAR as dominant b/c it's the only vine	e.				

Profile Descrip	tion: (Describe	to the d	epth ne	eded to docur	nent the i	ndicator	or confirr	n the ab	sence	of indicators.)
Depth	Matrix				x Features					
(inches) Co	olor (moist)	%	Colc	or (moist)	<u></u> %	Type ¹	Loc ²	<u>Textur</u>	<u>e</u> _	Remarks
<u>0-9</u> <u>10</u>	YR 2/1	98	7.5Y	'R 3/4	2	<u>C</u>	matrix	sandy l	oam	
9-20 <u>5</u> Y	′ 5/2 & 5Y 4/1	85&10	10Y	R 4/6	5	С	matrix	loamy s	sandy	2 matrix colors
					-					
			- —		-					
		_								
					_					
¹Type: C=Conc	entration, D=Dep	oletion, R	M=Red	luced Matrix, CS	S=Covered	d or Coate	ed Sand G	rains.	² Loc	eation: PL=Pore Lining, M=Matrix.
Hydric Soil Indi	icators: (Applic	cable to	all LRR	s, unless othe	rwise note	ed.)		In	dicato	rs for Problematic Hydric Soils³:
☐ Histosol (A1)			Sandy Redox (S	S5)] 2 cm	Muck (A10)
☐ Histic Epipe	don (A2)			Stripped Matrix	` '				_	Parent Material (TF2)
☐ Black Histic	• •			Loamy Mucky M			MLRA 1)		-	Shallow Dark Surface (TF12)
☐ Hydrogen Si				Loamy Gleyed I)] Othe	r (Explain in Remarks)
	low Dark Surfac	e (A11)		Depleted Matrix				31.		and the same best and a second
☐ Thick Dark S			_	Redox Dark Sur	, ,	7\		۳Ir		rs of hydrophytic vegetation and
☐ Sandy Muck ☐ Sandy Gleye				Depleted Dark S Redox Depressi	,	<i>(</i>)				nd hydrology must be present, s disturbed or problematic.
Restrictive Lay			<u> </u>	redox Depress	0113 (1 0)				unics	s disturbed of problematic.
				_						
Depth (inche	s):			_				Hvdri	ic Soil	Present? Yes ⊠ No □
Remarks:								,		
HYDROLOGY	•									
Wetland Hydro	logy Indicators	:								
Primary Indicato	ors (minimum of o	one requi	red; ch	eck all that appl	y)				Secon	ndary Indicators (2 or more required)
☐ Surface Wat	ter (A1)			☐ Water-Stai	ned Leave	es (B9) (e	xcept MLI	RA	□ W:	ater-Stained Leaves (B9) (MLRA 1, 2,
☐ High Water				1, 2, 4	A, and 4B))	•			4A, and 4B)
Saturation (A				☐ Salt Crust	(B11)				☐ Dr	ainage Patterns (B10)
☐ Water Marks	s (B1)			☐ Aquatic Inv	ertebrates	s (B13)			☐ Dr	y-Season Water Table (C2)
☐ Sediment De	eposits (B2)			☐ Hydrogen	Sulfide Od	or (C1)			☐ Sa	aturation Visible on Aerial Imagery (C9)
☐ Drift Deposit	ts (B3)			☐ Oxidized R	hizospher	es along	Living Roc	ots (C3)	☐ Ge	eomorphic Position (D2)
☐ Algal Mat or	Crust (B4)			☐ Presence of	of Reduce	d Iron (C4	!)		☐ Sh	nallow Aquitard (D3)
☐ Iron Deposit	s (B5)			☐ Recent Iron	n Reductio	n in Tille	d Soils (C6	3)	☐ FA	AC-Neutral Test (D5)
☐ Surface Soil	Cracks (B6)			☐ Stunted or	Stressed	Plants (D	1) (LRR A	.)	☐ Ra	aised Ant Mounds (D6) (LRR A)
☐ Inundation V	/isible on Aerial I	lmagery ((B7)	☐ Other (Exp	lain in Rei	marks)			☐ Fr	ost-Heave Hummocks (D7)
☐ Sparsely Ve	getated Concave	e Surface	e (B8)							
Field Observati	ions:									
i leid Observati				Depth (inches	:)-					
Surface Water F	Present?	∕es □	No 🛛	Debiti (iliches	,,					
			No ⊠ No ⊠	Depth (inches						
Surface Water F Water Table Pre Saturation Prese	esent?	∕es □			s):		Wet	land Hyd	irology	y Present? Yes ⊠ No □
Surface Water F Water Table Pre Saturation Prese (includes capilla	esent? \ ent? \ ry fringe)	∕es □ ∕es ⊠	No ⊠ No □	Depth (inches	s): s): <u>7</u>					y Present? Yes ⊠ No □
Surface Water F Water Table Pre Saturation Prese	esent? \ ent? \ ry fringe)	∕es □ ∕es ⊠	No ⊠ No □	Depth (inches	s): s): <u>7</u>					y Present? Yes ⊠ No □
Surface Water F Water Table Pre Saturation Press (includes capilla Describe Record	esent? \ ent? \ ry fringe)	∕es □ ∕es ⊠	No ⊠ No □	Depth (inches	s): s): <u>7</u>					y Present? Yes ⊠ No □
Surface Water F Water Table Pre Saturation Prese (includes capilla	esent? \ ent? \ ry fringe)	∕es □ ∕es ⊠	No ⊠ No □	Depth (inches	s): s): <u>7</u>					y Present? Yes ⊠ No □
Surface Water F Water Table Pre Saturation Press (includes capilla Describe Record	esent? \ ent? \ ry fringe)	∕es □ ∕es ⊠	No ⊠ No □	Depth (inches	s): s): <u>7</u>					y Present? Yes ⊠ No □
Surface Water F Water Table Pre Saturation Press (includes capilla Describe Record	esent? \ ent? \ ry fringe)	∕es □ ∕es ⊠	No ⊠ No □	Depth (inches	s): s): <u>7</u>					y Present? Yes ⊠ No □

Project/Site: Cheasty Trail Pilot Project			City/Coun	ty: <u>Seattle, K</u>	King	Sampling Date: Oct 19, 2016
Applicant/Owner: City of Seattle Parks					State: WA	Sampling Point: W3 DP3
Investigator(s): Claire Hoffman, Michae	el Muscari			Section, To	ownship, Range: <u>SE-16-2</u>	4-4
Landform (hillslope, terrace, etc.): slope	е		Local rel	ief (concave	, convex, none): concave	Slope (%): <u>20</u>
Subregion (LRR): <u>LRR A</u>		Lat: 47.56	62733		Long: -122.298868	Datum: <u>NAD1983</u>
						ation: PFOB, PEM1B
Are climatic / hydrologic conditions on t						
Are Vegetation, Soil, or H		•		,	ormal Circumstances" pre	
Are Vegetation, Soil, or H					ed, explain any answers i	
SUMMARY OF FINDINGS – A						•
Hydrophytic Vegetation Present?	Yes ⊠ No □					
Hydric Soil Present?	Yes ⊠ No □			he Sampled		. D
Wetland Hydrology Present?	Yes ⊠ No □		Wit	hin a Wetlar	nd? Yes⊠ N	10 🗆
Remarks:			<u> </u>			
VEGETATION – Use scientific	c names of plan	ts.				
Tree Stratum (Plot size: 30)		Absolute % Cover		nt Indicator	Dominance Test work	
1.)					Number of Dominant S That Are OBL, FACW,	
2						
3.					Total Number of Domin Species Across All Stra	
4.				· ——		、,
	_	5	= Total (Cover	Percent of Dominant Sp That Are OBL FACW	pecies or FAC: <u>75 </u>
Sapling/Shrub Stratum (Plot size: 10						
1. Corylus cornuta					Prevalence Index wor	
2Hedera helix						Multiply by:
3						x 1 = x 2 =
4					*	x 3 =
5		80				x 4 =
Herb Stratum (Plot size: 5)		00	- rotar t	OOVCI		x 5 =
Equisetum telmateia		60	У	FACW		(A) (B)
2. Polystichum munitum						
						= B/A =
4. Athyrium filix-femina					Hydrophytic Vegetation	
5					☐ Rapid Test for Hydr ☐ Dominance Test is	. , .
6					☐ Prevalence Index is	
7						otations ¹ (Provide supporting
8 9						s or on a separate sheet)
10					☐ Wetland Non-Vascu	ular Plants¹
11					☐ Problematic Hydrop	ohytic Vegetation¹ (Explain)
		150			¹ Indicators of hydric soi be present, unless distu	il and wetland hydrology must
Woody Vine Stratum (Plot size: 5)					be present, unless disti	anded of problematic.
1. Rubus armeniacus		trace	-		Hydrophytic	
2					Vegetation	- M - □
% Bare Ground in Herb Stratum		trace	= Total (Cover	Present? Ye	s⊠ No□
Remarks: Acer macrophyllum (rooted), included F	RUAR as	dominant be	cause is the only vine	
,					-	

	cription: (Describ	e to the d	epth ne				or confi	rm the a	absence of	indicators	.)
Depth (inches)	Matrix Color (moist)	%	Colo	Redox or (moist)	x Features %	Type ¹	Loc2	Text	ture	F	Remarks
0-18	10YR 2/2	100	0010	or (moist)		Турс					
<u>U-10</u>	101K 2/2	100			·		ī	Sanu	<u>y 10a111</u> _		
							-	-			
							-				
<u> </u>		_	· <u>-</u>		·						
	oncentration, D=De						ed Sand				re Lining, M=Matrix.
_	Indicators: (Appl	icable to a				ea.)					matic Hydric Soils ³ :
☐ Histosol	. ,			Sandy Redox (S Stripped Matrix (☐ 2 cm N	` ,	al /TEQ\
☐ Black His	oipedon (A2)			Suipped Maurx (Loamy Mucky M	,	(except	MIDA	1)		arent Materia	ai (1F2) : Surface (TF12)
	n Sulfide (A4)			Loamy Gleyed N	. ,	(except	WILIXA	')	•	Explain in F	, ,
	l Below Dark Surfa	ce (A11)		Depleted Matrix						Explain in i	iomano)
	rk Surface (A12)	()		Redox Dark Sur	. ,				3Indicators	of hydrophy	tic vegetation and
☐ Sandy M	ucky Mineral (S1)			Depleted Dark S	Surface (F7	')			wetland	hydrology r	must be present,
-	leyed Matrix (S4)			Redox Depressi	ons (F8)				unless	disturbed or	problematic.
_	Layer (if present):										
Type:											
Depth (in	ches):			-				Hyd	dric Soil P	resent? \	res □ No 🏻
Remarks:											
HYDROLO	GY										
Wetland Hy	drology Indicator	s:									
Primary India	cators (minimum of	one requi	red; ch	eck all that apply	y)				Seconda	ary Indicator	rs (2 or more required)
☐ Surface	Water (A1)			☐ Water-Stair	ned Leave	s (B9) (e	xcept M	LRA	☐ Wat	er-Stained L	eaves (B9) (MLRA 1, 2 ,
<u> </u>	ter Table (A2)				, and 4B)	(-) (-				IA, and 4B)	* * * * * * * * * * * * * * * * * * * *
☐ Saturation				☐ Salt Crust (nage Patteri	
☐ Water M				☐ Aquatic Inv	•	(B13)				•	ter Table (C2)
	t Deposits (B2)			☐ Hydrogen S		. ,					le on Aerial Imagery (C9)
	osits (B3)			☐ Oxidized R			Living Ro	oots (C3		morphic Pos	
	t or Crust (B4)			☐ Presence o		_		•		low Aquitare	d (D3)
☐ Iron Dep	osits (B5)			☐ Recent Iron			•	26)	☐ FAC	-Neutral Te	st (D5)
-	Soil Cracks (B6)			☐ Stunted or	Stressed F	Plants (D	1) (LRR	A)	☐ Rais	ed Ant Mou	nds (D6) (LRR A)
☐ Inundation	on Visible on Aeria	Imagery (B7)	☐ Other (Expl	lain in Ren	narks)			☐ Fros	t-Heave Hu	mmocks (D7)
☐ Sparsely	Vegetated Conca	ve Surface	(B8)								
Field Obser	vations:										
Surface Wat	er Present?	Yes 🗌	No 🛛	Depth (inches):						
Water Table	Present?	Yes 🗌	No 🛛	Depth (inches):						
Saturation P	resent?	Yes 🗌	No 🛛	Depth (inches):		We	tland H	ydrology F	Present?	Yes □ No ⊠
(includes cap											
Describe Re	corded Data (strea	m gauge,	monitoi	rıng well, aerial p	onotos, pre	evious ins	spections	s), if avai	lable:		
D	the state of the s										
Remarks: so	il moist but not sat	urated									
1											

Project/Site: Cheasty Trail Pilot Project		City/Count	y: <u>Seattle, K</u>	King	Sampling Date: Oct 31, 2016
Applicant/Owner: City of Seattle Parks				State: WA	Sampling Point: W2 DP2
				ownship, Range: <u>SE-16-24</u>	
Landform (hillslope, terrace, etc.): slope					
Subregion (LRR): <u>LRR A</u>					
Soil Map Unit Name: na				-	
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology sign	•		,	ormal Circumstances" pres	ent? Yes⊠ No □
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 ☒			he Sampled		
Wetland Hydrology Present? Yes ☐ No ☒		with	nin a Wetlar	nd? Yes ☐ No) <u> </u>
Remarks:					
VEGETATION – Use scientific names of plant	ts.				
Tree Stratum (Plot size: 30)	Absolute % Cover		t Indicator	Dominance Test works	
1. Acer macrophyllum				Number of Dominant Spe That Are OBL, FACW, or	
2					
3.				Total Number of Domina Species Across All Strata	
4				,	
	60	= Total C	Cover	Percent of Dominant Spe That Are OBL, FACW, or	r FAC: <u>0</u> (A/B)
Sapling/Shrub Stratum (Plot size: 10)	_		=	Prevalence Index work	
1. Oemleria cerasiformis					Multiply by:
Corylus cornuta 3.					x 1 =
4					x 2 =
5				*	x 3 =
	25			FACU species	x 4 =
Herb Stratum (Plot size: <u>5</u>)				UPL species	x 5 =
1. Polystichum munitum	80	-		Column Totals:	(A) (B)
Urtica dioica Vaccinium parvifolium	trace			Prevalence Index	= B/A =
4. Hedera helix				Hydrophytic Vegetation	
5				☐ Rapid Test for Hydro	
6.				☐ Dominance Test is >	50%
7				☐ Prevalence Index is:	≤3.0 ¹
8					tations ¹ (Provide supporting
9				□ Wetland Non-Vascul	or on a separate sheet)
10					nytic Vegetation¹ (Explain)
11				-	and wetland hydrology must
Woody Vine Stratum (Plot size: 5)	85	= Total C	Cover	be present, unless distur	
1. Rubus armeniacus	trace		FAC		
2				Hydrophytic Vegetation	
	trace	= Total C	Cover		No ⊠
% Bare Ground in Herb Stratum <u>0</u>					
Remarks:					

Depth	Matrix			Redox Feat				
(inches)	Color (moist)	%	Color (mo	<u>ist) %</u>	Type ¹	Loc ²	Texture	Remarks
<u>0-8</u>	10YR 2/1	100					sandy <u>loa</u>	am_
<u>8-16</u>	10YR 4/2	90	10YR4/6	10			sandy loa	am_
		_					-	_
								<u> </u>
							-	
				,				
¹Type: C=Ce	oncentration, D=De	epletion, RI	M=Reduced	Matrix, CS=Cove	ered or Coate	ed Sand Gr	rains.	² Location: PL=Pore Lining, M=Matrix.
	Indicators: (Appl							cators for Problematic Hydric Soils ³ :
☐ Histosol	(A1)		☐ Sandy	Redox (S5)				2 cm Muck (A10)
☐ Histic Ep	ipedon (A2)			ed Matrix (S6)				Red Parent Material (TF2)
☐ Black His	, ,			y Mucky Mineral		t MLRA 1)		Very Shallow Dark Surface (TF12)
	n Sulfide (A4)	(* ()		y Gleyed Matrix ((F2)			Other (Explain in Remarks)
	l Below Dark Surfa irk Surface (A12)	ce (A11)	•	ted Matrix (F3) c Dark Surface (F	:6)		3Ind	icators of hydrophytic vegetation and
	lucky Mineral (S1)			ted Dark Surface	-			vetland hydrology must be present,
	leyed Matrix (S4)			Depressions (F	` '			inless disturbed or problematic.
-	Layer (if present):			1 (- /			·
Type:								
Depth (in	ches):						Hydric	Soil Present? Yes ⊠ No □
Remarks:								_
HYDROLO								
_	drology Indicators						0	
-	cators (minimum of	one requir			(5.6) (econdary Indicators (2 or more required)
Surface \			□ /	Vater-Stained Le		xcept MLR	RA L	Water-Stained Leaves (B9) (MLRA 1, 2,
_	ter Table (A2)			1, 2, 4A, and	4B)		_	4A, and 4B)
☐ Saturation	` '		_	Salt Crust (B11)	otoo (D12)			Drainage Patterns (B10) Dry-Season Water Table (C2)
☐ Water Ma	arks (BT) it Deposits (B2)			Aquatic Invertebra				_ ` ` `
	osits (B3)			Hydrogen Sulfide Dxidized Rhizosp	` ,	Living Poo		Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
	t or Crust (B4)			Presence of Red	•	_	is (C3) L	Shallow Aquitard (D3)
	osits (B5)			Recent Iron Redu		-) [FAC-Neutral Test (D5)
-	Soil Cracks (B6)			Stunted or Stress		`	, –	Raised Ant Mounds (D6) (LRR A)
l	on Visible on Aerial	Imagery (I		Other (Explain in	•	., (=,	, <u> </u>	Frost-Heave Hummocks (D7)
	Vegetated Concav		, —		,		_	2
i i Sparsely								
Field Obser	vations:							
-		Yes □ N	No 🛛 Der	oth (inches):				
Field Obser Surface Wat	er Present?			, ,				
Field Obser Surface Wate Water Table	er Present? Present?	Yes ⊠ 1	— . No	oth (inches): 9	_	Wetl	and Hvdro	ology Present? Yes ⊠ No □
Field Obser Surface Wate Water Table Saturation P (includes cap	er Present? Present? resent? pillary fringe)	Yes ⊠ 1 Yes ⊠ 1	No ☐ Dep	oth (inches): <u>9</u> oth (inches): <u>surf</u>	ace			ology Present? Yes ⊠ No □
Field Obser Surface Wate Water Table Saturation P (includes cap	er Present? Present? resent?	Yes ⊠ 1 Yes ⊠ 1	No ☐ Dep	oth (inches): <u>9</u> oth (inches): <u>surf</u>	ace			
Field Obser Surface Wate Water Table Saturation P (includes cap Describe Re	er Present? Present? resent? pillary fringe)	Yes ⊠ 1 Yes ⊠ 1	No ☐ Dep	oth (inches): <u>9</u> oth (inches): <u>surf</u>	ace			
Field Obser Surface Wate Water Table Saturation P (includes cap	er Present? Present? resent? pillary fringe)	Yes ⊠ 1 Yes ⊠ 1	No ☐ Dep	oth (inches): <u>9</u> oth (inches): <u>surf</u>	ace			
Field Obser Surface Wate Water Table Saturation P (includes cap Describe Re	er Present? Present? resent? pillary fringe)	Yes ⊠ 1 Yes ⊠ 1	No ☐ Dep	oth (inches): <u>9</u> oth (inches): <u>surf</u>	ace			
Field Obser Surface Wate Water Table Saturation P (includes cap Describe Re	er Present? Present? resent? pillary fringe)	Yes ⊠ 1 Yes ⊠ 1	No ☐ Dep	oth (inches): <u>9</u> oth (inches): <u>surf</u>	ace			

Project/Site: Cheasty Trail Pilot Project		City/Cour	nty: <u>Seattle, K</u>	(ing	Sampling Date: Oct 31, 2016
Applicant/Owner: City of Seattle Parks				State: WA	Sampling Point: W2 DP1
Investigator(s): Claire Hoffman, Jessica Redman					
Landform (hillslope, terrace, etc.): hillslope		Local re	lief (concave,	, convex, none): concave	Slope (%): <u>5</u>
Subregion (LRR): LRR A					
Soil Map Unit Name: na					
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology sign	•		•	ormal Circumstances" pres	ent? Yes⊠ No □
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 □		wit	thin a Wetlar	nd? Yes⊠ No	
Remarks:		ı			
VEGETATION – Use scientific names of plan	ts.				
Tree Stratum (Plot size: 30)	Absolute % Cover		nt Indicator	Dominance Test works	
1. Acer macrophyllum				Number of Dominant Sp	ecies r FAC: <u>3 </u>
Populus balsamifera					
3				Total Number of Domina Species Across All Strate	
4				,	
	10			Percent of Dominant Spe That Are OBL, FACW, o	r FAC: <u>67</u> (A/B)
Sapling/Shrub Stratum (Plot size: 10)					
1. Corylus cornuta				Prevalence Index work	
2. Alnus rubra					<u>Multiply by:</u> x 1 =
3					x 2 =
5.				•	x 3 =
	5				x 4 =
Herb Stratum (Plot size: 5)					x 5 =
1. Equisetum telmateia	90			Column Totals:	(A) (B)
2. Tolmiea menziesii	<u>10</u>			Prevalence Index	= B/A =
3. Lysichiton americanus				Hydrophytic Vegetation	
Athyrium filix-femina Urtica dioica				☐ Rapid Test for Hydro	
6. Hedera helix				☐ Dominance Test is >	, , ,
7				☐ Prevalence Index is	≤3.0 ¹
8.				☐ Morphological Adapt	ations ¹ (Provide supporting
9					or on a separate sheet)
10				☐ Wetland Non-Vascul	
11				-	nytic Vegetation¹ (Explain) and wetland hydrology must
Mandy Vina Stratum (Plat size, E)	<u>160</u>	= Total	Cover	be present, unless distur	
Woody Vine Stratum (Plot size: <u>5</u>) 1. Rubus armeniacus	5	V	FAC		
2			IAO	Hydrophytic	
	5		Cover	Vegetation Present? Yes	⊠ No □
% Bare Ground in Herb Stratum 10					
Remarks:					

Depth	Matrix			Redox Features		the absence of indicators.)
(inches)	Color (moist)	%	Colo	r (moist) % Type ¹	Loc ²	Texture Remarks
0-9	7.5YR 2.5/2	100				sandy loam
9-16	2.5Y 5/1	80	7.5Y	R 4/4 20		loamy sand with cobbles
16-18	2.5Y 5/2	100				sandy clay loam
10 10	2.01 0/2	100				<u> </u>
		<u> </u>				
	-					
•		•		uced Matrix, CS=Covered or Coate	d Sand Gra	
-		cable to		s, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
Histosol	• •			Sandy Redox (S5)		2 cm Muck (A10)
-	oipedon (A2)			Stripped Matrix (S6)	MI DA 4\	Red Parent Material (TF2)
☐ Black Hi	` '			.oamy Mucky Mineral (F1) (except	MLRA 1)	☐ Very Shallow Dark Surface (TF12)
	n Sulfide (A4) d Below Dark Surfac	co (Δ11)		oamy Gleyed Matrix (F2) Depleted Matrix (F3)		☐ Other (Explain in Remarks)
	ark Surface (A12)	Je (A11)		Redox Dark Surface (F6)		³ Indicators of hydrophytic vegetation and
	lucky 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 (in	ches):					Hydric Soil Present? Yes ⊠ No □
Remarks:						
I						
I						
HYDROLO						
_	drology Indicators					
-	*					
		one requ	uired; che	eck all that apply)		Secondary Indicators (2 or more required)
	Water (A1)	one requ	uired; che	☐ Water-Stained Leaves (B9) (ex	ccept MLR	☐ Water-Stained Leaves (B9) (MLRA 1, 2,
•	iter Table (A2)	one requ	uired; che	☐ Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B)	cept MLR	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Saturation	nter Table (A2) on (A3)	one requ	uired; che	☐ Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B) ☐ Salt Crust (B11)	cept MLR	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10)
☐ Saturatio	nter Table (A2) on (A3) arks (B1)	one requ	uired; che	 □ Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) 	ccept MLR	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
☐ Saturation ☐ Water M ☐ Sedimer	on (A3) larks (B1) nt Deposits (B2)	one requ	uired; che	 □ Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) 		Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
☐ Saturation ☐ Water M ☐ Sedimen ☐ Drift Dep	on (A3) larks (B1) nt Deposits (B2) posits (B3)	one requ	uired; che	 □ Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along L 	Living Root	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) (C3) Geomorphic Position (D2)
Saturation Water M Sedimer Drift Dep	on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4)	one requ	uired; che	 □ Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along L □ Presence of Reduced Iron (C4) 	Living Roots	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Is (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
Saturation Water M Sedimer Drift Dep Algal Ma	on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	one requ	uired; che	Water-Stained Leaves (B9) (ex	iving Root) Soils (C6)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) Is (C3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5)
Saturation Water M Sedimen Drift Dep Algal Ma Iron Dep Surface	on (A3) arks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6)			Water-Stained Leaves (B9) (ex	iving Root) Soils (C6)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A)
Saturation Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundation	on (A3) arks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial	Imagery	(B7)	Water-Stained Leaves (B9) (ex	iving Root) Soils (C6)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) Is (C3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely	on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concav	Imagery	(B7)	Water-Stained Leaves (B9) (ex	iving Root) Soils (C6)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely Field Obser	on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concavervations:	Imagery e Surfac	(B7) e (B8)	Water-Stained Leaves (B9) (ex	iving Root) Soils (C6)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A)
Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat	ter Table (A2) on (A3) larks (B1) on t Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concaverations: ler Present?	lmagery re Surfac Yes □	(B7) de (B8) No ⊠	Water-Stained Leaves (B9) (ex	iving Root) Soils (C6)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely Field Obser Surface Water Table	ter Table (A2) on (A3) larks (B1) on t Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concave vations: ter Present?	Imagery re Surfac Yes ☐ Yes ☐	(B7) te (B8) No ⊠ No ⊠	Water-Stained Leaves (B9) (ex	Living Roots) Soils (C6)) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) S (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Water Table Saturation P	ter Table (A2) on (A3) larks (B1) on t Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concave vations: ter Present? Present?	lmagery re Surfac Yes □	(B7) de (B8) No ⊠	Water-Stained Leaves (B9) (ex	Living Roots) Soils (C6)) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A)
Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	on (A3) farks (B1) for (B2) for (B3) for Crust (B4) for Crust (B4) for Crust (B5) Soil Cracks (B6) for Visible on Aerial for Vegetated Concaverations: for Present? fresent? fresent? fresent?	Imagery re Surfac Yes Yes Yes Yes Yes	(B7) ee (B8) No ⊠ No ⊠ No ⊠	Water-Stained Leaves (B9) (ex	Living Roots) Soils (C6)) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) Is (C3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	on (A3) farks (B1) for (B2) for (B3) for Crust (B4) for Crust (B4) for Crust (B5) Soil Cracks (B6) for Visible on Aerial for Vegetated Concaverations: for Present? fresent? fresent? fresent?	Imagery re Surfac Yes Yes Yes Yes Yes	(B7) ee (B8) No ⊠ No ⊠ No ⊠	Water-Stained Leaves (B9) (ex	Living Roots) Soils (C6)) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) Is (C3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca) Describe Re	ter Table (A2) on (A3) farks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concaverations: for Present? Present? pillary fringe) proorded Data (stream	Imagery e Surface Yes ☐ Yes ☐ Yes ☐ m gauge	(B7) se (B8) No ⊠ No ⊠ No ⊠ No ⊠	Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along L Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Stunted or Stressed Plants (D1 Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Ing well, aerial photos, previous inspections and the properties of the prope	Living Roots) Soils (C6)) (LRR A) Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) Is (C3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca) Describe Re	on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concaverations: are Present? Present? Present? pillary fringe) proorded Data (stream	Imagery e Surface Yes ☐ Yes ☐ Yes ☐ m gauge	(B7) se (B8) No ⊠ No ⊠ No ⊠ No ⊠	Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along L Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Stunted or Stressed Plants (D1 Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Ing well, aerial photos, previous inspections and the properties of the prope	Living Roots) Soils (C6)) (LRR A) Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) Is (C3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) and Hydrology Present? Yes ☑ No □
Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely Field Obser Surface Water Table Saturation P (includes ca) Describe Re	on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concaverations: are Present? Present? Present? pillary fringe) proorded Data (stream	Imagery e Surface Yes ☐ Yes ☐ Yes ☐ m gauge	(B7) se (B8) No ⊠ No ⊠ No ⊠ No ⊠	Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along L Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Stunted or Stressed Plants (D1 Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Ing well, aerial photos, previous inspections and the properties of the prope	Living Roots) Soils (C6)) (LRR A) Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) Is (C3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) and Hydrology Present? Yes ☑ No □

Project/Site: Cheasty Trail Pilot Project		City/County: Seattle	, King	Sampling Date: Oct 31, 2016
Applicant/Owner: City of Seattle Parks			State: WA	Sampling Point: W1 DP2
Investigator(s): Claire Hoffman, Jessica Redman			Township, Range: <u>SE-16-24</u>	
Landform (hillslope, terrace, etc.): at base of slope		Local relief (concav	/e, convex, none): <u>flat</u>	Slope (%): <u>0</u>
Subregion (LRR): <u>LRR A</u>	Lat: 47	.561071	Long: -122.300474	Datum: NAD1983
			NWI classifica	
Are climatic / hydrologic conditions on the site typic				
Are Vegetation, Soil, or Hydrology	-		Normal Circumstances" pres	
Are Vegetation, Soil, or Hydrology			eded, explain any answers ir	<u> </u>
SUMMARY OF FINDINGS – Attach sit				•
Hydrophytic Vegetation Present? Yes ⊠	No 🗆			
Hydric Soil Present? Yes ⊠	=	Is the Sample		. 🗖
Wetland Hydrology Present? Yes ⊠	No 🗌	within a Wetl	land? Yes ⊠ N	0 ∐
Remarks: likely disturbed in the past				
VECETATION Lies scientific names	of plants			
VEGETATION – Use scientific names		e Dominant Indicator	r Dominance Test works	shoot:
Tree Stratum (Plot size: 30)		er Species? Status		
1. Populus balsamifera	<u>85</u>	y FAC		
2			Total Number of Domina	ant
3			Species Across All Strat	ta: <u>3</u> (B)
4			Percent of Dominant Sp	
Sapling/Shrub Stratum (Plot size: 10)	<u>85</u>	= Total Cover	That Are OBL, FACW, o	or FAC: <u>67</u> (A/B)
1.			Prevalence Index work	sheet:
2			Total % Cover of:	Multiply by:
3			OBL species	x 1 =
4				x 2 =
5			•	x 3 =
Herb Stratum (Plot size: 5)		= Total Cover		x 4 = x 5 =
1. grass sp.	5			(A) (B)
2. Hedera helix		y FACU		(1) (5)
3			Prevalence Index	
4			Hydrophytic Vegetatio	
5				. , ,
6			Prevalence Index is	
7			· 🚍	tations ¹ (Provide supporting
8 9				or on a separate sheet)
10.			☐ Wetland Non-Vascu	lar Plants ¹
11			☐ Problematic Hydropi	hytic Vegetation¹ (Explain)
		= Total Cover	¹ Indicators of hydric soil be present, unless distu	and wetland hydrology must rbed or problematic.
Woody Vine Stratum (Plot size: <u>5</u>)	40	540		<u> </u>
1. Rubus armeniacus		<u>y</u> <u>FAC</u>	Hydrophytic	
2		= Total Cover	Vegetation Yes	s⊠ No □
% Bare Ground in Herb Stratum <u>60</u>				· _
Remarks: primarily bare ground				

Profile Desc	cription: (Describ	e to the c	lepth ne		nent the indicator	or confirm	n the ab	sence of indic	cators.)	
Depth	Matrix				x Features					
(inches)	Color (moist)	%	Colc	or (moist)	<u>%</u> <u>Type¹</u>	Loc ²	Textur	<u> </u>	Remarks	
0-9	7.5YR 2.5/1	100					sandy I	oam_		
9-20	7.5YR 2.5/1 & 2.5Y	5/1 40&40	7.5Y	R 4/6	20	_ M	sandy l	oam with clay	mixed matrix	
			_							
			_							—
¹Tvpe: C=C	oncentration. D=D	epletion. F	RM=Red	luced Matrix. CS	S=Covered or Coate	ed Sand G	rains.	² Location: F	PL=Pore Lining, M=Matrix.	
	Indicators: (App								roblematic Hydric Soils ³ :	
☐ Histosol				Sandy Redox (S				2 cm Muck (A10)	
	pipedon (A2)			Stripped Matrix	·			Red Parent I	Material (TF2)	
☐ Black His			□ I	Loamy Mucky M	lineral (F1) (except	MLRA 1)] Very Shallov	/ Dark Surface (TF12)	
☐ Hydroge	n Sulfide (A4)		□ I	Loamy Gleyed I	Matrix (F2)			Other (Expla	in in Remarks)	
	d Below Dark Surfa	ice (A11)	□ I	Depleted Matrix	(F3)					
	ark Surface (A12)			Redox Dark Sur	, ,		³ lr	-	drophytic vegetation and	
-	lucky Mineral (S1)			Depleted Dark S	, ,			-	ology must be present,	
-	leyed Matrix (S4)			Redox Depress	ions (F8)			unless disturb	ped or problematic.	
_	Layer (if present)									
Type:	-1X			=						ļ
Depth (in	cnes):			=			Hydri	c Soil Presen	t? Yes ⊠ No □	
Remarks: gr	ound hard, compa	cted								
HYDROLO	GV.									
T-										
_	drology Indicator				`			0	" (0 ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	
	cators (minimum o	f one requ	ired; ch		**			-	dicators (2 or more required)	-
	Water (A1)				ned Leaves (B9) (e	xcept MLF	RA		ined Leaves (B9) (MLRA 1,	2,
_	ter Table (A2)				A, and 4B)			4A, ar	•	
☐ Saturation	` '			☐ Salt Crust	` '				Patterns (B10)	
	arks (B1)				vertebrates (B13)			•	on Water Table (C2)	
	nt Deposits (B2)				Sulfide Odor (C1)				Visible on Aerial Imagery (C	C9)
	oosits (B3)				thizospheres along	-	ots (C3)		nic Position (D2)	
_	it or Crust (B4)				of Reduced Iron (C4	•			quitard (D3)	
	osits (B5)				n Reduction in Tille	•	•	☐ FAC-Neut		
	Soil Cracks (B6)		:		Stressed Plants (D	1) (LRR A)	.)	=	it Mounds (D6) (LRR A)	
	on Visible on Aeria			☐ Other (Exp	lain in Remarks)			☐ Frost-Hea	ve Hummocks (D7)	
	Vegetated Conca	ve Surface	e (B8)							
Field Obser										
Surface Wat	er Present?	Yes 🗌	No 🛛	Depth (inches	s):					
Water Table	Present?	Yes 🗌	No 🛛	Depth (inches	s):					
Saturation P		Yes 🗌	No 🛛	Depth (inches	s):	Wetl	land Hyd	Irology Prese	nt? Yes 🛛 No 🗌	
(includes cap		m daligo	monitor	ring well poriol	photos, previous ins	enections)	if availal	nle:		
Describe Ke	corucu Data (Sties	ıııı yauye,	HIOHIO	ing well, aelial	priotos, previous ins	specii0118),	, ii avalidi	JIG.		
D		- 4 - I.			b . f	00 -				
	ne ot tne rainiest O	ctober on	record, '	very raıny night	before and until ~9	:3∪am.				
0.11										
Site visit Apr		ed to the s			proximately 3 inche	es in area t	that had	surface soil cra	acks in October.	
Site visit Apr		ed to the s			proximately 3 inche	es in area t	that had s	surface soil cra	acks in October.	

Project/Site: Cheasty Trail Pilot Pr	oject		City/Co	ounty: <u>Se</u>	eattle, K	ing	Sampling [Date: <u>Oct 31</u>	, 2016
Applicant/Owner: City of Seattle P	arks					State: WA	Sampling F	oint: W1 D	P1
Investigator(s): Claire Hoffman, Je	ssica Redman			Sec	ction, To	wnship, Range: <u>SE-16-24</u>	-4		
Landform (hillslope, terrace, etc.):	at base of slope		Local	relief (c	oncave,	convex, none): flat		_ Slope (%)): <u>0</u>
Subregion (LRR): LRR A		_ Lat: <u>47.5</u>	61068			Long: <u>-122.300669</u>		Datum: NAI	D1983
Soil Map Unit Name: na						NWI classificat	tion: none		
Are climatic / hydrologic conditions									
Are Vegetation, Soil		-			-	ormal Circumstances" pres	ent? Yes [⊠ No □	
Are Vegetation, Soil						ed, explain any answers in			
SUMMARY OF FINDINGS					`		,	nt feature	es, etc.
Hydrophytic Vegetation Present?	Yes ⊠ No □			1- 41- 0		A			
Hydric Soil Present?	Yes ⊠ No □			Is the Sawithin a	•		<u>.</u> П		
Wetland Hydrology Present?				witiiii a	a vvetiaii	id: Tes 🖂 No	, <u> </u>		
Remarks: likely disturbed in the p	past								
VEGETATION – Use scier	ntific names of plan	ts.							
Torra Otractions (Districts 200)		Absolute				Dominance Test works	heet:		
<u>Tree Stratum</u> (Plot size: <u>30</u>) 1. <u>Populus balsamifera</u>		% Cover				Number of Dominant Sp That Are OBL, FACW, o			(A)
2.									(^)
3						Total Number of Domina Species Across All Strate			(B)
4.									(-)
						Percent of Dominant Spo That Are OBL, FACW, o		1	(A/B)
Sapling/Shrub Stratum (Plot siz	•					Prevalence Index work			
1						Total % Cover of:		fultiply by	
2. 3.						OBL species			
4						FACW species			
5.						FAC species			
					er	FACU species	x 4 =		
Herb Stratum (Plot size: 5)						UPL species			
						Column Totals:	(A)		(B)
Polystichum munitum Hodoro boliv					ACU_	Prevalence Index	= B/A = 3 ()5	
Hedera helix 4.						Hydrophytic Vegetation			
5						☐ Rapid Test for Hydro			
6						□ Dominance Test is >	50%		
7.						☐ Prevalence Index is:	≤3.0¹		
8						☐ Morphological Adapt data in Remarks			
9						☐ Wetland Non-Vascul	ar Plants ¹		
10.						☐ Problematic Hydroph	ıytic Vegeta	ıtion¹ (Expla	in)
11		25			ar	¹ Indicators of hydric soil			must
Woody Vine Stratum (Plot size:	<u>5</u>)	20	_ 10	tai oove	, 1	be present, unless distur	bed or prob	lematic.	
1. Rubus armeniacus		20	У	<u>FA</u>	AC	Hydrophytic			
2		20				Vegetation	⊠ No □	1	
% Bare Ground in Herb Stratum	<u>60</u>	20	= 10	ıaı Cove	ei.	Fresent: 168	M INO	1	
Remarks:						L			

APPENDIX C: ECOLOGY RATING FORMS

Washington State Wetland Rating System

The observed wetlands were rated using the 2014 Washington State Department of Ecology's *Wetland Rating System for Western Washington* (Hruby, 2014). This system was developed by Ecology to differentiate wetlands based on their sensitivity to disturbance, their significance, their rarity, our ability to replace them, and the beneficial functions they provide to society. Wetlands are categorized using the Ecology rating system according to the following criteria:

Category I wetlands represent a unique or rare wetland type; or are more sensitive to disturbance; or are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime.

Category II wetlands are difficult, though not impossible, to replace, and provide high levels of some functions.

Category III wetlands have a moderate level of function. They have been disturbed in some ways, and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.

Category IV wetlands have the lowest levels of functions and are often heavily disturbed.

RATING SUMMARY – Western Washington

Name of wetland (or ID #):	Wetland 1	Date of site visit:	4/5/2017
Rated by Claire Hoffman	Trained by Ecology? ☑ Yes ☐ No	Date of training _	Mar-17
HGM Class used for rating	Depressional & Slope Wetland has multip	le HGM classes? ☑`	Yes □No
	ot complete with out the figures requested (figures can of base aerial photo/map Google Earth TEGORY III (based on functions 🗹 or specia	·	
	I based on FUNCTIONS		
	Category I - Total score = 23 - 27	Score for each	
	Category II - Total score = 20 - 22	function based	
X	Category III - Total score = 16 - 19	on three	
	Category IV - Total score = 9 - 15	ratings	

FUNCTION	Improving Water Quality	Hydrologic	Habitat			
	List appropriate rating (H, M, L)					
Site Potential	M	М	L			
Landscape Potential	M	М	L			
Value	Н	М	М	Total		
Score Based on Ratings	7	6	4	17		

function based on three ratings (order of ratings is not important) 9 = H, H, H 8 = H, H, M 7 = H, H, L 7 = H, M, M 6 = H, M, L 6 = M, M, M 5 = H, L, L 5 = M, M, L 4 = M, L, L 3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	Category
Estuarine	
Wetland of High Conservation Value	
Bog	
Mature Forest	
Old Growth Forest	
Coastal Lagoon	
Interdunal	
None of the above	Х

Maps and Figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	1
Hydroperiods	D 1.4, H 1.2	1
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	1
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	1
Map of the contributing basin	D 4.3, D 5.3	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	5
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	3
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	4

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense , rigid trees, shrubs, and herbaceous plants	S 4.1	
(can be added to another figure)		
Boundary of area within 150 ft of the wetland (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	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)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

2

HGM Classification of Wetland in Western Washington

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

1. Are the water levels in the entire ur	nit usually controlled by tides except during floods?
☑ NO - go to 2	☐ YES - the wetland class is Tidal Fringe - go to 1.1
1.1 Is the salinity of the water du	uring periods of annual low flow below 0.5 ppt (parts per thousand)?
-	ified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. it is an Estuarine wetland and is not scored. This method cannot be
	recipitation is the only source (>90%) of water to it. f are NOT sources of water to the unit.
☑ NO - go to 3 If your wetland can be class	☐ YES - The wetland class is Flats ified as a <i>Flats</i> wetland, use the form for Depressional wetlands.
plants on the surface at any	all of the following criteria? etland is on the shores of a body of permanent open water (without any time of the year) at least 20 ac (8 ha) in size; ter area is deeper than 6.6 ft (2 m).
☑ NO - go to 4	☐ YES - The wetland class is Lake Fringe (Lacustrine Fringe)
<u> </u>	lope can be very gradual), wetland in one direction (unidirectional) and usually comes from seeps. heetflow, or in a swale without distinct banks.
☑ NO - go to 5	☐ YES - The wetland class is Slope
•	n these type of wetlands except occasionally in very small and shallow pressions are usually <3 ft diameter and less than 1 ft deep).
from that stream or river,	all of the following criteria? eam channel, where it gets inundated by overbank flooding rs at least once every 2 years.
☑ NO - go to 6	☐ YES - The wetland class is Riverine
NOTE: The Riverine unit can contain of	depressions that are filled with water when the river is not flooding.

6. Is the entire wetland unit in a topographic depression some time during the year? <i>This means that any outlet</i>	n in which water ponds, or is saturated to the surface, at t, 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.		

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.

☐ YES - The wetland class is **Depressional**

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.

NOTES and FIELD OBSERVATIONS: wetland is depressional / slope

Wetland name or number 1

✓ NO - go to 8

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	1		
☑ 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		0		
(use NRCS definitions).	Yes = 4 No = 0			
D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-sh	rub, and/or			
Forested Cowardin classes):				
Wetland has persistent, ungrazed, plants > 95% of area	points = 5	3		
Wetland has persistent, ungrazed, plants $> \frac{1}{2}$ of area	points = 3	Ü		
Wetland has persistent, ungrazed plants > 1/10 of area	points = 1			
Wetland has persistent, ungrazed plants < 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	4		
Area seasonally ponded is > 1/4 total area of wetland	points = 2			
Area seasonally ponded is < 1/4 total area of wetland	points = 0			
Total for D 1 Add the points	in the boxes above	8		
Rating of Site Potential If score is:	Record the rating on	the first page		
D 2.0. Does the landscape have the potential to support the water quality functi	ion 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	100 1 110 0			
generate pollutants?	Yes = 1 No = 0	1		
·	Yes = 1 No = 0	0		
D 2.3. Are there septic systems within 250 ft of the wetland? D 2.4. Are there other sources of pollutants coming into the wetland that are	162 - 1 110 - 0	U		
not listed in questions D 2.1 - D 2.3?		0		
Source	Yes = 1 No = 0	O		
	in the boxes above	1		
Rating of Landscape Potential If score is: 3 or 4 = H 2 1 or 2 = M 0 = L				
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,		0		
lake, or marine water that is on the 303(d) list?	Yes = 1 No = 0			
D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the	` '	1		
	Yes = 1 No = 0	•		
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		2		
which the unit is found)?	Yes = 2 No = 0			
Total for D 3 Add the points	in the boxes above	3		
Rating of Value If score is: 2 - 4 = H 1 = M 0 = L	Record the rating on	the first page		

DEPRESSIONAL AND FLATS WETLANDS	
Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degr	adation
D 4.0. Does the site have the potential to reduce flooding and erosion?	
D 4.1. Characteristics of surface water outflows from the wetland:	
Wetland is a depression or flat depression with no surface water	
leaving it (no outlet) points = 4	
Wetland has an intermittently flowing stream or ditch, OR highly	
constricted permanently flowing outlet points = 2	0
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	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of	
the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the	
deepest part.	
Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7	
Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5	3
☑ 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)	
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.	
\Box The area of the basin is less than 10 times the area of the unit points = 5	0
The area of the basin is 10 to 100 times the area of the unit	3
The area of the basin is more than 100 times the area of the unit points = 0	
☐ Entire wetland is in the Flats class points = 5	
Total for D 4 Add the points in the boxes above	6
Rating of Site Potential If score is: 12 - 16 = H 6 - 11 = M 0 - 5 = L Record the rating on	the first page
D 5.0. Does the landscape have the potential to support hydrologic function of the site?	
D 5.1. Does the wetland unit 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.)?	1
Yes = 1 No = 0	
Total for D 5 Add the points in the boxes above	2
Rating of Landscape Potential If score is: 3 = H 1 or 2 = M 0 = L Record the rating on	the first page
D 6.0. Are the hydrologic functions provided by the site valuable to society?	the met page
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	1
 Surface flooding problems are in a sub-basin farther down- 	
gradient. points = 1	
☐ Flooding from groundwater is an issue in the sub-basin. points = 1	
☐ The existing or potential outflow from the wetland is so constrained	
by human or natural conditions that the water stored by the wetland	
cannot reach areas that flood. Explain why points = 0	
☐ There are no problems with flooding downstream of the wetland. points = 0	
D 6.2. Has the site been identified as important for flood storage or flood	0
conveyance in a regional flood control plan? Yes = 2 No = 0	4
Total for D 6 Add the points in the boxes above	1
Rating of Value If score is: 2 - 4 = H 1 = M 0 = L Record the rating on	

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 1 3 structures: points = 2 ☐ Emergent ☐ Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points - 1 ☑ Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: ☐ The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon 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 \(\frac{1}{4} \) ac to count (see text for descriptions of hydroperiods). ☐ Permanently flooded or inundated 4 or more types present: points = 3 ☑ Seasonally flooded or inundated 3 types present: points = 2 1 ☐ Occasionally flooded or inundated 2 types present: points = 1 1 types present: points = 0 Saturated only ☐ Permanently flowing stream or river in, or adjacent to, the wetland ☐ Seasonally flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland 2 points ☐ Freshwater tidal wetland 2 points 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 the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 1 If you counted: > 19 species points = 25 - 19 species points = 1< 5 species points = 0H 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. 2 None = 0 points **Low** = 1 point Moderate = 2 points All three diagrams in this row are **HIGH** = 3 points

7

H 3.0. Is the habitat provided by the site valuable to society?		
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies?	Choose	
only the highest score that applies to the wetland being rated.		
Site meets ANY of the following criteria:	points = 2	
☐ It has 3 or more priority habitats within 100 m (see next page)		
☐ It provides habitat for Threatened or Endangered species (any plant		
or animal on the state or federal lists)		
☐ It is mapped as a location for an individual WDFW priority species		1
☐ It is a Wetland of High Conservation Value as determined by the		ı
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) with in 100m	points = 1	
Site does not meet any of the criteria above	points = 0	

Rating of Value If Score is: 2 = H 2 1 = M 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

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

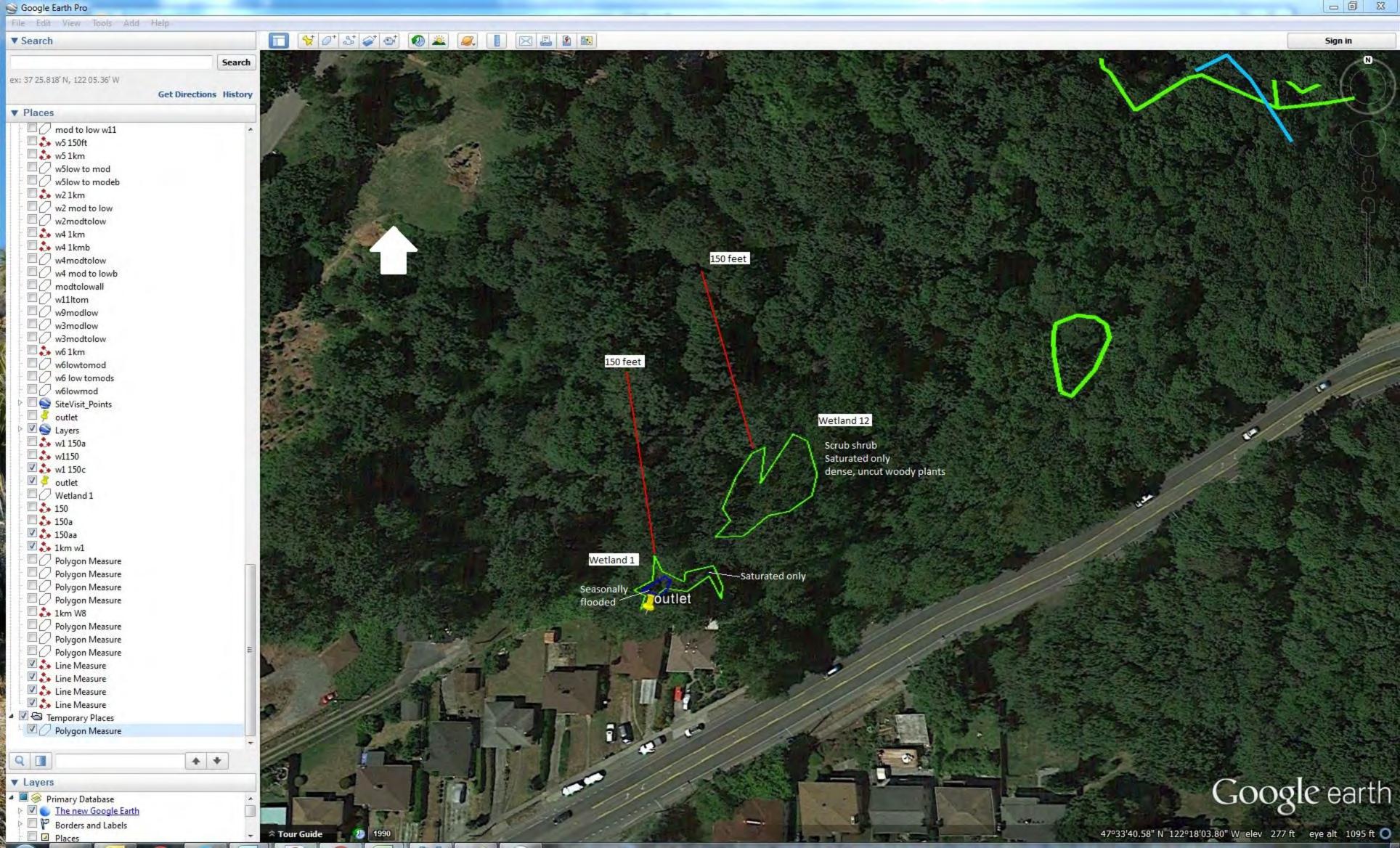
in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12

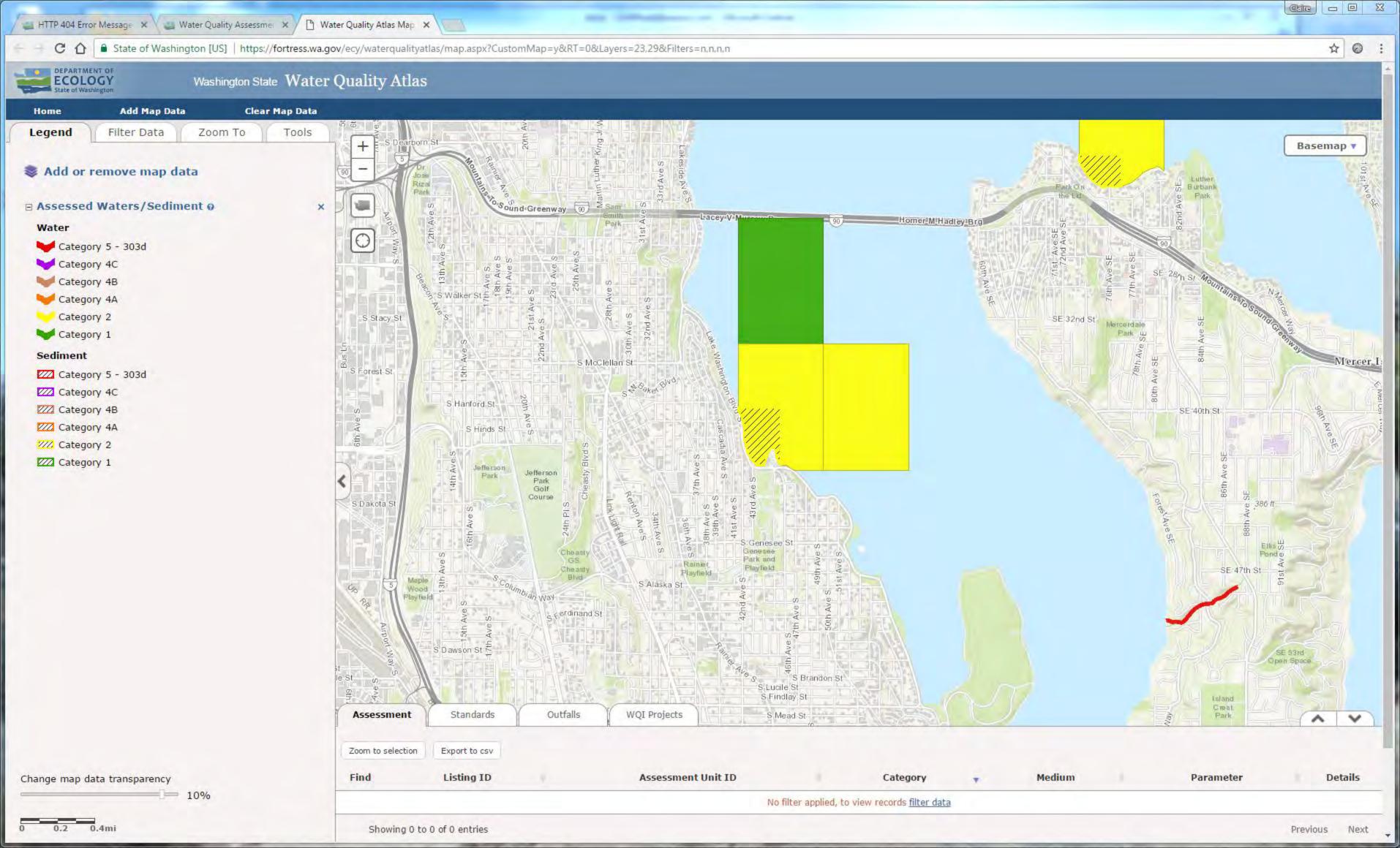
CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland	Туре	Category
	any criteria that apply to the wetland. List the category when the appropriate criteria are met.	
SC 1.0. E	Estuarine Wetlands	
	Does the wetland meet the following criteria for Estuarine wetlands? The dominant water regime is tidal,	
	Vegetated, and	
	With a salinity greater than 0.5 ppt	
	☐ Yes - Go to SC 1.1 ☐ No = Not an estuarine wetland	
SC 1.1.	Is the wetland within a National Wildlife Refuge, National Park, National Estuary	
	Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific	
	Reserve designated under WAC 332-30-151?	
	☐ Yes = Category I ☐ No - Go to SC 1.2	
SC 1.2.	Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
	The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing,	
	and has less than 10% cover of non-native plant species. (If non-native species are	
	Spartina, see page 25)	
	At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-	
	grazed or un-mowed grassland.	
	The wetland has at least two of the following features: tidal channels, depressions with	
	open water, or contiguous freshwater wetlands.	
	☐ Yes = Category I ☐ No = Category II	
	Netlands of High Conservation Value (WHCV)	
SC 2.1.	Has the WA Department of Natural Resources updated their website to include the list	
	of Wetlands of High Conservation Value?	
SC 2.2	☐ Yes - Go to SC 2.2 ☑ No - Go to SC 2.3	
SC 2.2.	Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?	
SC 2.3.	☐ Yes = Category I ☐ No = Not WHCV Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland?	
30 2.3.	http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf	
	☐ Yes - Contact WNHP/WDNR and to SC 2.4 ☐ No = Not WHCV	
SC 2.4.	Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation	
00 2.4.	Value and listed it on their website?	
	☐ Yes = Category I ☐ No = Not WHCV	
SC 3.0. E		
0.0.	Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation	
	in bogs? Use the key below. If you answer YES you will still need to rate the	
	wetland based on its functions.	
SC 3.1.	Does an area within the wetland unit have organic soil horizons, either peats or mucks,	
	that compose 16 in or more of the first 32 in of the soil profile?	
	☐ Yes - Go to SC 3.3 ☐ No - Go to SC 3.2	
SC 3.2.	Does an area within the wetland unit have organic soils, either peats or mucks, that are	
	less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic	
	ash, or that are floating on top of a lake or pond?	
	\square Yes - Go to SC 3.3 \square No = Is not a bog	
SC 3.3.	Does an area with peats or mucks have more than 70% cover of mosses at ground	
	level, AND at least a 30% cover of plant species listed in Table 4?	
	☐ Yes = Is a Category I bog ☐ No - Go to SC 3.4	
	NOTE: If you are uncertain about the extent of mosses in the understory, you may	
	substitute that criterion by measuring the pH of the water that seeps into a hole dug at	
	least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present,	
SC 2 4	the wetland is a bog.	
SC 3.4.	Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir,	
	western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed	
	in Table 4 provide more than 30% of the cover under the canopy?	
	·	
	☐ Yes = Is a Category I bog	

SC 4.0.	Forested Wetlands	
	Does the wetland have at least 1 contiguous acre of forest that meets one of these	
	criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you</i>	
	answer YES you will still need to rate the wetland based on its functions.	
	Old-growth forests (west of Cascade crest): Stands of at least two tree species,	
	forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac	
	(20 trees/ha) that are at least 200 years of age OR have a diameter at breast height	
	(dbh) of 32 in (81 cm) or more.	
	Mature forests (west of the Cascade Crest): Stands where the largest trees are 80-	
	200 years old OR the species that make up the canopy have an average diameter (dbh)	
	exceeding 21 in (53 cm).	
	☐ Yes = Category I ☑ No = Not a forested wetland for this section	
SC 5.0.	Wetlands in Coastal Lagoons	
	Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?	
	The wetland lies in a depression adjacent to marine waters that is wholly or partially	
	separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently,	
	rocks	
	The lagoon in which the wetland is located contains ponded water that is saline or	
	brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (needs to	
	be measured near the bottom)	
	☐ Yes - Go to SC 5.1 ☑ No = Not a wetland in a coastal lagoon	
SC 5.1.	Does the wetland meet all of the following three conditions?	
	The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing),	
	and has less than 20% cover of aggressive, opportunistic plant species (see list of	
	species on p. 100).	
	At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-	
	grazed or un-mowed grassland.	
	The wetland is larger than $^{1}/_{10}$ ac (4350 ft ²)	
	☐ Yes = Category I ☐ No = Category II	
SC 6.0.	Interdunal Wetlands	
	Is the wetland west of the 1889 line (also called the Western Boundary of Upland	
	Ownership or WBUO)? If you answer yes you will still need to rate the wetland	
	based on its habitat functions.	
	In practical terms that means the following geographic areas:	
	Long Beach Peninsula: Lands west of SR 103	
	Grayland-Westport: Lands west of SR 105	
	Ocean Shores-Copalis: Lands west of SR 115 and SR 109	
_	☐ Yes - Go to SC 6.1 ☑ No = Not an interdunal wetland for rating	
SC 6.1.	Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form	
	(rates H,H,H or H,H,M for the three aspects of function)?	
	☐ Yes = Category I ☐ No - Go to SC 6.2	
SC 6.2.	Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?	
· - ·	☐ Yes = Category II ☐ No - Go to SC 6.3	
SC 6.3.	Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and	
	1 ac?	
	☐ Yes = Category III ☐ No = Category IV	
Categor	y of wetland based on Special Characteristics	
_	swored No for all types, enter "Not Applicable" on Summary Form	





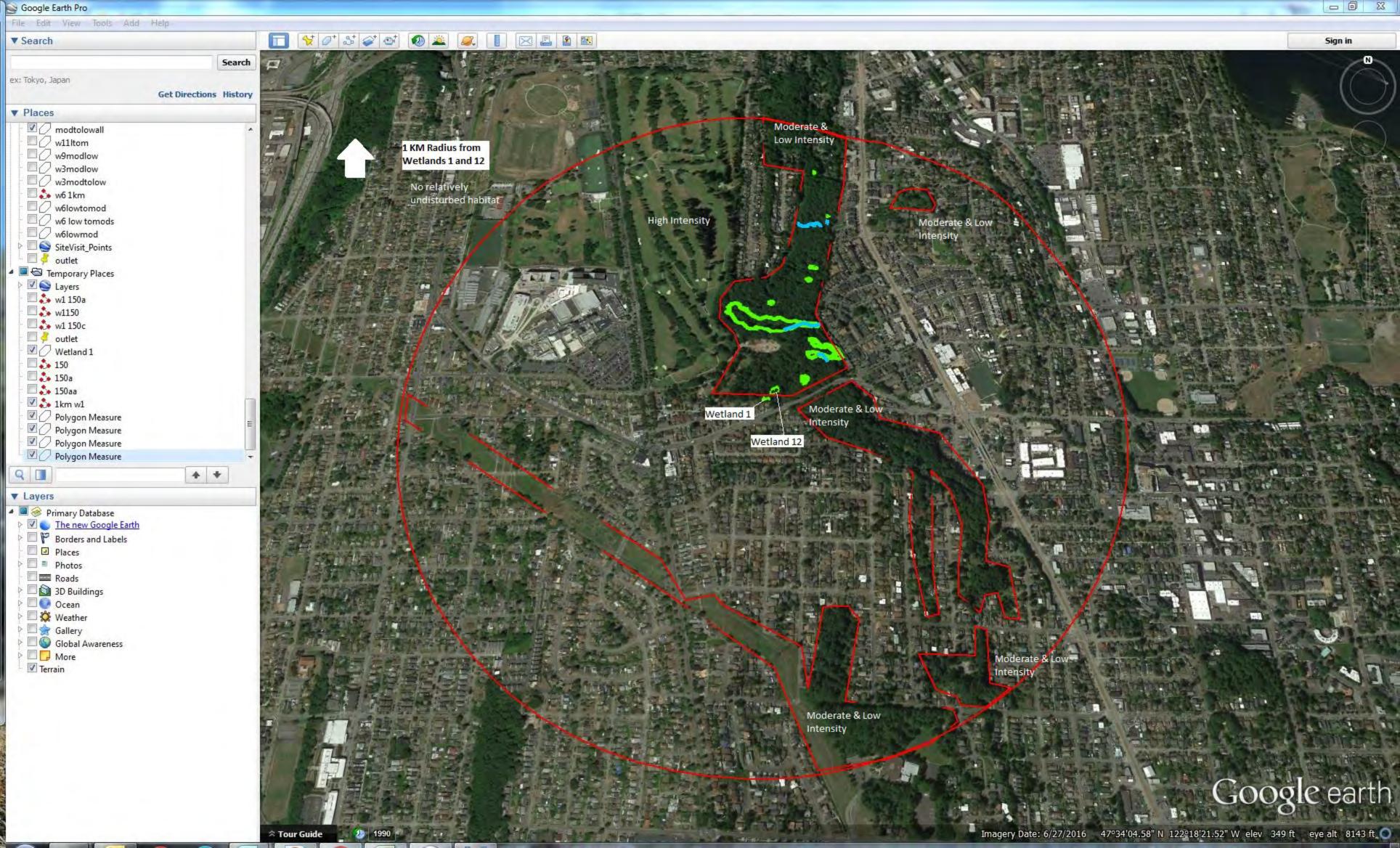


LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
4672	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
4676	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
500005	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500006	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500007	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500038	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
12193	5	WASHINGTON LAKE	Bacteria	Water
12206	5	WASHINGTON LAKE	Bacteria	Water
43482	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
51591	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51592	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51593	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51706	5	WASHINGTON LAKE	4,4'-DDD	Tissue
51767	5	WASHINGTON LAKE	4,4'-DDE	Tissue
52642	5	WASHINGTON LAKE	Mercury	Tissue
52703	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52704	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52705	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52766	5	WASHINGTON LAKE	Total Chlordane	Tissue
52853	5	WASHINGTON LAKE	Total Phosphorus	Water
74460	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74461	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74775	5	WASHINGTON LAKE	Bacteria	Water
76477		WASHINGTON LAKE	Dieldrin	Tissue
76478	5	WASHINGTON LAKE	Dieldrin	Tissue
76479		WASHINGTON LAKE	Dieldrin	Tissue
77049		WASHINGTON LAKE	Chlordane	Tissue
77050		WASHINGTON LAKE	Chlordane	Tissue
77064	5	WASHINGTON LAKE	Chlordane	Tissue
500009	5	WASHINGTON LAKE	Sediment Bioassay	Sediment
500010		WASHINGTON LAKE	Sediment Bioassay	Sediment
8078		WASHINGTON LAKE	Lead	Water
11960	2	WASHINGTON LAKE	Ammonia-N	Water
11963	2	WASHINGTON LAKE	Ammonia-N	Water

11964 2 WASHINGTON LAKE Ammonia-N Water 11970 2 WASHINGTON LAKE Ammonia-N Water 12207 2 WASHINGTON LAKE Bacteria Water 12264 2 WASHINGTON LAKE Mercury Water 12272 2 WASHINGTON LAKE Mercury Water 12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE POlychlorinated Biphenyls (PCBs) Water 1237,8-TCDD TEQ Tissue 1238 1 WASHINGTON LAKE Bacteria Water 1239 1 WASHINGTON LAKE Bacteria Water 1230 1 WASHINGTON LAKE Bacteria Water 12344	LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
12207 2 WASHINGTON LAKE Bacteria Water 12264 2 WASHINGTON LAKE Mercury Water Water 12272 2 WASHINGTON LAKE Mercury Water 12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Bacteria Water 12319 2 WASHINGTON LAKE Bacteria Water 12319 3 WASHINGTON LAKE Bacteria Water 12319 3 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 5 WASHINGTON LAKE Bacteria Water 12319 5 WASHINGTON LAKE Bacteria Water 12319 5 WASHINGTON LAKE Bacteria Water 12319 6 WASHINGTON LAKE Bacteria Water 12319 6 WASHINGTON LAKE Bacteria Water 12319 1 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE Bacteria Water 13348 1 WAS	11964	2	WASHINGTON LAKE	Ammonia-N	
12264 2 WASHINGTON LAKE 12272 2 WASHINGTON LAKE 12311 2 WASHINGTON LAKE 12312 2 WASHINGTON LAKE 12312 2 WASHINGTON LAKE 12313 2 WASHINGTON LAKE 12313 2 WASHINGTON LAKE 12314 2 WASHINGTON LAKE 12315 2 WASHINGTON LAKE 12315 2 WASHINGTON LAKE 12316 2 WASHINGTON LAKE 12317 2 WASHINGTON LAKE 12318 2 WASHINGTON LAKE 12319 2 WASHINGTON LAKE 12319 3 LWASHINGTON LAKE 11972 1 WASHINGTON LAKE 11972 1 WASHINGTON LAKE 11973 1 WASHINGTON LAKE 11973 1 WASHINGTON LAKE 11973 1 WASHINGTON LAKE 111973 1 WASHINGTON LAKE 111973 1 WASHINGTON LAKE 111973 1 WASHINGTON LAKE 111974 1 WASHINGTON LAKE 111975 1 WASHINGTON LAKE 111975 1 WASHINGTON LAKE 11199 1 WASHINGTON LAKE 11190 1 WASHINGTON LAKE	11970	2	WASHINGTON LAKE	Ammonia-N	Water
12272 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water Polychlorinated Biphenyls (PCBs)	12207	2	WASHINGTON LAKE	Bacteria	Water
12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12319 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12319 3 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 5 WASHINGTON LAKE Bacteria Water 12319 6 WASHINGTON LAKE Bacteria Water 12319 6 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE WASHINGTO	12264	2	WASHINGTON LAKE	Mercury	Water
12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 151645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12200	12272	2	WASHINGTON LAKE	Mercury	Water
12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 123645 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 13318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water Polychlorinated Bipheny	12311	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 151645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Tissue 143481 1 WASHINGTON LAKE Mercury Tissue 143483 1 WASHINGTON LAKE Mercury Tissue 143484 1 WASHINGTON LAKE Mercury Tissue 143485 1 WASHINGTON LAKE Hexachlorobenzene Tissue 15sue 15s	12312	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 151645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 123481 1 WASHINGTON LAKE Bacteria Tissue 12381 1 WASHINGTON LAKE Bacteria Tissue 12383 1 WASHINGTON LAKE Bacteria Tissue 12383 1 WASHINGTON LAKE Mercury Tissue 12384 1 WASH	12313	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Tissue 12483 1 WASHINGTON LAKE Bacteria Tissue 12483 1 WASHINGTON LAKE Bacteria Tissue 12484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 12504 1 WASHINGTON LAKE Hexachlorobenzene Tissue 12506 Tissu	12314	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12191 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12203 1 WASHINGTON LAKE Bacteria Water 12204 1 WASHINGTON LAKE Bacteria Tissue 12488 1 WASHINGTON LAKE Macteria Tissue 12488 1 WASHINGTON LAKE Mercury Tissue 12488 1 WASHINGTON LAKE Mercury Tissue 12506 1 WASHINGTON LAKE Mercury Tissue 12607 Tissue 12608 1 WASHINGTON LAKE Mercury Tissue 12709 Tissue 12709 Tissue 12709 Tissue 12709 Tissue 12709 Tissue 12709 Tissue	12315	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12191 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12203 1 WASHINGTON LAKE Bacteria Water 12204 1 WASHINGTON LAKE Bacteria Water 12205 1 WASHINGTON LAKE Bacteria Water 12206 1 WASHINGTON LAKE Bacteria Tissue 123481 1 WASHINGTON LAKE Bacteria Tissue 124483 1 WASHINGTON LAKE Mercury Tissue 124484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 124485 1 WASHINGTON LAKE Hexachlor Epoxide Tissue	12316	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Water 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Mercury Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12317	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Bacteria Water 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Mercury Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12318	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12191 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 123481 1 WASHINGTON LAKE Mercury Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	51644	2	WASHINGTON LAKE	2,3,7,8-TCDD TEQ	Tissue
11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Bacteria Water 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Mercury Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	51645	2	WASHINGTON LAKE	2,3,7,8-TCDD TEQ	Tissue
11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Bacteria Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	51646	2	WASHINGTON LAKE	2,3,7,8-TCDD TEQ	Tissue
12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Hexachlor Epoxide Tissue	11972	1	WASHINGTON LAKE	Ammonia-N	Water
12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13500	11973	1	WASHINGTON LAKE	Ammonia-N	Water
12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13584 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13685 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12183	1	WASHINGTON LAKE	Bacteria	Water
12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12186	1	WASHINGTON LAKE	Bacteria	Water
12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12189	1	WASHINGTON LAKE	Bacteria	Water
12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 124481 1 WASHINGTON LAKE Toxaphene Tissue 12483 1 WASHINGTON LAKE Mercury Tissue 12484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 12485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12190	1	WASHINGTON LAKE	Bacteria	Water
12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12194	1	WASHINGTON LAKE	Bacteria	Water
12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12195	1	WASHINGTON LAKE	Bacteria	Water
12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12196	1	WASHINGTON LAKE	Bacteria	Water
12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12197	1	WASHINGTON LAKE	Bacteria	Water
1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12200	1	WASHINGTON LAKE	Bacteria	Water
43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12201	1	WASHINGTON LAKE	Bacteria	Water
43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12202	1	WASHINGTON LAKE	Bacteria	Water
43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43481	1	WASHINGTON LAKE	Toxaphene	Tissue
43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43483	1	WASHINGTON LAKE	Mercury	Tissue
· · · ·	43484	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
43486 1 WASHINGTON LAKE Heptachlor Tissue	43485	1	WASHINGTON LAKE	Heptachlor Epoxide	Tissue
	43486	1	WASHINGTON LAKE	Heptachlor	Tissue

LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
43487	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
43488	1	WASHINGTON LAKE	Endrin	Tissue
43492	1	WASHINGTON LAKE	Beta-BHC	Tissue
43493	1	WASHINGTON LAKE	Alpha-BHC	Tissue
43494	1	WASHINGTON LAKE	4,4'-DDT	Tissue
43495	1	WASHINGTON LAKE	4,4'-DDE	Tissue
43496	1	WASHINGTON LAKE	4,4'-DDD	Tissue
51827	1	WASHINGTON LAKE	4,4'-DDT	Tissue
51949	1	WASHINGTON LAKE	Alpha-BHC	Tissue
52010	1	WASHINGTON LAKE	Beta-BHC	Tissue
52403	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
52464	1	WASHINGTON LAKE	Heptachlor	Tissue
52585	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
52854	1	WASHINGTON LAKE	Total Phosphorus	Water
52855	1	WASHINGTON LAKE	Total Phosphorus	Water
52856	1	WASHINGTON LAKE	Total Phosphorus	Water
52857	1	WASHINGTON LAKE	Total Phosphorus	Water
52858	1	WASHINGTON LAKE	Total Phosphorus	Water
52859	1	WASHINGTON LAKE	Total Phosphorus	Water
52860	1	WASHINGTON LAKE	Total Phosphorus	Water
52861	1	WASHINGTON LAKE	Total Phosphorus	Water
52862	1	WASHINGTON LAKE	Total Phosphorus	Water
52863	1	WASHINGTON LAKE	Total Phosphorus	Water
52864	1	WASHINGTON LAKE	Total Phosphorus	Water
52865		WASHINGTON LAKE	Total Phosphorus	Water
74484		WASHINGTON LAKE	4,4'-DDD	Tissue
74485		WASHINGTON LAKE	4,4'-DDD	Tissue
74772		WASHINGTON LAKE	Bacteria	Water
74776		WASHINGTON LAKE	Bacteria	Water
75112		WASHINGTON LAKE	4,4'-DDT	Tissue
75114		WASHINGTON LAKE	4,4'-DDT	Tissue
75221		WASHINGTON LAKE	Beta-BHC	Tissue
75222		WASHINGTON LAKE	Beta-BHC	Tissue
75309	1	WASHINGTON LAKE	Endrin	Tissue

LISTING_ID CATEGORY_20	14 WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
75310	1 WASHINGTON LAKE	Endrin	Tissue
75311	1 WASHINGTON LAKE	Endrin	Tissue
75400	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75401	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75402	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75403	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75486	1 WASHINGTON LAKE	Heptachlor	Tissue
75487	1 WASHINGTON LAKE	Heptachlor	Tissue
75563	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75564	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75565	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75645	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75646	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75791	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75792	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75793	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75794	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
77219	1 WASHINGTON LAKE	Toxaphene	Tissue
77220	1 WASHINGTON LAKE	Toxaphene	Tissue
77236	1 WASHINGTON LAKE	Toxaphene	Tissue
77243	1 WASHINGTON LAKE	Endosulfan	Tissue
78987	1 WASHINGTON LAKE	Endosulfan	Tissue
78988	1 WASHINGTON LAKE	Endosulfan	Tissue
78989	1 WASHINGTON LAKE	Endosulfan	Tissue
79488	1 WASHINGTON LAKE	Mercury	Tissue
79502	1 WASHINGTON LAKE	Mercury	Tissue



RATING SUMMARY – Western Washington

Name of wetland (or ID #):	Wetland 2		Date of site visit:	31-Oct-16
Rated by Claire Hoffman	Trained by E	Ecology? ☑ Yes ☐ No	Date of training	2008
HGM Class used for rating	Slope	Wetland has multip	ole HGM classes? ☑	Yes □No
	ot complete with out the figures r of base aerial photo/map Google E	• • •	be combined).	
OVERALL WETLAND CA	TEGORY(based or	n functions	al characteristics \Box)	
1. Category of wetlan	l based on FUNCTIONS			
	Category I - Total score = 23 - 27		Score for each	
	Category II - Total score = 20 - 22	<u>)</u>	function based	
	Category III - Total score = 16 - 1	9	on three	
x	Category IV - Total score = 9 - 15		ratings	
	_		(order of ratings	

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
List appropriate rating (H, M, L)				
Site Potential	L	L	L	
Landscape Potential	L	L	L	
Value	Н	M	М	Total
Score Based on Ratings	5	4	4	13

Score for each function based on three ratings (order of ratings is not important) 9 = H, H, H 8 = H, H, M 7 = H, H, L 7 = H, M, M 6 = H, M, L 6 = M, M, M 5 = H, L, L 5 = M, M, L 4 = M, L, L 3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	Category
Estuarine	
Wetland of High Conservation Value	
Bog	
Mature Forest	
Old Growth Forest	
Coastal Lagoon	
Interdunal	
None of the above	х

Maps and Figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	1
Hydroperiods	H 1.2	1
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	1
Plant cover of dense, rigid trees, shrubs, and herbaceous plants	S 4.1	1
(can be added to another figure)		'
Boundary of area within 150 ft of the wetland (can be added to another figure)	S 2.1, S 5.1	1
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	2
polygons for accessible habitat and undisturbed habitat		2
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	3
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	4

HGM Classification of Wetland in Western Washington

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

 Are the water levels in the 	entire unit usually controlled by tides except during floods?
☐ NO - go to 2	☐ YES - the wetland class is Tidal Fringe - go to 1.1
1.1 Is the salinity of the	water during periods of annual low flow below 0.5 ppt (parts per thousand)?
If your wetland can If it is Saltwater Tid	al Fringe (Estuarine)
	at and precipitation is the only source (>90%) of water to it. ter runoff are NOT sources of water to the unit.
☑ NO - go to 3 If your wetland can	☐ YES - The wetland class is Flats be classified as a Flats wetland, use the form for Depressional wetlands.
☐ The vegetated part plants on the surface	it meet all of the following criteria? of the wetland is on the shores of a body of permanent open water (without any se at any time of the year) at least 20 ac (8 ha) in size; open water area is deeper than 6.6 ft (2 m).
☑ NO - go to 4	☐ YES - The wetland class is Lake Fringe (Lacustrine Fringe)
☑ The wetland is on a☑ The water flows thrIt may flow subsurfa	it meet all of the following criteria? slope (<i>slope can be very gradual</i>), ough the wetland in one direction (unidirectional) and usually comes from seeps. ace, as sheetflow, or in a swale without distinct banks. e wetland without being impounded.
□ NO - go to 5	☑ YES - The wetland class is Slope
	ot pond in these type of wetlands except occasionally in very small and shallow ocks (depressions are usually <3 ft diameter and less than 1 ft deep).
☐ The unit is in a valle from that stream or	it meet all of the following criteria? ey, or stream channel, where it gets inundated by overbank flooding river, ing occurs at least once every 2 years.
□ 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

	sion in which water ponds, or is saturated to the surface, at utlet, if present, is higher than the interior of the wetland.
□ NO - go to 7	\square YES - The wetland class is Depressional
•	ea with no obvious depression and no overbank flooding? few inches. The unit seems to be maintained by high ed, but has no obvious natural outlet.

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.

☐ **YES** - The wetland class is **Depressional**

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.

Wetland name or number

☐ NO - go to 8

CLODE WETLANDS			
SLOPE WETLANDS			
Water Quality Functions - Indicators that the site functions to im	prove water	quality	
S 1.0. Does the site have the potential to improve water quality?			
S 1.1. Characteristics of the average slope of the wetland: (a 1% slope has a 1	ft vertical dro	op in	
elevation for every 100 ft of horizontal distance)			
Slope is 1% or less	•	nts = 3	1
Slope is > 1% - 2%	poir	nts = 2	•
Slope is > 2% - 5%	poir	nts = 1	
Slope is greater than 5%	poir	nts = 0	
S 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic			0
(use NRCS definitions):		No = 0	0
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollu			
Choose the points appropriate for the description that best fits the plants in the			
means you have trouble seeing the soil surface (>75% cover), and uncut mean	ns not grazed	or	
mowed and plants are higher than 6 in.		-4 0	
Dense, uncut, herbaceous plants > 90% of the wetland area	•	nts = 6	3
Dense, uncut, herbaceous plants > ½ of area	·	nts = 3	
Dense, woody, plants > ½ of area	•	nts = 2	
Dense, uncut, herbaceous plants > ½ of area	•	nts = 1	
Does not meet any of the criteria above for plants		nts = 0	4
Total for S 1 Add the points in the boxes above			
Rating of Site Potential If score is: 12 = H 6 - 11 = M 0 - 5 = L	Record the ra	ating on	the first page
S 2.0. Does the landscape have the potential to support the water quality funct	ion of the site	?	
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in			0
land uses that generate pollutants?	Yes = 1	No = 0	0
S 2.2. Are there other sources of pollutants coming into the wetland that are			
not listed in question S 2.1?			0
Other Sources	Yes = 1 I	No = 0	
Total for S 2 Add the points	in the boxes	above	0
Rating of Landscape Potential If score is: ☐1 - 2 = M ☐0 = L	Record the ra	ating on	the first page
S 3.0. Is the water quality improvement provided by the site valuable to society	?		
S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river,			0
lake, or marine water that is on the 303(d) list?	V 4 I	No = 0	U
	Yes = 1 I	10	
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue?	Yes = 1	10 0	4
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? At least one aquatic resource in the basin is on the 303(d) list.		No = 0	1
, ,	Yes = 1 I		1
At least one aquatic resource in the basin is on the 303(d) list.	Yes = 1 I		2
At least one aquatic resource in the basin is on the 303(d) list. S 3.3. Has the site been identified in a watershed or local plan as important for	Yes = 1		
At least one aquatic resource in the basin is on the 303(d) list. S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? Answer YES if there is a TMDL for the basin in	Yes = 1 Yes = 2	No = 0 No = 0	

SLOPE WETLANDS			
Hydrologic Functions - Indicators that the site functions to reduce flooding and stre	eam erosion		
S 4.0. Does the site have the potential to reduce flooding and stream erosion?	_		
S 4.1. Characteristics of plants that reduce the velocity of surface flows during storms: Choo			
the points appropriate for the description that best fits conditions in the wetland. Stems of plants			
should be thick enough (usually $> 1/8$ in), or dense enough, to remain erect during surface	flows. 0		
Dense, uncut, rigid plants cover > 90% of the area of the wetland poir	nts = 1		
All other conditions poir	nts = 0		
Rating of Site Potential If score is: 1 = M	ating on the first page		
S 5.0. Does the landscape have the potential to support hydrologic functions of the site?			
S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land	0		
uses or cover that generate excess surface runoff? Yes = 1	No = 0		
Rating of Landscape Potential If score is: 1 = M 0 = L Record the rating on			
S 6.0. Are the hydrologic functions provided by the site valuable to society?			
S 6.1. Distance to the nearest areas downstream that have flooding problems:			
The sub-basin immediately down-gradient of site has flooding			
problems that result in damage to human or natural resources (e.g.,			
1	nts = 2		
· ·	nts = 1		
1	nts = 0		
S 6.2. Has the site been identified as important for flood storage or flood			
,	No = 0		
Total for S 6 Add the points in the boxes			
· · · · · · · · · · · · · · · · · · ·	ating on the first page		

NOTES and FIELD OBSERVATIONS:

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 1 3 structures: points = 2 ☑ Emergent ☐ Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points - 1 ☑ Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: ☐ The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon 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 \(\frac{1}{4} \) ac to count (see text for descriptions of hydroperiods). ☐ Permanently flooded or inundated 4 or more types present: points = 3 ☐ Seasonally flooded or inundated 3 types present: points = 2 1 ☑ Occasionally flooded or inundated 2 types present: points = 1 1 types present: points = 0 ☑ Saturated only ☐ Permanently flowing stream or river in, or adjacent to, the wetland ☐ Seasonally flowing stream in, or adjacent to, the wetland ☐ Lake Fringe wetland 2 points ☐ Freshwater tidal wetland 2 points 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 the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 1 If you counted: > 19 species points = 25 - 19 species points = 1< 5 species points = 0H 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. 1 None = 0 points **Low** = 1 point Moderate = 2 points All three diagrams in this row are **HIGH** = 3 points

H 1.5. Special habitat features:	
Check the habitat features that are present in the wetland. <i>The number of checks is the number</i>	
of points.	
\square Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long)	
\square 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)	1
☐ 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 (<i>cut shrubs or trees</i>	
that have not yet weathered where wood is exposed)	
☐ At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas	
that are permanently or seasonally inundated (structures for egg-laying by amphibians)	
☑ Invasive plants cover less than 25% of the wetland area in every stratum of plants (see	
H 1.1 for list of strata)	
Total for H 1 Add the points in the boxes above	5
Rating of Site Potential If Score is: 15 - 18 = H 7 - 14 = M 0 - 6 = L Record the rating or	
H 2.0. Does the landscape have the potential to support the habitat function of the site?	
H 2.1 Accessible habitat (include only habitat that directly abuts wetland unit).	
Calculate:	
0 % undisturbed habitat + (7 % moderate & low intensity land uses / 2) = 3.5%	
70 thioderate & low intensity land uses 7 2) = 3.370	
If total accessible habitat is:	0
	0
$> \frac{1}{3}$ (33.3%) of 1 km Polygon points = 3	
20 - 33% of 1 km Polygon points = 2	
10 - 19% of 1 km Polygon points = 1	
< 10 % of 1 km Polygon points = 0	
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.	
Calculate:	
0 % undisturbed habitat + (22 % moderate & low intensity land uses / 2) = 11%	
	4
Undisturbed habitat > 50% of Polygon points = 3	1
Undisturbed habitat 10 - 50% and in 1-3 patches points = 2	
Undisturbed habitat 10 - 50% and > 3 patches points = 1	
Undisturbed habitat < 10% of 1 km Polygon points = 0	
H 2.3 Land use intensity in 1 km Polygon: If	
> 50% of 1 km Polygon is high intensity land use points = (-2)	-2
≤ 50% of 1km Polygon is high intensity points = 0	
Total for H 2 Add the points in the boxes above	
Rating of Landscape Potential If Score is: 4 - 6 = H 1 - 3 = M <a>III - 3 = M <a>III	
Training of Landscape Potential in Score is. 4-0-11 1-3-14 1-1-1 Necord the rating of	ine msi page
H 3.0. Is the habitat provided by the site valuable to society?	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose</i>	
only the highest score that applies to the wetland being rated.	
Site meets ANY of the following criteria: points = 2	
☐ It has 3 or more priority habitats within 100 m (see next page)	
☐ It provides habitat for Threatened or Endangered species (any plant	
or animal on the state or federal lists)	
☐ It is mapped as a location for an individual WDFW priority species	1
☐ 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) with in 100m points = 1	
Site does not meet any of the criteria above points = 0	
Rating of Value If Score is: \square 2 = H \square 1 = M \square 0 = L Record the rating or	the first page

Wetland Rating System for Western WA: 2014 Update Rating Form - Effective January 1, 2015

8

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/

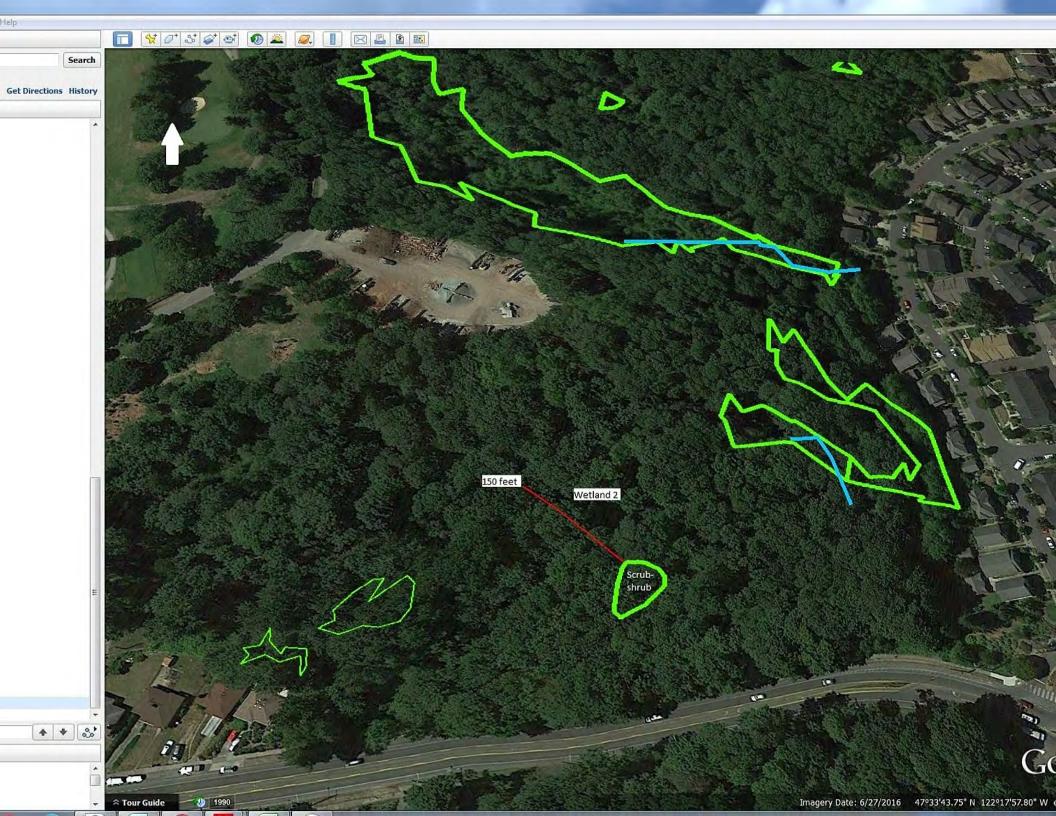
Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: NOTE: This question is independent of the land use between the wetland unit and the priority habitat. Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha). ☑ **Biodiversity Areas and Corridors**: 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.

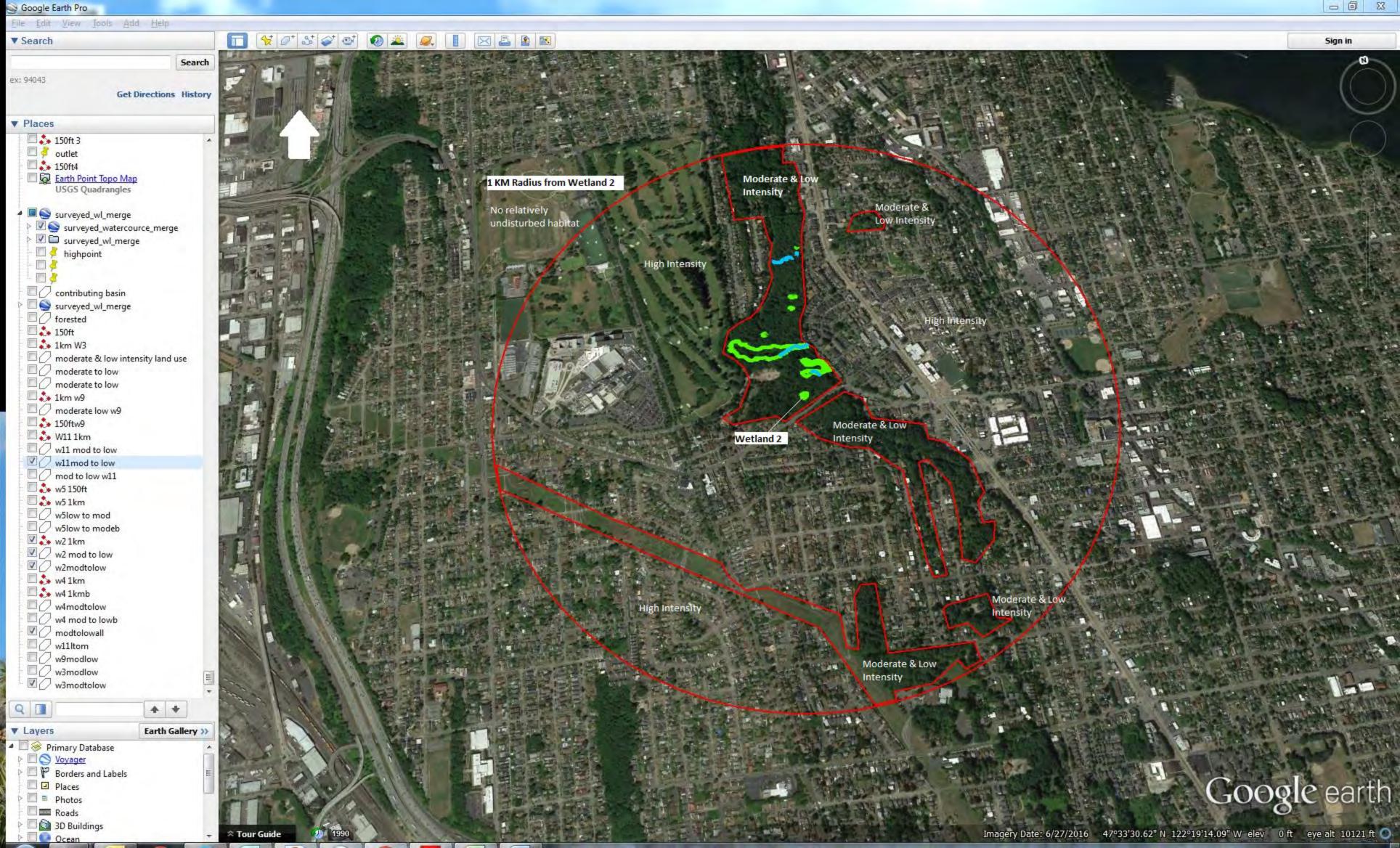
Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

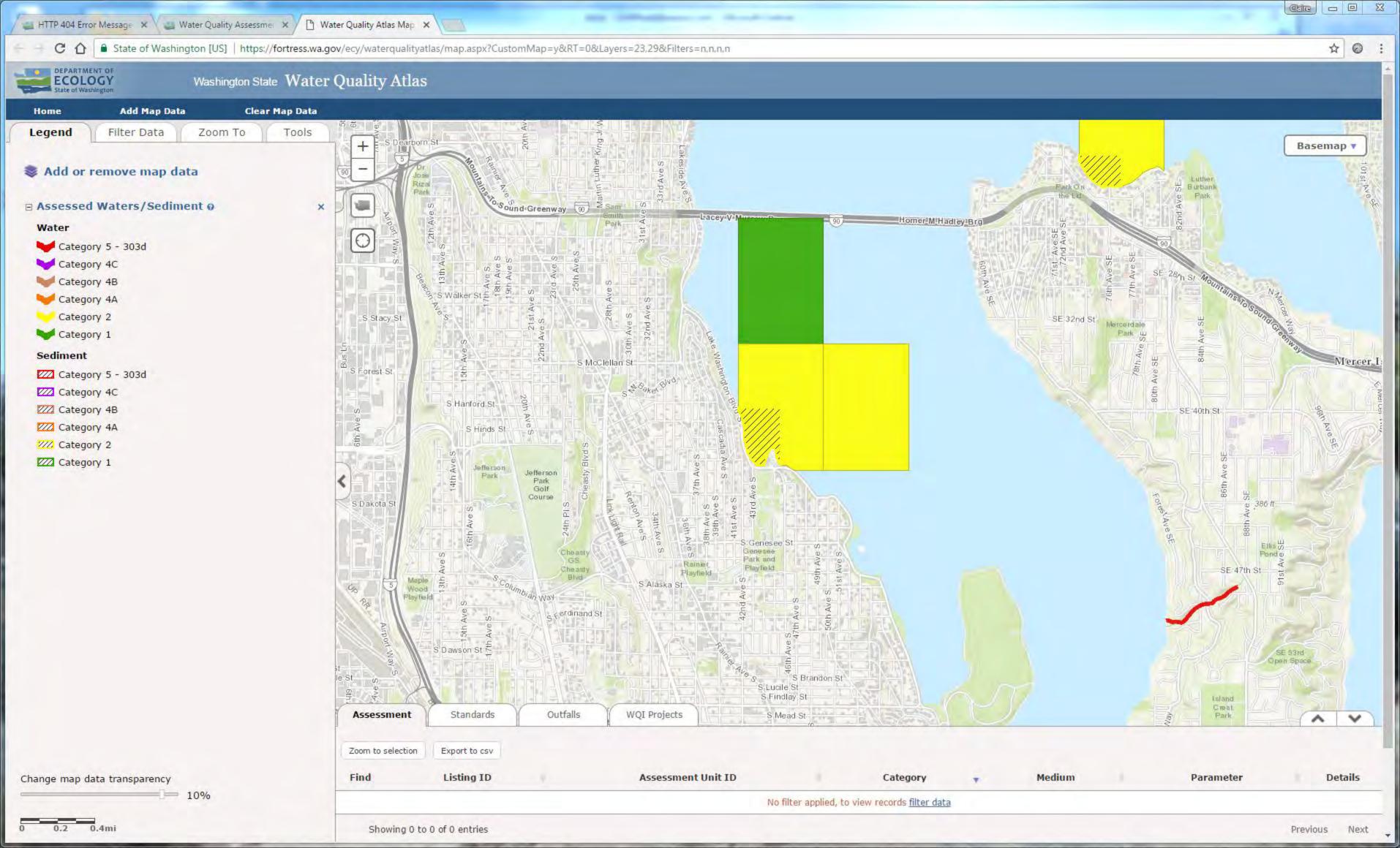
CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland	Туре	Category
	any criteria that apply to the wetland. List the category when the appropriate criteria are met.	
SC 1.0. I	Estuarine Wetlands	
	Does the wetland meet the following criteria for Estuarine wetlands? The dominant water regime is tidal,	
	Vegetated, and	
	With a salinity greater than 0.5 ppt	
	☐ Yes - Go to SC 1.1 ☑ No = Not an estuarine wetland	
SC 1.1.	Is the wetland within a National Wildlife Refuge, National Park, National Estuary	
00 1.1.	Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific	
	Reserve designated under WAC 332-30-151?	
	☐ Yes = Category I ☐ No - Go to SC 1.2	
SC 1.2.	Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
	The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing,	
	and has less than 10% cover of non-native plant species. (If non-native species are	
	Spartina, see page 25)	
	At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-	
	grazed or un-mowed grassland.	
	The wetland has at least two of the following features: tidal channels, depressions with	
	open water, or contiguous freshwater wetlands.	
	☐ Yes = Category I ☐ No = Category II	
SC 2.0. \	Wetlands of High Conservation Value (WHCV)	
SC 2.1.	Has the WA Department of Natural Resources updated their website to include the list	
	of Wetlands of High Conservation Value?	
	\square Yes - Go to SC 2.2 \square No - Go to SC 2.3	
SC 2.2.	Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?	
	☐ Yes = Category I ☐ No = Not WHCV	
SC 2.3.	Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland?	
	http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf	
	☐ Yes - Contact WNHP/WDNR and to SC 2.4 ☑ No = Not WHCV	
SC 2.4.	Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation	
	Value and listed it on their website?	
	☐ Yes = Category I ☐ No = Not WHCV	
SC 3.0. I	Bogs Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation	
	, , ,	
	in bogs? Use the key below. If you answer YES you will still need to rate the wetland based on its functions.	
SC 3.1.	Does an area within the wetland unit have organic soil horizons, either peats or mucks,	
30 3.1.	that compose 16 in or more of the first 32 in of the soil profile?	
	☐ Yes - Go to SC 3.3 ☐ No - Go to SC 3.2	
SC 3.2.	Does an area within the wetland unit have organic soils, either peats or mucks, that are	
00 0.2.	less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic	
	ash, or that are floating on top of a lake or pond?	
	☐ Yes - Go to SC 3.3 ☐ No = Is not a bog	
SC 3.3.	Does an area with peats or mucks have more than 70% cover of mosses at ground	
	level, AND at least a 30% cover of plant species listed in Table 4?	
	☐ Yes = Is a Category I bog ☐ No - Go to SC 3.4	
	NOTE: If you are uncertain about the extent of mosses in the understory, you may	
	substitute that criterion by measuring the pH of the water that seeps into a hole dug at	
	least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present,	
	the wetland is a bog.	
SC 3.4.	Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir,	
	western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann	
	spruce, or western white pine, AND any of the species (or combination of species) listed	
	in Table 4 provide more than 30% of the cover under the canopy?	
	☐ Yes = Is a Category I bog ☑ No = Is not a bog	

SC 4.0. I	Forested Wetlands	
	Does the wetland have at least 1 contiguous acre of forest that meets one of these	
	criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you</i>	
	answer YES you will still need to rate the wetland based on its functions.	
	Old-growth forests (west of Cascade crest): Stands of at least two tree species,	
	forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac	
	(20 trees/ha) that are at least 200 years of age OR have a diameter at breast height	
	(dbh) of 32 in (81 cm) or more.	
	Mature forests (west of the Cascade Crest): Stands where the largest trees are 80-	
	200 years old OR the species that make up the canopy have an average diameter (dbh)	
	exceeding 21 in (53 cm).	
	☐ Yes = Category I ☑ No = Not a forested wetland for this section	
SC 5.0. \	Vetlands in Coastal Lagoons	
	Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?	
	The wetland lies in a depression adjacent to marine waters that is wholly or partially	
	separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently,	
	rocks	
	The lagoon in which the wetland is located contains ponded water that is saline or	
	brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (needs to	
	be measured near the bottom)	
	☐ Yes - Go to SC 5.1 ☑ No = Not a wetland in a coastal lagoon	
SC 5.1. I	Does the wetland meet all of the following three conditions?	
	The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing),	
	and has less than 20% cover of aggressive, opportunistic plant species (see list of	
	species on p. 100).	
	At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-	
	grazed or un-mowed grassland.	
	The wetland is larger than $^{1}/_{10}$ ac (4350 ft ²)	
	☐ Yes = Category I ☐ No = Category II	
SC 6.0. I	nterdunal Wetlands	
	Is the wetland west of the 1889 line (also called the Western Boundary of Upland	
	Ownership or WBUO)? If you answer yes you will still need to rate the wetland	
	based on its habitat functions.	
	In practical terms that means the following geographic areas:	
	Long Beach Peninsula: Lands west of SR 103	
	Grayland-Westport: Lands west of SR 105	
	Ocean Shores-Copalis: Lands west of SR 115 and SR 109	
0004	☐ Yes - Go to SC 6.1 ☑ No = Not an interdunal wetland for rating	
SC 6.1.	Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form	
	(rates H,H,H or H,H,M for the three aspects of function)?	
0000	☐ Yes = Category I ☐ No - Go to SC 6.2	
SC 6.2.	Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?	
0000	☐ Yes = Category II ☐ No - Go to SC 6.3	
SC 6.3.	Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and	
	1 ac?	
Cotoss	☐ Yes = Category III ☐ No = Category IV	
	y of wetland based on Special Characteristics	







LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
4672	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
4676	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
500005	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500006	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500007	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500038	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
12193	5	WASHINGTON LAKE	Bacteria	Water
12206	5	WASHINGTON LAKE	Bacteria	Water
43482	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
51591	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51592	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51593	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51706	5	WASHINGTON LAKE	4,4'-DDD	Tissue
51767	5	WASHINGTON LAKE	4,4'-DDE	Tissue
52642	5	WASHINGTON LAKE	Mercury	Tissue
52703	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52704	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52705	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52766	5	WASHINGTON LAKE	Total Chlordane	Tissue
52853	5	WASHINGTON LAKE	Total Phosphorus	Water
74460	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74461	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74775	5	WASHINGTON LAKE	Bacteria	Water
76477		WASHINGTON LAKE	Dieldrin	Tissue
76478	5	WASHINGTON LAKE	Dieldrin	Tissue
76479		WASHINGTON LAKE	Dieldrin	Tissue
77049		WASHINGTON LAKE	Chlordane	Tissue
77050		WASHINGTON LAKE	Chlordane	Tissue
77064	5	WASHINGTON LAKE	Chlordane	Tissue
500009	5	WASHINGTON LAKE	Sediment Bioassay	Sediment
500010		WASHINGTON LAKE	Sediment Bioassay	Sediment
8078		WASHINGTON LAKE	Lead	Water
11960	2	WASHINGTON LAKE	Ammonia-N	Water
11963	2	WASHINGTON LAKE	Ammonia-N	Water

11964 2 WASHINGTON LAKE Ammonia-N Water 11970 2 WASHINGTON LAKE Ammonia-N Water 12207 2 WASHINGTON LAKE Bacteria Water 12264 2 WASHINGTON LAKE Mercury Water 12272 2 WASHINGTON LAKE Mercury Water 12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE POlychlorinated Biphenyls (PCBs) Water 1237,8-TCDD TEQ Tissue 1238 1 WASHINGTON LAKE Bacteria Water 1239 1 WASHINGTON LAKE Bacteria Water 1230 1 WASHINGTON LAKE Bacteria Water 12344	LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
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12272 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water Polychlorinated Biphenyls (PCBs)	12207	2	WASHINGTON LAKE	Bacteria	Water
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12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12189	1	WASHINGTON LAKE	Bacteria	Water
12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 124481 1 WASHINGTON LAKE Toxaphene Tissue 12483 1 WASHINGTON LAKE Mercury Tissue 12484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 12485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12190	1	WASHINGTON LAKE	Bacteria	Water
12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12194	1	WASHINGTON LAKE	Bacteria	Water
12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12195	1	WASHINGTON LAKE	Bacteria	Water
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1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12200	1	WASHINGTON LAKE	Bacteria	Water
43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12201	1	WASHINGTON LAKE	Bacteria	Water
43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12202	1	WASHINGTON LAKE	Bacteria	Water
43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43481	1	WASHINGTON LAKE	Toxaphene	Tissue
43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43483	1	WASHINGTON LAKE	Mercury	Tissue
· · · ·	43484	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
43486 1 WASHINGTON LAKE Heptachlor Tissue	43485	1	WASHINGTON LAKE	Heptachlor Epoxide	Tissue
	43486	1	WASHINGTON LAKE	Heptachlor	Tissue

LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
43487	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
43488	1	WASHINGTON LAKE	Endrin	Tissue
43492	1	WASHINGTON LAKE	Beta-BHC	Tissue
43493	1	WASHINGTON LAKE	Alpha-BHC	Tissue
43494	1	WASHINGTON LAKE	4,4'-DDT	Tissue
43495	1	WASHINGTON LAKE	4,4'-DDE	Tissue
43496	1	WASHINGTON LAKE	4,4'-DDD	Tissue
51827	1	WASHINGTON LAKE	4,4'-DDT	Tissue
51949	1	WASHINGTON LAKE	Alpha-BHC	Tissue
52010	1	WASHINGTON LAKE	Beta-BHC	Tissue
52403	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
52464	1	WASHINGTON LAKE	Heptachlor	Tissue
52585	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
52854	1	WASHINGTON LAKE	Total Phosphorus	Water
52855	1	WASHINGTON LAKE	Total Phosphorus	Water
52856	1	WASHINGTON LAKE	Total Phosphorus	Water
52857	1	WASHINGTON LAKE	Total Phosphorus	Water
52858	1	WASHINGTON LAKE	Total Phosphorus	Water
52859	1	WASHINGTON LAKE	Total Phosphorus	Water
52860	1	WASHINGTON LAKE	Total Phosphorus	Water
52861	1	WASHINGTON LAKE	Total Phosphorus	Water
52862	1	WASHINGTON LAKE	Total Phosphorus	Water
52863	1	WASHINGTON LAKE	Total Phosphorus	Water
52864	1	WASHINGTON LAKE	Total Phosphorus	Water
52865		WASHINGTON LAKE	Total Phosphorus	Water
74484		WASHINGTON LAKE	4,4'-DDD	Tissue
74485		WASHINGTON LAKE	4,4'-DDD	Tissue
74772		WASHINGTON LAKE	Bacteria	Water
74776		WASHINGTON LAKE	Bacteria	Water
75112		WASHINGTON LAKE	4,4'-DDT	Tissue
75114		WASHINGTON LAKE	4,4'-DDT	Tissue
75221		WASHINGTON LAKE	Beta-BHC	Tissue
75222		WASHINGTON LAKE	Beta-BHC	Tissue
75309	1	WASHINGTON LAKE	Endrin	Tissue

LISTING_ID CATEGORY_20	14 WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
75310	1 WASHINGTON LAKE	Endrin	Tissue
75311	1 WASHINGTON LAKE	Endrin	Tissue
75400	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75401	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75402	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75403	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75486	1 WASHINGTON LAKE	Heptachlor	Tissue
75487	1 WASHINGTON LAKE	Heptachlor	Tissue
75563	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75564	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75565	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75645	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75646	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75791	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75792	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75793	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75794	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
77219	1 WASHINGTON LAKE	Toxaphene	Tissue
77220	1 WASHINGTON LAKE	Toxaphene	Tissue
77236	1 WASHINGTON LAKE	Toxaphene	Tissue
77243	1 WASHINGTON LAKE	Endosulfan	Tissue
78987	1 WASHINGTON LAKE	Endosulfan	Tissue
78988	1 WASHINGTON LAKE	Endosulfan	Tissue
78989	1 WASHINGTON LAKE	Endosulfan	Tissue
79488	1 WASHINGTON LAKE	Mercury	Tissue
79502	1 WASHINGTON LAKE	Mercury	Tissue

RATING SUMMARY – Western Washington

Name of wetland (or II	D#): Wetland 3				Date of site visit:	20-Oct-16
Rated by Claire Hoffr	man	_ Tr	ained by E	cology? ☑ Yes ☐ No	Date of training_	2008
HGM Class used for	rating Slope	g Slope Wetland has multiple HGM classes? ☐ Yes ☑ No			Yes ☑No	
	m is not complete Source of base aer		•	equested (figures can rth	be combined).	
OVERALL WETLAN	OVERALL WETLAND CATEGORY III (based on functions ⊡or special characteristics □)					
1. Category of w	etland based on	FUNCTION	IS			
0 ,		I - Total score			Score for each	
_	Category	II - Total score	e = 20 - 22		function based	
_	X Category	III - Total scoi	re = 16 - 19) ·	on three	
_	Category IV - Total score = 9 - 15 ratings					
_					(order of ratings	
FUNCTION	Improving	Hydrologic	Habitat		is not	
FUNCTION	Water Quality				important)	
	Liston	roprioto rotino	~ / 🗓 🚺 🚺			

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
	List appropriate rating (H, M, L)			
Site Potential	L	М	М	
Landscape Potential	L	L	L	
Value	Н	Н	М	Total
Score Based on Ratings	5	6	5	16
-				

function based on three ratings (order of ratings is not important) 9 = H, H, H 8 = H, H, M 7 = H, H, L 7 = H, M, M 6 = H, M, L 6 = M, M, M 5 = H, L, L 5 = M, M, L 4 = M, L, L 3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	Category
Estuarine	
Wetland of High Conservation Value	
Bog	
Mature Forest	
Old Growth Forest	
Coastal Lagoon	
Interdunal	
None of the above	Х

Maps and Figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	1
Hydroperiods	H 1.2	1
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	1
Plant cover of dense, rigid trees, shrubs, and herbaceous plants	S 4.1	1
(can be added to another figure)		'
Boundary of area within 150 ft of the wetland (can be added to another figure)	S 2.1, S 5.1	1
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	2
polygons for accessible habitat and undisturbed habitat		2
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	3
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	4

HGM Classification of Wetland in Western Washington

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

1. Are the water levels in the entire u	nit usually controlled by tides except during floods?
☑ NO - go to 2	☐ YES - the wetland class is Tidal Fringe - go to 1.1
1.1 Is the salinity of the water d	uring periods of annual low flow below 0.5 ppt (parts per thousand)?
	sified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. It is an Estuarine wetland and is not scored. This method cannot be
	recipitation is the only source (>90%) of water to it. If are NOT sources of water to the unit.
☑ NO - go to 3 If your wetland can be class	☐ YES - The wetland class is Flats sified as a Flats wetland, use the form for Depressional wetlands.
plants on the surface at any	all of the following criteria? etland is on the shores of a body of permanent open water (without any time of the year) at least 20 ac (8 ha) in size; ater area is deeper than 6.6 ft (2 m).
☑ NO - go to 4	☐ YES - The wetland class is Lake Fringe (Lacustrine Fringe)
It may flow subsurface, as s	· · · · · · · · · · · · · · · · · · ·
\square NO - go to 5	☑ YES - The wetland class is Slope
•	in these type of wetlands except occasionally in very small and shallow epressions are usually <3 ft diameter and less than 1 ft deep).
from that stream or river,	all of the following criteria? eam channel, where it gets inundated by overbank flooding urs at least once every 2 years.
☑ 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.

. •	aphic depression in which water ponds, or is saturated to the surface, at s that any outlet, if present, is higher than the interior of the wetland.
☑ NO - go to 7	☐ YES - The wetland class is Depressional
The unit does not pond surface water n	very flat area with no obvious depression and no overbank flooding? nore than a few inches. The unit seems to be maintained by high nay 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.

SLOPE WETLANDS		
Water Quality Functions - Indicators that the site functions to im	prove water quality	
S 1.0. Does the site have the potential to improve water quality?	1 7	
S 1.1. Characteristics of the average slope of the wetland: (a 1% slope has a 1	ft vertical drop in	
elevation for every 100 ft of horizontal distance)	,	
Slope is 1% or less	points = 3	0
Slope is > 1% - 2%	points = 2	U
Slope is > 2% - 5%	points = 1	
Slope is greater than 5%	points = 0	
S 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic		0
(use NRCS definitions):	Yes = 3 No = 0	U
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollu		
Choose the points appropriate for the description that best fits the plants in the		
means you have trouble seeing the soil surface (>75% cover), and uncut mean	is not grazed or	
mowed and plants are higher than 6 in. Dense, uncut, herbaceous plants > 90% of the wetland area	points = 6	
Dense, uncut, herbaceous plants > ½ of area	points = 3	2
•	•	
Dense, woody, plants > ½ of area Dense, uncut, herbaceous plants > ¼ of area	points = 2 points = 1	
Does not meet any of the criteria above for plants	points = 0	
	in the boxes above	2
Rating of Site Potential If score is: 12 = H	Record the rating on	_
Rating of Site Potential if Score is 12 - 11 _ 0 - 11 - W	Necord the rating on	trie mst page
S 2.0. Does the landscape have the potential to support the water quality functi	on of the site?	
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in		0
land uses that generate pollutants?	Yes = 1 No = 0	O
S 2.2. Are there other sources of pollutants coming into the wetland that are		
not listed in question S 2.1?		0
Other Sources	Yes = 1 No = 0	
Total for S 2 Add the points	in the boxes above	0
Rating of Landscape Potential If score is: ☐1 - 2 = M ☐0 = L	Record the rating on	the first page
S 3.0. Is the water quality improvement provided by the site valuable to society	?	
S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river,		0
lake, or marine water that is on the 303(d) list?	Yes = 1 No = 0	0
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue?		1
At least one aquatic resource in the basin is on the 303(d) list.	Yes = 1 No = 0	1
S 3.3. Has the site been identified in a watershed or local plan as important for		
maintaining water quality? Answer YES if there is a TMDL for the basin in		2
which the unit is found?	Yes = 2 No = 0	
	103 - 2 110 - 0	
Total for S 3 Add the points	in the boxes above	3

SLOPE WETLANDS Hydrologic Functions - Indicators that the site functions to reduce floor	oding and stream er	osion
S 4.0. Does the site have the potential to reduce flooding and stream erosion?	ding and stream en	331011
S 4.1. Characteristics of plants that reduce the velocity of surface flows during	storms: Choose	
the points appropriate for the description that best fits conditions in the wetland		
should be thick enough (usually > $^{1}/_{8}$ in), or dense enough, to remain erect du	-	1
Dense, uncut, rigid plants cover > 90% of the area of the wetland	points = 1	
All other conditions	points = 0	
Rating of Site Potential If score is:	Record the rating on	the first page
S 5.0. Does the landscape have the potential to support hydrologic functions of	the site?	
S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land		0
uses or cover that generate excess surface runoff?	Yes = 1 No = 0	U
Rating of Landscape Potential If score is: 1 = M 0 = L	Record the rating on	the first page
S 6.0. Are the hydrologic functions provided by the site valuable to society?		
S 6.1. Distance to the nearest areas downstream that have flooding problems:		
The sub-basin immediately down-gradient of site has flooding		
problems that result in damage to human or natural resources (e.g.,		2
houses or salmon redds)	points = 2	۷
Surface flooding problems are in a sub-basin farther down-gradient	points = 1	
No flooding problems anywhere downstream	points = 0	
S 6.2. Has the site been identified as important for flood storage or flood		
conveyance in a regional flood control plan?	Yes = 2 No = 0	
Total for S 6 Add the points	in the boxes above	2
Rating of Value If score is: 2 - 4 = H 1 = M 0 = L	Record the rating on	the first page

NOTES and FIELD OBSERVATIONS:

observed wetland continues into/around house immediately outside of park property. House may have water issus.

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: <i>Indicators are Cowardin classes and strata within the Forested class.</i> Check the Cowardin plant classes in the wetland. <i>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.</i>	
 □ Aquatic bed □ Emergent □ Scrub-shrub (areas where shrubs have > 30% cover) □ Forested (areas where trees have > 30% cover) □ If the unit has a Forested class, check if: □ The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon 	1
H 1.2. Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (see text for descriptions of hydroperiods).	
 □ Permanently flooded or inundated □ Seasonally flooded or inundated □ Occasionally flooded or inundated □ Occasionally flooded or inundated □ Saturated only □ Permanently flowing stream or river in, or adjacent to, the wetland □ Seasonally flowing stream in, or adjacent to, the wetland 	1
□ Lake Fringe wetland□ Freshwater tidal wetland2 points2 points	
H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft ² . Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 5 - 19 species points = 1	1
< 5 species points = 0 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.	
	2
None = 0 points	
All three diagrams in this row are HIGH = 3 points	

H 1.5. Special habitat features:	
Check the habitat features that are present in the wetland. <i>The number of checks is the number</i>	
of points.	
\square Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long)	
☑ Standing snags (dbh > 4 in) within the wetland	
☑ Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends	
at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at	
least 33 ft (10 m)	2
☐ 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 (<i>cut shrubs or trees</i>	
that have not yet weathered where wood is exposed)	
\square At least $rac{1}{4}$ 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)	
\square Invasive plants cover less than 25% of the wetland area in every stratum of plants (see	
H 1.1 for list of strata)	
Total for H 1 Add the points in the boxes above	7
Rating of Site Potential If Score is: 15 - 18 = H 7 - 14 = M 0 - 6 = L Record the rating on	the first page
H 2.0. Does the landscape have the potential to support the habitat function of the site?	
H 2.1 Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).	
Calculate:	
0 % undisturbed habitat + (10 % moderate & low intensity land uses / 2) = 5%	
If total accessible habitat is:	0
$> \frac{1}{3}$ (33.3%) of 1 km Polygon points = 3	
20 - 33% of 1 km Polygon points = 2	
10 - 19% of 1 km Polygon points = 1	
< 10 % of 1 km Polygon points = 0	
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.	
Calculate:	
0 % undisturbed habitat + (20 % moderate & low intensity land uses / 2) = 10%	
76 dildistdibed liabitat 1 (20 76 filloderate & low litterisity land uses 7.2.) = 10.76	
Undisturbed habitat > 50% of Polygon points = 3	1
Undisturbed habitat > 50% of Polygon points = 3 Undisturbed habitat 10 - 50% and in 1-3 patches points = 2	
Undisturbed habitat 10 - 50% and > 3 patches points = 1	
Undisturbed habitat < 10% of 1 km Polygon points = 0	
H 2.3 Land use intensity in 1 km Polygon: If	
> 50% of 1 km Polygon is high intensity land use points = (-2)	-2
≤ 50% of 1km Polygon is high intensity points = 0	-2
Total for H 2 Add the points in the boxes above	-1
Rating of Landscape Potential If Score is: 4-6=H 1-3=M <a> < 1 = L Record the rating on	
Training of Landscape Potential in Score is. 4-0-11 1-3-W V-1-L Necord the fathing of	the mst page
H 3.0. Is the habitat provided by the site valuable to society?	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose</i>	
only the highest score that applies to the wetland being rated.	
Site meets ANY of the following criteria: points = 2	
☐ It has 3 or more priority habitats within 100 m (see next page)	
☐ It provides habitat for Threatened or Endangered species (any plant	
or animal on the state or federal lists)	
☐ It is mapped as a location for an individual WDFW priority species	_
☐ It is a Wetland of High Conservation Value as determined by the	1
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) with in 100m points = 1	
Site does not meet any of the criteria above points = 0	
Rating of Value If Score is: 2 = H 1 = M 0 = L Record the rating on	the first page

Wetland Rating System for Western WA: 2014 Update Rating Form - Effective January 1, 2015

8

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.

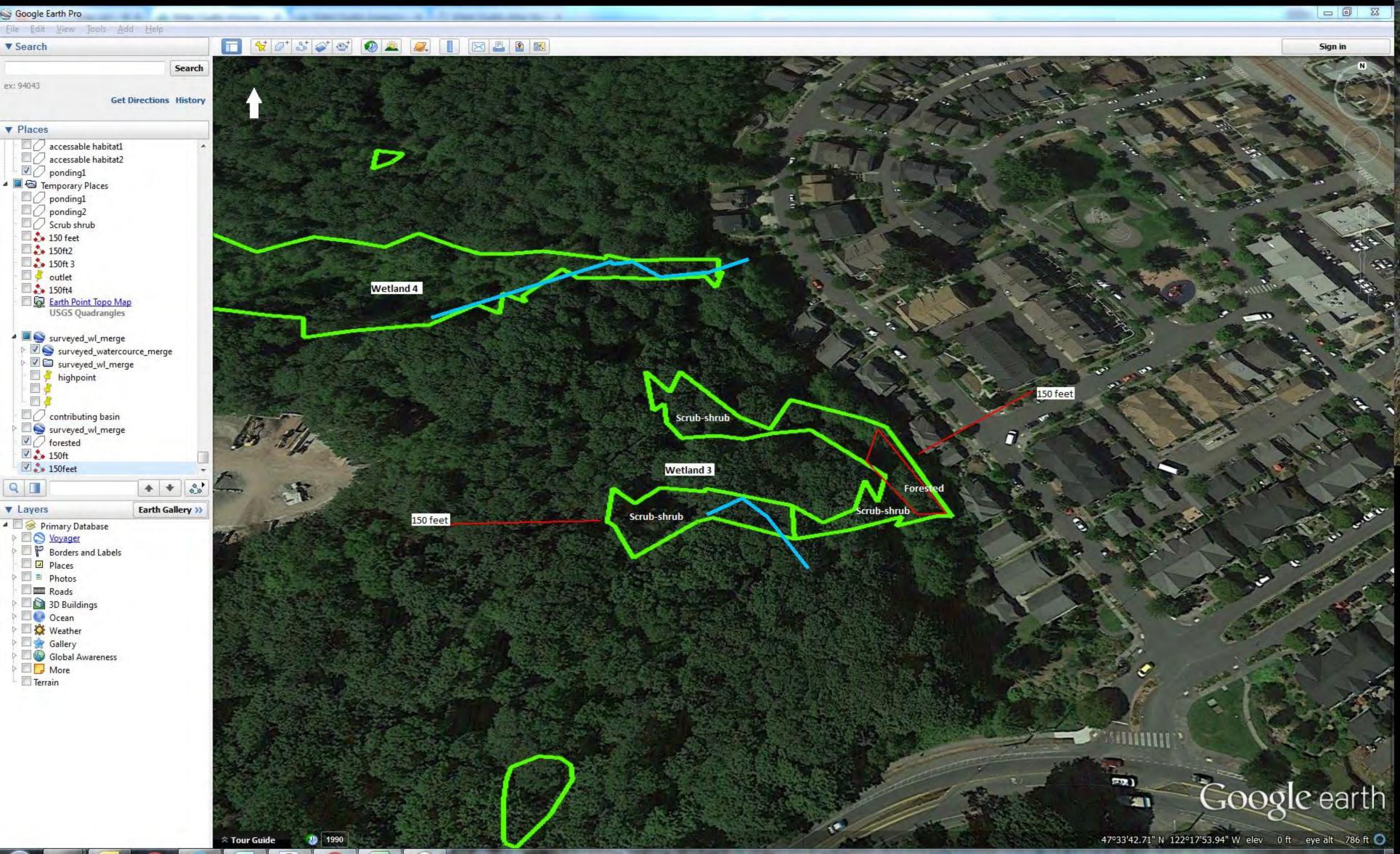
Snags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

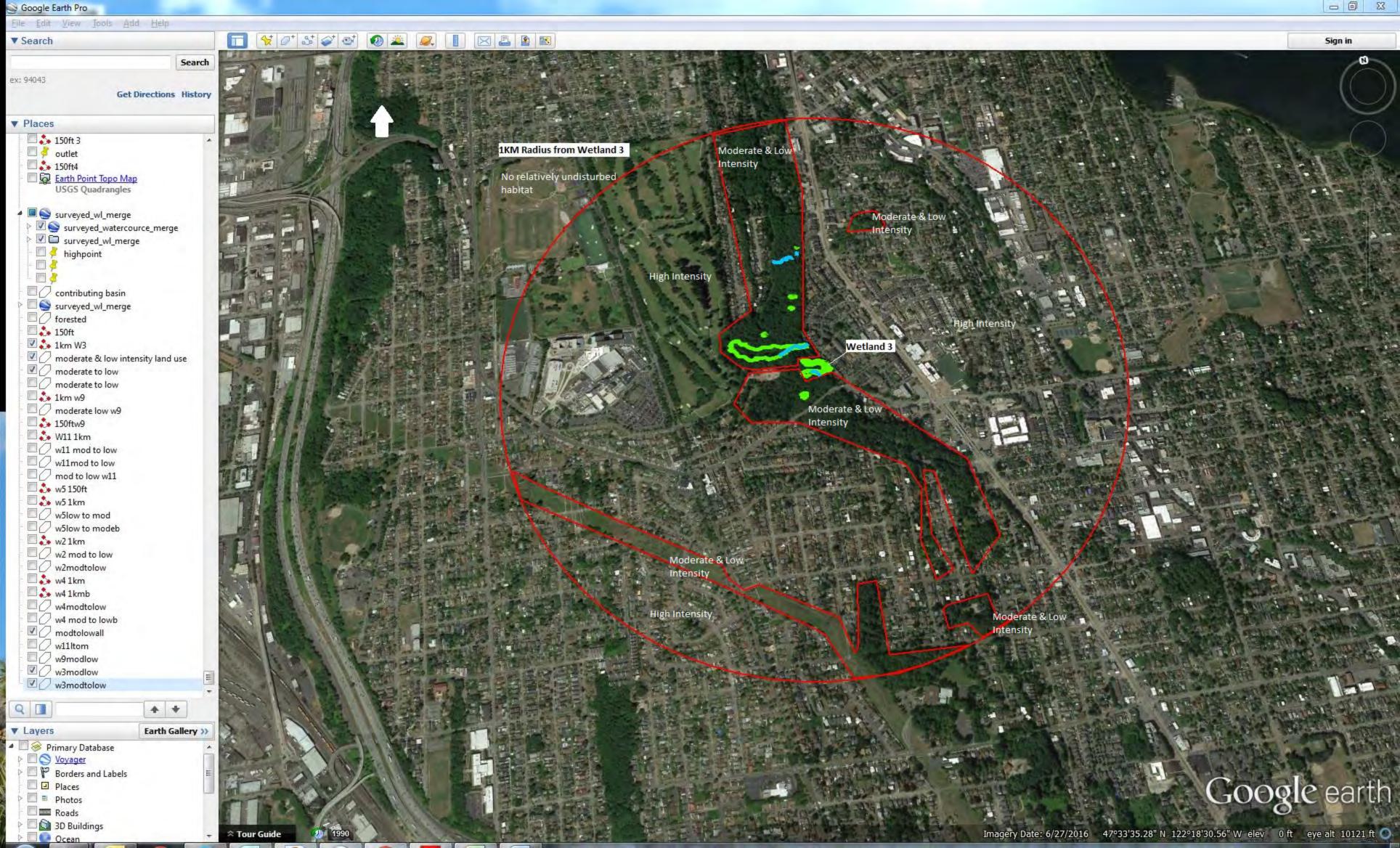
Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

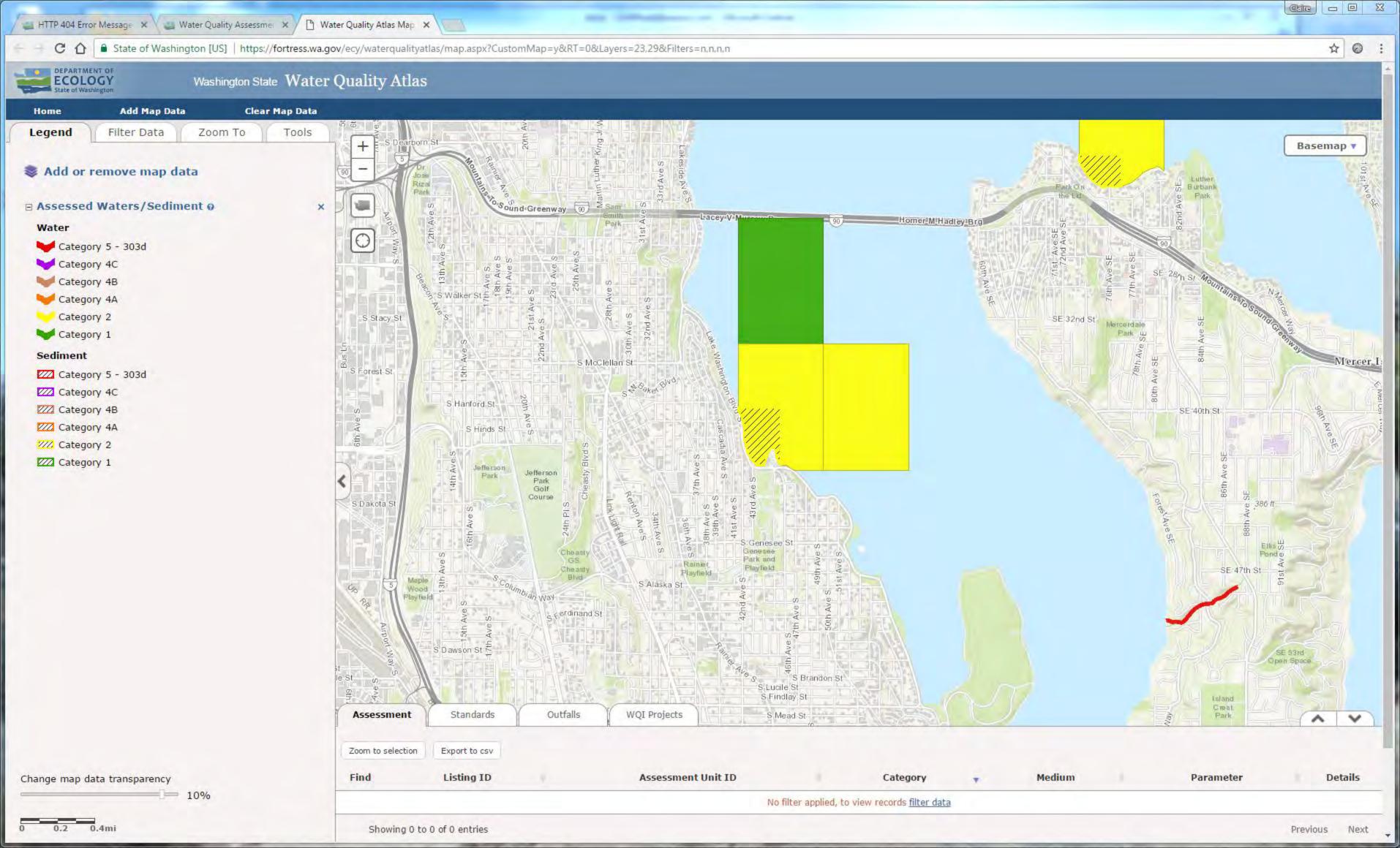
CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland	Туре	Category
	any criteria that apply to the wetland. List the category when the appropriate criteria are met.	
SC 1.0. E	Estuarine Wetlands	
	Does the wetland meet the following criteria for Estuarine wetlands? The dominant water regime is tidal,	
	Vegetated, and	
	With a salinity greater than 0.5 ppt	
	☐ Yes - Go to SC 1.1 ☐ No = Not an estuarine wetland	
SC 1.1.	Is the wetland within a National Wildlife Refuge, National Park, National Estuary	
	Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific	
	Reserve designated under WAC 332-30-151?	
	☐ Yes = Category I ☐ No - Go to SC 1.2	
SC 1.2.	Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
	The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing,	
	and has less than 10% cover of non-native plant species. (If non-native species are	
	Spartina, see page 25)	
	At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-	
	grazed or un-mowed grassland.	
	The wetland has at least two of the following features: tidal channels, depressions with	
	open water, or contiguous freshwater wetlands.	
	☐ Yes = Category I ☐ No = Category II	
	Vetlands of High Conservation Value (WHCV)	
SC 2.1.	Has the WA Department of Natural Resources updated their website to include the list	
	of Wetlands of High Conservation Value?	
	☐ Yes - Go to SC 2.2 ☑ No - Go to SC 2.3	
SC 2.2.	Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?	
SC 2.3.	☐ Yes = Category I ☐ No = Not WHCV	
30 2.3.	Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf	
	☐ Yes - Contact WNHP/WDNR and to SC 2.4 ☐ No = Not WHCV	
SC 2.4.	Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation	
00 2.4.	Value and listed it on their website?	
	☐ Yes = Category I ☐ No = Not WHCV	
SC 3.0. E		
	Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation	
	in bogs? Use the key below. If you answer YES you will still need to rate the	
	wetland based on its functions.	
SC 3.1.	Does an area within the wetland unit have organic soil horizons, either peats or mucks,	
	that compose 16 in or more of the first 32 in of the soil profile?	
	☐ Yes - Go to SC 3.3 ☐ No - Go to SC 3.2	
SC 3.2.	Does an area within the wetland unit have organic soils, either peats or mucks, that are	
	less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic	
	ash, or that are floating on top of a lake or pond?	
	☐ Yes - Go to SC 3.3 ☐ No = Is not a bog	
SC 3.3.	Does an area with peats or mucks have more than 70% cover of mosses at ground	
	level, AND at least a 30% cover of plant species listed in Table 4?	
	\square Yes = Is a Category I bog \square No - Go to SC 3.4 NOTE : If you are uncertain about the extent of mosses in the understory, you may	
	substitute that criterion by measuring the pH of the water that seeps into a hole dug at	
	least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present,	
	the wetland is a bog.	
SC 3.4.	Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir,	
	western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann	
	spruce, or western white pine, AND any of the species (or combination of species) listed	
	in Table 4 provide more than 30% of the cover under the canopy?	
	☐ Yes = Is a Category I bog ☐ No = Is not a bog	

SC 4.0	Forested Wetlands	
	Does the wetland have at least 1 contiguous acre of forest that meets one of these	
	criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you</i>	
	answer YES you will still need to rate the wetland based on its functions.	
_	forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac	
	(20 trees/ha) that are at least 200 years of age OR have a diameter at breast height	
	(dbh) of 32 in (81 cm) or more.	
	200 years old OR the species that make up the canopy have an average diameter (dbh)	
	exceeding 21 in (53 cm).	
	☐ Yes = Category I ☑ No = Not a forested wetland for this section	
SC 5.0	. Wetlands in Coastal Lagoons	
	Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?	
	' ' '	
	separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently,	
	rocks	
	The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to</i>	
	be measured near the bottom)	
	☐ Yes - Go to SC 5.1 ☑ No = Not a wetland in a coastal lagoon	
SC 5 1	Does the wetland meet all of the following three conditions?	
J 0.1		
	and has less than 20% cover of aggressive, opportunistic plant species (see list of	
	species on p. 100).	
	. ' '	
	grazed or un-mowed grassland.	
	The wetland is larger than ¹ / ₁₀ ac (4350 ft²)	
	☐ Yes = Category I ☐ No = Category II	
SC 6.0	. Interdunal Wetlands	
	Is the wetland west of the 1889 line (also called the Western Boundary of Upland	
	Ownership or WBUO)? If you answer yes you will still need to rate the wetland	
	based on its habitat functions.	
_	In practical terms that means the following geographic areas:	
	9	
L	·	
00 0 4	☐ Yes - Go to SC 6.1 ☑ No = Not an interdunal wetland for rating	
SC 6.1	<u> </u>	
	(rates H,H,H or H,H,M for the three aspects of function)?	
SC 6 2	☐ Yes = Category I ☐ No - Go to SC 6.2	
SC 6.2	. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? ☐ Yes = Category II ☐ No - Go to SC 6.3	
SC 6.3	5 , —	
0.0	1 ac?	
	☐ Yes = Category III ☐ No = Category IV	
Catego	ory of wetland based on Special Characteristics	
_	newared No for all types, enter "Not Applicable" on Summery Form	







LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
4672	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
4676	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
500005	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500006	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500007	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500038	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
12193	5	WASHINGTON LAKE	Bacteria	Water
12206	5	WASHINGTON LAKE	Bacteria	Water
43482	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
51591	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51592	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51593	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51706	5	WASHINGTON LAKE	4,4'-DDD	Tissue
51767	5	WASHINGTON LAKE	4,4'-DDE	Tissue
52642	5	WASHINGTON LAKE	Mercury	Tissue
52703	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52704	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52705	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52766	5	WASHINGTON LAKE	Total Chlordane	Tissue
52853	5	WASHINGTON LAKE	Total Phosphorus	Water
74460	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74461	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74775	5	WASHINGTON LAKE	Bacteria	Water
76477		WASHINGTON LAKE	Dieldrin	Tissue
76478	5	WASHINGTON LAKE	Dieldrin	Tissue
76479		WASHINGTON LAKE	Dieldrin	Tissue
77049		WASHINGTON LAKE	Chlordane	Tissue
77050		WASHINGTON LAKE	Chlordane	Tissue
77064	5	WASHINGTON LAKE	Chlordane	Tissue
500009	5	WASHINGTON LAKE	Sediment Bioassay	Sediment
500010		WASHINGTON LAKE	Sediment Bioassay	Sediment
8078		WASHINGTON LAKE	Lead	Water
11960	2	WASHINGTON LAKE	Ammonia-N	Water
11963	2	WASHINGTON LAKE	Ammonia-N	Water

11964 2 WASHINGTON LAKE Ammonia-N Water 11970 2 WASHINGTON LAKE Ammonia-N Water 12207 2 WASHINGTON LAKE Bacteria Water 12264 2 WASHINGTON LAKE Mercury Water 12272 2 WASHINGTON LAKE Mercury Water 12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE POlychlorinated Biphenyls (PCBs) Water 1237,8-TCDD TEQ Tissue 1238 1 WASHINGTON LAKE Bacteria Water 1239 1 WASHINGTON LAKE Bacteria Water 1230 1 WASHINGTON LAKE Bacteria Water 12344	LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
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51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Water 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Mercury Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12317	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
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51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12191 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12303 1 WASHINGTON LAKE Bacteria Water 124481 1 WASHINGTON LAKE Bacteria Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	51644	2	WASHINGTON LAKE	2,3,7,8-TCDD TEQ	Tissue
11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Bacteria Water 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Mercury Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	51645	2	WASHINGTON LAKE	2,3,7,8-TCDD TEQ	Tissue
11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Bacteria Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	51646	2	WASHINGTON LAKE	2,3,7,8-TCDD TEQ	Tissue
12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Hexachlor Epoxide Tissue	11972	1	WASHINGTON LAKE	Ammonia-N	Water
12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13500	11973	1	WASHINGTON LAKE	Ammonia-N	Water
12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13584 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13685 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12183	1	WASHINGTON LAKE	Bacteria	Water
12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12186	1	WASHINGTON LAKE	Bacteria	Water
12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12189	1	WASHINGTON LAKE	Bacteria	Water
12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 124481 1 WASHINGTON LAKE Toxaphene Tissue 12483 1 WASHINGTON LAKE Mercury Tissue 12484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 12485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12190	1	WASHINGTON LAKE	Bacteria	Water
12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12194	1	WASHINGTON LAKE	Bacteria	Water
12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12195	1	WASHINGTON LAKE	Bacteria	Water
12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12196	1	WASHINGTON LAKE	Bacteria	Water
12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12197	1	WASHINGTON LAKE	Bacteria	Water
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43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12201	1	WASHINGTON LAKE	Bacteria	Water
43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12202	1	WASHINGTON LAKE	Bacteria	Water
43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43481	1	WASHINGTON LAKE	Toxaphene	Tissue
43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43483	1	WASHINGTON LAKE	Mercury	Tissue
, ,	43484	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
43486 1 WASHINGTON LAKE Heptachlor Tissue	43485	1	WASHINGTON LAKE	Heptachlor Epoxide	Tissue
	43486	1	WASHINGTON LAKE	Heptachlor	Tissue

LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
43487	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
43488	1	WASHINGTON LAKE	Endrin	Tissue
43492	1	WASHINGTON LAKE	Beta-BHC	Tissue
43493	1	WASHINGTON LAKE	Alpha-BHC	Tissue
43494	1	WASHINGTON LAKE	4,4'-DDT	Tissue
43495	1	WASHINGTON LAKE	4,4'-DDE	Tissue
43496	1	WASHINGTON LAKE	4,4'-DDD	Tissue
51827	1	WASHINGTON LAKE	4,4'-DDT	Tissue
51949	1	WASHINGTON LAKE	Alpha-BHC	Tissue
52010	1	WASHINGTON LAKE	Beta-BHC	Tissue
52403	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
52464	1	WASHINGTON LAKE	Heptachlor	Tissue
52585	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
52854	1	WASHINGTON LAKE	Total Phosphorus	Water
52855	1	WASHINGTON LAKE	Total Phosphorus	Water
52856	1	WASHINGTON LAKE	Total Phosphorus	Water
52857	1	WASHINGTON LAKE	Total Phosphorus	Water
52858	1	WASHINGTON LAKE	Total Phosphorus	Water
52859	1	WASHINGTON LAKE	Total Phosphorus	Water
52860	1	WASHINGTON LAKE	Total Phosphorus	Water
52861	1	WASHINGTON LAKE	Total Phosphorus	Water
52862	1	WASHINGTON LAKE	Total Phosphorus	Water
52863	1	WASHINGTON LAKE	Total Phosphorus	Water
52864	1	WASHINGTON LAKE	Total Phosphorus	Water
52865		WASHINGTON LAKE	Total Phosphorus	Water
74484		WASHINGTON LAKE	4,4'-DDD	Tissue
74485		WASHINGTON LAKE	4,4'-DDD	Tissue
74772		WASHINGTON LAKE	Bacteria	Water
74776		WASHINGTON LAKE	Bacteria	Water
75112		WASHINGTON LAKE	4,4'-DDT	Tissue
75114		WASHINGTON LAKE	4,4'-DDT	Tissue
75221		WASHINGTON LAKE	Beta-BHC	Tissue
75222		WASHINGTON LAKE	Beta-BHC	Tissue
75309	1	WASHINGTON LAKE	Endrin	Tissue

LISTING_ID CATEGORY_20	14 WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
75310	1 WASHINGTON LAKE	Endrin	Tissue
75311	1 WASHINGTON LAKE	Endrin	Tissue
75400	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75401	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75402	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75403	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75486	1 WASHINGTON LAKE	Heptachlor	Tissue
75487	1 WASHINGTON LAKE	Heptachlor	Tissue
75563	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75564	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75565	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75645	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75646	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75791	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75792	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75793	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75794	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
77219	1 WASHINGTON LAKE	Toxaphene	Tissue
77220	1 WASHINGTON LAKE	Toxaphene	Tissue
77236	1 WASHINGTON LAKE	Toxaphene	Tissue
77243	1 WASHINGTON LAKE	Endosulfan	Tissue
78987	1 WASHINGTON LAKE	Endosulfan	Tissue
78988	1 WASHINGTON LAKE	Endosulfan	Tissue
78989	1 WASHINGTON LAKE	Endosulfan	Tissue
79488	1 WASHINGTON LAKE	Mercury	Tissue
79502	1 WASHINGTON LAKE	Mercury	Tissue

RATING SUMMARY – Western Washington

Name of wetland (or ID #):	Wetland 4	Date of site visit: 20-Oct-1	6
Rated by Claire Hoffman	Trained by Ecology? ☑ Yes □	No Date of training 2008	
HGM Class used for rating	Depressional & Slope Wetland has m	ultiple HGM classes? ☑ Yes ☐No)
	ot complete with out the figures requested (figures of base aerial photo/map Google earth	can be combined).	
OVERALL WETLAND CA	ATEGORYIII(based on functions ⊡or sp	pecial characteristics \Box)	
1. Category of wetland	d based on FUNCTIONS		
	Category I - Total score = 23 - 27	Score for each	
	Category II - Total score = 20 - 22	function based	
X	Category III - Total score = 16 - 19	on three	
	Category IV - Total score = 9 - 15	ratings	

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
	List app	ropriate rating	g (H, M, L)	
Site Potential	М	M	М	
Landscape Potential	Н	Н	L	
Value	Н	L	М	Total
Score Based on Ratings	8	6	5	19

function based on three ratings (order of ratings is not important) 9 = H, H, H 8 = H, H, M 7 = H, H, L 7 = H, M, M 6 = H, M, L 6 = M, M, M 5 = H, L, L 5 = M, M, L 4 = M, L, L 3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	Category
Estuarine	
Wetland of High Conservation Value	
Bog	
Mature Forest	
Old Growth Forest	
Coastal Lagoon	
Interdunal	
None of the above	х

Maps and Figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	1
Hydroperiods	D 1.4, H 1.2	1
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	1
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	1
Map of the contributing basin	D 4.3, D 5.3	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	5
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	3
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	4

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense , rigid trees, shrubs, and herbaceous plants	S 4.1	
(can be added to another figure)		
Boundary of area within 150 ft of the wetland (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	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)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

HGM Classification of Wetland in Western Washington

For questions 1 -7, the criteria described must apply to the entire unit being rated. If 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	e water levels in the entire unit usual	ly controlled by tides	except during floods?
√	NO - go to 2	☐ YES - the wetlan	d class is Tidal Fringe - go to 1.1
1.1	Is the salinity of the water during per	riods of annual low flo	ow below 0.5 ppt (parts per thousand)?
V		a Freshwater Tidal Fi Estuarine wetland a	☐ YES - Freshwater Tidal Fringe ringe use the forms for Riverine wetlands. and is not scored. This method cannot be
	ntire wetland unit is flat and precipitati ater and surface water runoff are NC	=	
V	NO - go to 3 If your wetland can be classified as		☐ YES - The wetland class is Flats the form for Depressional wetlands.
	he entire wetland unit meet all of the The vegetated part of the wetland is plants on the surface at any time of At least 30% of the open water area	on the shores of a be the year) at least 20 a	
√	NO - go to 4	☐ YES - The wetland	nd class is Lake Fringe (Lacustrine Fringe)
✓ ✓	he entire wetland unit meet all of the The wetland is on a slope (<i>slope cal</i> The water flows through the wetland It may flow subsurface, as sheetflow The water leaves the wetland witho	n be very gradual), I in one direction (uni v, or in a swale withou	
√	NO - go to 5		\square YES - The wetland class is Slope
	urface water does not pond in these ons or behind hummocks (depression	- -	ept occasionally in very small and shallow ameter and less than 1 ft deep).
	he entire wetland unit meet all of the The unit is in a valley, or stream cha from that stream or river, The overbank flooding occurs at lea	nnel, where it gets in	
V	NO - go to 6		☐ YES - The wetland class is Riverine
NOTE: TI	he Riverine unit can contain denress	ions that are filled wit	h water when the river is not flooding

Wetland name or number	W4
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	raphic depression in which water ponds, or is saturated to the surface, at any outlet, if present, is higher than the interior of the wetland.
☑ NO - go to 7	\square YES - The wetland class is Depressional
The unit does not pond surface water	a very flat area with no obvious depression and no overbank flooding? more than a few inches. The unit seems to be maintained by high 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.

NOTES and FIELD OBSERVATIONS:

Wetland is depressional and slope. Wetland is on a slope and water flows to the east into a culvert (outlet). There are also areas of ponding.

DEI REGGIONAL AND I LATO WETER	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 1	
☑ Wetland has an unconstricted, or slightly constricted, surface outlet		4	
that is permanently flowing	points =	1	
☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is	nainta —	4	
a permanently flowing ditch.	points =	I	
D 1.2. <u>The soil 2 in below the surface (or duff layer)</u> is true clay or true organic (use NRCS definitions).	Vac = 4 Na = 4	0	
,	Yes = 4 No =) 	
D 1.3. <u>Characteristics and distribution of persistent plants</u> (Emergent, Scrub-sh Forested Cowardin classes):	rub, ariu/or		
Wetland has persistent, ungrazed, plants > 95% of area	points =	5	
Wetland has persistent, ungrazed, plants > ½ of area	points = :	1 5	
Wetland has persistent, ungrazed plants > $^{1}/_{10}$ of area	points =		
· · · · · · · · · · · · · · · · · · ·	points =		
Wetland has persistent, ungrazed plants < ¹ / ₁₀ of area	points –	7	
D 1.4. Characteristics of seasonal ponding or inundation:	in manual		
This is the area that is ponded for at least 2 months. See description		4 0	
Area seasonally ponded is > ½ total area of wetland	points =		
Area seasonally ponded is > 1/4 total area of wetland	points = :		
Area seasonally ponded is < 1/4 total area of wetland Total for D 1 Add the points	points = in the boxes above		
Rating of Site Potential If score is:	Record the rating of		
	rtooora aro raarig c	are met page	
D 2.0. Does the landscape have the potential to support the water quality funct	on of the site?		
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No =		
		1	
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that			
	Yes = 1 No =	1	
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = Yes = 1 No =	1	
generate pollutants? D 2.3. Are there septic systems within 250 ft of the wetland? D 2.4. Are there other sources of pollutants coming into the wetland that are		1	
generate pollutants? D 2.3. Are there septic systems within 250 ft of the wetland? 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?	Yes = 1 No =	1 0 0	
generate pollutants? D 2.3. Are there septic systems within 250 ft of the wetland? D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1 - D 2.3? Source golf course; adjacent human disturbance & restoration	Yes = 1 No =	1 0 0	
generate pollutants? D 2.3. Are there septic systems within 250 ft of the wetland? D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1 - D 2.3? Source golf course; adjacent human disturbance & restoration Total for D 2 Add the points	Yes = 1 No = Yes = 1 No = in the boxes above	1 0 0 0 1 0 1	
generate pollutants? D 2.3. Are there septic systems within 250 ft of the wetland? D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1 - D 2.3? Source golf course; adjacent human disturbance & restoration	Yes = 1 No = Yes = 1 No = in the boxes above	1 0 0 0 1 0 1	
generate pollutants? D 2.3. Are there septic systems within 250 ft of the wetland? D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1 - D 2.3? Source golf course; adjacent human disturbance & restoration Total for D 2 Add the points Rating of Landscape Potential If score is: ☑ 3 or 4 = H ☐ 1 or 2 = M ☐ 0 = L	Yes = 1 No = Yes = 1 No = in the boxes above Record the rating of	1 0 0 0 1 0 2 3	
generate pollutants? D 2.3. Are there septic systems within 250 ft of the wetland? D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1 - D 2.3? Source golf course; adjacent human disturbance & restoration Total for D 2 Add the points Rating of Landscape Potential If score is: ☑ 3 or 4 = H ☐ 1 or 2 = M ☐ 0 = L D 3.0. Is the water quality improvement provided by the site valuable to society	Yes = 1 No = Yes = 1 No = in the boxes above Record the rating of	1 0 0 1 1 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1	
generate pollutants? D 2.3. Are there septic systems within 250 ft of the wetland? D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1 - D 2.3? Source golf course; adjacent human disturbance & restoration Total for D 2 Add the points Rating of Landscape Potential If score is: ☑ 3 or 4 = H ☐ 1 or 2 = M ☐ 0 = L 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,	Yes = 1 No = Yes = 1 No = in the boxes above Record the rating of	1 0 0 1 1 0 0 1 1 0 0 1 1 0 1 1 1 1 1 1	
generate pollutants? D 2.3. Are there septic systems within 250 ft of the wetland? D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1 - D 2.3? Source golf course; adjacent human disturbance & restoration Total for D 2 Add the points Rating of Landscape Potential If score is: ☑ 3 or 4 = H ☐ 1 or 2 = M ☐ 0 = L 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 = 1 Yes = 1 No = 1 in the boxes above Record the rating of 2 Yes = 1 No = 1	1 0 0 0 1 1 0 0 0 1 1 0 0 0 0 1 1 0	
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D 2.3. Are there septic systems within 250 ft of the wetland? D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1 - D 2.3? Source golf course; adjacent human disturbance & restoration Total for D 2 Add the points Rating of Landscape Potential If score is: ☑ 3 or 4 = H ☐ 1 or 2 = M ☐ 0 = L 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? D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the	Yes = 1 No = Yes = 1 No = in the boxes above Record the rating of Yes = 1 No = Yes = 1 No = 1 No	1 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
generate pollutants? D 2.3. Are there septic systems within 250 ft of the wetland? D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1 - D 2.3? Source golf course; adjacent human disturbance & restoration Total for D 2 Add the points Rating of Landscape Potential If score is: ☑ 3 or 4 = H ☐ 1 or 2 = M ☐ 0 = L 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? D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the D 3.3. Has the site been identified in a watershed or local plan as important	Yes = 1 No = Yes = 1 No = in the boxes above Record the rating of Yes = 1 No = Yes = 1 No = 1 No	1 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
generate pollutants? D 2.3. Are there septic systems within 250 ft of the wetland? D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1 - D 2.3? Source golf course; adjacent human disturbance & restoration Total for D 2 Add the points	Yes = 1 No = Yes = 1 No = in the boxes above Record the rating of Yes = 1 No = Yes = 1 No = 1 No	1 0 0 0 1 1 0 0 0 1 1 0 0 0 0 0 0 0 0 0	
D 2.3. Are there septic systems within 250 ft of the wetland? D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1 - D 2.3? Source golf course; adjacent human disturbance & restoration Total for D 2 Add the points Rating of Landscape Potential If score is: ☑ 3 or 4 = H □ 1 or 2 = M □ 0 = L 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? D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 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 = 1 No = 1 in the boxes above Record the rating of 2 in the second the rating of 3 in the boxes above 2 in the boxes above 2 in the boxes above 3 in the boxes above 2 in the boxes above 3 in the boxes	1 0 0 0 1 1 0 0 0 1 1 0 0 0 0 0 0 0 0 0	

DEPRESSIONAL AND FLATS WETLANDS	
Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degra	adation
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	0
constricted permanently flowing outlet points = 2	0
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch points = 1	
a permanently flowing ditch Wetland has an unconstricted, or slightly constricted, surface outlet	
that is permanently flowing points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of	
the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the	
deepest part.	
Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7	
Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5	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	
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	5
The area of the basin is 10 to 100 times the area of the unit points = 3	
The area of the basin is more than 100 times the area of the unit points = 0 ☐ Entire wetland is in the Flats class points = 5	
Total for D 4 Add the points in the boxes above	10
·	
	ine iirsi page
D 5.0. Does the landscape have the potential to support hydrologic function of the site?	4
D 5.1. Does the wetland unit receive stormwater discharges? Yes = 1 No = 0	1
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.)?	1
Yes = 1 No = 0	•
Total for D 5 Add the points in the boxes above	3
Rating of Landscape Potential If score is: 3 = H 1 or 2 = M 0 = L Record the rating on	
D 6.0. Are the hydrologic functions provided by the site valuable to society?	are met page
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	4
☑ • Surface flooding problems are in a sub-basin farther down-	1
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	
cannot reach areas that flood. Explain why points = 0 ☑ There are no problems with flooding downstream of the wetland. points = 0	
cannot reach areas that flood. Explain why There are no problems with flooding downstream of the wetland. D 6.2. Has the site been identified as important for flood storage or flood	0
cannot reach areas that flood. Explain why points = 0 ☑ There are no problems with flooding downstream of the wetland. points = 0	0

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 2 3 structures: points = 2 ☐ Emergent ☑ Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points - 1 ☑ Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: ☐ The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon 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 \(\frac{1}{4} \) ac to count (see text for descriptions of hydroperiods). ☐ Permanently flooded or inundated 4 or more types present: points = 3 ☑ Seasonally flooded or inundated 3 types present: points = 2 2 ☐ Occasionally flooded or inundated 2 types present: points = 1 1 types present: points = 0 Saturated only ☐ Permanently flowing stream or river in, or adjacent to, the wetland ☑ Seasonally flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland 2 points ☐ Freshwater tidal wetland 2 points 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 the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 1 If you counted: > 19 species points = 25 - 19 species points = 1< 5 species points = 0H 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. 3 None = 0 points **Low** = 1 point Moderate = 2 points All three diagrams in this row are **HIGH** = 3 points

H 1.5. Special habitat features:	
Check the habitat features that are present in the wetland. <i>The number of checks is the number</i>	
of points.	
☑ Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long)	
☑ Standing snags (dbh > 4 in) within the wetland	
☑ Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends	
at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at	
least 33 ft (10 m)	3
☐ 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 (<i>cut shrubs or trees</i>	
that have not yet weathered where wood is exposed)	
\square At least $1/4$ ac of thin-stemmed persistent plants or woody branches are present in areas	
that are permanently or seasonally inundated (structures for egg-laying by amphibians)	
☐ Invasive plants cover less than 25% of the wetland area in every stratum of plants (see	
H 1.1 for list of strata)	
Total for H 1 Add the points in the boxes above	11
Rating of Site Potential If Score is: 15 - 18 = H 7 - 14 = M 0 - 6 = L Record the rating on	the first page
H 2.0. Does the landscape have the potential to support the habitat function of the site?	
H 2.1 Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).	
Calculate:	
0 % undisturbed habitat + (10 % moderate & low intensity land uses / 2) = 5%	
If total accessible habitat is:	0
$> \frac{1}{3}$ (33.3%) of 1 km Polygon points = 3	
20 - 33% of 1 km Polygon points = 2	
10 - 19% of 1 km Polygon points = 1	
< 10 % of 1 km Polygon points = 0	
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.	
Calculate:	
0 % undisturbed habitat + (20 % moderate & low intensity land uses / 2) = 10%	
(4
Undisturbed habitat > 50% of Polygon points = 3	1
Undisturbed habitat 10 - 50% and in 1-3 patches points = 2	
Undisturbed habitat 10 - 50% and > 3 patches points = 1	
Undisturbed habitat < 10% of 1 km Polygon points = 0	
H 2.3 Land use intensity in 1 km Polygon: If	
> 50% of 1 km Polygon is high intensity land use points = (-2)	-2
≤ 50% of 1km Polygon is high intensity points = 0	
Total for H 2 Add the points in the boxes above	-1
Rating of Landscape Potential If Score is: 4 - 6 = H 1 - 3 = M 2 < 1 = L Record the rating on	the first page
	,
H 3.0. Is the habitat provided by the site valuable to society?	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose</i>	
only the highest score that applies to the wetland being rated.	
Site meets ANY of the following criteria: points = 2	
☐ It has 3 or more priority habitats within 100 m (see next page)	
☐ It provides habitat for Threatened or Endangered species (any plant	
or animal on the state or federal lists)	
☐ It is mapped as a location for an individual WDFW priority species	4
☐ It is a Wetland of High Conservation Value as determined by the	1
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) with in 100m points = 1	
Site does not meet any of the criteria above points = 0	
Rating of Value If Score is: 2 = H 2 1 = M 0 = L Record the rating on	the first page

Wetland Rating System for Western WA: 2014 Update Rating Form - Effective January 1, 2015

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.

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

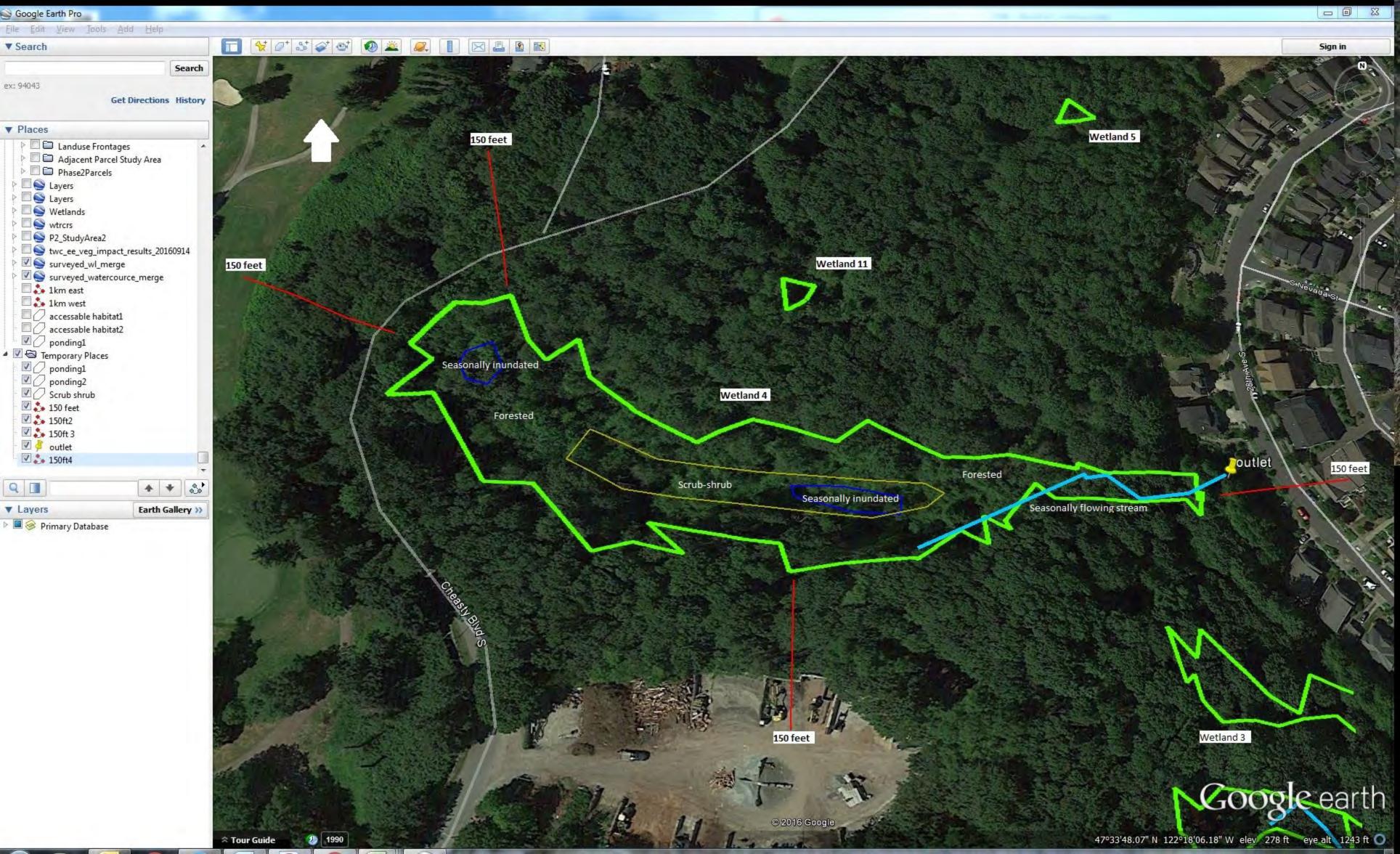
in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

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

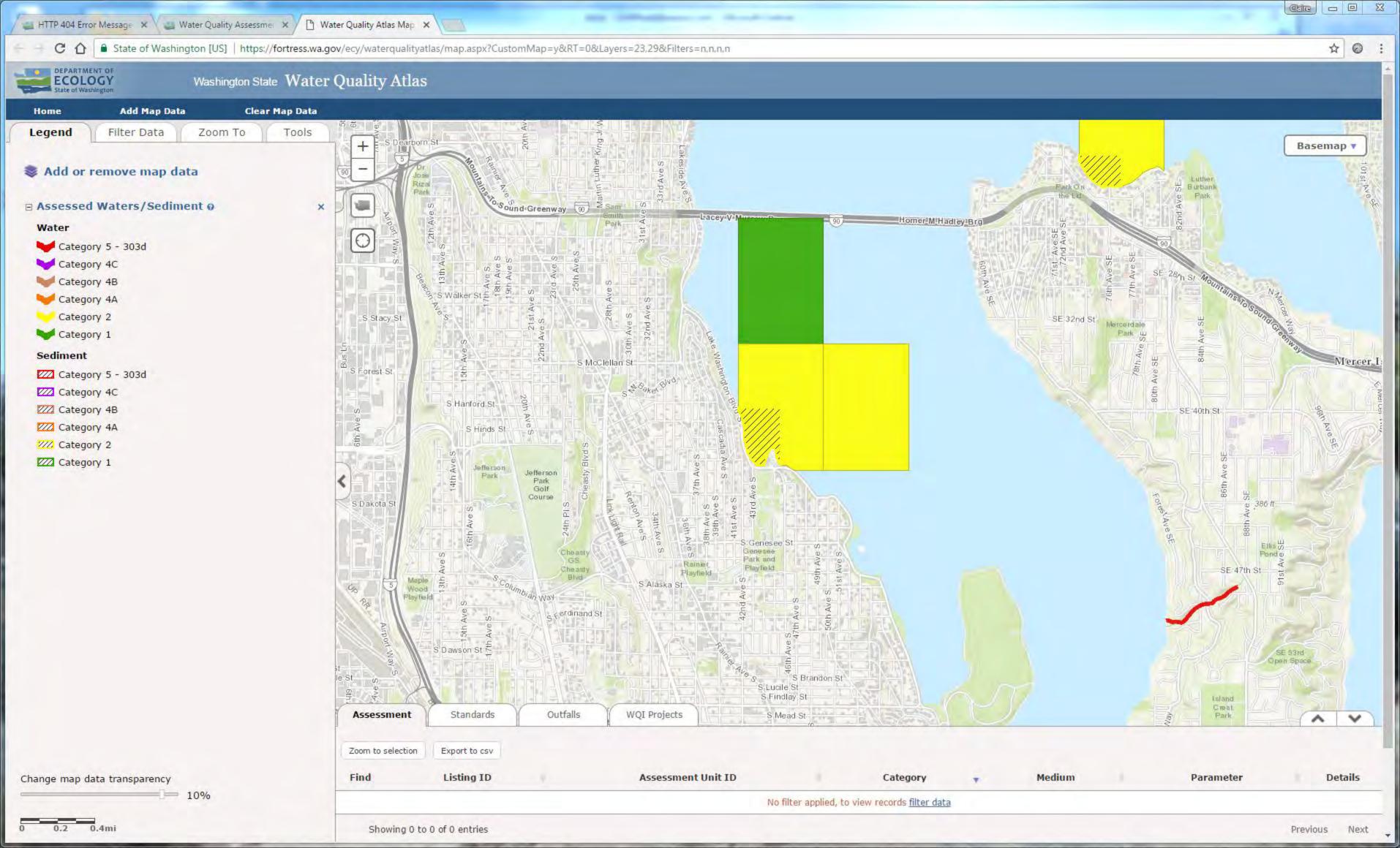
CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland	Туре	Category
	any criteria that apply to the wetland. List the category when the appropriate criteria are met.	
SC 1.0. E	Estuarine Wetlands	
	Does the wetland meet the following criteria for Estuarine wetlands? The dominant water regime is tidal,	
	Vegetated, and	
	With a salinity greater than 0.5 ppt	
	☐ Yes - Go to SC 1.1 ☐ No = Not an estuarine wetland	
SC 1.1.	Is the wetland within a National Wildlife Refuge, National Park, National Estuary	
	Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific	
	Reserve designated under WAC 332-30-151?	
	☐ Yes = Category I ☐ No - Go to SC 1.2	
SC 1.2.	Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
	The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing,	
	and has less than 10% cover of non-native plant species. (If non-native species are	
	Spartina, see page 25)	
	At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-	
	grazed or un-mowed grassland.	
	The wetland has at least two of the following features: tidal channels, depressions with	
	open water, or contiguous freshwater wetlands.	
	☐ Yes = Category I ☐ No = Category II	
	Vetlands of High Conservation Value (WHCV)	
SC 2.1.	Has the WA Department of Natural Resources updated their website to include the list	
	of Wetlands of High Conservation Value?	
	☐ Yes - Go to SC 2.2 ☑ No - Go to SC 2.3	
SC 2.2.	Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?	
SC 2.3.	☐ Yes = Category I ☐ No = Not WHCV	
30 2.3.	Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf	
	☐ Yes - Contact WNHP/WDNR and to SC 2.4 ☐ No = Not WHCV	
SC 2.4.	Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation	
00 2.4.	Value and listed it on their website?	
	☐ Yes = Category I ☐ No = Not WHCV	
SC 3.0. E		
	Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation	
	in bogs? Use the key below. If you answer YES you will still need to rate the	
	wetland based on its functions.	
SC 3.1.	Does an area within the wetland unit have organic soil horizons, either peats or mucks,	
	that compose 16 in or more of the first 32 in of the soil profile?	
	☐ Yes - Go to SC 3.3 ☐ No - Go to SC 3.2	
SC 3.2.	Does an area within the wetland unit have organic soils, either peats or mucks, that are	
	less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic	
	ash, or that are floating on top of a lake or pond?	
	☐ Yes - Go to SC 3.3 ☐ No = Is not a bog	
SC 3.3.	Does an area with peats or mucks have more than 70% cover of mosses at ground	
	level, AND at least a 30% cover of plant species listed in Table 4?	
	\square Yes = Is a Category I bog \square No - Go to SC 3.4 NOTE : If you are uncertain about the extent of mosses in the understory, you may	
	substitute that criterion by measuring the pH of the water that seeps into a hole dug at	
	least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present,	
	the wetland is a bog.	
SC 3.4.	Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir,	
	western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann	
	spruce, or western white pine, AND any of the species (or combination of species) listed	
	in Table 4 provide more than 30% of the cover under the canopy?	
	☐ Yes = Is a Category I bog ☐ No = Is not a bog	

SC 4.0.	orested Wetlands	
	Does the wetland have at least 1 contiguous acre of forest that meets one of these	
	criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you</i>	
	answer YES you will still need to rate the wetland based on its functions.	
	Old-growth forests (west of Cascade crest): Stands of at least two tree species,	
	forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac	
	(20 trees/ha) that are at least 200 years of age OR have a diameter at breast height	
	(dbh) of 32 in (81 cm) or more.	
	Mature forests (west of the Cascade Crest): Stands where the largest trees are 80-	
	200 years old OR the species that make up the canopy have an average diameter (dbh)	
	exceeding 21 in (53 cm).	
	3 ()	
	☐ Yes = Category I ☑ No = Not a forested wetland for this section	
SC 5.0. \	Wetlands in Coastal Lagoons	
	Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?	
	The wetland lies in a depression adjacent to marine waters that is wholly or partially	
	separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently,	
	rocks	
	The lagoon in which the wetland is located contains ponded water that is saline or	
	brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (needs to	
	be measured near the bottom)	
	☐ Yes - Go to SC 5.1 ☑ No = Not a wetland in a coastal lagoon	
SC 5. <u>1.</u> [Does the wetland meet all of the following three conditions?	
	The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing),	
	and has less than 20% cover of aggressive, opportunistic plant species (see list of	
	species on p. 100).	
	At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-	
	grazed or un-mowed grassland.	
	The wetland is larger than $^{1}/_{10}$ ac (4350 ft 2)	
	☐ Yes = Category I ☐ No = Category II	
SC 6.0. I	nterdunal Wetlands	
	Is the wetland west of the 1889 line (also called the Western Boundary of Upland	
	Ownership or WBUO)? If you answer yes you will still need to rate the wetland	
	based on its habitat functions.	
	In practical terms that means the following geographic areas:	
	Long Beach Peninsula: Lands west of SR 103	
	Grayland-Westport: Lands west of SR 105	
	Ocean Shores-Copalis: Lands west of SR 115 and SR 109	
	☐ Yes - Go to SC 6.1 ☑ No = Not an interdunal wetland for rating	
SC 6.1.	Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form	
	(rates H,H,H or H,H,M for the three aspects of function)?	
0005	☐ Yes = Category I ☐ No - Go to SC 6.2	
SC 6.2.	Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?	
0000	☐ Yes = Category II ☐ No - Go to SC 6.3	
SC 6.3.	Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and	
	1 ac?	
0 1	☐ Yes = Category III ☐ No = Category IV	
	y of wetland based on Special Characteristics	





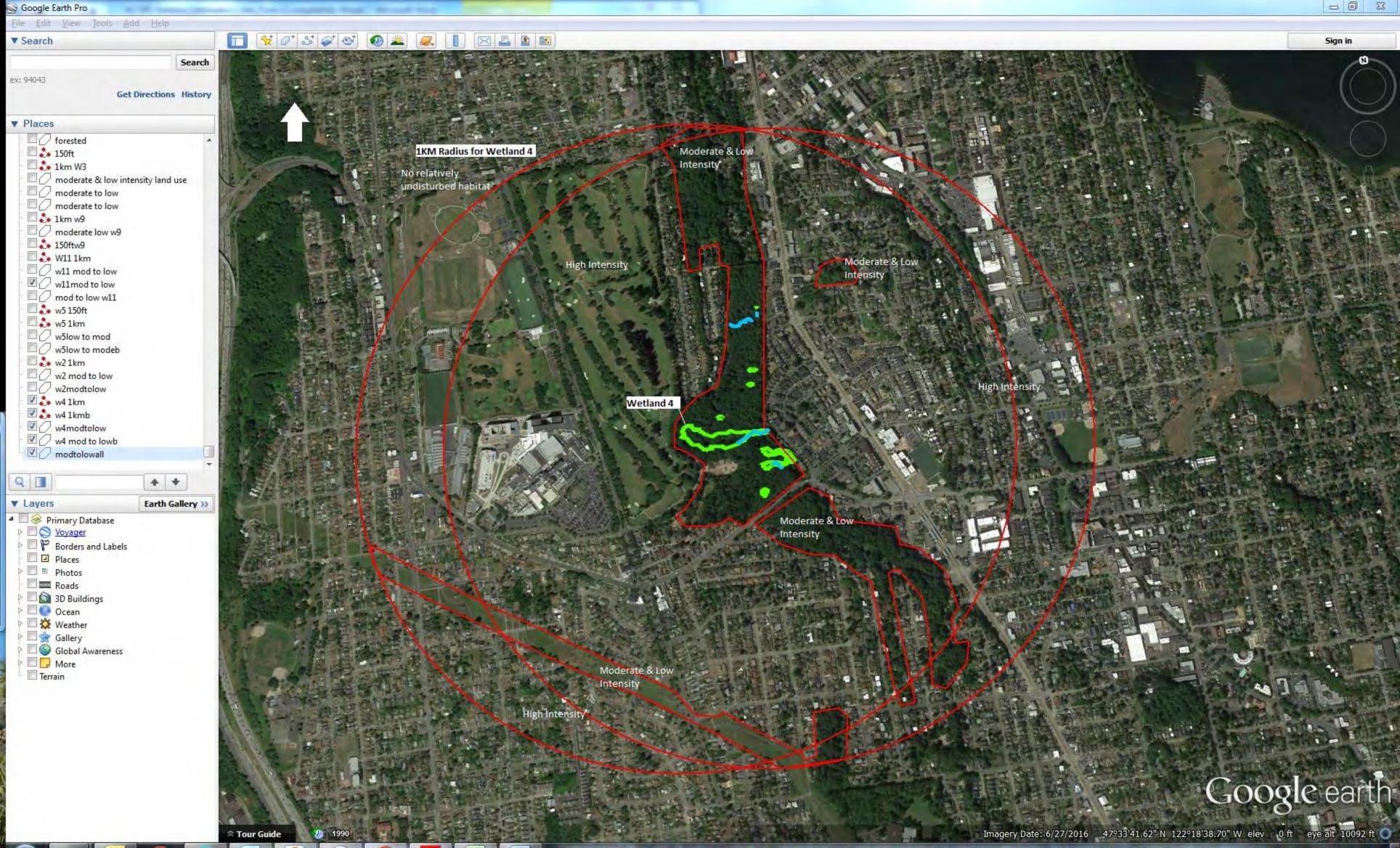


LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
4672	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
4676	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
500005	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500006	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500007	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500038	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
12193	5	WASHINGTON LAKE	Bacteria	Water
12206	5	WASHINGTON LAKE	Bacteria	Water
43482	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
51591	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51592	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51593	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51706	5	WASHINGTON LAKE	4,4'-DDD	Tissue
51767	5	WASHINGTON LAKE	4,4'-DDE	Tissue
52642	5	WASHINGTON LAKE	Mercury	Tissue
52703	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52704	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52705	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52766	5	WASHINGTON LAKE	Total Chlordane	Tissue
52853	5	WASHINGTON LAKE	Total Phosphorus	Water
74460	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74461	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74775	5	WASHINGTON LAKE	Bacteria	Water
76477		WASHINGTON LAKE	Dieldrin	Tissue
76478	5	WASHINGTON LAKE	Dieldrin	Tissue
76479		WASHINGTON LAKE	Dieldrin	Tissue
77049		WASHINGTON LAKE	Chlordane	Tissue
77050		WASHINGTON LAKE	Chlordane	Tissue
77064	5	WASHINGTON LAKE	Chlordane	Tissue
500009	5	WASHINGTON LAKE	Sediment Bioassay	Sediment
500010		WASHINGTON LAKE	Sediment Bioassay	Sediment
8078		WASHINGTON LAKE	Lead	Water
11960	2	WASHINGTON LAKE	Ammonia-N	Water
11963	2	WASHINGTON LAKE	Ammonia-N	Water

11964 2 WASHINGTON LAKE Ammonia-N Water 11970 2 WASHINGTON LAKE Ammonia-N Water 12207 2 WASHINGTON LAKE Bacteria Water 12264 2 WASHINGTON LAKE Mercury Water 12272 2 WASHINGTON LAKE Mercury Water 12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE POlychlorinated Biphenyls (PCBs) Water 1237,8-TCDD TEQ Tissue 1238 1 WASHINGTON LAKE Bacteria Water 1239 1 WASHINGTON LAKE Bacteria Water 1230 1 WASHINGTON LAKE Bacteria Water 12344	LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
12207 2 WASHINGTON LAKE Bacteria Water 12264 2 WASHINGTON LAKE Mercury Water Water 12272 2 WASHINGTON LAKE Mercury Water 12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Bacteria Water 12319 2 WASHINGTON LAKE Bacteria Water 12319 3 WASHINGTON LAKE Bacteria Water 12319 3 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 5 WASHINGTON LAKE Bacteria Water 12319 5 WASHINGTON LAKE Bacteria Water 12319 5 WASHINGTON LAKE Bacteria Water 12319 6 WASHINGTON LAKE Bacteria Water 12319 6 WASHINGTON LAKE Bacteria Water 12319 1 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE Bacteria Water 13348 1 WAS	11964	2	WASHINGTON LAKE	Ammonia-N	
12264 2 WASHINGTON LAKE 12272 2 WASHINGTON LAKE 12311 2 WASHINGTON LAKE 12312 2 WASHINGTON LAKE 12312 2 WASHINGTON LAKE 12313 2 WASHINGTON LAKE 12313 2 WASHINGTON LAKE 12314 2 WASHINGTON LAKE 12315 2 WASHINGTON LAKE 12315 2 WASHINGTON LAKE 12316 2 WASHINGTON LAKE 12317 2 WASHINGTON LAKE 12318 2 WASHINGTON LAKE 12319 2 WASHINGTON LAKE 12319 3 LWASHINGTON LAKE 11972 1 WASHINGTON LAKE 11972 1 WASHINGTON LAKE 11973 1 WASHINGTON LAKE 11973 1 WASHINGTON LAKE 11973 1 WASHINGTON LAKE 111973 1 WASHINGTON LAKE 111973 1 WASHINGTON LAKE 111973 1 WASHINGTON LAKE 111974 1 WASHINGTON LAKE 111975 1 WASHINGTON LAKE 111975 1 WASHINGTON LAKE 11199 1 WASHINGTON LAKE 11190 1 WASHINGTON LAKE	11970	2	WASHINGTON LAKE	Ammonia-N	Water
12272 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water Polychlorinated Biphenyls (PCBs)	12207	2	WASHINGTON LAKE	Bacteria	Water
12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12319 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12319 3 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 5 WASHINGTON LAKE Bacteria Water 12319 6 WASHINGTON LAKE Bacteria Water 12319 6 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE WASHINGTO	12264	2	WASHINGTON LAKE	Mercury	Water
12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 151645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12200	12272	2	WASHINGTON LAKE	Mercury	Water
12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 123645 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 13318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water Polychlorinated Bipheny	12311	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 151645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Tissue 143481 1 WASHINGTON LAKE Bacteria Tissue 143481 1 WASHINGTON LAKE Mercury Tissue 143484 1 WASHINGTON LAKE Mercury Tissue 143485 1 WASHINGTON LAKE Hexachlorobenzene Tissue 15sue 15	12312	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 151645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 123481 1 WASHINGTON LAKE Bacteria Tissue 12381 1 WASHINGTON LAKE Bacteria Tissue 12383 1 WASHINGTON LAKE Bacteria Tissue 12383 1 WASHINGTON LAKE Mercury Tissue 12384 1 WASH	12313	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Tissue 12483 1 WASHINGTON LAKE Bacteria Tissue 12483 1 WASHINGTON LAKE Bacteria Tissue 12484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 12504 1 WASHINGTON LAKE Hexachlorobenzene Tissue 12506 Tissu	12314	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12191 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12203 1 WASHINGTON LAKE Bacteria Water 12204 1 WASHINGTON LAKE Bacteria Tissue 12488 1 WASHINGTON LAKE Macteria Tissue 12488 1 WASHINGTON LAKE Mercury Tissue 12488 1 WASHINGTON LAKE Mercury Tissue 12506 1 WASHINGTON LAKE Mercury Tissue 12607 Tissue 12608 1 WASHINGTON LAKE Mercury Tissue 12709 Tissue 12709 Tissue 12709 Tissue 12709 Tissue 12709 Tissue 12709 Tissue	12315	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12191 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12203 1 WASHINGTON LAKE Bacteria Water 12204 1 WASHINGTON LAKE Bacteria Water 12205 1 WASHINGTON LAKE Bacteria Water 12206 1 WASHINGTON LAKE Bacteria Tissue 123481 1 WASHINGTON LAKE Bacteria Tissue 124483 1 WASHINGTON LAKE Mercury Tissue 124484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 124485 1 WASHINGTON LAKE Hexachlor Epoxide Tissue	12316	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Water 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Mercury Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12317	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Bacteria Water 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Mercury Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12318	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12191 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12303 1 WASHINGTON LAKE Bacteria Water 124481 1 WASHINGTON LAKE Bacteria Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	51644	2	WASHINGTON LAKE	2,3,7,8-TCDD TEQ	Tissue
11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Bacteria Water 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Mercury Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	51645	2	WASHINGTON LAKE	2,3,7,8-TCDD TEQ	Tissue
11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Bacteria Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	51646	2	WASHINGTON LAKE	2,3,7,8-TCDD TEQ	Tissue
12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Hexachlor Epoxide Tissue	11972	1	WASHINGTON LAKE	Ammonia-N	Water
12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13500	11973	1	WASHINGTON LAKE	Ammonia-N	Water
12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13584 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13685 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12183	1	WASHINGTON LAKE	Bacteria	Water
12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12186	1	WASHINGTON LAKE	Bacteria	Water
12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12189	1	WASHINGTON LAKE	Bacteria	Water
12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 124481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12190	1	WASHINGTON LAKE	Bacteria	Water
12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12194	1	WASHINGTON LAKE	Bacteria	Water
12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12195	1	WASHINGTON LAKE	Bacteria	Water
12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12196	1	WASHINGTON LAKE	Bacteria	Water
12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12197	1	WASHINGTON LAKE	Bacteria	Water
1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12200	1	WASHINGTON LAKE	Bacteria	Water
43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12201	1	WASHINGTON LAKE	Bacteria	Water
43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12202	1	WASHINGTON LAKE	Bacteria	Water
43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43481	1	WASHINGTON LAKE	Toxaphene	Tissue
43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43483	1	WASHINGTON LAKE	Mercury	Tissue
, ,	43484	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
43486 1 WASHINGTON LAKE Heptachlor Tissue	43485	1	WASHINGTON LAKE	Heptachlor Epoxide	Tissue
	43486	1	WASHINGTON LAKE	Heptachlor	Tissue

LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
43487	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
43488	1	WASHINGTON LAKE	Endrin	Tissue
43492	1	WASHINGTON LAKE	Beta-BHC	Tissue
43493	1	WASHINGTON LAKE	Alpha-BHC	Tissue
43494	1	WASHINGTON LAKE	4,4'-DDT	Tissue
43495	1	WASHINGTON LAKE	4,4'-DDE	Tissue
43496	1	WASHINGTON LAKE	4,4'-DDD	Tissue
51827	1	WASHINGTON LAKE	4,4'-DDT	Tissue
51949	1	WASHINGTON LAKE	Alpha-BHC	Tissue
52010	1	WASHINGTON LAKE	Beta-BHC	Tissue
52403	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
52464	1	WASHINGTON LAKE	Heptachlor	Tissue
52585	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
52854	1	WASHINGTON LAKE	Total Phosphorus	Water
52855	1	WASHINGTON LAKE	Total Phosphorus	Water
52856	1	WASHINGTON LAKE	Total Phosphorus	Water
52857	1	WASHINGTON LAKE	Total Phosphorus	Water
52858	1	WASHINGTON LAKE	Total Phosphorus	Water
52859	1	WASHINGTON LAKE	Total Phosphorus	Water
52860	1	WASHINGTON LAKE	Total Phosphorus	Water
52861	1	WASHINGTON LAKE	Total Phosphorus	Water
52862	1	WASHINGTON LAKE	Total Phosphorus	Water
52863	1	WASHINGTON LAKE	Total Phosphorus	Water
52864	1	WASHINGTON LAKE	Total Phosphorus	Water
52865		WASHINGTON LAKE	Total Phosphorus	Water
74484		WASHINGTON LAKE	4,4'-DDD	Tissue
74485		WASHINGTON LAKE	4,4'-DDD	Tissue
74772		WASHINGTON LAKE	Bacteria	Water
74776		WASHINGTON LAKE	Bacteria	Water
75112		WASHINGTON LAKE	4,4'-DDT	Tissue
75114		WASHINGTON LAKE	4,4'-DDT	Tissue
75221		WASHINGTON LAKE	Beta-BHC	Tissue
75222		WASHINGTON LAKE	Beta-BHC	Tissue
75309	1	WASHINGTON LAKE	Endrin	Tissue

LISTING_ID CATEGORY_20	14 WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
75310	1 WASHINGTON LAKE	Endrin	Tissue
75311	1 WASHINGTON LAKE	Endrin	Tissue
75400	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75401	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75402	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75403	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75486	1 WASHINGTON LAKE	Heptachlor	Tissue
75487	1 WASHINGTON LAKE	Heptachlor	Tissue
75563	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75564	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75565	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75645	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75646	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75791	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75792	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75793	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75794	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
77219	1 WASHINGTON LAKE	Toxaphene	Tissue
77220	1 WASHINGTON LAKE	Toxaphene	Tissue
77236	1 WASHINGTON LAKE	Toxaphene	Tissue
77243	1 WASHINGTON LAKE	Endosulfan	Tissue
78987	1 WASHINGTON LAKE	Endosulfan	Tissue
78988	1 WASHINGTON LAKE	Endosulfan	Tissue
78989	1 WASHINGTON LAKE	Endosulfan	Tissue
79488	1 WASHINGTON LAKE	Mercury	Tissue
79502	1 WASHINGTON LAKE	Mercury	Tissue



RATING SUMMARY – Western Washington

Name of wetland (or ID #):	Wetland 5		Date of site visit:	20-Oct-16
Rated by <u>Claire Hoffman</u>		Trained by Ecology? ☑ Yes ☐ No	Date of training	2008
HGM Class used for rating	Slope	Wetland has multip	le HGM classes? ☐ `	Yes ☑No
	ot complete with out of base aerial photo/n	the figures requested (figures can nap Google Earth	be combined).	
OVERALL WETLAND CA	TEGORY <u>IV</u>	(based on functions	al characteristics $\;\Box$)	
1. Category of wetland	based on FUNCTI	ONS		
	Category I - Total so	ore = 23 - 27	Score for each	
	Category II - Total s	core = 20 - 22	function based	
	Category III - Total s	score = 16 - 19	on three	
X	Category IV - Total s		ratings (order of ratings	

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
	List app	ropriate rating	g (H, M, L)	
Site Potential	L	М	L	
Landscape Potential	L	L	L	
Value	Н	M	М	Total
Score Based on Ratings	5	5	4	14

Score for each function based on three ratings (order of ratings is not important) 9 = H, H, H 8 = H, H, M 7 = H, H, L 7 = H, M, M 6 = H, M, L 6 = M, M, M 5 = H, L, L 5 = M, M, L 4 = M, L, L 3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	Category
Estuarine	
Wetland of High Conservation Value	
Bog	
Mature Forest	
Old Growth Forest	
Coastal Lagoon	
Interdunal	
None of the above	Х

Maps and Figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	1
Hydroperiods	H 1.2	1
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	1
Plant cover of dense , rigid trees, shrubs, and herbaceous plants	S 4.1	1
(can be added to another figure)		'
Boundary of area within 150 ft of the wetland (can be added to another figure)	S 2.1, S 5.1	1
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	2
polygons for accessible habitat and undisturbed habitat		2
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	3
Screen capture of list of TMDLs for WRIA in which unit is found (from web) S 3.3		4

HGM Classification of Wetland in Western Washington

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

 Are the water levels in the entire unit usually controlled by tides except during floods? 				
☑ NC) - go to 2	☐ YES - the wetla	nd class is Tidal Fringe - go to 1.1	
1.1 ls t	the salinity of the water during per	riods of annual low fl	ow below 0.5 ppt (parts per thousand)?	
If y If it		a Freshwater Tidal I Estuarine wetland	☐ YES - Freshwater Tidal Fringe Fringe use the forms for Riverine wetlands. and is not scored. This method cannot be	
	wetland unit is flat and precipitat r and surface water runoff are NC			
	our wetland can be classified as	a Flats wetland, use	☐ YES - The wetland class is Flats 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).				
☑ NC) - go to 4	☐ YES - The wetla	and 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. 				
□NC) - 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).				
☐ The	entire wetland unit meet all of the e unit is in a valley, or stream cha m that stream or river, e overbank flooding occurs at lea	annel, where it gets in	•	
) - go to 6		☐ YES - The wetland class is Riverine	
NOTF: The I	Riverine unit can contain denress	ions that are filled w	ith water when the river is not flooding	

, , ,	pression in which water ponds, or is saturated to the surface, at y outlet, if present, is higher than the interior of the wetland.
□ NO - go to 7	\square YES - The wetland class is Depressional
•	area with no obvious depression and no overbank flooding? n a few inches. The unit seems to be maintained by high itched, but has no obvious natural outlet.

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.

☐ **YES** - The wetland class is **Depressional**

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.

Wetland name or number

☐ NO - go to 8

SLOPE WETLANDS		
Water Quality Functions - Indicators that the site functions to im	prove water quality	
S 1.0. Does the site have the potential to improve water quality?	1 7	
S 1.1. Characteristics of the average slope of the wetland: (a 1% slope has a 1	ft vertical drop in	
elevation for every 100 ft of horizontal distance)	,	
Slope is 1% or less	points = 3	0
Slope is > 1% - 2%	points = 2	U
Slope is > 2% - 5%	points = 1	
Slope is greater than 5%	points = 0	
S 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic		0
(use NRCS definitions):	Yes = 3 No = 0	U
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollu		
Choose the points appropriate for the description that best fits the plants in the		
means you have trouble seeing the soil surface (>75% cover), and uncut mean	is not grazed or	
mowed and plants are higher than 6 in. Dense, uncut, herbaceous plants > 90% of the wetland area	points = 6	
Dense, uncut, herbaceous plants > ½ of area	points = 3	2
•	•	
Dense, woody, plants > ½ of area Dense, uncut, herbaceous plants > ¼ of area	points = 2 points = 1	
Does not meet any of the criteria above for plants	points = 0	
	in the boxes above	2
Rating of Site Potential If score is: 12 = H	Record the rating on	_
Rating of Site Potential if Score is 12 - 11 _ 0 - 11 - W	Necord the rating on	trie mst page
S 2.0. Does the landscape have the potential to support the water quality functi	on of the site?	
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in		0
land uses that generate pollutants?	Yes = 1 No = 0	O
S 2.2. Are there other sources of pollutants coming into the wetland that are		
not listed in question S 2.1?		0
Other Sources	Yes = 1 No = 0	
Total for S 2 Add the points	in the boxes above	0
Rating of Landscape Potential If score is: ☐1 - 2 = M ☐0 = L	Record the rating on	the first page
S 3.0. Is the water quality improvement provided by the site valuable to society	?	
S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river,		0
lake, or marine water that is on the 303(d) list?	Yes = 1 No = 0	0
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue?		1
At least one aquatic resource in the basin is on the 303(d) list.	Yes = 1 No = 0	1
S 3.3. Has the site been identified in a watershed or local plan as important for		
maintaining water quality? Answer YES if there is a TMDL for the basin in		2
which the unit is found?	Yes = 2 No = 0	
	103 - 2 110 - 0	
Total for S 3 Add the points	in the boxes above	3

SLOPE WETLANDS	
Hydrologic Functions - Indicators that the site functions to reduce flooding and stream e	erosion
S 4.0. Does the site have the potential to reduce flooding and stream erosion?	
S 4.1. Characteristics of plants that reduce the velocity of surface flows during storms: Choose	
the points appropriate for the description that best fits conditions in the wetland. Stems of plants	
should be thick enough (usually $> 1/8$ in), or dense enough, to remain erect during surface flows.	1
Dense, uncut, rigid plants cover > 90% of the area of the wetland points = 1	1
All other conditions points = 0	
Rating of Site Potential If score is: 1 = M 10 = L Record the rating of	n the first page
S 5.0. Does the landscape have the potential to support hydrologic functions of the site?	
S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land	0
uses or cover that generate excess surface runoff? Yes = 1 No = 0	
Rating of Landscape Potential If score is: 1 = M 0 = L Record the rating of	n the first page
S 6.0. Are the hydrologic functions provided by the site valuable to society?	
	-
S 6.1. Distance to the nearest areas downstream that have flooding problems:	
S 6.1. Distance to the nearest areas downstream that have flooding problems: The sub-basin immediately down-gradient of site has flooding	
The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or natural resources (e.g.,	1
The sub-basin immediately down-gradient of site has flooding	1
The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or natural resources (e.g.,	2
The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or natural resources (e.g., houses or salmon redds)	2 1
The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or natural resources (e.g., houses or salmon redds) Surface flooding problems are in a sub-basin farther down-gradient points = 1	2
The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or natural resources (e.g., houses or salmon redds) Surface flooding problems are in a sub-basin farther down-gradient No flooding problems anywhere downstream S 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2 No = 6	0
The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or natural resources (e.g., houses or salmon redds) Surface flooding problems are in a sub-basin farther down-gradient points = 1 No flooding problems anywhere downstream points = 1 S 6.2. Has the site been identified as important for flood storage or flood	0

NOTES and FIELD OBSERVATIONS:

Dense uncut rigid plants are blackberries, emergent plants are not dense

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 0 3 structures: points = 2 ☐ Emergent ☑ Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points - 1 ☐ Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: ☐ The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon 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 \(\frac{1}{4} \) ac to count (see text for descriptions of hydroperiods). ☐ Permanently flooded or inundated 4 or more types present: points = 3 ☐ Seasonally flooded or inundated 3 types present: points = 2 0 2 types present: points = 1 ☐ Occasionally flooded or inundated 1 types present: points = 0 ☑ Saturated only ☐ Permanently flowing stream or river in, or adjacent to, the wetland ☐ Seasonally flowing stream in, or adjacent to, the wetland ☐ Lake Fringe wetland 2 points ☐ Freshwater tidal wetland 2 points 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 the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 1 If you counted: > 19 species points = 25 - 19 species points = 1< 5 species points = 0H 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. 0 None = 0 points **Low** = 1 point Moderate = 2 points All three diagrams in this row are **HIGH** = 3 points

H 1.5. Special habitat features:				
Check the habitat features that are present in the wetland. <i>The number of checks is the number</i>				
of points.				
\square Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long)				
☐ Standing snags (dbh > 4 in) within the wetland				
☐ Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends				
at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at	0			
least 33 ft (10 m) ☐ Stable steep banks of fine material that might be used by beaver or muskrat for denning	0			
(> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees</i>				
that have not yet weathered where wood is exposed) ☐ At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas				
that are permanently or seasonally inundated (structures for egg-laying by amphibians)				
☐ Invasive plants cover less than 25% of the wetland area in every stratum of plants (see				
H 1.1 for list of strata)				
Total for H 1 Add the points in the boxes above	1			
Rating of Site Potential If Score is: 15 - 18 = H 7 - 14 = M 0 - 6 = L Record the rating on	the first page			
Training of Otte Fotential in Good 18. 10 - 10 - 11 17 - 14 - 11 10 - 0 - 0 - 1 10 - 10 10 10 10 10 10 10 10 10 10 10 10 10	the mat page			
H 2.0. Does the landscape have the potential to support the habitat function of the site?				
H 2.1 Accessible habitat (include only habitat that directly abuts wetland unit).				
Calculate:				
0 % undisturbed habitat + (10 % moderate & low intensity land uses / 2) = 5%				
<u> </u>				
If total accessible habitat is:	0			
$> \frac{1}{3}$ (33.3%) of 1 km Polygon points = 3	·			
20 - 33% of 1 km Polygon $20 - 33% of 1 km Polygon$ $20 - 33% of 1 km Polygon$				
,				
10 - 19% of 1 km Polygon points = 1 < 10 % of 1 km Polygon points = 0				
< 10 % of 1 km Polygon points = 0 H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.				
Calculate:				
0 % undisturbed habitat + (20 % moderate & low intensity land uses / 2) = 10%				
// dilidisturbed liabitat + (
Undisturbed habitat > 50% of Polygon points = 3	1			
Undisturbed habitat 10 - 50% and in 1-3 patches points = 2				
Undisturbed habitat 10 - 50% and > 3 patches points = 1				
Undisturbed habitat < 10% of 1 km Polygon points = 0				
H 2.3 Land use intensity in 1 km Polygon: If				
> 50% of 1 km Polygon is high intensity land use points = (-2)	-2			
≤ 50% of 1km Polygon is high intensity points = 0	-2			
Total for H 2 Add the points in the boxes above	-1			
Rating of Landscape Potential If Score is: 4-6=H 1-3=M <a> < 1 = L Record the rating on	=			
Taking of Landscape Potential in Score is 4-0-11 1-3-W 1-1-L Necord the rating on	the mst page			
H 3.0. Is the habitat provided by the site valuable to society?				
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose</i>				
only the highest score that applies to the wetland being rated.				
Site meets ANY of the following criteria: points = 2				
☐ It has 3 or more priority habitats within 100 m (see next page)				
☐ It provides habitat for Threatened or Endangered species (any plant				
or animal on the state or federal lists)				
☐ It is mapped as a location for an individual WDFW priority species				
☐ It is a Wetland of High Conservation Value as determined by the	1			
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) with in 100m points = 1				
Site does not meet any of the criteria above points = 0				
Rating of Value If Score is: 2 = H 1 = M 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

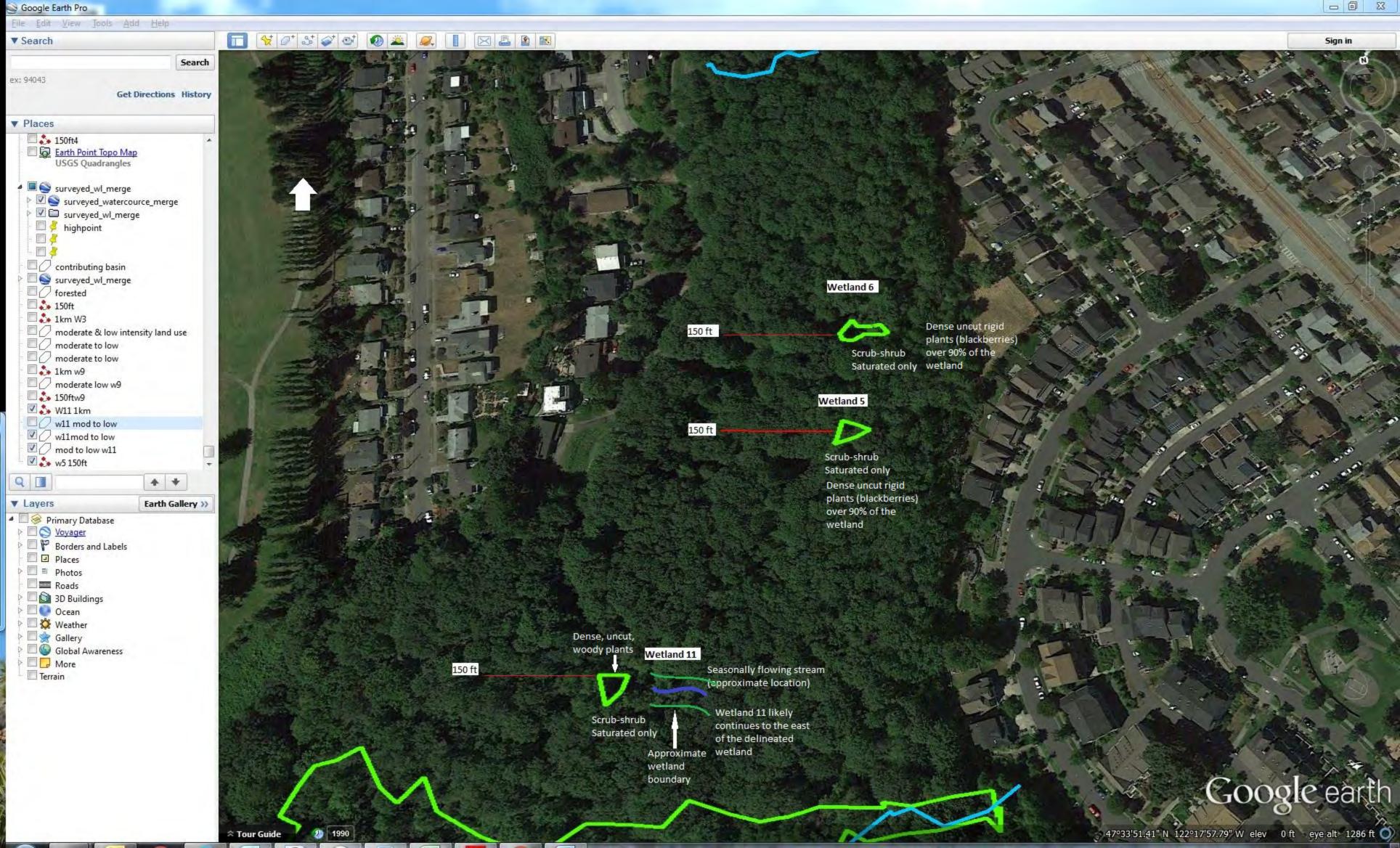
Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

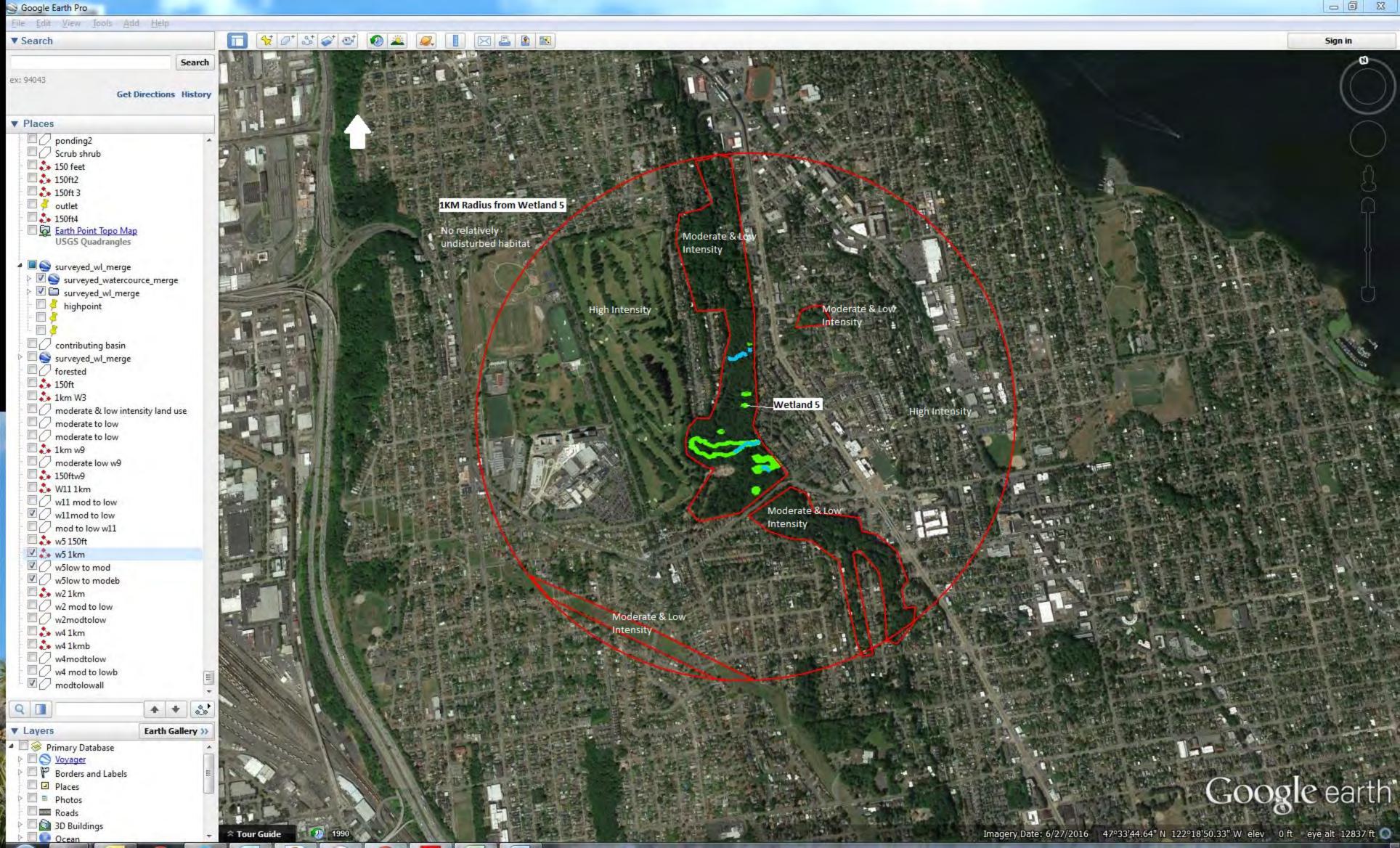
in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

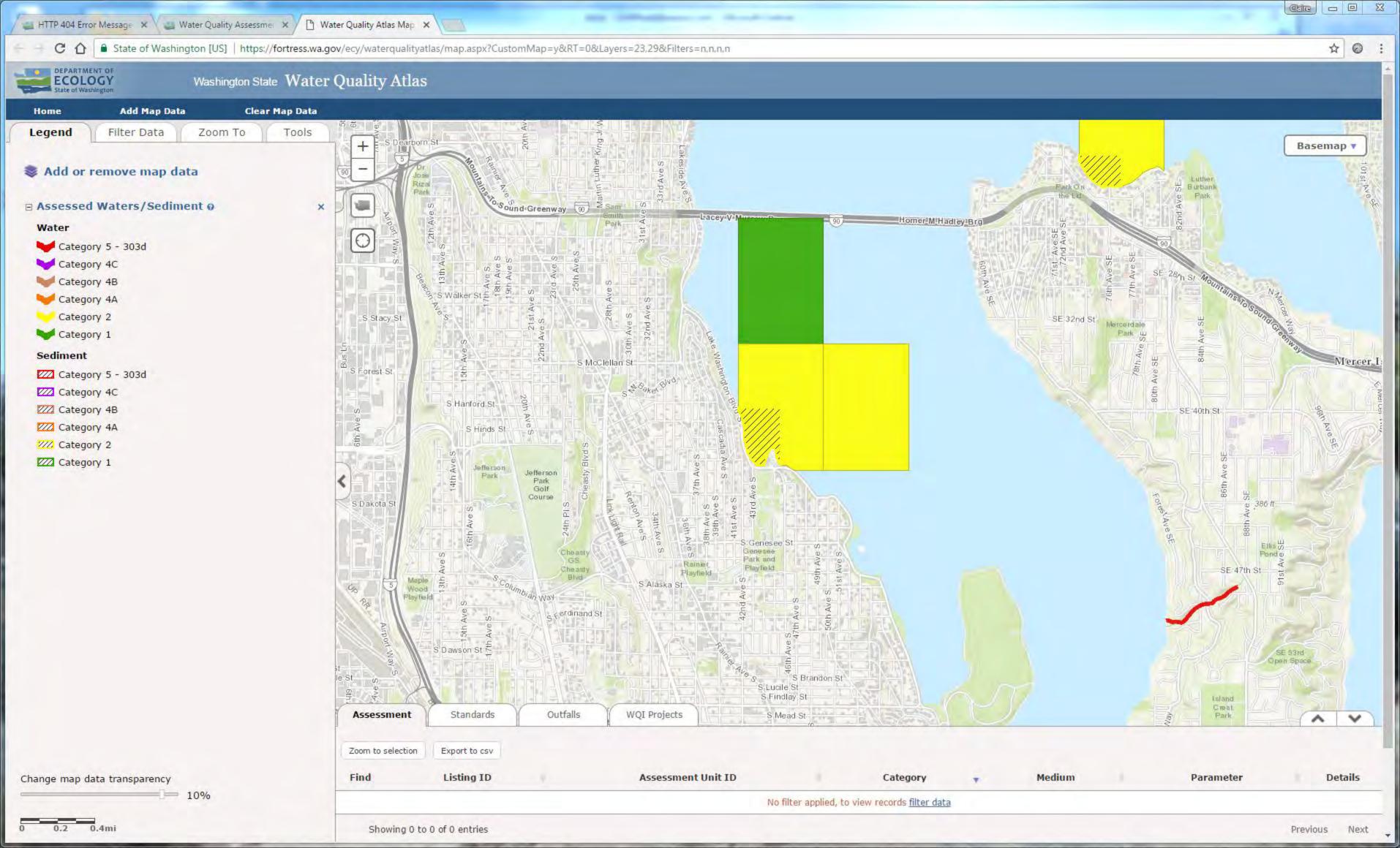
CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland	Туре	Category
	any criteria that apply to the wetland. List the category when the appropriate criteria are met.	
SC 1.0. E	Estuarine Wetlands	
	Does the wetland meet the following criteria for Estuarine wetlands? The dominant water regime is tidal,	
	Vegetated, and	
	With a salinity greater than 0.5 ppt	
	☐ Yes - Go to SC 1.1 ☐ No = Not an estuarine wetland	
SC 1.1.	Is the wetland within a National Wildlife Refuge, National Park, National Estuary	
	Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific	
	Reserve designated under WAC 332-30-151?	
	☐ Yes = Category I ☐ No - Go to SC 1.2	
SC 1.2.	Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
	The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing,	
	and has less than 10% cover of non-native plant species. (If non-native species are	
	Spartina, see page 25)	
	At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-	
	grazed or un-mowed grassland.	
	The wetland has at least two of the following features: tidal channels, depressions with	
	open water, or contiguous freshwater wetlands.	
	☐ Yes = Category I ☐ No = Category II	
	Vetlands of High Conservation Value (WHCV)	
SC 2.1.	Has the WA Department of Natural Resources updated their website to include the list	
	of Wetlands of High Conservation Value?	
	☐ Yes - Go to SC 2.2 ☑ No - Go to SC 2.3	
SC 2.2.	Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?	
SC 2.3.	☐ Yes = Category I ☐ No = Not WHCV	
30 2.3.	Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf	
	☐ Yes - Contact WNHP/WDNR and to SC 2.4 ☐ No = Not WHCV	
SC 2.4.	Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation	
00 2.4.	Value and listed it on their website?	
	☐ Yes = Category I ☐ No = Not WHCV	
SC 3.0. E		
	Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation	
	in bogs? Use the key below. If you answer YES you will still need to rate the	
	wetland based on its functions.	
SC 3.1.	Does an area within the wetland unit have organic soil horizons, either peats or mucks,	
	that compose 16 in or more of the first 32 in of the soil profile?	
	☐ Yes - Go to SC 3.3 ☐ No - Go to SC 3.2	
SC 3.2.	Does an area within the wetland unit have organic soils, either peats or mucks, that are	
	less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic	
	ash, or that are floating on top of a lake or pond?	
	☐ Yes - Go to SC 3.3 ☐ No = Is not a bog	
SC 3.3.	Does an area with peats or mucks have more than 70% cover of mosses at ground	
	level, AND at least a 30% cover of plant species listed in Table 4?	
	\square Yes = Is a Category I bog \square No - Go to SC 3.4 NOTE : If you are uncertain about the extent of mosses in the understory, you may	
	substitute that criterion by measuring the pH of the water that seeps into a hole dug at	
	least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present,	
	the wetland is a bog.	
SC 3.4.	Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir,	
	western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann	
	spruce, or western white pine, AND any of the species (or combination of species) listed	
	in Table 4 provide more than 30% of the cover under the canopy?	
	☐ Yes = Is a Category I bog ☐ No = Is not a bog	

SC 4.0. I	orested Wetlands	
	Does the wetland have at least 1 contiguous acre of forest that meets one of these	
	criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you</i>	
	answer YES you will still need to rate the wetland based on its functions.	
	Old-growth forests (west of Cascade crest): Stands of at least two tree species,	
	forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac	
	(20 trees/ha) that are at least 200 years of age OR have a diameter at breast height	
	(dbh) of 32 in (81 cm) or more.	
	Mature forests (west of the Cascade Crest): Stands where the largest trees are 80-	
	200 years old OR the species that make up the canopy have an average diameter (dbh)	
	exceeding 21 in (53 cm).	
	☐ Yes = Category I ☑ No = Not a forested wetland for this section	
SC 5.0. \	Wetlands in Coastal Lagoons	
	Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?	
	The wetland lies in a depression adjacent to marine waters that is wholly or partially	
	separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently,	
	rocks	
	The lagoon in which the wetland is located contains ponded water that is saline or	
	brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (needs to	
	be measured near the bottom)	
	☐ Yes - Go to SC 5.1 ☐ No = Not a wetland in a coastal lagoon	
	Does the wetland meet all of the following three conditions?	
	The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing),	
	and has less than 20% cover of aggressive, opportunistic plant species (see list of	
	species on p. 100).	
	At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-	
	grazed or un-mowed grassland.	
	The wetland is larger than $^{1}/_{10}$ ac (4350 ft ²)	
	☐ Yes = Category I ☐ No = Category II	
SC 6.0. I	nterdunal Wetlands	
	Is the wetland west of the 1889 line (also called the Western Boundary of Upland	
	Ownership or WBUO)? If you answer yes you will still need to rate the wetland	
	based on its habitat functions.	
	In practical terms that means the following geographic areas:	
	Long Beach Peninsula: Lands west of SR 103	
	Grayland-Westport: Lands west of SR 105	
	Ocean Shores-Copalis: Lands west of SR 115 and SR 109	
0004	☐ Yes - Go to SC 6.1 ☑ No = Not an interdunal wetland for rating	
SC 6.1.	Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form	
	(rates H,H,H or H,H,M for the three aspects of function)?	
	☐ Yes = Category I ☐ No - Go to SC 6.2	
SC 6.2.	Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?	
0000	☐ Yes = Category II ☐ No - Go to SC 6.3	
SC 6.3.	Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and	
	1 ac?	
Cotoss	☐ Yes = Category III ☐ No = Category IV	
	y of wetland based on Special Characteristics	







LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
4672	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
4676	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
500005	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500006	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500007	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500038	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
12193	5	WASHINGTON LAKE	Bacteria	Water
12206	5	WASHINGTON LAKE	Bacteria	Water
43482	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
51591	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51592	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51593	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51706	5	WASHINGTON LAKE	4,4'-DDD	Tissue
51767	5	WASHINGTON LAKE	4,4'-DDE	Tissue
52642	5	WASHINGTON LAKE	Mercury	Tissue
52703	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52704	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52705	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52766	5	WASHINGTON LAKE	Total Chlordane	Tissue
52853	5	WASHINGTON LAKE	Total Phosphorus	Water
74460	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74461	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74775	5	WASHINGTON LAKE	Bacteria	Water
76477		WASHINGTON LAKE	Dieldrin	Tissue
76478	5	WASHINGTON LAKE	Dieldrin	Tissue
76479		WASHINGTON LAKE	Dieldrin	Tissue
77049		WASHINGTON LAKE	Chlordane	Tissue
77050		WASHINGTON LAKE	Chlordane	Tissue
77064	5	WASHINGTON LAKE	Chlordane	Tissue
500009	5	WASHINGTON LAKE	Sediment Bioassay	Sediment
500010		WASHINGTON LAKE	Sediment Bioassay	Sediment
8078		WASHINGTON LAKE	Lead	Water
11960	2	WASHINGTON LAKE	Ammonia-N	Water
11963	2	WASHINGTON LAKE	Ammonia-N	Water

11964 2 WASHINGTON LAKE Ammonia-N Water 11970 2 WASHINGTON LAKE Ammonia-N Water 12207 2 WASHINGTON LAKE Bacteria Water 12264 2 WASHINGTON LAKE Mercury Water 12272 2 WASHINGTON LAKE Mercury Water 12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE POlychlorinated Biphenyls (PCBs) Water 1237,8-TCDD TEQ Tissue 1238 1 WASHINGTON LAKE Bacteria Water 1239 1 WASHINGTON LAKE Bacteria Water 1230 1 WASHINGTON LAKE Bacteria Water 12344	LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
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12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12189	1	WASHINGTON LAKE	Bacteria	Water
12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 124481 1 WASHINGTON LAKE Toxaphene Tissue 12483 1 WASHINGTON LAKE Mercury Tissue 12484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 12485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12190	1	WASHINGTON LAKE	Bacteria	Water
12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12194	1	WASHINGTON LAKE	Bacteria	Water
12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12195	1	WASHINGTON LAKE	Bacteria	Water
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1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12200	1	WASHINGTON LAKE	Bacteria	Water
43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12201	1	WASHINGTON LAKE	Bacteria	Water
43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12202	1	WASHINGTON LAKE	Bacteria	Water
43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43481	1	WASHINGTON LAKE	Toxaphene	Tissue
43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43483	1	WASHINGTON LAKE	Mercury	Tissue
· · · ·	43484	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
43486 1 WASHINGTON LAKE Heptachlor Tissue	43485	1	WASHINGTON LAKE	Heptachlor Epoxide	Tissue
	43486	1	WASHINGTON LAKE	Heptachlor	Tissue

LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
43487	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
43488	1	WASHINGTON LAKE	Endrin	Tissue
43492	1	WASHINGTON LAKE	Beta-BHC	Tissue
43493	1	WASHINGTON LAKE	Alpha-BHC	Tissue
43494	1	WASHINGTON LAKE	4,4'-DDT	Tissue
43495	1	WASHINGTON LAKE	4,4'-DDE	Tissue
43496	1	WASHINGTON LAKE	4,4'-DDD	Tissue
51827	1	WASHINGTON LAKE	4,4'-DDT	Tissue
51949	1	WASHINGTON LAKE	Alpha-BHC	Tissue
52010	1	WASHINGTON LAKE	Beta-BHC	Tissue
52403	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
52464	1	WASHINGTON LAKE	Heptachlor	Tissue
52585	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
52854	1	WASHINGTON LAKE	Total Phosphorus	Water
52855	1	WASHINGTON LAKE	Total Phosphorus	Water
52856	1	WASHINGTON LAKE	Total Phosphorus	Water
52857	1	WASHINGTON LAKE	Total Phosphorus	Water
52858	1	WASHINGTON LAKE	Total Phosphorus	Water
52859	1	WASHINGTON LAKE	Total Phosphorus	Water
52860	1	WASHINGTON LAKE	Total Phosphorus	Water
52861	1	WASHINGTON LAKE	Total Phosphorus	Water
52862	1	WASHINGTON LAKE	Total Phosphorus	Water
52863	1	WASHINGTON LAKE	Total Phosphorus	Water
52864	1	WASHINGTON LAKE	Total Phosphorus	Water
52865		WASHINGTON LAKE	Total Phosphorus	Water
74484		WASHINGTON LAKE	4,4'-DDD	Tissue
74485		WASHINGTON LAKE	4,4'-DDD	Tissue
74772		WASHINGTON LAKE	Bacteria	Water
74776		WASHINGTON LAKE	Bacteria	Water
75112		WASHINGTON LAKE	4,4'-DDT	Tissue
75114		WASHINGTON LAKE	4,4'-DDT	Tissue
75221		WASHINGTON LAKE	Beta-BHC	Tissue
75222		WASHINGTON LAKE	Beta-BHC	Tissue
75309	1	WASHINGTON LAKE	Endrin	Tissue

LISTING_ID CATEGORY_20	14 WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
75310	1 WASHINGTON LAKE	Endrin	Tissue
75311	1 WASHINGTON LAKE	Endrin	Tissue
75400	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75401	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75402	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75403	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75486	1 WASHINGTON LAKE	Heptachlor	Tissue
75487	1 WASHINGTON LAKE	Heptachlor	Tissue
75563	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75564	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75565	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75645	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75646	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75791	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75792	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75793	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75794	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
77219	1 WASHINGTON LAKE	Toxaphene	Tissue
77220	1 WASHINGTON LAKE	Toxaphene	Tissue
77236	1 WASHINGTON LAKE	Toxaphene	Tissue
77243	1 WASHINGTON LAKE	Endosulfan	Tissue
78987	1 WASHINGTON LAKE	Endosulfan	Tissue
78988	1 WASHINGTON LAKE	Endosulfan	Tissue
78989	1 WASHINGTON LAKE	Endosulfan	Tissue
79488	1 WASHINGTON LAKE	Mercury	Tissue
79502	1 WASHINGTON LAKE	Mercury	Tissue

RATING SUMMARY – Western Washington

Name of wetland (or ID #):	wetland 6		Date of site visit:	31-Oct-16
Rated by <u>Claire Hoffman</u>		Trained by Ecology? ☑ Yes ☐ No	Date of training	2008
HGM Class used for rating	Slope	Wetland has multipl	le HGM classes? □	Yes ☑No
	-	vith out the figures requested (figures can photo/map Google Earth	be combined).	
OVERALL WETLAND CA	TEGORY _	IV (based on functions ⊡or specia	l characteristics \Box)	1
1. Category of wetland	d based on F	UNCTIONS		
	Category I -	Total score = 23 - 27	Score for each	
	Category II -	· Total score = 20 - 22	function based	
Category III - Total score = 16 - 19		on three		
X	_Category IV		ratings (order of ratings	

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
	List app	ropriate rating	g (H, M, L)	
Site Potential	L	М	М	
Landscape Potential	L	L	L	
Value	Н	М	М	Total
Score Based on Ratings	5	5	5	15

Score for each function based on three ratings (order of ratings is not important) 9 = H, H, H 8 = H, H, M 7 = H, H, L 7 = H, M, M 6 = H, M, L 6 = M, M, M 5 = H, L, L 5 = M, M, L 4 = M, L, L 3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	Category
Estuarine	
Wetland of High Conservation Value	
Bog	
Mature Forest	
Old Growth Forest	
Coastal Lagoon	
Interdunal	
None of the above	х

Maps and Figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	1
Hydroperiods	H 1.2	1
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	1
Plant cover of dense, rigid trees, shrubs, and herbaceous plants	S 4.1	1
(can be added to another figure)		'
Boundary of area within 150 ft of the wetland (can be added to another figure)	S 2.1, S 5.1	1
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	2
polygons for accessible habitat and undisturbed habitat		2
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	3
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	4

HGM Classification of Wetland in Western Washington

For questions 1 -7, the criteria described must apply to the entire unit being rated. If 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 tr	ne water levels in the entire unit usuali	y controlled by tides excep	ot during floods?
√	NO - go to 2	☐ YES - the wetland clas	ss is Tidal Fringe - go to 1.1
1.1	Is the salinity of the water during per	ods of annual low flow be	low 0.5 ppt (parts per thousand)?
	=	n Fréshwater Tidal Fringe E stuarine wetland and is	ES - Freshwater Tidal Fringe use the forms for Riverine wetlands. not scored. This method cannot be
	ntire wetland unit is flat and precipitati vater and surface water runoff are NO	•	,
✓	NO - go to 3 If your wetland can be classified as a	_	ES - The wetland class is Flats orm for Depressional wetlands.
	the entire wetland unit meet all of the] The vegetated part of the wetland is plants on the surface at any time of t] At least 30% of the open water area	on the shores of a body o he year) at least 20 ac (8	ha) in size;
√	NO - go to 4	☐ YES - The wetland cla	ass is Lake Fringe (Lacustrine Fringe)
√ √	the entire wetland unit meet all of the The wetland is on a slope (<i>slope car</i> The water flows through the wetland It may flow subsurface, as sheetflow The water leaves the wetland witho	be very gradual), in one direction (unidirect , or in a swale without dist	ional) and usually comes from seeps. inct banks.
	NO - go to 5	☑ YE	ES - The wetland class is Slope
	Surface water does not pond in these to ions or behind hummocks (depression		
	the entire wetland unit meet all of the] The unit is in a valley, or stream cha from that stream or river,] The overbank flooding occurs at leas	nnel, where it gets inunda	ted by overbank flooding
	NO - go to 6	□ YE	S - The wetland class is Riverine
NOTE: T	The Riverine unit can contain depressi	ons that are filled with wat	ter when the river is not flooding.

Wetland name or number _	W6	

, , ,	ic depression in which water ponds, or is saturated to the surface, at nat any outlet, if present, is higher than the interior of the wetland.
□ NO - go to 7	\square YES - The wetland class is Depressional
The unit does not pond surface water mor	ery flat area with no obvious depression and no overbank flooding? The than a few inches. The unit seems to be maintained by high To 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.

SLOPE WETLANDS		
Water Quality Functions - Indicators that the site functions to im	prove water quality	
S 1.0. Does the site have the potential to improve water quality?		
S 1.1. Characteristics of the average slope of the wetland: (a 1% slope has a 1	ft vertical drop in	
elevation for every 100 ft of horizontal distance)	,	
Slope is 1% or less	points = 3	4
Slope is > 1% - 2%	points = 2	1
Slope is > 2% - 5%	points = 1	
Slope is greater than 5%	points = 0	
S 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic	•	0
(use NRCS definitions):	Yes = 3 No = 0	0
5 1.3. Characteristics of the plants in the wetland that trap sediments and pollu	ıtants:	
Choose the points appropriate for the description that best fits the plants in the		
means you have trouble seeing the soil surface (>75% cover), and uncut mear	ns not grazed or	
mowed and plants are higher than 6 in.		
Dense, uncut, herbaceous plants > 90% of the wetland area	points = 6	2
Dense, uncut, herbaceous plants > ½ of area	points = 3	
Dense, woody, plants > ½ of area	points = 2	
Dense, uncut, herbaceous plants > 1/4 of area	points = 1	
•	•	
Does not meet any of the criteria above for plants	points = 0	
Does not meet any of the criteria above for plants Total for S 1 Add the points	points = 0 in the boxes above	3
Does not meet any of the criteria above for plants Total for S 1 Add the points Rating of Site Potential If score is: □ 12 = H □6 - 11 = M ☑0 - 5 = L	points = 0 in the boxes above Record the rating on	
Does not meet any of the criteria above for plants Total for S 1 Add the points Rating of Site Potential If score is: □ 12 = H □6 - 11 = M ☑0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality functions.	points = 0 in the boxes above Record the rating on	
Does not meet any of the criteria above for plants Total for S 1 Rating of Site Potential If score is: □ 12 = H □6 - 11 = M ☑0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in	points = 0 in the boxes above Record the rating on ion of the site?	the first pag
Does not meet any of the criteria above for plants Total for S 1 Rating of Site Potential If score is: □ 12 = H □6 - 11 = M □0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality functions 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in and uses that generate pollutants?	points = 0 in the boxes above Record the rating on	
Does not meet any of the criteria above for plants Total for S 1 Rating of Site Potential If score is: 12 = H S 2.0. Does the landscape have the potential to support the water quality function in and uses that generate pollutants? S 2.2. Are there other sources of pollutants coming into the wetland that are	points = 0 in the boxes above Record the rating on ion of the site?	the first pag
Does not meet any of the criteria above for plants Total for S 1 Rating of Site Potential If score is: □12 = H □6 - 11 = M □0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function in the support side of the wetland in the land uses that generate pollutants? S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1?	points = 0 in the boxes above Record the rating on ion of the site? Yes = 1 No = 0	the first pag
Does not meet any of the criteria above for plants Total for S 1 Rating of Site Potential If score is: □12 = H □6 - 11 = M □0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function in and uses that generate pollutants? S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in and uses that generate pollutants? S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other Sources	points = 0 in the boxes above Record the rating on ion of the site? Yes = 1 No = 0 Yes = 1 No = 0	the first pag 0
Does not meet any of the criteria above for plants Total for S 1 Rating of Site Potential If score is: □12 = H □6 - 11 = M □0 - 5 = L Solution 2.0. Does the landscape have the potential to support the water quality function and uses that generate pollutants? Solution 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question Solution	points = 0 in the boxes above Record the rating on ion of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above	the first pag 0 0
Does not meet any of the criteria above for plants Total for S 1 Rating of Site Potential If score is: □12 = H □6 - 11 = M □0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function in the support side of the wetland in the land uses that generate pollutants? S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other Sources Total for S 2 Add the points	points = 0 in the boxes above Record the rating on ion of the site? Yes = 1 No = 0 Yes = 1 No = 0	the first pag 0 0
Does not meet any of the criteria above for plants Total for S 1 Rating of Site Potential If score is: □12 = H □6 - 11 = M □0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality functions 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in and uses that generate pollutants? S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other Sources Total for S 2 Add the points Rating of Landscape Potential If score is: □1 - 2 = M □0 = L	points = 0 in the boxes above Record the rating on ion of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above Record the rating on	the first pag 0 0
Does not meet any of the criteria above for plants Total for S 1 Add the points Rating of Site Potential If score is: □12 = H □6 - 11 = M □0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function is 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in and uses that generate pollutants? S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other Sources Total for S 2 Add the points Rating of Landscape Potential If score is: □1 - 2 = M □0 = L	points = 0 in the boxes above Record the rating on ion of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above Record the rating on ?	the first pag 0 0 the first pag
Does not meet any of the criteria above for plants Total for S 1 Rating of Site Potential If score is: □12 = H □6 - 11 = M □0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function in and uses that generate pollutants? S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in and uses that generate pollutants? S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other Sources Total for S 2 Add the points Rating of Landscape Potential If score is: □1 - 2 = M □0 = L S 3.0. Is the water quality improvement provided by the site valuable to society is 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, ake, or marine water that is on the 303(d) list?	points = 0 in the boxes above Record the rating on ion of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above Record the rating on	the first pag 0 0
Does not meet any of the criteria above for plants Total for S 1 Rating of Site Potential If score is: □12 = H □6 - 11 = M □0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function in and uses that generate pollutants? S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in and uses that generate pollutants? S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other Sources Total for S 2 Add the points Rating of Landscape Potential If score is: □1 - 2 = M □0 = L S 3.0. Is the water quality improvement provided by the site valuable to society along the same water that is on the 303(d) list? S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue?	points = 0 in the boxes above Record the rating on ion of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above Record the rating on ? Yes = 1 No = 0	the first pag 0 the first pag the first pag
Does not meet any of the criteria above for plants Total for S 1 Rating of Site Potential If score is: □12 = H □6 - 11 = M □0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in and uses that generate pollutants? S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other Sources Total for S 2 Add the points Rating of Landscape Potential If score is: □1 - 2 = M □0 = L S 3.0. Is the water quality improvement provided by the site valuable to society S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, ake, or marine water that is on the 303(d) list? S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue?	points = 0 in the boxes above Record the rating on ion of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above Record the rating on ?	the first pag 0 0 the first pag
Does not meet any of the criteria above for plants Total for S 1 Add the points Rating of Site Potential If score is: □12 = H □6 - 11 = M □0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function in the second in	points = 0 in the boxes above Record the rating on ion of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above Record the rating on ? Yes = 1 No = 0 Yes = 1 No = 0	the first pag 0 0 the first pag 1
Does not meet any of the criteria above for plants Total for S 1 Add the points Rating of Site Potential If score is: □12 = H □6 - 11 = M □0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other Sources Total for S 2 Add the points Rating of Landscape Potential If score is: □1 - 2 = M □0 = L S 3.0. Is the water quality improvement provided by the site valuable to society S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, ake, or marine water that is on the 303(d) list? S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? At least one aquatic resource in the basin is on the 303(d) list. S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? Answer YES if there is a TMDL for the basin in	points = 0 in the boxes above Record the rating on ion of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above Record the rating on ? Yes = 1 No = 0 Yes = 1 No = 0	the first pag 0 the first pag the first pag
Does not meet any of the criteria above for plants Total for S 1 Add the points Rating of Site Potential If score is: □12 = H □6 - 11 = M ☑0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality functions 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in and uses that generate pollutants? S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other Sources Total for S 2 Add the points Rating of Landscape Potential If score is: □1 - 2 = M ☑0 = L S 3.0. Is the water quality improvement provided by the site valuable to society as 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, aske, or marine water that is on the 303(d) list? S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? At least one aquatic resource in the basin is on the 303(d) list.	points = 0 in the boxes above Record the rating on ion of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above Record the rating on ? Yes = 1 No = 0 Yes = 1 No = 0	the first pag 0 0 the first pag 1

SLOPE WETLANDS		
Hydrologic Functions - Indicators that the site functions to reduce flooding ar	nd stream ero	sion
S 4.0. Does the site have the potential to reduce flooding and stream erosion?		
S 4.1. Characteristics of plants that reduce the velocity of surface flows during storms: the points appropriate for the description that best fits conditions in the wetland. Stems should be thick enough (usually > $^{1}/_{8}$ in), or dense enough, to remain erect during su	s of plants	1
Dense, uncut, rigid plants cover > 90% of the area of the wetland All other conditions	points = 1 points = 0	·
Rating of Site Potential If score is: 1 = M 0 = L Record	I the rating on t	the first page
S 5.0. Does the landscape have the potential to support hydrologic functions of the site	e?	
S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff? Yes =	= 1 No = 0	0
Rating of Landscape Potential If score is: 1 = M 0 = L Record	I the rating on t	the first page
S 6.0. Are the hydrologic functions provided by the site valuable to society?		
S 6.1. Distance to the nearest areas downstream that have flooding problems: The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or natural resources (e.g.,		1
houses or salmon redds)	points = 2	ı
Surface flooding problems are in a sub-basin farther down-gradient No flooding problems anywhere downstream	points = 1 points = 0	
S 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes	= 2 No = 0	0
Total for S 6 Add the points in the b	ovec chove	1
	oxes above	<u> </u>

NOTES and FIELD OBSERVATIONS:

Dense uncut rigid plants are blackberries

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 0 3 structures: points = 2 ☐ Emergent ☑ Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points - 1 ☐ Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: ☐ The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon 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 \(\frac{1}{4} \) ac to count (see text for descriptions of hydroperiods). ☐ Permanently flooded or inundated 4 or more types present: points = 3 ☐ Seasonally flooded or inundated 3 types present: points = 2 0 ☐ Occasionally flooded or inundated 2 types present: points = 1 1 types present: points = 0 ☑ Saturated only ☐ Permanently flowing stream or river in, or adjacent to, the wetland ☐ Seasonally flowing stream in, or adjacent to, the wetland ☐ Lake Fringe wetland 2 points ☐ Freshwater tidal wetland 2 points 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 the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 1 If you counted: > 19 species points = 25 - 19 species points = 1< 5 species points = 0H 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. 0 None = 0 points **Low** = 1 point Moderate = 2 points All three diagrams in this row are **HIGH** = 3 points

H 1.5. Special habitat features:	
Check the habitat features that are present in the wetland. The number of checks is the number	
of points.	
☐ Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long)	
☐ Standing snags (dbh > 4 in) within the wetland	
Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends	
at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at	•
least 33 ft (10 m)	0
☐ 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 (<i>cut shrubs or trees</i>	
that have not yet weathered where wood is exposed)	
☐ At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas	
that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)	
☐ Invasive plants cover less than 25% of the wetland area in every stratum of plants (see	
H 1.1 for list of strata)	
Total for H 1 Add the points in the boxes above	1
Rating of Site Potential If Score is: 15 - 18 = H 7 - 14 = M 0 - 6 = L Record the rating on	the first page
1100 December leaders as heavy the material to some at the heat throught as at the extra	
H 2.0. Does the landscape have the potential to support the habitat function of the site?	
H 2.1 Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).	
Calculate:	
0 % undisturbed habitat + (10 % moderate & low intensity land uses / 2) = 5%	
If total accessible habitat is:	0
$> \frac{1}{3}$ (33.3%) of 1 km Polygon points = 3	
20 - 33% of 1 km Polygon points = 2	
10 - 19% of 1 km Polygon points = 1	
< 10 % of 1 km Polygon points = 0	
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.	
Calculate:	
0 % undisturbed habitat + (20 % moderate & low intensity land uses / 2) = 10%	
	1
Undisturbed habitat > 50% of Polygon points = 3	ı
Undisturbed habitat 10 - 50% and in 1-3 patches points = 2	
Undisturbed habitat 10 - 50% and > 3 patches points = 1	
Undisturbed habitat < 10% of 1 km Polygon points = 0	
H 2.3 Land use intensity in 1 km Polygon: If	
> 50% of 1 km Polygon is high intensity land use points = (-2)	-2
≤ 50% of 1km Polygon is high intensity points = 0	
Total for H 2 Add the points in the boxes above	-1
Rating of Landscape Potential If Score is: 4-6=H 1-3=M <-1=L Record the rating on	the first page
H 3.0. Is the habitat provided by the site valuable to society?	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose</i>	
only the highest score that applies to the wetland being rated.	
Site meets ANY of the following criteria: points = 2	
☐ It has 3 or more priority habitats within 100 m (see next page)	
☐ It provides habitat for Threatened or Endangered species (any plant	
or animal on the state or federal lists)	
☐ It is mapped as a location for an individual WDFW priority species	1
☐ It is a Wetland of High Conservation Value as determined by the	1
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) with in 100m points = 1	
Site does not meet any of the criteria above points = 0	
Rating of Value If Score is: \square 2 = H \square 1 = M \square 0 = L Record the rating on	the first page

Wetland Rating System for Western WA: 2014 Update Rating Form - Effective January 1, 2015

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

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

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

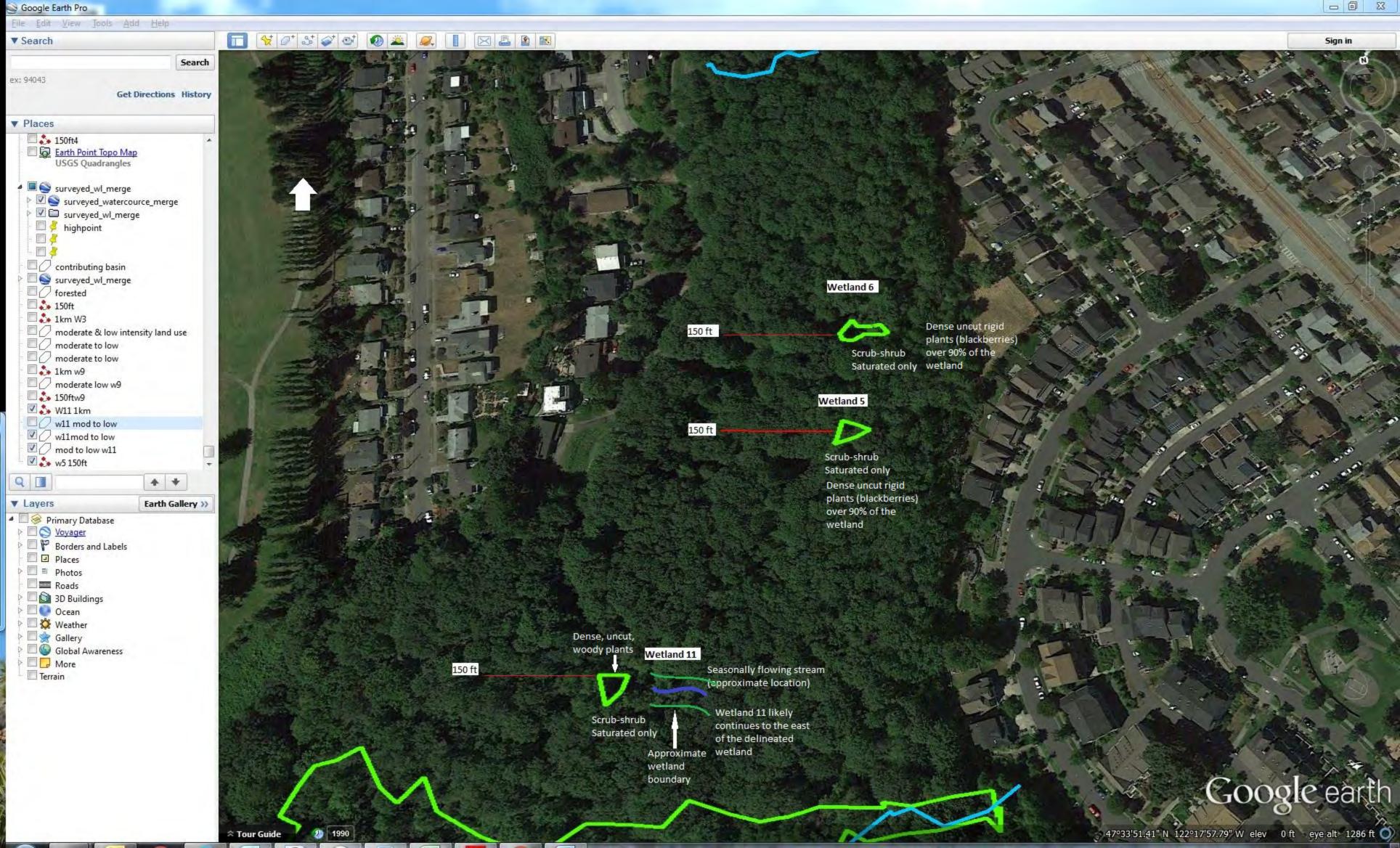
addressed elsewhere.

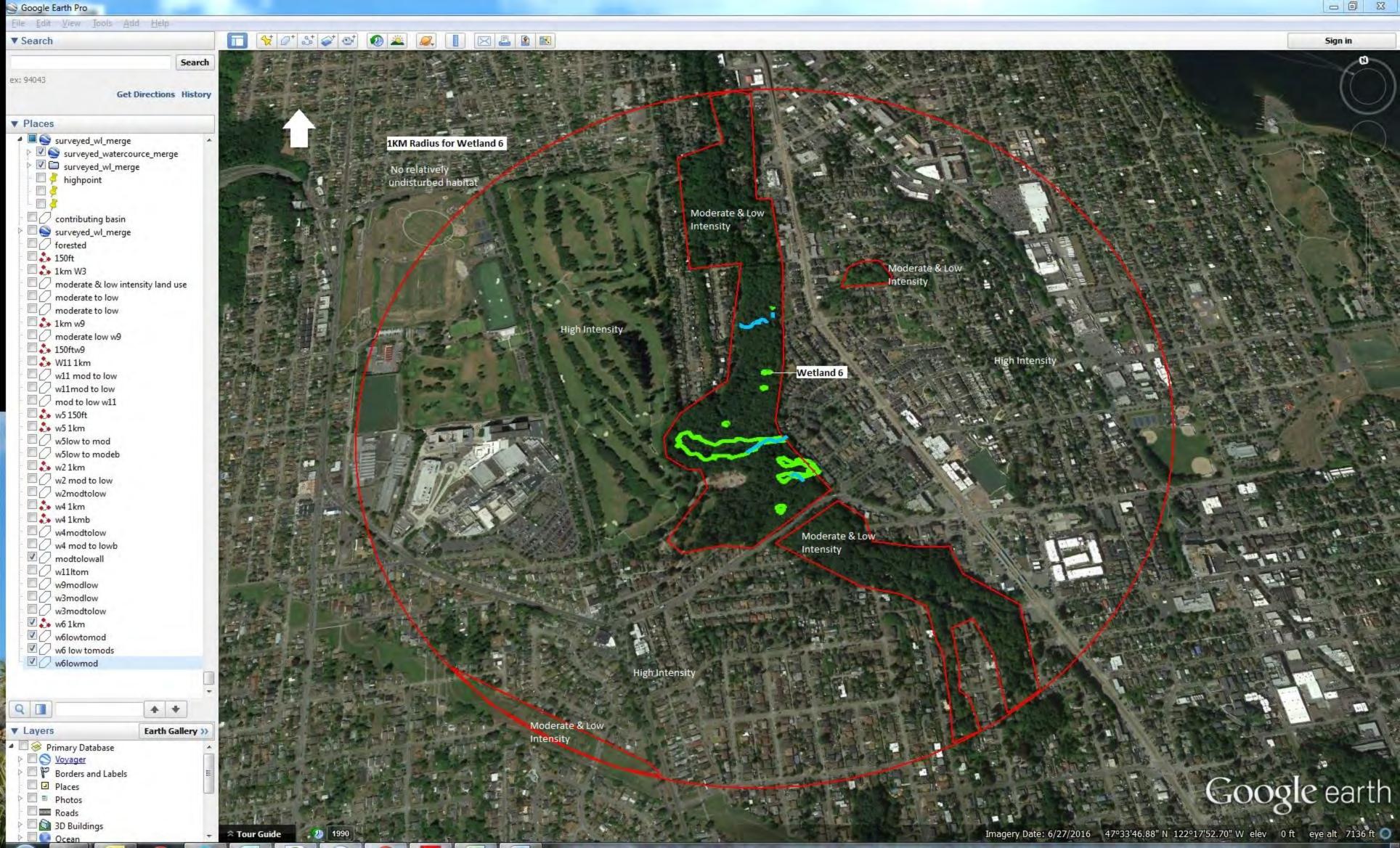
be associated with cliffs.

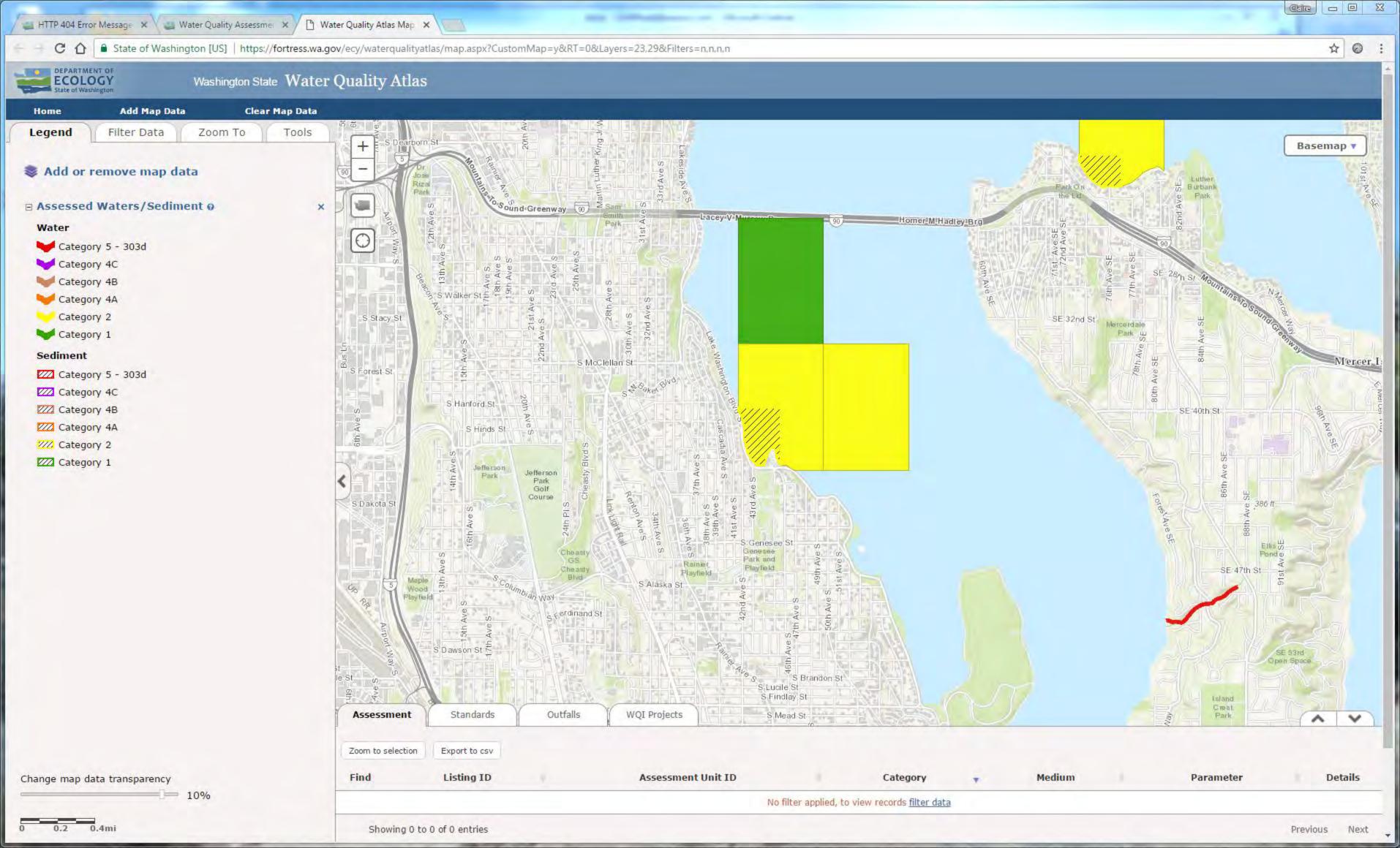
CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type		
	any criteria that apply to the wetland. List the category when the appropriate criteria are met.	
SC 1.0. E	Estuarine Wetlands	
	Does the wetland meet the following criteria for Estuarine wetlands? The dominant water regime is tidal,	
	Vegetated, and	
	With a salinity greater than 0.5 ppt	
	☐ Yes - Go to SC 1.1 ☐ No = Not an estuarine wetland	
SC 1.1.	Is the wetland within a National Wildlife Refuge, National Park, National Estuary	
	Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific	
	Reserve designated under WAC 332-30-151?	
	☐ Yes = Category I ☐ No - Go to SC 1.2	
SC 1.2.	Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
	The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing,	
	and has less than 10% cover of non-native plant species. (If non-native species are	
	Spartina, see page 25)	
	At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-	
	grazed or un-mowed grassland.	
	The wetland has at least two of the following features: tidal channels, depressions with	
	open water, or contiguous freshwater wetlands.	
	☐ Yes = Category I ☐ No = Category II	
	Vetlands of High Conservation Value (WHCV)	
SC 2.1.	Has the WA Department of Natural Resources updated their website to include the list	
	of Wetlands of High Conservation Value?	
	☐ Yes - Go to SC 2.2 ☑ No - Go to SC 2.3	
SC 2.2.	Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?	
SC 2.3.	☐ Yes = Category I ☐ No = Not WHCV	
30 2.3.	Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf	
	☐ Yes - Contact WNHP/WDNR and to SC 2.4 ☐ No = Not WHCV	
SC 2.4.	Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation	
00 2.4.	Value and listed it on their website?	
	☐ Yes = Category I ☐ No = Not WHCV	
SC 3.0. E		
	Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation	
	in bogs? Use the key below. If you answer YES you will still need to rate the	
	wetland based on its functions.	
SC 3.1.	Does an area within the wetland unit have organic soil horizons, either peats or mucks,	
	that compose 16 in or more of the first 32 in of the soil profile?	
	☐ Yes - Go to SC 3.3 ☐ No - Go to SC 3.2	
SC 3.2.	Does an area within the wetland unit have organic soils, either peats or mucks, that are	
	less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic	
	ash, or that are floating on top of a lake or pond?	
	☐ Yes - Go to SC 3.3 ☐ No = Is not a bog	
SC 3.3.	Does an area with peats or mucks have more than 70% cover of mosses at ground	
	level, AND at least a 30% cover of plant species listed in Table 4?	
	\square Yes = Is a Category I bog \square No - Go to SC 3.4 NOTE : If you are uncertain about the extent of mosses in the understory, you may	
	substitute that criterion by measuring the pH of the water that seeps into a hole dug at	
	least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present,	
	the wetland is a bog.	
SC 3.4.	Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir,	
	western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann	
	spruce, or western white pine, AND any of the species (or combination of species) listed	
	in Table 4 provide more than 30% of the cover under the canopy?	
	☐ Yes = Is a Category I bog ☐ No = Is not a bog	

SC 4 0 E	Forested Wetlands	
3C 4.0. F	Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these	
	criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you</i>	
	answer YES you will still need to rate the wetland based on its functions.	
	Old-growth forests (west of Cascade crest): Stands of at least two tree species,	
	forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac	
	(20 trees/ha) that are at least 200 years of age OR have a diameter at breast height	
	(dbh) of 32 in (81 cm) or more.	
	Mature forests (west of the Cascade Crest): Stands where the largest trees are 80-	
	200 years old OR the species that make up the canopy have an average diameter (dbh)	
	exceeding 21 in (53 cm).	
	☐ Yes = Category I ☑ No = Not a forested wetland for this section	
SC 5.0. V	Wetlands in Coastal Lagoons	
	Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?	
	The wetland lies in a depression adjacent to marine waters that is wholly or partially	
	separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently,	
	rocks	
	The lagoon in which the wetland is located contains ponded water that is saline or	
	brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (needs to	
	be measured near the bottom)	
	☐ Yes - Go to SC 5.1 ☑ No = Not a wetland in a coastal lagoon	
SC 5.1. [Does the wetland meet all of the following three conditions?	
	The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing),	
	and has less than 20% cover of aggressive, opportunistic plant species (see list of	
	species on p. 100).	
	At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-	
	grazed or un-mowed grassland.	
	The wetland is larger than $^{1}/_{10}$ ac (4350 ft ²)	
	☐ Yes = Category I ☐ No = Category II	
SC 6.0. I	nterdunal Wetlands	
	Is the wetland west of the 1889 line (also called the Western Boundary of Upland	
	Ownership or WBUO)? If you answer yes you will still need to rate the wetland	
	based on its habitat functions.	
	In practical terms that means the following geographic areas:	
	Long Beach Peninsula: Lands west of SR 103	
	Grayland-Westport: Lands west of SR 105	
	Ocean Shores-Copalis: Lands west of SR 115 and SR 109	
	☐ Yes - Go to SC 6.1 ☑ No = Not an interdunal wetland for rating	
SC 6.1.	Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form	
0.1.	(rates H,H,H or H,H,M for the three aspects of function)?	
	Yes = Category I □ No - Go to SC 6.2	
SC 6.2.		
0.2.	Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? ☐ Yes = Category II ☐ No - Go to SC 6.3	
SC 6.3.	Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and	
0.3.	1 ac?	
	☐ Yes = Category III ☐ No = Category IV	
Catogor	y of wetland based on Special Characteristics	
	y of wetland based on Special Characteristics swered No for all types, enter "Not Applicable" on Summary Form	







LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
4672	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
4676	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
500005	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500006	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500007	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500038	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
12193	5	WASHINGTON LAKE	Bacteria	Water
12206	5	WASHINGTON LAKE	Bacteria	Water
43482	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
51591	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51592	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51593	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51706	5	WASHINGTON LAKE	4,4'-DDD	Tissue
51767	5	WASHINGTON LAKE	4,4'-DDE	Tissue
52642	5	WASHINGTON LAKE	Mercury	Tissue
52703	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52704	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52705	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52766	5	WASHINGTON LAKE	Total Chlordane	Tissue
52853	5	WASHINGTON LAKE	Total Phosphorus	Water
74460	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74461	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74775	5	WASHINGTON LAKE	Bacteria	Water
76477		WASHINGTON LAKE	Dieldrin	Tissue
76478	5	WASHINGTON LAKE	Dieldrin	Tissue
76479		WASHINGTON LAKE	Dieldrin	Tissue
77049		WASHINGTON LAKE	Chlordane	Tissue
77050		WASHINGTON LAKE	Chlordane	Tissue
77064	5	WASHINGTON LAKE	Chlordane	Tissue
500009	5	WASHINGTON LAKE	Sediment Bioassay	Sediment
500010		WASHINGTON LAKE	Sediment Bioassay	Sediment
8078		WASHINGTON LAKE	Lead	Water
11960	2	WASHINGTON LAKE	Ammonia-N	Water
11963	2	WASHINGTON LAKE	Ammonia-N	Water

11964 2 WASHINGTON LAKE Ammonia-N Water 11970 2 WASHINGTON LAKE Ammonia-N Water 12207 2 WASHINGTON LAKE Bacteria Water 12264 2 WASHINGTON LAKE Mercury Water 12272 2 WASHINGTON LAKE Mercury Water 12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE POlychlorinated Biphenyls (PCBs) Water 1237,8-TCDD TEQ Tissue 1238 1 WASHINGTON LAKE Bacteria Water 1239 1 WASHINGTON LAKE Bacteria Water 1230 1 WASHINGTON LAKE Bacteria Water 12344	LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
12207 2 WASHINGTON LAKE Bacteria Water 12264 2 WASHINGTON LAKE Mercury Water Water 12272 2 WASHINGTON LAKE Mercury Water 12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Bacteria Water 12319 2 WASHINGTON LAKE Bacteria Water 12319 3 WASHINGTON LAKE Bacteria Water 12319 3 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 5 WASHINGTON LAKE Bacteria Water 12319 6 WASHINGTON LAKE Bacteria Water 12319 7 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE Bacteria Water 13348 1 WAS	11964	2	WASHINGTON LAKE	Ammonia-N	
12264 2 WASHINGTON LAKE 12272 2 WASHINGTON LAKE 12311 2 WASHINGTON LAKE 12312 2 WASHINGTON LAKE 12312 2 WASHINGTON LAKE 12313 2 WASHINGTON LAKE 12313 2 WASHINGTON LAKE 12314 2 WASHINGTON LAKE 12315 2 WASHINGTON LAKE 12315 2 WASHINGTON LAKE 12316 2 WASHINGTON LAKE 12317 2 WASHINGTON LAKE 12318 2 WASHINGTON LAKE 12319 2 WASHINGTON LAKE 12319 3 LWASHINGTON LAKE 11972 1 WASHINGTON LAKE 11972 1 WASHINGTON LAKE 11973 1 WASHINGTON LAKE 11973 1 WASHINGTON LAKE 11973 1 WASHINGTON LAKE 111973 1 WASHINGTON LAKE 111973 1 WASHINGTON LAKE 111973 1 WASHINGTON LAKE 111974 1 WASHINGTON LAKE 111975 1 WASHINGTON LAKE 111975 1 WASHINGTON LAKE 11199 1 WASHINGTON LAKE 11190 1 WASHINGTON LAKE	11970	2	WASHINGTON LAKE	Ammonia-N	Water
12272 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water Polychlorinated Biphenyls (PCBs)	12207	2	WASHINGTON LAKE	Bacteria	Water
12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12319 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12319 3 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 5 WASHINGTON LAKE Bacteria Water 12319 6 WASHINGTON LAKE Bacteria Water 12319 6 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE WASHINGTO	12264	2	WASHINGTON LAKE	Mercury	Water
12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 151645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12200	12272	2	WASHINGTON LAKE	Mercury	Water
12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 123645 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 13318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water Polychlorinated Bipheny	12311	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 151645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Tissue 143481 1 WASHINGTON LAKE Mercury Tissue 143483 1 WASHINGTON LAKE Mercury Tissue 143484 1 WASHINGTON LAKE Mercury Tissue 143485 1 WASHINGTON LAKE Hexachlorobenzene Tissue 15sue 15s	12312	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 151645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 123481 1 WASHINGTON LAKE Bacteria Tissue 12381 1 WASHINGTON LAKE Bacteria Tissue 12383 1 WASHINGTON LAKE Bacteria Tissue 12383 1 WASHINGTON LAKE Mercury Tissue 12384 1 WASH	12313	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Tissue 12483 1 WASHINGTON LAKE Bacteria Tissue 12483 1 WASHINGTON LAKE Bacteria Tissue 12484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 12504 1 WASHINGTON LAKE Hexachlorobenzene Tissue 12506 Tissu	12314	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12191 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12203 1 WASHINGTON LAKE Bacteria Water 12204 1 WASHINGTON LAKE Bacteria Tissue 12488 1 WASHINGTON LAKE Macteria Tissue 12488 1 WASHINGTON LAKE Mercury Tissue 12488 1 WASHINGTON LAKE Mercury Tissue 12506 1 WASHINGTON LAKE Mercury Tissue 12607 1 WASHINGTON LAKE Mercury Tissue 12608 1 WASHINGTON LAKE Mercury Tissue 12709 Tissue	12315	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12191 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12203 1 WASHINGTON LAKE Bacteria Water 12204 1 WASHINGTON LAKE Bacteria Water 12205 1 WASHINGTON LAKE Bacteria Water 12206 1 WASHINGTON LAKE Bacteria Tissue 123481 1 WASHINGTON LAKE Bacteria Tissue 124483 1 WASHINGTON LAKE Mercury Tissue 124484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 124485 1 WASHINGTON LAKE Hexachlor Epoxide Tissue	12316	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Water 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Mercury Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12317	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Bacteria Water 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Mercury Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12318	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12191 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12303 1 WASHINGTON LAKE Bacteria Water 124481 1 WASHINGTON LAKE Bacteria Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	51644	2	WASHINGTON LAKE	2,3,7,8-TCDD TEQ	Tissue
11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Bacteria Water 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Mercury Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	51645	2	WASHINGTON LAKE	2,3,7,8-TCDD TEQ	Tissue
11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Bacteria Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	51646	2	WASHINGTON LAKE	2,3,7,8-TCDD TEQ	Tissue
12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Hexachlor Epoxide Tissue	11972	1	WASHINGTON LAKE	Ammonia-N	Water
12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13500	11973	1	WASHINGTON LAKE	Ammonia-N	Water
12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13584 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13685 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12183	1	WASHINGTON LAKE	Bacteria	Water
12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12186	1	WASHINGTON LAKE	Bacteria	Water
12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12189	1	WASHINGTON LAKE	Bacteria	Water
12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 124481 1 WASHINGTON LAKE Toxaphene Tissue 12483 1 WASHINGTON LAKE Mercury Tissue 12484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 12485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12190	1	WASHINGTON LAKE	Bacteria	Water
12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12194	1	WASHINGTON LAKE	Bacteria	Water
12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12195	1	WASHINGTON LAKE	Bacteria	Water
12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12196	1	WASHINGTON LAKE	Bacteria	Water
12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12197	1	WASHINGTON LAKE	Bacteria	Water
1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12200	1	WASHINGTON LAKE	Bacteria	Water
43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12201	1	WASHINGTON LAKE	Bacteria	Water
43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12202	1	WASHINGTON LAKE	Bacteria	Water
43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43481	1	WASHINGTON LAKE	Toxaphene	Tissue
43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43483	1	WASHINGTON LAKE	Mercury	Tissue
· · · ·	43484	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
43486 1 WASHINGTON LAKE Heptachlor Tissue	43485	1	WASHINGTON LAKE	Heptachlor Epoxide	Tissue
	43486	1	WASHINGTON LAKE	Heptachlor	Tissue

LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
43487	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
43488	1	WASHINGTON LAKE	Endrin	Tissue
43492	1	WASHINGTON LAKE	Beta-BHC	Tissue
43493	1	WASHINGTON LAKE	Alpha-BHC	Tissue
43494	1	WASHINGTON LAKE	4,4'-DDT	Tissue
43495	1	WASHINGTON LAKE	4,4'-DDE	Tissue
43496	1	WASHINGTON LAKE	4,4'-DDD	Tissue
51827	1	WASHINGTON LAKE	4,4'-DDT	Tissue
51949	1	WASHINGTON LAKE	Alpha-BHC	Tissue
52010	1	WASHINGTON LAKE	Beta-BHC	Tissue
52403	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
52464	1	WASHINGTON LAKE	Heptachlor	Tissue
52585	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
52854	1	WASHINGTON LAKE	Total Phosphorus	Water
52855	1	WASHINGTON LAKE	Total Phosphorus	Water
52856	1	WASHINGTON LAKE	Total Phosphorus	Water
52857	1	WASHINGTON LAKE	Total Phosphorus	Water
52858	1	WASHINGTON LAKE	Total Phosphorus	Water
52859	1	WASHINGTON LAKE	Total Phosphorus	Water
52860	1	WASHINGTON LAKE	Total Phosphorus	Water
52861	1	WASHINGTON LAKE	Total Phosphorus	Water
52862	1	WASHINGTON LAKE	Total Phosphorus	Water
52863	1	WASHINGTON LAKE	Total Phosphorus	Water
52864	1	WASHINGTON LAKE	Total Phosphorus	Water
52865		WASHINGTON LAKE	Total Phosphorus	Water
74484		WASHINGTON LAKE	4,4'-DDD	Tissue
74485		WASHINGTON LAKE	4,4'-DDD	Tissue
74772		WASHINGTON LAKE	Bacteria	Water
74776		WASHINGTON LAKE	Bacteria	Water
75112		WASHINGTON LAKE	4,4'-DDT	Tissue
75114		WASHINGTON LAKE	4,4'-DDT	Tissue
75221		WASHINGTON LAKE	Beta-BHC	Tissue
75222		WASHINGTON LAKE	Beta-BHC	Tissue
75309	1	WASHINGTON LAKE	Endrin	Tissue

LISTING_ID CATEGORY_20	14 WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
75310	1 WASHINGTON LAKE	Endrin	Tissue
75311	1 WASHINGTON LAKE	Endrin	Tissue
75400	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75401	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75402	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75403	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75486	1 WASHINGTON LAKE	Heptachlor	Tissue
75487	1 WASHINGTON LAKE	Heptachlor	Tissue
75563	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75564	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75565	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75645	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75646	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75791	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75792	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75793	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75794	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
77219	1 WASHINGTON LAKE	Toxaphene	Tissue
77220	1 WASHINGTON LAKE	Toxaphene	Tissue
77236	1 WASHINGTON LAKE	Toxaphene	Tissue
77243	1 WASHINGTON LAKE	Endosulfan	Tissue
78987	1 WASHINGTON LAKE	Endosulfan	Tissue
78988	1 WASHINGTON LAKE	Endosulfan	Tissue
78989	1 WASHINGTON LAKE	Endosulfan	Tissue
79488	1 WASHINGTON LAKE	Mercury	Tissue
79502	1 WASHINGTON LAKE	Mercury	Tissue

RATING SUMMARY – Western Washington

Name of wetland (or ID #):	Wetland 8	Date of site visit:	28-Jun-22
Rated by Rachelle Tews	Trained by Ecology?☑ \	Yes□ No Date of training _	Mar-20
HGM Class used for rating	Depressional & Flats Wetland	has multiple HGM classes? ☑	Yes □ No
	ot complete with out the figures requested (figures aerial photo/map ESRI, 2022	gures can be combined).	
OVERALL WETLAND CA	TEGORYIV(based on functions ☑	or special characteristics $\ \square$)	
1. Category of wetland	based on FUNCTIONS		
	Category I - Total score = 23 - 27	Score for each	
	Category II - Total score = 20 - 22	function based	
	Category III - Total score = 16 - 19	on three	
X	Category IV - Total score = 9 - 15	ratings	

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
	List app	ropriate rating	g (H, M, L)	
Site Potential	L	M	L	
Landscape Potential	M	M	L	
Value	Н	L	М	Total
Score Based on Ratings	6	5	4	15

Score for each function based on three ratings (order of ratings is not important) 9 = H, H, H 8 = H, H, M 7 = H, H, L 7 = H, M, M 6 = H, M, L 6 = M, M, M 5 = H, L, L 5 = M, M, L 4 = M, L, L 3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	Category
Estuarine	
Wetland of High Conservation Value	
Bog	
Mature Forest	
Old Growth Forest	
Coastal Lagoon	
Interdunal	
None of the above	х

Wetland name or number

Maps and Figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense , rigid trees, shrubs, and herbaceous plants	S 4.1	
(can be added to another figure)		
Boundary of area within 150 ft of the wetland (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	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)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

HGM Classification of Wetland in Western Washington

For questions 1 -7, the criteria described must apply to the entire unit being rated. If 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 th	ne water levels in the entire unit usua	lly contro	folled by tides except during floods?
V	NO - go to 2	□ YE	S - the wetland class is Tidal Fringe - go to 1.1
1.1	Is the salinity of the water during pe	riods of	annual low flow below 0.5 ppt (parts per thousand)?
V		a Fresh Estuar i	□ YES - Freshwater Tidal Fringe nwater Tidal Fringe use the forms for Riverine wetlands. rine wetland and is not scored. This method cannot be nds.
	ntire wetland unit is flat and precipita vater and surface water runoff are N0		
✓	NO - go to 3 If your wetland can be classified as	a Flats	☐ YES - The wetland class is Flats wetland, use the form for Depressional wetlands.
3. Does	the entire wetland unit meet all of the The vegetated part of the wetland is plants on the surface at any time of At least 30% of the open water area	on the the year	shores of a body of permanent open water (without any ar) at least 20 ac (8 ha) in size;
7	NO - go to 4	□ YE	S - The wetland class is Lake Fringe (Lacustrine Fringe)
4. Does	the entire wetland unit meet all of the The wetland is on a slope (<i>slope ca</i>). The water flows through the wetlan may flow subsurface, as sheetflow, The water leaves the wetland with	<i>n be ver</i> d in one or in a s	ery gradual), e direction (unidirectional) and usually comes from seeps. It swale without distinct banks.
7	NO - go to 5		□ YES - The wetland class is Slope
			wetlands except occasionally in very small and shallow usually <3 ft diameter and less than 1 ft deep).
5. Does	the entire wetland unit meet all of the The unit is in a valley, or stream cha from that stream or river, The overbank flooding occurs at lea	annel, w	here it gets inundated by overbank flooding
7	NO - go to 6		□ YES - The wetland class is Riverine
NOTE: T	he Riverine unit can contain depress	ions tha	at 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, a 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		
The unit does not pond surface water r	a very flat area with no obvious depression and no overbank flooding? more than a few inches. The unit seems to be maintained by high may be ditched, but has no obvious natural outlet.		
✓ NO - ao 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.

NOTES and FIELD OBSERVATIONS: Slope and Depressional wetland

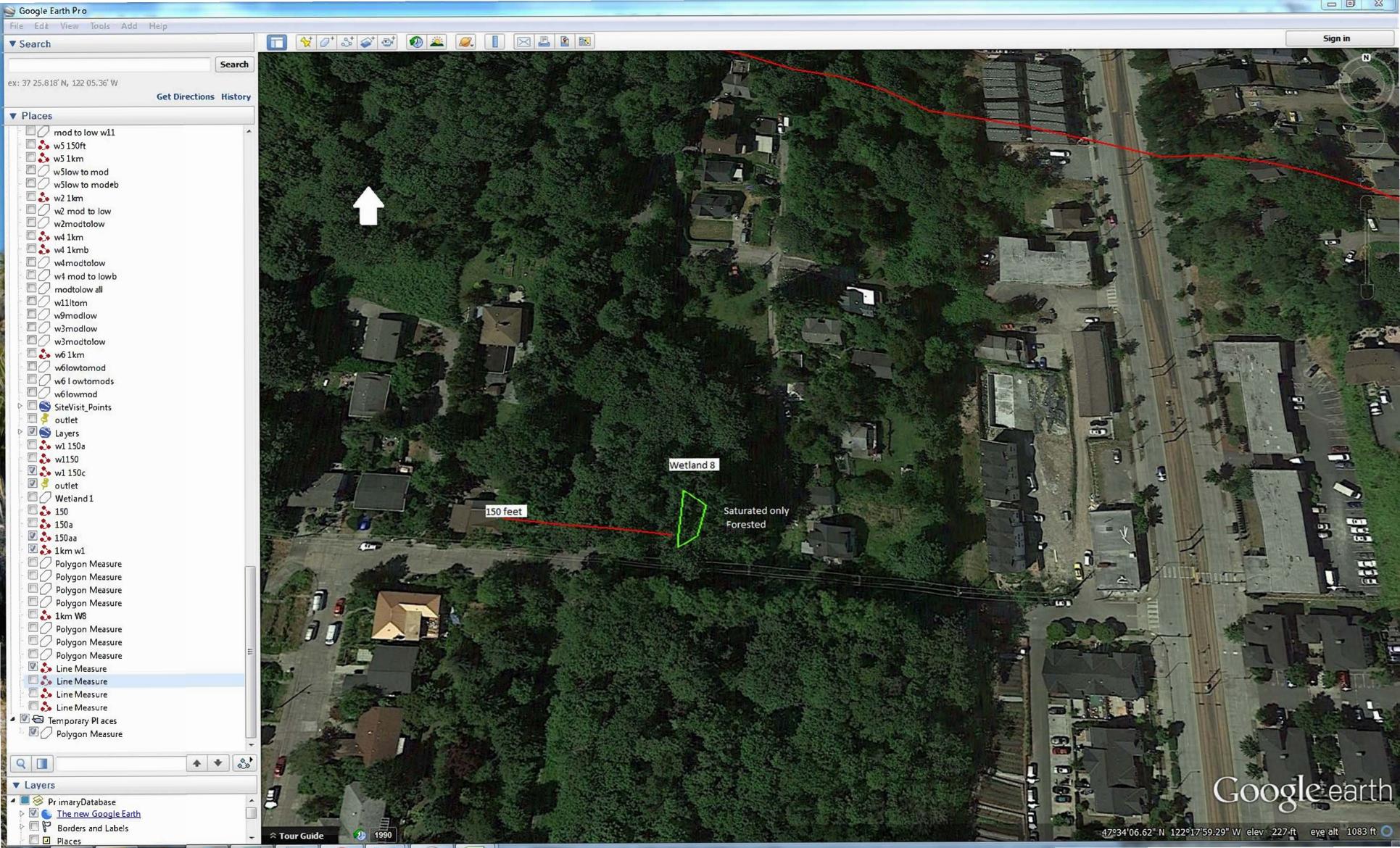
DEPRESSIONAL AND FLATS WETLANDS				
Water Quality Functions - Indicators that the site functions to improve water quality				
D 1.0. Does the site have the potential to improve water quality?				
D 1.1. Characteristics of surface water outflows from the wetland:				
Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet).	po	oints = 3		
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet.	po	oints = 2	2	
 Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing 	ро	oints = 1		
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch.	ро	oints = 1		
D 1.2. <u>The soil 2 in below the surface (or duff layer)</u> 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-sh	rub, and/or			
Forested Cowardin classes):				
Wetland has persistent, ungrazed, plants > 95% of area		oints = 5	5	
Wetland has persistent, ungrazed, plants > ½ of area	•	oints = 3	3	
Wetland has persistent, ungrazed plants $> \frac{1}{10}$ of area	р	oints = 1		
Wetland has persistent, ungrazed plants < 1/10 of area	р	oints = 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	po	oints = 4	2	
Area seasonally ponded is > 1/4 total area of wetland	р	oints = 2		
Area seasonally ponded is < 1/4 total area of wetland	po po	oints = 0		
Total for D 1 Add the points	in the boxe	s above	9	
Rating of Site Potential If score is: 12 - 16 = H 6 - 11 = M 0 - 5 = L			the first page	
D 2.0. Does the landscape have the potential to support the water quality functi	on of the si	te?		
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1	No = 0	0	
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1	No = 0	0	
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1	No = 0	0	
D 2.4. Are there other sources of pollutants coming into the wetland that are		0		
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 boxe	s above	0	
Rating of Landscape Potential If score is: □ 3 or 4 = H □ 1 or 2 = M ☑ 0 = L			the first page	
D 3.0. Is the water quality improvement provided by the site valuable to society	-			
	?			
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list?	? Yes = 1	No = 0	0	
	Yes = 1		0	
lake, or marine water that is on the 303(d) list?	Yes = 1 ie 303(d) lis	st?	-	
lake, or marine water that is on the 303(d) list? D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 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	Yes = 1 le 303(d) lis Yes = 1 Yes = 2	st? No = 0 No = 0	1	

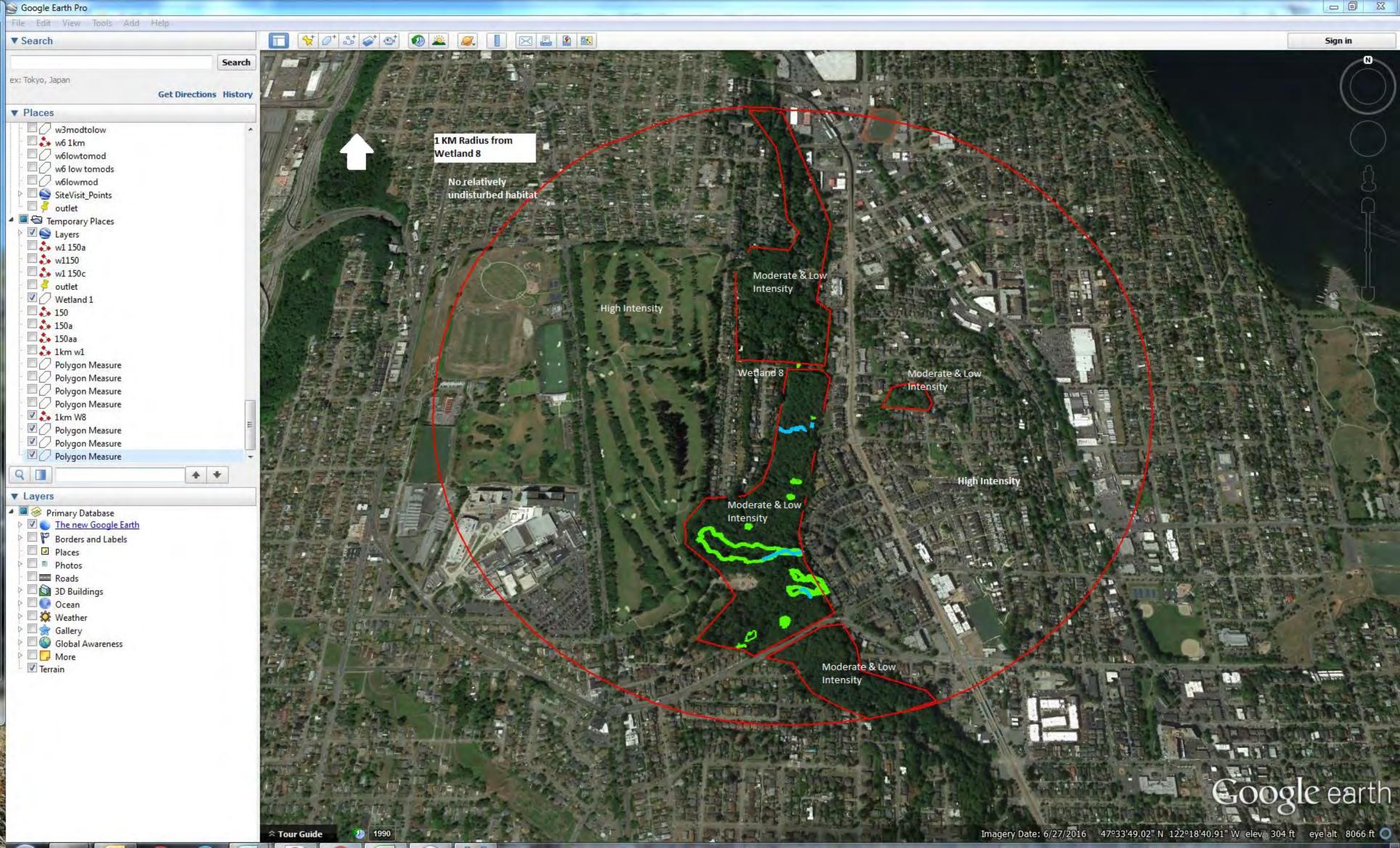
DEPRESSIONAL AND FLATS WETLANDS				
Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degrada				
D 4.0. Does the site have the potential to reduce flooding and erosion?				
D 4.1. Characteristics of surface water outflows from the wetland:				
Wetland is a depression or flat depression with no surface water	I			
leaving it (no outlet) points = 4	I			
Wetland has an intermittently flowing stream or ditch, OR highly	I			
constricted permanently flowing outlet points = 2	2			
Wetland is a flat depression (QUESTION 7 on key), whose outlet is	I			
a permanently flowing ditch points = 1	I			
Wetland has an unconstricted, or slightly constricted, surface outlet	I			
that is permanently flowing points = 0	1			
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of	I			
the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the	I			
deepest part. Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7	I			
' '	3			
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	3 			
☐ The wetland is a "headwater" wetland points = 3	I			
Wetland is flat but has small depressions on the surface that trap water points = 1	I			
Marks of ponding less than 0.5 ft (6 in)	I			
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.	I			
☐ The area of the basin is less than 10 times the area of the unit points = 5	I			
The area of the basin is 10 to 100 times the area of the unit points = 3	3			
The area of the basin is more than 100 times the area of the unit points = 0	I			
□ Entire wetland is in the Flats class points = 5	I			
Total for D 4 Add the points in the boxes above	8			
Rating of Site Potential If score is: 12 - 16 = H 6 - 11 = M 0 - 5 = L Record the rating on				
D 5.0. Does the landscape have the potential to support hydrologic function of the site?				
D 5.1. Does the wetland unit 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?	0			
Yes = 1 No = 0	0			
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human				
land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	1			
Yes = 1 No = 0	<u> </u>			
Total for D 5 Add the points in the boxes above	1			
Rating of Landscape Potential If score is: 3 = H 1 or 2 = M 0 = L Record the rating on	the first page			
D 6.0. Are the hydrologic functions provided by the site valuable to society?				
, , , , , , , , , , , , , , , , , , , ,				
D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best	1			
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				
D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best				
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				
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):				
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-				
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.	0			
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. □ Surface flooding problems are in a sub-basin farther down-	0			
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.	0			
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.	0			
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	0			
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.				

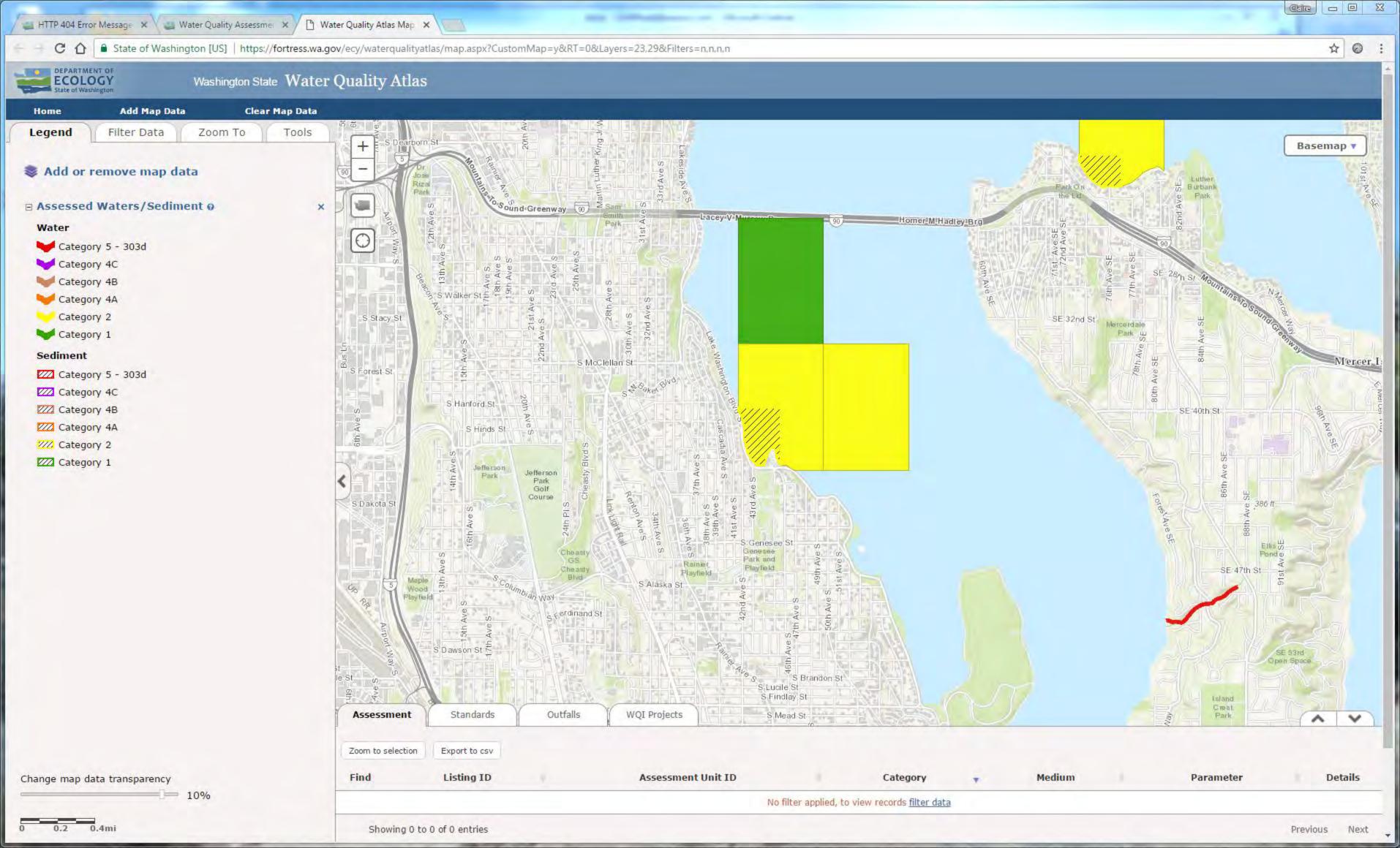
☐ There are no problems with flooding downstream of the	he wetland. points = 0	
D 6.2. Has the site been identified as important for flood storage	e or flood	0
conveyance in a regional flood control plan?	Yes = 2 No = 0	U
Total for D 6	Add the points in the boxes above	0

Rating of Value If score is: \Box 2 - 4 = H \Box 1 = M \Box 0 = L

Record the rating on the first page







LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
4672	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
4676	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
500005	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500006	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500007	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500038	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
12193	5	WASHINGTON LAKE	Bacteria	Water
12206	5	WASHINGTON LAKE	Bacteria	Water
43482	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
51591	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51592	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51593	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51706	5	WASHINGTON LAKE	4,4'-DDD	Tissue
51767	5	WASHINGTON LAKE	4,4'-DDE	Tissue
52642	5	WASHINGTON LAKE	Mercury	Tissue
52703	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52704	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52705	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52766	5	WASHINGTON LAKE	Total Chlordane	Tissue
52853	5	WASHINGTON LAKE	Total Phosphorus	Water
74460	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74461	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74775	5	WASHINGTON LAKE	Bacteria	Water
76477		WASHINGTON LAKE	Dieldrin	Tissue
76478	5	WASHINGTON LAKE	Dieldrin	Tissue
76479		WASHINGTON LAKE	Dieldrin	Tissue
77049		WASHINGTON LAKE	Chlordane	Tissue
77050		WASHINGTON LAKE	Chlordane	Tissue
77064	5	WASHINGTON LAKE	Chlordane	Tissue
500009	5	WASHINGTON LAKE	Sediment Bioassay	Sediment
500010		WASHINGTON LAKE	Sediment Bioassay	Sediment
8078		WASHINGTON LAKE	Lead	Water
11960	2	WASHINGTON LAKE	Ammonia-N	Water
11963	2	WASHINGTON LAKE	Ammonia-N	Water

11964 2 WASHINGTON LAKE Ammonia-N Water 11970 2 WASHINGTON LAKE Ammonia-N Water 12207 2 WASHINGTON LAKE Bacteria Water 12264 2 WASHINGTON LAKE Mercury Water 12272 2 WASHINGTON LAKE Mercury Water 12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE POlychlorinated Biphenyls (PCBs) Water 1237,8-TCDD TEQ Tissue 1238 1 WASHINGTON LAKE Bacteria Water 1239 1 WASHINGTON LAKE Bacteria Water 1230 1 WASHINGTON LAKE Bacteria Water 12344	LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
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12264 2 WASHINGTON LAKE 12272 2 WASHINGTON LAKE 12311 2 WASHINGTON LAKE 12312 2 WASHINGTON LAKE 12312 2 WASHINGTON LAKE 12313 2 WASHINGTON LAKE 12313 2 WASHINGTON LAKE 12314 2 WASHINGTON LAKE 12315 2 WASHINGTON LAKE 12315 2 WASHINGTON LAKE 12316 2 WASHINGTON LAKE 12317 2 WASHINGTON LAKE 12318 2 WASHINGTON LAKE 12319 2 WASHINGTON LAKE 12319 3 LWASHINGTON LAKE 11972 1 WASHINGTON LAKE 11972 1 WASHINGTON LAKE 11973 1 WASHINGTON LAKE 11973 1 WASHINGTON LAKE 11973 1 WASHINGTON LAKE 111973 1 WASHINGTON LAKE 111973 1 WASHINGTON LAKE 111973 1 WASHINGTON LAKE 111974 1 WASHINGTON LAKE 111975 1 WASHINGTON LAKE 111975 1 WASHINGTON LAKE 11199 1 WASHINGTON LAKE 11190 1 WASHINGTON LAKE	11970	2	WASHINGTON LAKE	Ammonia-N	Water
12272 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water Polychlorinated Biphenyls (PCBs)	12207	2	WASHINGTON LAKE	Bacteria	Water
12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12319 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12319 3 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 5 WASHINGTON LAKE Bacteria Water 12319 6 WASHINGTON LAKE Bacteria Water 12319 6 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE WASHINGTO	12264	2	WASHINGTON LAKE	Mercury	Water
12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 151645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12200	12272	2	WASHINGTON LAKE	Mercury	Water
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11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Bacteria Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	51646	2	WASHINGTON LAKE	2,3,7,8-TCDD TEQ	Tissue
12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Hexachlor Epoxide Tissue	11972	1	WASHINGTON LAKE	Ammonia-N	Water
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12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13584 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13685 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12183	1	WASHINGTON LAKE	Bacteria	Water
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12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12189	1	WASHINGTON LAKE	Bacteria	Water
12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 124481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12190	1	WASHINGTON LAKE	Bacteria	Water
12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12194	1	WASHINGTON LAKE	Bacteria	Water
12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12195	1	WASHINGTON LAKE	Bacteria	Water
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12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12197	1	WASHINGTON LAKE	Bacteria	Water
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43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12201	1	WASHINGTON LAKE	Bacteria	Water
43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12202	1	WASHINGTON LAKE	Bacteria	Water
43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43481	1	WASHINGTON LAKE	Toxaphene	Tissue
43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43483	1	WASHINGTON LAKE	Mercury	Tissue
, ,	43484	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
43486 1 WASHINGTON LAKE Heptachlor Tissue	43485	1	WASHINGTON LAKE	Heptachlor Epoxide	Tissue
	43486	1	WASHINGTON LAKE	Heptachlor	Tissue

LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
43487	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
43488	1	WASHINGTON LAKE	Endrin	Tissue
43492	1	WASHINGTON LAKE	Beta-BHC	Tissue
43493	1	WASHINGTON LAKE	Alpha-BHC	Tissue
43494	1	WASHINGTON LAKE	4,4'-DDT	Tissue
43495	1	WASHINGTON LAKE	4,4'-DDE	Tissue
43496	1	WASHINGTON LAKE	4,4'-DDD	Tissue
51827	1	WASHINGTON LAKE	4,4'-DDT	Tissue
51949	1	WASHINGTON LAKE	Alpha-BHC	Tissue
52010	1	WASHINGTON LAKE	Beta-BHC	Tissue
52403	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
52464	1	WASHINGTON LAKE	Heptachlor	Tissue
52585	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
52854	1	WASHINGTON LAKE	Total Phosphorus	Water
52855	1	WASHINGTON LAKE	Total Phosphorus	Water
52856	1	WASHINGTON LAKE	Total Phosphorus	Water
52857	1	WASHINGTON LAKE	Total Phosphorus	Water
52858	1	WASHINGTON LAKE	Total Phosphorus	Water
52859	1	WASHINGTON LAKE	Total Phosphorus	Water
52860	1	WASHINGTON LAKE	Total Phosphorus	Water
52861	1	WASHINGTON LAKE	Total Phosphorus	Water
52862	1	WASHINGTON LAKE	Total Phosphorus	Water
52863	1	WASHINGTON LAKE	Total Phosphorus	Water
52864	1	WASHINGTON LAKE	Total Phosphorus	Water
52865		WASHINGTON LAKE	Total Phosphorus	Water
74484		WASHINGTON LAKE	4,4'-DDD	Tissue
74485		WASHINGTON LAKE	4,4'-DDD	Tissue
74772		WASHINGTON LAKE	Bacteria	Water
74776		WASHINGTON LAKE	Bacteria	Water
75112		WASHINGTON LAKE	4,4'-DDT	Tissue
75114		WASHINGTON LAKE	4,4'-DDT	Tissue
75221		WASHINGTON LAKE	Beta-BHC	Tissue
75222		WASHINGTON LAKE	Beta-BHC	Tissue
75309	1	WASHINGTON LAKE	Endrin	Tissue

LISTING_ID CATEGORY_20	14 WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
75310	1 WASHINGTON LAKE	Endrin	Tissue
75311	1 WASHINGTON LAKE	Endrin	Tissue
75400	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75401	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75402	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75403	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75486	1 WASHINGTON LAKE	Heptachlor	Tissue
75487	1 WASHINGTON LAKE	Heptachlor	Tissue
75563	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75564	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75565	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75645	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75646	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75791	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75792	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75793	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75794	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
77219	1 WASHINGTON LAKE	Toxaphene	Tissue
77220	1 WASHINGTON LAKE	Toxaphene	Tissue
77236	1 WASHINGTON LAKE	Toxaphene	Tissue
77243	1 WASHINGTON LAKE	Endosulfan	Tissue
78987	1 WASHINGTON LAKE	Endosulfan	Tissue
78988	1 WASHINGTON LAKE	Endosulfan	Tissue
78989	1 WASHINGTON LAKE	Endosulfan	Tissue
79488	1 WASHINGTON LAKE	Mercury	Tissue
79502	1 WASHINGTON LAKE	Mercury	Tissue

RATING SUMMARY – Western Washington

Name of wetland (or ID #):	Wetland 9	Date of site visit:	20-Oct-16			
Rated by Claire Hoffman	Trained by Ecology? ☑ Yes ☐ No	Date of training	2008			
HGM Class used for rating	Slope Wetland has multip	le HGM classes? ☐	Yes ☑No			
	NOTE: Form is not complete with out the figures requested (figures can be combined). Source of base aerial photo/map google earth					
OVERALL WETLAND CATEGORYIV(based on functions ⊡or special characteristics □)						
1. Category of wetland	l based on FUNCTIONS					
	Category I - Total score = 23 - 27	Score for each				
Category II - Total score = 20 - 22		function based				
Category III - Total score = 16 - 19		on three				
X	Category IV - Total score = 9 - 15	ratings				
		(order of ratings				

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
	List app	ropriate rating	g (H, M, L)	
Site Potential	L	М	L	
Landscape Potential	L	L	L	
Value	Н	М	М	Total
Score Based on Ratings	5	5	4	14

Score for each function based on three ratings (order of ratings is not important) 9 = H, H, H 8 = H, H, M 7 = H, H, L 7 = H, M, M 6 = H, M, L 6 = M, M, M 5 = H, L, L 5 = M, M, L 4 = M, L, L 3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	Category
Estuarine	
Wetland of High Conservation Value	
Bog	
Mature Forest	
Old Growth Forest	
Coastal Lagoon	
Interdunal	
None of the above	х

Maps and Figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	1
Hydroperiods	H 1.2	1
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	1
Plant cover of dense, rigid trees, shrubs, and herbaceous plants	S 4.1	1
(can be added to another figure)		'
Boundary of area within 150 ft of the wetland (can be added to another figure)	S 2.1, S 5.1	1
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	2
polygons for accessible habitat and undisturbed habitat		2
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	3
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	4

HGM Classification of Wetland in Western Washington

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

 Are the water levels in the enti 	re unit usually controlled by tides except during floods?
☑ NO - go to 2	☐ YES - the wetland class is Tidal Fringe - go to 1.1
1.1 Is the salinity of the wat	er during periods of annual low flow below 0.5 ppt (parts per thousand)?
	classified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. inge it is an Estuarine wetland and is not scored. This method cannot be
	nd precipitation is the only source (>90%) of water to it. unoff are NOT sources of water to the unit.
☑ NO - go to 3 If your wetland can be o	☐ YES - The wetland class is Flats classified as a <i>Flats</i> wetland, use the form for Depressional wetlands.
plants on the surface at	eet all of the following criteria? The wetland is on the shores of a body of permanent open water (without any any time of the year) at least 20 ac (8 ha) in size; The water area is deeper than 6.6 ft (2 m).
☑ NO - go to 4	☐ YES - The wetland class is Lake Fringe (Lacustrine Fringe)
The water flows through It may flow subsurface,	eet all of the following criteria? De (slope can be very gradual), The wetland in one direction (unidirectional) and usually comes from seeps. The as sheetflow, or in a swale without distinct banks. The etland without being impounded.
□ NO - go to 5	\square YES - The wetland class is Slope
•	ond in these type of wetlands except occasionally in very small and shallow (depressions are usually <3 ft diameter and less than 1 ft deep).
from that stream or rive	r stream channel, where it gets inundated by overbank flooding
☑ NO - go to 6	☐ YES - The wetland class is Riverine
NOTE: The Riverine unit can con	tain depressions that are filled with water when the river is not flooding

Wetland name or number	W9

	depression in which water ponds, or is saturated to the surface, at any outlet, if present, is higher than the interior of the wetland.
□ NO - go to 7	☐ YES - The wetland class is Depressional
•	flat area with no obvious depression and no overbank flooding? han a few inches. The unit seems to be maintained by high e 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.

SLOPE WETLANDS		
Water Quality Functions - Indicators that the site functions to im	prove water quality	
S 1.0. Does the site have the potential to improve water quality?		
S 1.1. Characteristics of the average slope of the wetland: (a 1% slope has a 1	ft vertical drop in	
elevation for every 100 ft of horizontal distance)		
Slope is 1% or less	points = 3	1
Slope is > 1% - 2%	points = 2	
Slope is > 2% - 5%	points = 1	
Slope is greater than 5%	points = 0	
S 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic		0
use NRCS definitions):	Yes = 3 No = 0	U
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollu		
Choose the points appropriate for the description that best fits the plants in the		
means you have trouble seeing the soil surface (>75% cover), and uncut mean	ns not grazed or	
mowed and plants are higher than 6 in.	ncinto — C	
Dense, uncut, herbaceous plants > 90% of the wetland area	points = 6	2
Dense, uncut, herbaceous plants > ½ of area	points = 3	
Dense, woody, plants > ½ of area	points = 2	
Dense, uncut, herbaceous plants > ½ of area	points = 1	
Does not meet any of the criteria above for plants	points = 0	•
Total for S 1 Add the points	in the boxes above Record the rating on	3 the first pag
Total for S 1 Rating of Site Potential If score is: ☐ 12 = H ☐ 6 - 11 = M ☑ 0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality functions.	in the boxes above Record the rating on	
Total for S 1 Rating of Site Potential If score is: □ 12 = H □6 - 11 = M ☑0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in	in the boxes above Record the rating on	
Total for S 1 Rating of Site Potential If score is: □ 12 = H □6 - 11 = M ☑0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in and uses that generate pollutants?	in the boxes above Record the rating on on of the site?	the first pag
Total for S 1 Rating of Site Potential If score is: □ 12 = H □6 - 11 = M ☑0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in and uses that generate pollutants? S 2.2. Are there other sources of pollutants coming into the wetland that are	in the boxes above Record the rating on on of the site?	the first pag
Total for S 1 Rating of Site Potential If score is: □12 = H □6 - 11 = M ☑0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function in the support that are support the wetland in the support that generate pollutants? S 2.2. Are there other sources of pollutants coming into the wetland that are	in the boxes above Record the rating on on of the site?	the first pag
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Total for S 1 Rating of Site Potential If score is: □ 12 = H □ 6 - 11 = M ☑ 0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function in the second secon	in the boxes above Record the rating on on of the site? Yes = 1 No = 0 Yes = 1 No = 0	the first page 0
Total for S 1 Rating of Site Potential If score is: □12 = H □6 - 11 = M ☑0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other Sources Total for S 2 Add the points Rating of Landscape Potential If score is: □1 - 2 = M ☑0 = L	in the boxes above Record the rating on on of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above Record the rating on	the first page 0
Total for S 1 Rating of Site Potential If score is: □12 = H □6 - 11 = M ☑0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in and uses that generate pollutants? S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other Sources Total for S 2 Add the points Rating of Landscape Potential If score is: □1 - 2 = M ☑0 = L	in the boxes above Record the rating on on of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above Record the rating on	the first page of the first pa
Total for S 1 Rating of Site Potential If score is: □12 = H □6 - 11 = M ☑0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in and uses that generate pollutants? S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other Sources Total for S 2 Add the points Rating of Landscape Potential If score is: □1 - 2 = M ☑0 = L S 3.0. Is the water quality improvement provided by the site valuable to society S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river,	in the boxes above Record the rating on on of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above Record the rating on	the first page 0
Add the points Rating of Site Potential If score is: □12 = H □6 - 11 = M □0 - 5 = L Solution 2.0. Does the landscape have the potential to support the water quality function in and uses that generate pollutants? Solution 2.1. Are there other sources of pollutants coming into the wetland that are not listed in question Solution Sol	in the boxes above Record the rating on on of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above Record the rating on ?	the first page of the first pa
Add the points Rating of Site Potential If score is:	in the boxes above Record the rating on on of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above Record the rating on ?	the first page of the first pa
Rating of Site Potential If score is: □12 = H □6 - 11 = M ☑0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function in the second se	in the boxes above Record the rating on on of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above Record the rating on ? Yes = 1 No = 0	the first page of the first pa
Total for S 1 Rating of Site Potential If score is: □12 = H □6 - 11 = M ☑0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function in the second s	in the boxes above Record the rating on on of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above Record the rating on ? Yes = 1 No = 0	the first page of the first pa
Total for S 1 Rating of Site Potential If score is: □12 = H □6 - 11 = M ☑0 - 5 = L S 2.0. Does the landscape have the potential to support the water quality function S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other Sources Total for S 2 Add the points	in the boxes above Record the rating on on of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above Record the rating on ? Yes = 1 No = 0	the first page of the first pa
Add the points Rating of Site Potential If score is: □12 = H □6 - 11 = M □0 - 5 = L Signature 2.0. Does the landscape have the potential to support the water quality function in the second in the	in the boxes above Record the rating on on of the site? Yes = 1 No = 0 Yes = 1 No = 0 in the boxes above Record the rating on ? Yes = 1 No = 0 Yes = 1 No = 0	the first page of the first pa

SLOPE WETLANDS		
Hydrologic Functions - Indicators that the site functions to reduce flooding and stream erosion		
S 4.0. Does the site have the potential to reduce flooding and stream erosion?		
S 4.1. Characteristics of plants that reduce the velocity of surface flows during	storms: Choose	
the points appropriate for the description that best fits conditions in the wetland	-	
should be thick enough (usually $> 1/8$ in), or dense enough, to remain erect du	ıring surface flows.	1
Dense, uncut, rigid plants cover > 90% of the area of the wetland	points = 1	
All other conditions	points = 0	
Rating of Site Potential If score is: 1 = M 0 = L	Record the rating on	the first page
S 5.0. Does the landscape have the potential to support hydrologic functions of	the site?	
S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land		0
uses or cover that generate excess surface runoff?	Yes = 1 No = 0	U
Rating of Landscape Potential If score is: 1 = M 0 = L	Record the rating on	the first page
S 6.0. Are the hydrologic functions provided by the site valuable to society?		
S 6.1. Distance to the nearest areas downstream that have flooding problems:		
The sub-basin immediately down-gradient of site has flooding		
problems that result in damage to human or natural resources (e.g.,		1
houses or salmon redds)	points = 2	'
Surface flooding problems are in a sub-basin farther down-gradient	points = 1	
No flooding problems anywhere downstream	points = 0	
S 6.2. Has the site been identified as important for flood storage or flood		0
conveyance in a regional flood control plan?	Yes = 2 No = 0	U
Total for S 6 Add the points	in the boxes above	1
Rating of Value If score is: 2 - 4 = H 1 = M 0 = L	Record the rating on	the first page

NOTES and FIELD OBSERVATIONS:

in park below wetland, a lot of water flowing across grass and paved areas. Dense uncut woody vegetation is blackberries.

These questions apply to wetlands of all HGM classes.			
HABITAT FUNCTIONS - Indicators that site functions to provide important habitat			
H 1.0. Does the site have the potential to provide habitat?			
H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.			
 □ Aquatic bed □ Emergent □ Scrub-shrub (areas where shrubs have > 30% cover) □ Forested (areas where trees have > 30% cover) □ If the unit has a Forested class, check if: □ The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon 	0		
H 1.2. Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (see text for descriptions of hydroperiods).			
 □ Permanently flooded or inundated □ Seasonally flooded or inundated □ Occasionally flooded or inundated □ Occasionally flooded or inundated □ Saturated only □ Permanently flowing stream or river in, or adjacent to, the wetland □ Seasonally flowing stream in, or adjacent to, the wetland 	0		
□ Lake Fringe wetland□ Freshwater tidal wetland2 points2 points			
H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft ² . Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 5 - 19 species points = 1 < 5 species points = 0	0		
H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. None = 0 points Low = 1 point Moderate = 2 points All three diagrams in this row are HIGH = 3 points	0		

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.	
\square Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long)	
\square 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)	0
☐ Stable steep banks of fine material that might be used by beaver or muskrat for dennir	-
(> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees</i>	
that have not yet weathered where wood is exposed)	
\square At least $rac{1}{4}$ ac of thin-stemmed persistent plants or woody branches are present in area	
that are permanently or seasonally inundated (structures for egg-laying by amphibians	,
\square Invasive plants cover less than 25% of the wetland area in every stratum of plants (see)
H 1.1 for list of strata)	
Total for H 1 Add the points in the boxes above	/e 0
Rating of Site Potential If Score is: 15 - 18 = H 7 - 14 = M 0 - 6 = L Record the rating	on the first page
H 2.0. Does the landscape have the potential to support the habitat function of the site?	
H 2.1 Accessible habitat (include only habitat that directly abuts wetland unit).	
Calculate:	
0 % undisturbed habitat + (10 % moderate & low intensity land uses / 2) = 5%	
If total accessible habitat is:	0
$> \frac{1}{3}$ (33.3%) of 1 km Polygon points =	
20 - 33% of 1 km Polygon points =	
10 - 19% of 1 km Polygon points =	
,	
< 10 % of 1 km Polygon points = H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.	<u>U</u>
Calculate:	
0 % undisturbed habitat + (17 % moderate & low intensity land uses / 2) = 8.5%	
11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0
Undisturbed habitat > 50% of Polygon points =	
Undisturbed habitat 10 - 50% and in 1-3 patches points =	
Undisturbed habitat 10 - 50% and > 3 patches points =	
Undisturbed habitat < 10% of 1 km Polygon points =	0
H 2.3 Land use intensity in 1 km Polygon: If	3.
> 50% of 1 km Polygon is high intensity land use points = (-	,
≤ 50% of 1km Polygon is high intensity points =	
Total for H 2 Add the points in the boxes above	
Rating of Landscape Potential If Score is:	on the first page
II 2 0 to the helitet may ideal by the cite welveble to encist 0	
H 3.0. Is the habitat provided by the site valuable to society?	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose</i>	
only the highest score that applies to the wetland being rated. Site meets ANY of the following criteria: points =	
l i	2
☐ It has 3 or more priority habitats within 100 m (see next page)☐ It provides habitat for Threatened or Endangered species (any plant	
or animal on the state or federal lists)	
·	
☐ It is mapped as a location for an individual WDFW priority species☐ It is a Wetland of High Conservation Value as determined by the	1
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) with in 100m points =	1
Site does not meet any of the criteria above points =	
Rating of Value If Score is: \square 2 = H \square 1 = M \square 0 = L Record the rating	
Trading of value in occitors. Liz-II Li I-III Liv-L Tecona (ile lating	on the mot paye

Wetland Rating System for Western WA: 2014 Update Rating Form - Effective January 1, 2015

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.

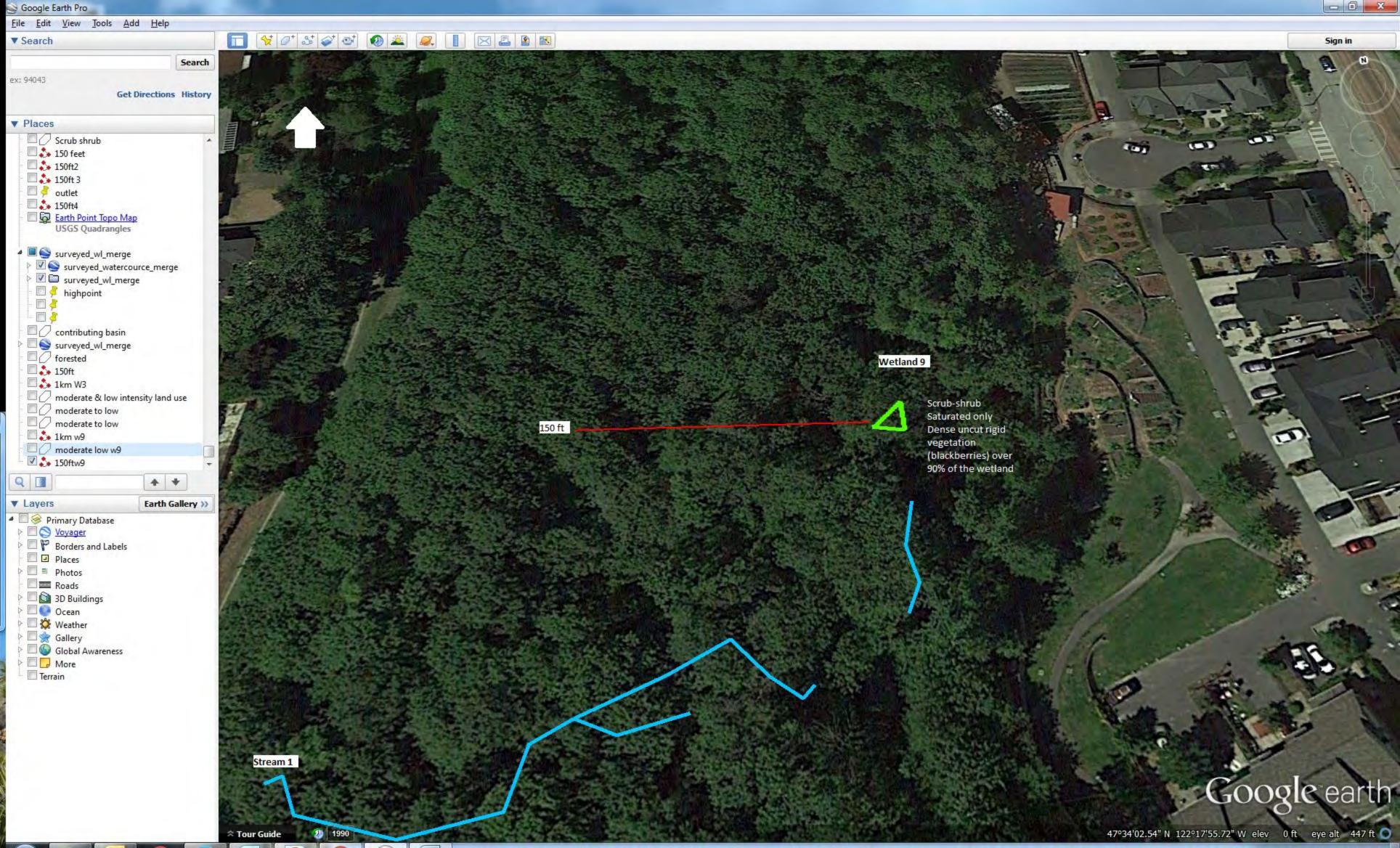
Ш	Aspen Stands : Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
✓	Biodiversity Areas and Corridors : Areas of habitat that are relatively important to various species of native fish and wildlife (<i>full descriptions in WDFW PHS report</i>).
	Herbaceous Balds: Variable size patches of grass 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 (<i>full descriptions in WDFW PHS report p. 158</i> – 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 (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>).
	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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report</i> – 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.

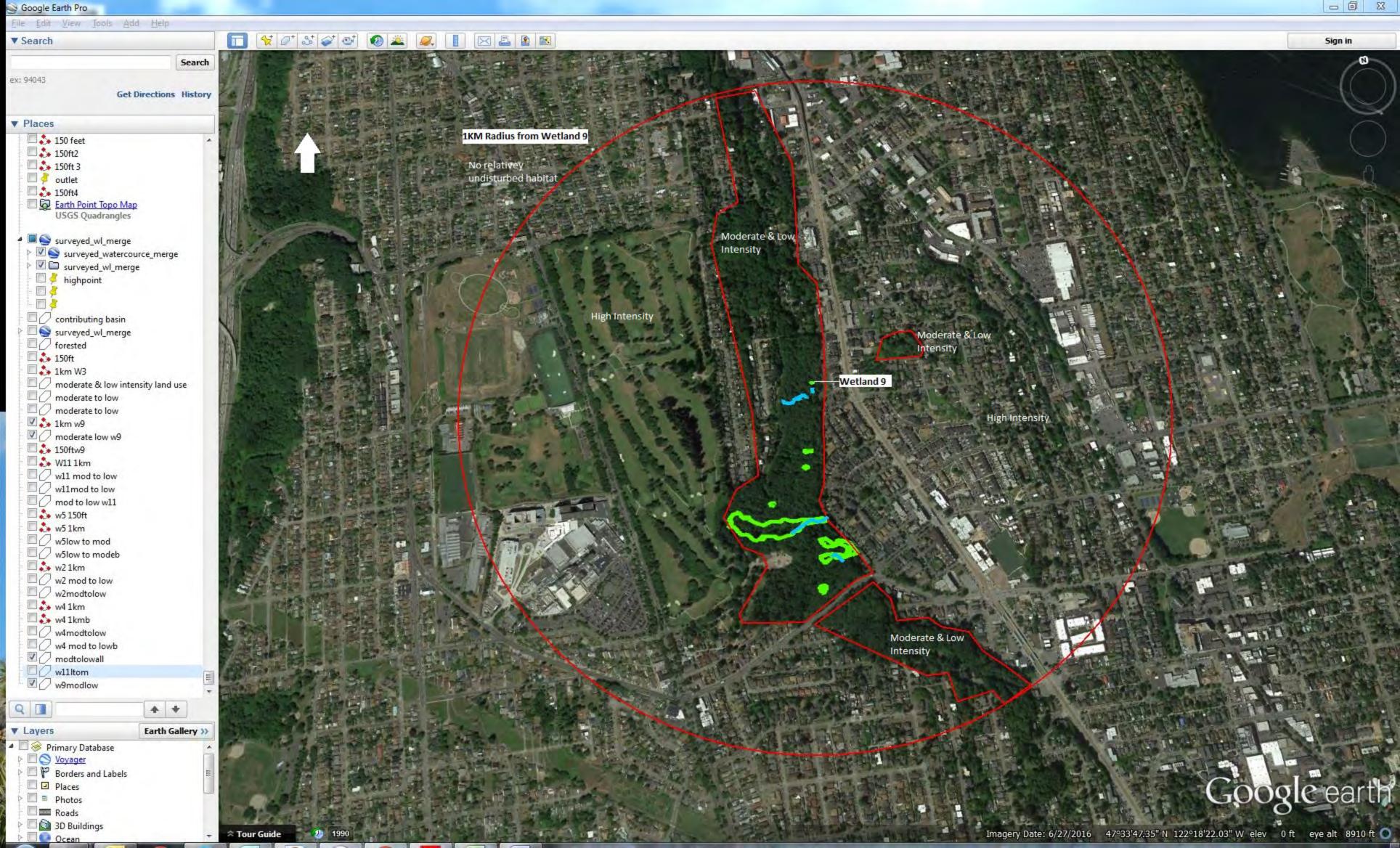
Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

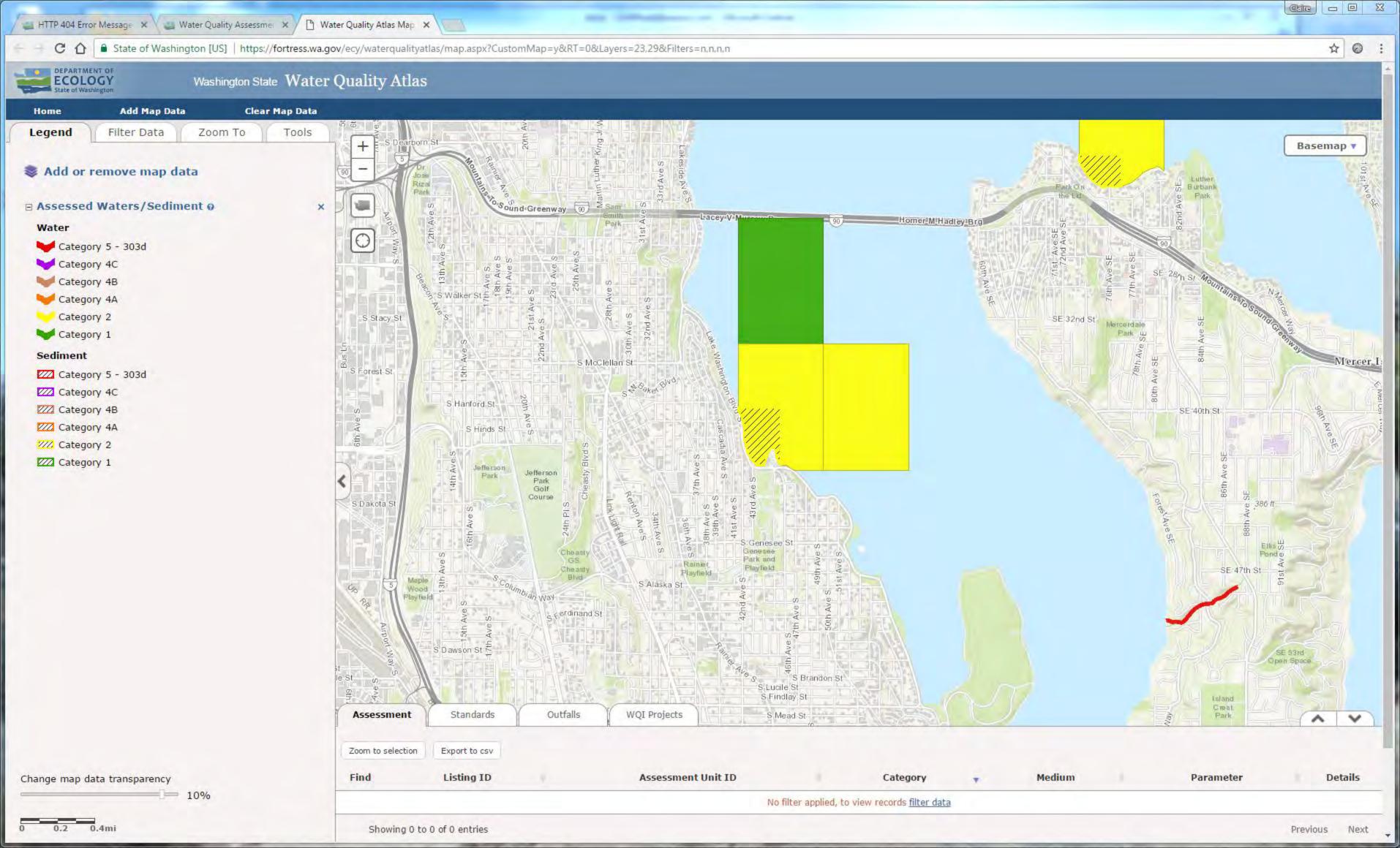
CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland	Туре	Category
	any criteria that apply to the wetland. List the category when the appropriate criteria are met.	
SC 1.0. E	Estuarine Wetlands	
	Does the wetland meet the following criteria for Estuarine wetlands? The dominant water regime is tidal,	
	Vegetated, and	
	With a salinity greater than 0.5 ppt	
	☐ Yes - Go to SC 1.1 ☐ No = Not an estuarine wetland	
SC 1.1.	Is the wetland within a National Wildlife Refuge, National Park, National Estuary	
	Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific	
	Reserve designated under WAC 332-30-151?	
	☐ Yes = Category I ☐ No - Go to SC 1.2	
SC 1.2.	Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
	The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing,	
	and has less than 10% cover of non-native plant species. (If non-native species are	
	Spartina, see page 25)	
	At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-	
	grazed or un-mowed grassland.	
	The wetland has at least two of the following features: tidal channels, depressions with	
	open water, or contiguous freshwater wetlands.	
	☐ Yes = Category I ☐ No = Category II	
	Vetlands of High Conservation Value (WHCV)	
SC 2.1.	Has the WA Department of Natural Resources updated their website to include the list	
	of Wetlands of High Conservation Value?	
	☐ Yes - Go to SC 2.2 ☑ No - Go to SC 2.3	
SC 2.2.	Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?	
SC 2.3.	☐ Yes = Category I ☐ No = Not WHCV	
30 2.3.	Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf	
	☐ Yes - Contact WNHP/WDNR and to SC 2.4 ☐ No = Not WHCV	
SC 2.4.	Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation	
00 2.4.	Value and listed it on their website?	
	☐ Yes = Category I ☐ No = Not WHCV	
SC 3.0. E		
	Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation	
	in bogs? Use the key below. If you answer YES you will still need to rate the	
	wetland based on its functions.	
SC 3.1.	Does an area within the wetland unit have organic soil horizons, either peats or mucks,	
	that compose 16 in or more of the first 32 in of the soil profile?	
	☐ Yes - Go to SC 3.3 ☐ No - Go to SC 3.2	
SC 3.2.	Does an area within the wetland unit have organic soils, either peats or mucks, that are	
	less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic	
	ash, or that are floating on top of a lake or pond?	
	☐ Yes - Go to SC 3.3 ☐ No = Is not a bog	
SC 3.3.	Does an area with peats or mucks have more than 70% cover of mosses at ground	
	level, AND at least a 30% cover of plant species listed in Table 4?	
	\square Yes = Is a Category I bog \square No - Go to SC 3.4 NOTE : If you are uncertain about the extent of mosses in the understory, you may	
	substitute that criterion by measuring the pH of the water that seeps into a hole dug at	
	least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present,	
	the wetland is a bog.	
SC 3.4.	Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir,	
	western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann	
	spruce, or western white pine, AND any of the species (or combination of species) listed	
	in Table 4 provide more than 30% of the cover under the canopy?	
	☐ Yes = Is a Category I bog ☐ No = Is not a bog	

SC 4.0. I	Forested Wetlands					
	Does the wetland have at least 1 contiguous acre of forest that meets one of these					
	criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you</i>					
	answer YES you will still need to rate the wetland based on its functions.					
	Old-growth forests (west of Cascade crest): Stands of at least two tree species,					
	forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac					
	(20 trees/ha) that are at least 200 years of age OR have a diameter at breast height					
	· · · · · · · · · · · · · · · · · · ·					
	(dbh) of 32 in (81 cm) or more.					
	Mature forests (west of the Cascade Crest): Stands where the largest trees are 80-					
	200 years old OR the species that make up the canopy have an average diameter (dbh)					
	exceeding 21 in (53 cm).					
	5.6554mg 2 1 m (55 5m).					
	☐ Yes = Category I ☑ No = Not a forested wetland for this section					
SC 5.0. \	Wetlands in Coastal Lagoons					
	Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?					
	The wetland lies in a depression adjacent to marine waters that is wholly or partially					
	separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently,					
	rocks					
	The lagoon in which the wetland is located contains ponded water that is saline or					
	brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (needs to					
	be measured near the bottom)					
	,					
0054	☐ Yes - Go to SC 5.1 ☐ No = Not a wetland in a coastal lagoon					
SC 5.1. I	Does the wetland meet all of the following three conditions?					
	The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing),					
	and has less than 20% cover of aggressive, opportunistic plant species (see list of					
	species on p. 100).					
	At least $\frac{3}{4}$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-					
	grazed or un-mowed grassland.					
	The wetland is larger than $^{1}/_{10}$ ac (4350 ft 2)					
	☐ Yes = Category I ☐ No = Category II					
SC 6.0. I	Interdunal Wetlands					
	Is the wetland west of the 1889 line (also called the Western Boundary of Upland					
	Ownership or WBUO)? If you answer yes you will still need to rate the wetland					
	, , , , , , , , , , , , , , , , , , , ,					
	based on its habitat functions.					
	In practical terms that means the following geographic areas:					
	Long Beach Peninsula: Lands west of SR 103					
	Grayland-Westport: Lands west of SR 105					
	Ocean Shores-Copalis: Lands west of SR 115 and SR 109					
	☐ Yes - Go to SC 6.1 ☑ No = Not an interdunal wetland for rating					
CC 6 4	<u> </u>					
SC 6.1.	Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form					
	(rates H,H,H or H,H,M for the three aspects of function)?					
	\square Yes = Category I \square No - Go to SC 6.2					
SC 6.2.	Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?					
	☐ Yes = Category II ☐ No - Go to SC 6.3					
SC 6.3.	Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and					
0.0.	·					
	1 ac?					
	☐ Yes = Category III ☐ No = Category IV					
Categor	y of wetland based on Special Characteristics					
If you an	swered No for all types, enter "Not Applicable" on Summary Form					







LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
4672	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
4676	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
500005	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500006	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500007	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500038	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
12193	5	WASHINGTON LAKE	Bacteria	Water
12206	5	WASHINGTON LAKE	Bacteria	Water
43482	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
51591	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51592	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51593	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51706	5	WASHINGTON LAKE	4,4'-DDD	Tissue
51767	5	WASHINGTON LAKE	4,4'-DDE	Tissue
52642	5	WASHINGTON LAKE	Mercury	Tissue
52703	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52704	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52705	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52766	5	WASHINGTON LAKE	Total Chlordane	Tissue
52853	5	WASHINGTON LAKE	Total Phosphorus	Water
74460	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74461	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74775	5	WASHINGTON LAKE	Bacteria	Water
76477		WASHINGTON LAKE	Dieldrin	Tissue
76478	5	WASHINGTON LAKE	Dieldrin	Tissue
76479		WASHINGTON LAKE	Dieldrin	Tissue
77049		WASHINGTON LAKE	Chlordane	Tissue
77050		WASHINGTON LAKE	Chlordane	Tissue
77064	5	WASHINGTON LAKE	Chlordane	Tissue
500009	5	WASHINGTON LAKE	Sediment Bioassay	Sediment
500010		WASHINGTON LAKE	Sediment Bioassay	Sediment
8078		WASHINGTON LAKE	Lead	Water
11960	2	WASHINGTON LAKE	Ammonia-N	Water
11963	2	WASHINGTON LAKE	Ammonia-N	Water

11964 2 WASHINGTON LAKE Ammonia-N Water 11970 2 WASHINGTON LAKE Ammonia-N Water 12207 2 WASHINGTON LAKE Bacteria Water 12264 2 WASHINGTON LAKE Mercury Water 12272 2 WASHINGTON LAKE Mercury Water 12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE POlychlorinated Biphenyls (PCBs) Water 1237,8-TCDD TEQ Tissue 1238 1 WASHINGTON LAKE Bacteria Water 1239 1 WASHINGTON LAKE Bacteria Water 1230 1 WASHINGTON LAKE Bacteria Water 12344	LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
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12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12189	1	WASHINGTON LAKE	Bacteria	Water
12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 124481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12190	1	WASHINGTON LAKE	Bacteria	Water
12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12194	1	WASHINGTON LAKE	Bacteria	Water
12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12195	1	WASHINGTON LAKE	Bacteria	Water
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12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12197	1	WASHINGTON LAKE	Bacteria	Water
1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12200	1	WASHINGTON LAKE	Bacteria	Water
43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12201	1	WASHINGTON LAKE	Bacteria	Water
43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12202	1	WASHINGTON LAKE	Bacteria	Water
43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43481	1	WASHINGTON LAKE	Toxaphene	Tissue
43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43483	1	WASHINGTON LAKE	Mercury	Tissue
, ,	43484	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
43486 1 WASHINGTON LAKE Heptachlor Tissue	43485	1	WASHINGTON LAKE	Heptachlor Epoxide	Tissue
	43486	1	WASHINGTON LAKE	Heptachlor	Tissue

LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
43487	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
43488	1	WASHINGTON LAKE	Endrin	Tissue
43492	1	WASHINGTON LAKE	Beta-BHC	Tissue
43493	1	WASHINGTON LAKE	Alpha-BHC	Tissue
43494	1	WASHINGTON LAKE	4,4'-DDT	Tissue
43495	1	WASHINGTON LAKE	4,4'-DDE	Tissue
43496	1	WASHINGTON LAKE	4,4'-DDD	Tissue
51827	1	WASHINGTON LAKE	4,4'-DDT	Tissue
51949	1	WASHINGTON LAKE	Alpha-BHC	Tissue
52010	1	WASHINGTON LAKE	Beta-BHC	Tissue
52403	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
52464	1	WASHINGTON LAKE	Heptachlor	Tissue
52585	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
52854	1	WASHINGTON LAKE	Total Phosphorus	Water
52855	1	WASHINGTON LAKE	Total Phosphorus	Water
52856	1	WASHINGTON LAKE	Total Phosphorus	Water
52857	1	WASHINGTON LAKE	Total Phosphorus	Water
52858	1	WASHINGTON LAKE	Total Phosphorus	Water
52859	1	WASHINGTON LAKE	Total Phosphorus	Water
52860	1	WASHINGTON LAKE	Total Phosphorus	Water
52861	1	WASHINGTON LAKE	Total Phosphorus	Water
52862	1	WASHINGTON LAKE	Total Phosphorus	Water
52863	1	WASHINGTON LAKE	Total Phosphorus	Water
52864	1	WASHINGTON LAKE	Total Phosphorus	Water
52865		WASHINGTON LAKE	Total Phosphorus	Water
74484		WASHINGTON LAKE	4,4'-DDD	Tissue
74485		WASHINGTON LAKE	4,4'-DDD	Tissue
74772		WASHINGTON LAKE	Bacteria	Water
74776		WASHINGTON LAKE	Bacteria	Water
75112		WASHINGTON LAKE	4,4'-DDT	Tissue
75114		WASHINGTON LAKE	4,4'-DDT	Tissue
75221		WASHINGTON LAKE	Beta-BHC	Tissue
75222		WASHINGTON LAKE	Beta-BHC	Tissue
75309	1	WASHINGTON LAKE	Endrin	Tissue

LISTING_ID CATEGORY_20	14 WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
75310	1 WASHINGTON LAKE	Endrin	Tissue
75311	1 WASHINGTON LAKE	Endrin	Tissue
75400	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75401	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75402	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75403	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75486	1 WASHINGTON LAKE	Heptachlor	Tissue
75487	1 WASHINGTON LAKE	Heptachlor	Tissue
75563	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75564	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75565	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75645	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75646	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75791	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75792	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75793	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75794	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
77219	1 WASHINGTON LAKE	Toxaphene	Tissue
77220	1 WASHINGTON LAKE	Toxaphene	Tissue
77236	1 WASHINGTON LAKE	Toxaphene	Tissue
77243	1 WASHINGTON LAKE	Endosulfan	Tissue
78987	1 WASHINGTON LAKE	Endosulfan	Tissue
78988	1 WASHINGTON LAKE	Endosulfan	Tissue
78989	1 WASHINGTON LAKE	Endosulfan	Tissue
79488	1 WASHINGTON LAKE	Mercury	Tissue
79502	1 WASHINGTON LAKE	Mercury	Tissue

RATING SUMMARY – Western Washington

Name of wetland (or ID #):	Wetland 11	Date of site visit: 20-Oct-16	
Rated by <u>Claire Hoffman</u>	Trained by Ecology? ☑	Yes □No Date of training 2008	
HGM Class used for rating	Slope Wetland	has multiple HGM classes? ☐ Yes ☑No	
NOTE: Form is not complete with out the figures requested (figures can be combined). Source of base aerial photo/map Google Earth			
OVERALL WETLAND CA	TEGORYIV(based on functions [☑or special characteristics □)	
1. Category of wetland	based on FUNCTIONS		
	Category I - Total score = 23 - 27	Score for each	
	Category II - Total score = 20 - 22	function based	
Category III - Total score = 16 - 19		on three	
X	Category IV - Total score = 9 - 15	ratings (order of ratings	

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
	List app	ropriate rating	g (H, M, L)	
Site Potential	L	L	L	
Landscape Potential	L	L	L	
Value	Н	М	М	Total
Score Based on Ratings	5	4	4	13

Score for each function based on three ratings (order of ratings is not important) 9 = H, H, H 8 = H, H, M 7 = H, H, L 7 = H, M, M 6 = H, M, L 6 = M, M, M 5 = H, L, L 5 = M, M, L 4 = M, L, L 3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	Category
Estuarine	
Wetland of High Conservation Value	
Bog	
Mature Forest	
Old Growth Forest	
Coastal Lagoon	
Interdunal	
None of the above	х

Maps and Figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	1
Hydroperiods	H 1.2	1
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	1
Plant cover of dense, rigid trees, shrubs, and herbaceous plants	S 4.1	1
(can be added to another figure)		'
Boundary of area within 150 ft of the wetland (can be added to another figure)	S 2.1, S 5.1	1
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	2
polygons for accessible habitat and undisturbed habitat		2
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	3
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	4

HGM Classification of Wetland in Western Washington

For questions 1 -7, the criteria described must apply to the entire unit being rated. If 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 t	ne water levels in the entire unit usuali	y controlled by tides except during floods?
V	NO - go to 2	\square YES - the wetland class is Tidal Fringe - go to 1.1
1.1	1 Is the salinity of the water during per	iods of annual low flow below 0.5 ppt (parts per thousand)?
		a Freshwater Tidal Fringe use the forms for Riverine wetlands. Estuarine wetland and is not scored. This method cannot be
	entire wetland unit is flat and precipitati water and surface water runoff are NO	on is the only source (>90%) of water to it. T sources of water to the unit.
~	NO - go to 3 If your wetland can be classified as a	☐ YES - The wetland class is Flats a <i>Flats wetland, use the form for</i> Depressional wetlands.
	•	on the shores of a body of permanent open water (without any the year) at least 20 ac (8 ha) in size;
√	☑ NO - go to 4	☐ YES - The wetland class is Lake Fringe (Lacustrine Fringe)
\ \?		n be very gradual), in one direction (unidirectional) and usually comes from seeps. r, or in a swale without distinct banks.
	□ NO - go to 5	☑ YES - The wetland class is Slope
		type of wetlands except occasionally in very small and shallow as are usually <3 ft diameter and less than 1 ft deep).
	the entire wetland unit meet all of the The unit is in a valley, or stream cha from that stream or river, The overbank flooding occurs at leas	nnel, where it gets inundated by overbank flooding
	□ NO - go to 6	☐ YES - The wetland class is Riverine
NOTE:	The Riverine unit can contain depressi	ons that are filled with water when the river is not flooding.

	aphic depression in which water ponds, or is saturated to the surface, as that any outlet, if present, is higher than the interior of the wetland.
\square NO - go to 7	\square YES - The wetland class is Depressional
The unit does not pond surface water n	very flat area with no obvious depression and no overbank flooding? nore than a few inches. The unit seems to be maintained by high

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.

☐ YES - The wetland class is **Depressional**

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.

Wetland name or number W11

☐ NO - go to 8

SLOPE WETLANDS		
Water Quality Functions - Indicators that the site functions to im	prove water quality	
S 1.0. Does the site have the potential to improve water quality?		
S 1.1. Characteristics of the average slope of the wetland: (a 1% slope has a 1	ft vertical drop in	
elevation for every 100 ft of horizontal distance)		
Slope is 1% or less	points = 3	1
Slope is > 1% - 2%	points = 2	'
Slope is > 2% - 5%	points = 1	
Slope is greater than 5%	points = 0	
S 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic		0
(use NRCS definitions):	Yes = 3 No = 0	O
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollu		
Choose the points appropriate for the description that best fits the plants in the		
means you have trouble seeing the soil surface (>75% cover), and uncut mean	s not grazed or	
mowed and plants are higher than 6 in.	:	
Dense, uncut, herbaceous plants > 90% of the wetland area	points = 6	2
Dense, uncut, herbaceous plants > ½ of area	points = 3	
Dense, woody, plants > ½ of area	points = 2	
Dense, uncut, herbaceous plants > ½ of area	points = 1	
Does not meet any of the criteria above for plants	points = 0	
·	in the boxes above	3
Rating of Site Potential If score is: 12 = H 6 - 11 = M 0 - 5 = L	Record the rating on	the first page
	t 11 :1 0	
S 2.0. Does the landscape have the potential to support the water quality function	on of the site?	
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in		0
land uses that generate pollutants?	Yes = 1 No = 0	
S 2.2. Are there other sources of pollutants coming into the wetland that are		
not listed in question S 2.1?		0
Other Sources	Yes = 1 No = 0	_
	in the boxes above	0
Rating of Landscape Potential If score is: □1 - 2 = M □0 = L	Record the rating on	the first page
S 3.0. Is the water quality improvement provided by the site valuable to society	?	
S 3.0. Is the water quality improvement provided by the site valuable to society S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river,	?	0
	? Yes = 1 No = 0	0
S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river,		
S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list?		0
S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue?	Yes = 1 No = 0	
S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? At least one aquatic resource in the basin is on the 303(d) list.	Yes = 1 No = 0	
S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? At least one aquatic resource in the basin is on the 303(d) list. S 3.3. Has the site been identified in a watershed or local plan as important for	Yes = 1 No = 0	1
S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? At least one aquatic resource in the basin is on the 303(d) list. S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? Answer YES if there is a TMDL for the basin in which the unit is found?	Yes = 1 No = 0 Yes = 1 No = 0	1

SLOPE WETLANDS				
Hydrologic Functions - Indicators that the site functions to reduce flo	oding and stream ero	osion		
S 4.0. Does the site have the potential to reduce flooding and stream erosion?				
S 4.1. Characteristics of plants that reduce the velocity of surface flows during the points appropriate for the description that best fits conditions in the wetland	d. Stems of plants			
should be thick enough (usually > $^{1}/_{8}$ in), or dense enough, to remain erect defined as	uring surface flows.	0		
Dense, uncut, rigid plants cover > 90% of the area of the wetland	points = 1			
All other conditions	points = 0			
Rating of Site Potential If score is: □1 = M □0 = L	Record the rating on	the first page		
S 5.0. Does the landscape have the potential to support hydrologic functions o	f the site?			
S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land		0		
uses or cover that generate excess surface runoff?	Yes = 1 No = 0	O		
Rating of Landscape Potential If score is: 1 = M 0 = L	Record the rating on	the first page		
S 6.0. Are the hydrologic functions provided by the site valuable to society?				
S 6.1. Distance to the nearest areas downstream that have flooding problems:				
The sub-basin immediately down-gradient of site has flooding				
problems that result in damage to human or natural resources (e.g.,		1		
houses or salmon redds)	points = 2	'		
Surface flooding problems are in a sub-basin farther down-gradient	points = 1			
No flooding problems anywhere downstream	points = 0			
S 6.2. Has the site been identified as important for flood storage or flood		0		
conveyance in a regional flood control plan?	Yes = 2 No = 0			
Total for S 6 Add the points	in the boxes above	1		
Rating of Value If score is: 2 - 4 = H 1 = M 0 = L	Record the rating on	the first need		

NOTES and FIELD OBSERVATIONS:

downslope of the delineated portion of the wetland, the wetland had been disturbed by human activity (homeless encampment) and subsequently restored. Wetland is reestablishing, a channel is also forming. Wetland soils are not evident in restored area. Restoration is recent (within the last 1 or 1 years). Upland plants that were planted are not growing well in wet areas. Restored area included in rating even though it was not delineated.

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 0 3 structures: points = 2 ☐ Emergent ☑ Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points - 1 ☐ Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: ☐ The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon 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 \(\frac{1}{4} \) ac to count (see text for descriptions of hydroperiods). ☐ Permanently flooded or inundated 4 or more types present: points = 3 ☐ Seasonally flooded or inundated 3 types present: points = 2 1 ☐ Occasionally flooded or inundated 2 types present: points = 1 1 types present: points = 0 ☑ Saturated only ☐ Permanently flowing stream or river in, or adjacent to, the wetland ☑ Seasonally flowing stream in, or adjacent to, the wetland ☐ Lake Fringe wetland 2 points ☐ Freshwater tidal wetland 2 points 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 the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 1 If you counted: > 19 species points = 25 - 19 species points = 1< 5 species points = 0H 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. 2 None = 0 points **Low** = 1 point Moderate = 2 points All three diagrams in this row are **HIGH** = 3 points

Check the habitat features that are present in the wetland. The number of checks is the number of points. Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long) Standing snags (dbh > 4 lin) 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 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 3.3 ft (10 m) Stable steep banks of fine material that might be used by beaver or muskrat for denining (> 30 degree slope) OR signs of recent beaver activity are present (out shrubs or trees that have not yet weathered where wood is exposed) At least 1/2 as of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) Invasive plants cover less than 25% of the wetland area in every strutum of plants (see H 1.1 for list of strate) Total for H1 Add the points in the boxes above Fating of Site Potential If Score is: 15 - 18 = H 7 - 14 = M 20 - 6 = L Record the rating on the first page ## 2.0. Does the landscape have the potential to support the habitat function of the site? ## 2.1 Accessible habitat (Include only habitat that directly abuts wetland unit). Calciculate: If total accessible habitat is: 10	H 1.5. Special habitat features:	
Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long) Standing snags (4bh > 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 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 3.3 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 structs or trees that have not yet weathered where wood is exposed) At least ¼ as of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata) Add the points in the boxes above 5	Check the habitat features that are present in the wetland. The number of checks is the number	
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□ Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (10 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 3.3 ft (10 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 3.3 ft (10 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 3.3 ft (10 m) Stable steep banks of fine material that might be used by beaver or muskraf for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>) At least 3/a ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>) Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H1.1 for list of strata) Total for H1 Add the points in the boxes above 5 Rating of Site Potential if Score is: □15-18 = H □7-14 = M □9-6 = L Record the rating on the first page H2.0 Does the landscape have the potential to support the habitat function of the site? H 2.1 Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>). Calculate: 0 % undisturbed habitat + (10 % moderate & low intensity land uses / 2) = 5% If total accessible habitat is:	\square Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long)	
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H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. Calculate: 0 % undisturbed habitat + (10 - 19% of 1 km Polygon points = 1	
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> 50% of 1 km Polygon is high intensity land use	Undisturbed habitat < 10% of 1 km Polygon points = 0	
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Total for H 2 Rating of Landscape Potential If Score is:	> 50% of 1 km Polygon is high intensity land use points = (-2)	-2
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		the first page

Wetland Rating System for Western WA: 2014 Update Rating Form - Effective January 1, 2015

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.

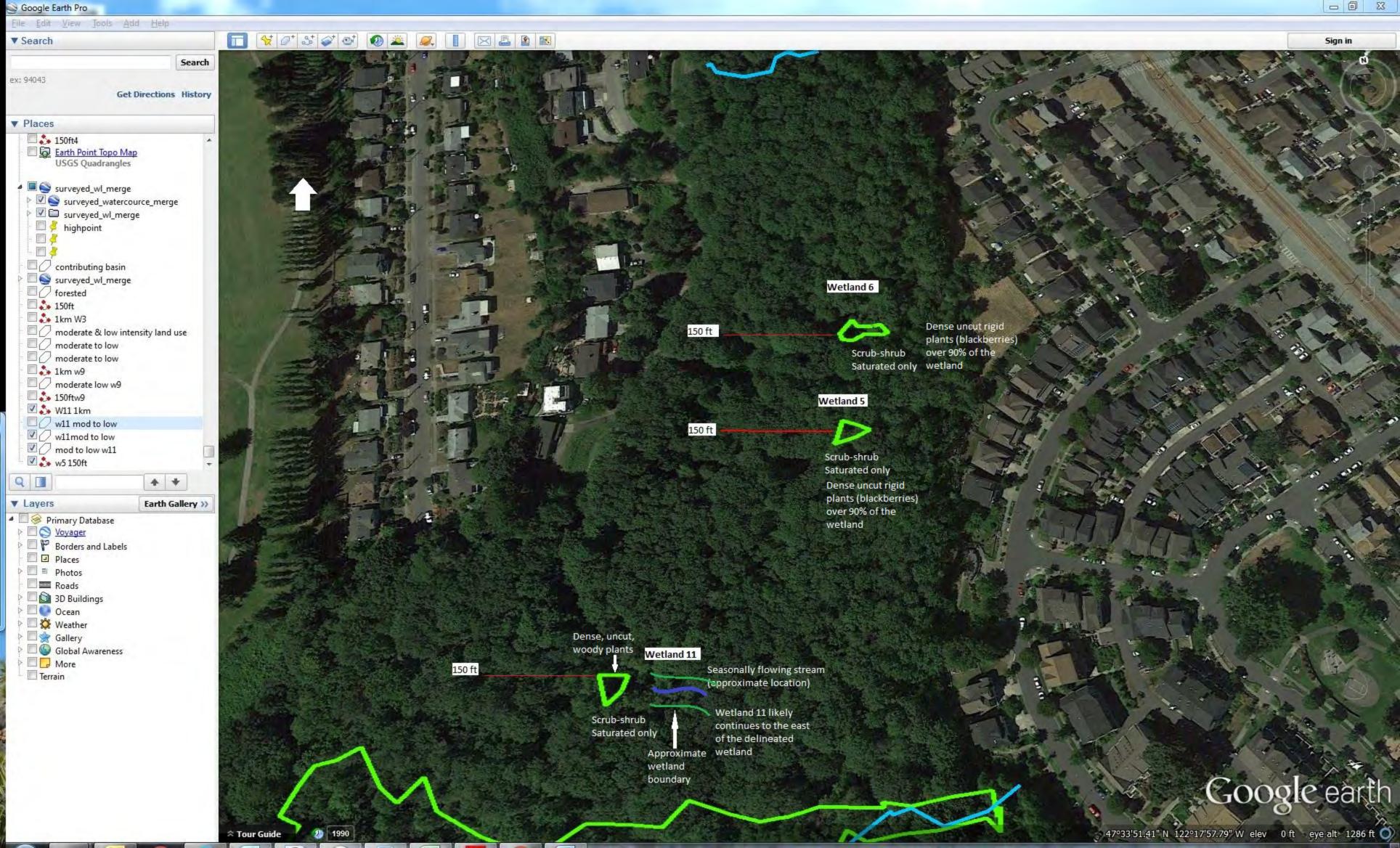
Ш	Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
7	Biodiversity Areas and Corridors : Areas of habitat that are relatively important to various species of native fish and wildlife (<i>full descriptions in WDFW PHS report</i>).
	Herbaceous Balds: Variable size patches of grass 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 (<i>full descriptions in WDFW PHS report p. 158</i> – 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 (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>).
	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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report</i> – 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.
7	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.

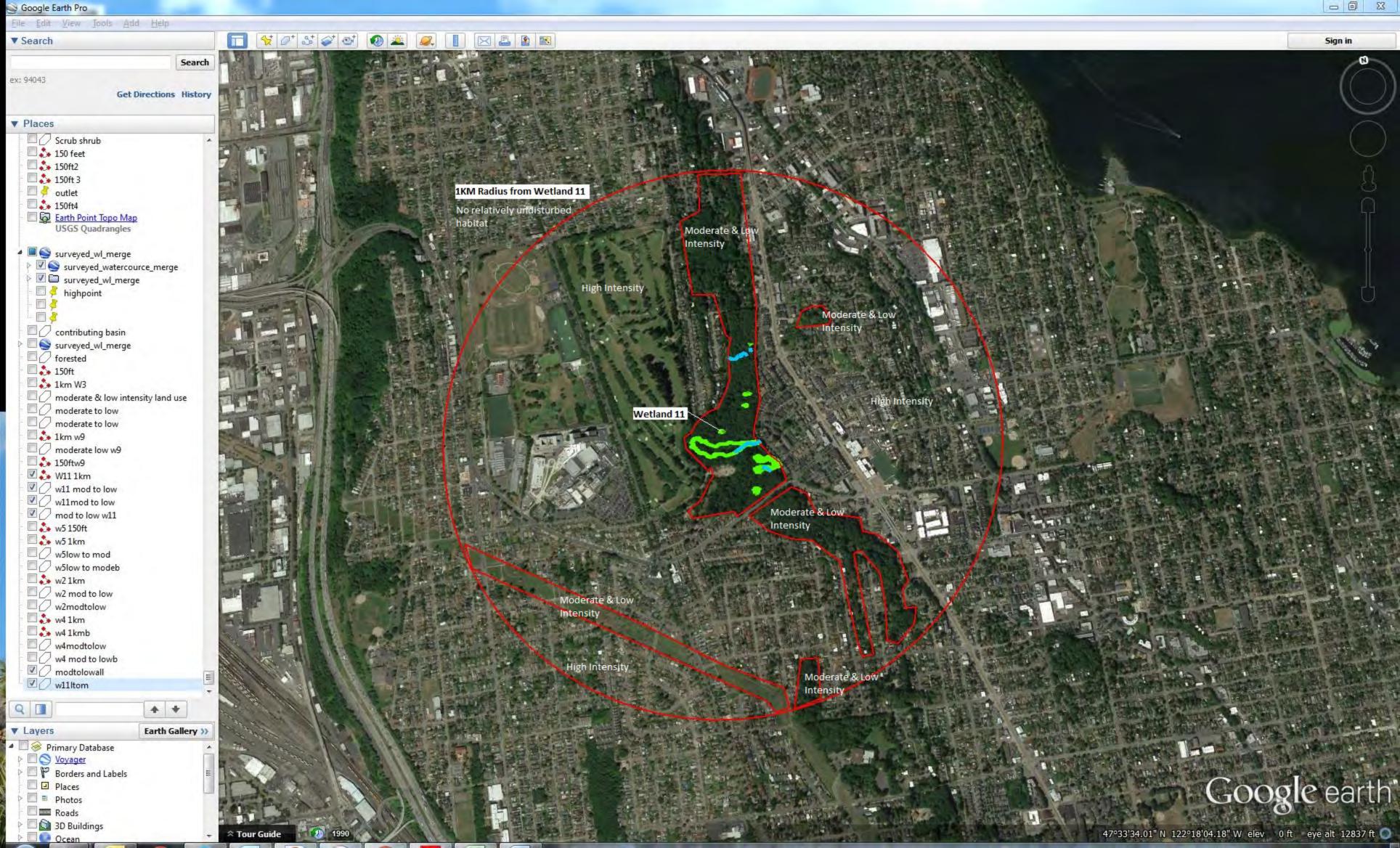
Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

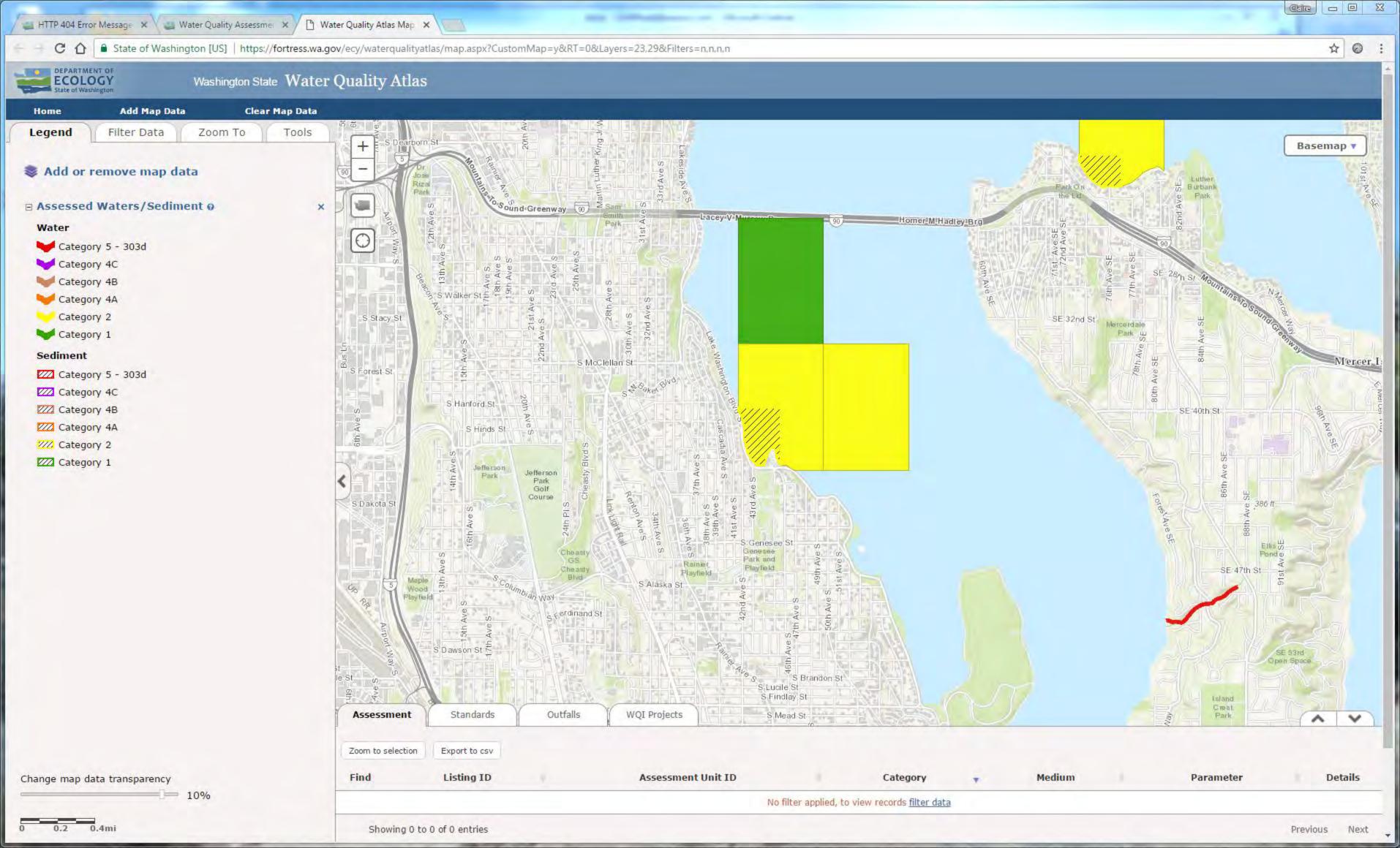
CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland	Туре	Category
	any criteria that apply to the wetland. List the category when the appropriate criteria are met.	
SC 1.0. E	Estuarine Wetlands	
	Does the wetland meet the following criteria for Estuarine wetlands? The dominant water regime is tidal,	
	Vegetated, and	
	With a salinity greater than 0.5 ppt	
	☐ Yes - Go to SC 1.1 ☐ No = Not an estuarine wetland	
SC 1.1.	Is the wetland within a National Wildlife Refuge, National Park, National Estuary	
	Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific	
	Reserve designated under WAC 332-30-151?	
	☐ Yes = Category I ☐ No - Go to SC 1.2	
SC 1.2.	Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
	The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing,	
	and has less than 10% cover of non-native plant species. (If non-native species are	
	Spartina, see page 25)	
	At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-	
	grazed or un-mowed grassland.	
	The wetland has at least two of the following features: tidal channels, depressions with	
	open water, or contiguous freshwater wetlands. ☐ Yes = Category I ☐ No = Category II	
SC 2 0 V	Wetlands of High Conservation Value (WHCV)	
SC 2.0. V	Has the WA Department of Natural Resources updated their website to include the list	
	of Wetlands of High Conservation Value?	
	☐ Yes - Go to SC 2.2 ☑ No - Go to SC 2.3	
SC 2.2.	Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?	
	☐ Yes = Category I ☐ No = Not WHCV	
SC 2.3.	Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland?	
	http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf	
	☐ Yes - Contact WNHP/WDNR and to SC 2.4 ☐ No = Not WHCV	
SC 2.4.	Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation	
	Value and listed it on their website?	
CC 2 0 F	☐ Yes = Category I ☐ No = Not WHCV	
SC 3.0. E	Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation	
	in bogs? Use the key below. If you answer YES you will still need to rate the	
	wetland based on its functions.	
SC 3.1.	Does an area within the wetland unit have organic soil horizons, either peats or mucks,	
	that compose 16 in or more of the first 32 in of the soil profile?	
	☐ Yes - Go to SC 3.3 ☐ No - Go to SC 3.2	
SC 3.2.	Does an area within the wetland unit have organic soils, either peats or mucks, that are	
	less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic	
	ash, or that are floating on top of a lake or pond?	
	☐ Yes - Go to SC 3.3 ☐ No = Is not a bog	
SC 3.3.	Does an area with peats or mucks have more than 70% cover of mosses at ground	
	level, AND at least a 30% cover of plant species listed in Table 4?	
	☐ Yes = Is a Category I bog ☐ No - Go to SC 3.4	
	NOTE : If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at	
	least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present,	
	the wetland is a bog.	
SC 3.4.	Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir,	
	western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann	
	spruce, or western white pine, AND any of the species (or combination of species) listed	
	in Table 4 provide more than 30% of the cover under the canopy?	
	☐ Yes = Is a Category I bog ☐ No = Is not a bog	

SC 4.0. I	Forested Wetlands	
	Does the wetland have at least 1 contiguous acre of forest that meets one of these	
	criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you</i>	
	answer YES you will still need to rate the wetland based on its functions.	
	Old-growth forests (west of Cascade crest): Stands of at least two tree species,	
	forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac	
	(20 trees/ha) that are at least 200 years of age OR have a diameter at breast height	
	· · · · · · · · · · · · · · · · · · ·	
	(dbh) of 32 in (81 cm) or more.	
	Mature forests (west of the Cascade Crest): Stands where the largest trees are 80-	
	200 years old OR the species that make up the canopy have an average diameter (dbh)	
	exceeding 21 in (53 cm).	
	☐ Yes = Category I ☑ No = Not a forested wetland for this section	
SC 5.0. \	Wetlands in Coastal Lagoons	
	Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?	
	The wetland lies in a depression adjacent to marine waters that is wholly or partially	
	, , , , , , , , , , , , , , , , , , , ,	
	separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently,	
_	rocks	
	The lagoon in which the wetland is located contains ponded water that is saline or	
	brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to</i>	
	be measured near the bottom)	
	☐ Yes - Go to SC 5.1 ☑ No = Not a wetland in a coastal lagoon	
SC 5 1 I	Does the wetland meet all of the following three conditions?	
_		
	The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing),	
	and has less than 20% cover of aggressive, opportunistic plant species (see list of	
	species on p. 100).	
	At least 3/4 of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-	
	grazed or un-mowed grassland.	
	The wetland is larger than ¹ / ₁₀ ac (4350 ft ²)	
0000	☐ Yes = Category I ☐ No = Category II	
SC 6.0. I	Interdunal Wetlands	
	Is the wetland west of the 1889 line (also called the Western Boundary of Upland	
	Ownership or WBUO)? If you answer yes you will still need to rate the wetland	
	based on its habitat functions.	
	In practical terms that means the following geographic areas:	
	Long Beach Peninsula: Lands west of SR 103	
	-	
	Grayland-Westport: Lands west of SR 105	
	Ocean Shores-Copalis: Lands west of SR 115 and SR 109	
	☐ Yes - Go to SC 6.1 ☑ No = Not an interdunal wetland for rating	
SC 6.1.	Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form	
	(rates H,H,H or H,H,M for the three aspects of function)?	
	☐ Yes = Category I ☐ No - Go to SC 6.2	
SC 6.2.	Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?	
0.2.		
0000	☐ Yes = Category II ☐ No - Go to SC 6.3	
SC 6.3.	Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and	
	1 ac?	
	☐ Yes = Category III ☐ No = Category IV	
Categor	y of wetland based on Special Characteristics	
_	swered No for all types, enter "Not Applicable" on Summary Form	







LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
4672	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
4676	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
500005	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500006	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500007	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500038	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
12193	5	WASHINGTON LAKE	Bacteria	Water
12206	5	WASHINGTON LAKE	Bacteria	Water
43482	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
51591	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51592	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51593	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51706	5	WASHINGTON LAKE	4,4'-DDD	Tissue
51767	5	WASHINGTON LAKE	4,4'-DDE	Tissue
52642	5	WASHINGTON LAKE	Mercury	Tissue
52703	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52704	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52705	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52766	5	WASHINGTON LAKE	Total Chlordane	Tissue
52853	5	WASHINGTON LAKE	Total Phosphorus	Water
74460	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74461	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74775	5	WASHINGTON LAKE	Bacteria	Water
76477		WASHINGTON LAKE	Dieldrin	Tissue
76478	5	WASHINGTON LAKE	Dieldrin	Tissue
76479		WASHINGTON LAKE	Dieldrin	Tissue
77049		WASHINGTON LAKE	Chlordane	Tissue
77050		WASHINGTON LAKE	Chlordane	Tissue
77064	5	WASHINGTON LAKE	Chlordane	Tissue
500009	5	WASHINGTON LAKE	Sediment Bioassay	Sediment
500010		WASHINGTON LAKE	Sediment Bioassay	Sediment
8078		WASHINGTON LAKE	Lead	Water
11960	2	WASHINGTON LAKE	Ammonia-N	Water
11963	2	WASHINGTON LAKE	Ammonia-N	Water

11964 2 WASHINGTON LAKE Ammonia-N Water 11970 2 WASHINGTON LAKE Ammonia-N Water 12207 2 WASHINGTON LAKE Bacteria Water 12264 2 WASHINGTON LAKE Mercury Water 12272 2 WASHINGTON LAKE Mercury Water 12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE POlychlorinated Biphenyls (PCBs) Water 1237,8-TCDD TEQ Tissue 1238 1 WASHINGTON LAKE Bacteria Water 1239 1 WASHINGTON LAKE Bacteria Water 1230 1 WASHINGTON LAKE Bacteria Water 1230 1 WASHINGTON LAKE Bacteria Water 12344	LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
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12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12319 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12319 3 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 5 WASHINGTON LAKE Bacteria Water 12319 6 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE WASHINGTO	12264	2	WASHINGTON LAKE	Mercury	Water
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12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12191 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12203 1 WASHINGTON LAKE Bacteria Water 12204 1 WASHINGTON LAKE Bacteria Tissue 12488 1 WASHINGTON LAKE Macteria Tissue 12488 1 WASHINGTON LAKE Mercury Tissue 12488 1 WASHINGTON LAKE Mercury Tissue 12506 1 WASHINGTON LAKE Mercury Tissue 12607 1 WASHINGTON LAKE Mercury Tissue 12608 1 WASHINGTON LAKE Mercury Tissue 12709 Tissue	12315	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
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12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13584 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13685 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12183	1	WASHINGTON LAKE	Bacteria	Water
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12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12189	1	WASHINGTON LAKE	Bacteria	Water
12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 124481 1 WASHINGTON LAKE Toxaphene Tissue 12483 1 WASHINGTON LAKE Mercury Tissue 12484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 12485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12190	1	WASHINGTON LAKE	Bacteria	Water
12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12194	1	WASHINGTON LAKE	Bacteria	Water
12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12195	1	WASHINGTON LAKE	Bacteria	Water
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12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12197	1	WASHINGTON LAKE	Bacteria	Water
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43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12201	1	WASHINGTON LAKE	Bacteria	Water
43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12202	1	WASHINGTON LAKE	Bacteria	Water
43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43481	1	WASHINGTON LAKE	Toxaphene	Tissue
43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43483	1	WASHINGTON LAKE	Mercury	Tissue
, ,	43484	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
43486 1 WASHINGTON LAKE Heptachlor Tissue	43485	1	WASHINGTON LAKE	Heptachlor Epoxide	Tissue
	43486	1	WASHINGTON LAKE	Heptachlor	Tissue

LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
43487	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
43488	1	WASHINGTON LAKE	Endrin	Tissue
43492	1	WASHINGTON LAKE	Beta-BHC	Tissue
43493	1	WASHINGTON LAKE	Alpha-BHC	Tissue
43494	1	WASHINGTON LAKE	4,4'-DDT	Tissue
43495	1	WASHINGTON LAKE	4,4'-DDE	Tissue
43496	1	WASHINGTON LAKE	4,4'-DDD	Tissue
51827	1	WASHINGTON LAKE	4,4'-DDT	Tissue
51949	1	WASHINGTON LAKE	Alpha-BHC	Tissue
52010	1	WASHINGTON LAKE	Beta-BHC	Tissue
52403	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
52464	1	WASHINGTON LAKE	Heptachlor	Tissue
52585	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
52854	1	WASHINGTON LAKE	Total Phosphorus	Water
52855	1	WASHINGTON LAKE	Total Phosphorus	Water
52856	1	WASHINGTON LAKE	Total Phosphorus	Water
52857	1	WASHINGTON LAKE	Total Phosphorus	Water
52858	1	WASHINGTON LAKE	Total Phosphorus	Water
52859	1	WASHINGTON LAKE	Total Phosphorus	Water
52860	1	WASHINGTON LAKE	Total Phosphorus	Water
52861	1	WASHINGTON LAKE	Total Phosphorus	Water
52862	1	WASHINGTON LAKE	Total Phosphorus	Water
52863	1	WASHINGTON LAKE	Total Phosphorus	Water
52864	1	WASHINGTON LAKE	Total Phosphorus	Water
52865		WASHINGTON LAKE	Total Phosphorus	Water
74484		WASHINGTON LAKE	4,4'-DDD	Tissue
74485		WASHINGTON LAKE	4,4'-DDD	Tissue
74772		WASHINGTON LAKE	Bacteria	Water
74776		WASHINGTON LAKE	Bacteria	Water
75112		WASHINGTON LAKE	4,4'-DDT	Tissue
75114		WASHINGTON LAKE	4,4'-DDT	Tissue
75221		WASHINGTON LAKE	Beta-BHC	Tissue
75222		WASHINGTON LAKE	Beta-BHC	Tissue
75309	1	WASHINGTON LAKE	Endrin	Tissue

LISTING_ID CATEGORY_20	14 WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
75310	1 WASHINGTON LAKE	Endrin	Tissue
75311	1 WASHINGTON LAKE	Endrin	Tissue
75400	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75401	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75402	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75403	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75486	1 WASHINGTON LAKE	Heptachlor	Tissue
75487	1 WASHINGTON LAKE	Heptachlor	Tissue
75563	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75564	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75565	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75645	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75646	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75791	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75792	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75793	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75794	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
77219	1 WASHINGTON LAKE	Toxaphene	Tissue
77220	1 WASHINGTON LAKE	Toxaphene	Tissue
77236	1 WASHINGTON LAKE	Toxaphene	Tissue
77243	1 WASHINGTON LAKE	Endosulfan	Tissue
78987	1 WASHINGTON LAKE	Endosulfan	Tissue
78988	1 WASHINGTON LAKE	Endosulfan	Tissue
78989	1 WASHINGTON LAKE	Endosulfan	Tissue
79488	1 WASHINGTON LAKE	Mercury	Tissue
79502	1 WASHINGTON LAKE	Mercury	Tissue

RATING SUMMARY – Western Washington

Name of wetland (or ID #):	Wetland 12	Date of site visit: 5-Apr-	17
Rated by Claire Hoffman	Trained by Ecology? ☑ Yes ☐ No	Date of training Mar-1	17
HGM Class used for rating	Slope Wetland has multip	le HGM classes? ☐ Yes ☑N	10
	ot complete with out the figures requested (figures can of base aerial photo/map Google Earth	be combined).	
OVERALL WETLAND CA	TEGORY (based on functions ⊡or specia	al characteristics □)	
1. Category of wetland	I based on FUNCTIONS		
	Category I - Total score = 23 - 27	Score for each	
	Category II - Total score = 20 - 22	function based	
	Category III - Total score = 16 - 19	on three	
X	Category IV - Total score = 9 - 15	ratings (order of ratings	

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
List appropriate rating (H, M, L)				
Site Potential	L	М	L	
Landscape Potential	L	L	L	
Value	M	М	М	Total
Score Based on Ratings	4	5	4	13

Score for each function based on three ratings (order of ratings is not important) 9 = H, H, H 8 = H, H, M 7 = H, H, L 7 = H, M, M 6 = H, M, L 6 = M, M, M 5 = H, L, L 5 = M, M, L 4 = M, L, L 3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	Category
Estuarine	
Wetland of High Conservation Value	
Bog	
Mature Forest	
Old Growth Forest	
Coastal Lagoon	
Interdunal	
None of the above	Х

Maps and Figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	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)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	1
Hydroperiods	H 1.2	1
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	1
Plant cover of dense , rigid trees, shrubs, and herbaceous plants	S 4.1	1
(can be added to another figure)		'
Boundary of area within 150 ft of the wetland (can be added to another figure)	S 2.1, S 5.1	1
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	2
polygons for accessible habitat and undisturbed habitat		2
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	3
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	4

HGM Classification of Wetland in Western Washington

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

1. Are the water levels in the entire u	nit usually controlled by tides except during floods?
☑ NO - go to 2	☐ YES - the wetland class is Tidal Fringe - go to 1.1
1.1 Is the salinity of the water d	uring periods of annual low flow below 0.5 ppt (parts per thousand)?
	sified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. e it is an Estuarine wetland and is not scored. This method cannot be
	precipitation is the only source (>90%) of water to it. If are NOT sources of water to the unit.
☐ NO - go to 3 If your wetland can be class	☐ YES - The wetland class is Flats sified as a Flats wetland, use the form for Depressional wetlands.
plants on the surface at any	all of the following criteria? retland is on the shores of a body of permanent open water (without any time of the year) at least 20 ac (8 ha) in size; ater area is deeper than 6.6 ft (2 m).
☑ NO - go to 4	☐ YES - The wetland class is Lake Fringe (Lacustrine Fringe)
It may flow subsurface, as s	· · · · · · · · · · · · · · · · · · ·
□ NO - go to 5	\square YES - The wetland class is Slope
•	in these type of wetlands except occasionally in very small and shallow epressions are usually <3 ft diameter and less than 1 ft deep).
from that stream or river,	all of the following criteria? eam channel, where it gets inundated by overbank flooding urs at least once every 2 years.
☑ 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 some time during the year? This means that any outle	on in which water ponds, or is saturated to the surface, at et, if present, is higher than the interior of the wetland.
☑ NO - go to 7	\square YES - The wetland class is Depressional
7. Is the entire wetland unit located in a very flat area the unit does not pond surface water more than a few groundwater in the area. The wetland may be ditched	, ,
☑ NO - go to 8	\square 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.

SLODE WETLANDS			
SLOPE WETLANDS			
Water Quality Functions - Indicators that the site functions to improve water quality			
S 1.0. Does the site have the potential to improve water quality?			
S 1.1. Characteristics of the average slope of the wetland: (a 1% slope has a 1	ft vertical drop in		
elevation for every 100 ft of horizontal distance)			
Slope is 1% or less	points = 3	3	
Slope is > 1% - 2%	points = 2	· ·	
Slope is > 2% - 5%	points = 1		
Slope is greater than 5%	points = 0		
S 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic		0	
(use NRCS definitions):	Yes = 3 No = 0	0	
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollu			
Choose the points appropriate for the description that best fits the plants in the			
means you have trouble seeing the soil surface (>75% cover), and uncut mean	s not grazed or		
mowed and plants are higher than 6 in.	nainta — C		
Dense, uncut, herbaceous plants > 90% of the wetland area	points = 6	2	
Dense, uncut, herbaceous plants > ½ of area	points = 3		
Dense, woody, plants > ½ of area	points = 2		
Dense, uncut, herbaceous plants > 1/4 of area	points = 1		
Does not meet any of the criteria above for plants	points = 0	_	
·	in the boxes above	5	
Rating of Site Potential If score is: 12 = H 6 - 11 = M 0 - 5 = L	Record the rating on	the first page	
S 2.0. Does the landscape have the potential to support the water quality functi	on of the site?		
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in		0	
land uses that generate pollutants?	Yes = 1 No = 0	0	
S 2.2. Are there other sources of pollutants coming into the wetland that are			
not listed in question S 2.1?		0	
Other Sources	Yes = 1 No = 0		
Total for S 2 Add the points	in the boxes above	0	
Rating of Landscape Potential If score is: ☐1 - 2 = M	Record the rating on	the first page	
S 3.0. Is the water quality improvement provided by the site valuable to society	?		
S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river,			
lake, or marine water that is on the 303(d) list?	Yes = 1 No = 0	0	
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue?		1	
At least one aquatic resource in the basin is on the 303(d) list.	Yes = 1 No = 0		
S 3.3. Has the site been identified in a watershed or local plan as important for			
maintaining water quality? Answer YES if there is a TMDL for the basin in		0	
which the unit is found?	Yes = 2 No = 0		
Total for S 3 Add the points	in the boxes above	1	
Rating of Value If score is: 2 - 4 = H 1 = M 0 = L	Record the rating on	the first page	

SLOPE WETLANDS		
Hydrologic Functions - Indicators that the site functions to reduce floor	oding and stream ero	osion
S 4.0. Does the site have the potential to reduce flooding and stream erosion?		
S 4.1. Characteristics of plants that reduce the velocity of surface flows during	storms: Choose	
the points appropriate for the description that best fits conditions in the wetland	. Stems of plants	
should be thick enough (usually $> 1/8$ in), or dense enough, to remain erect du	ıring surface flows.	1
Dense, uncut, rigid plants cover > 90% of the area of the wetland	points = 1	
All other conditions	points = 0	
Rating of Site Potential If score is: 1 = M 0 = L	Record the rating on	the first page
S 5.0. Does the landscape have the potential to support hydrologic functions of	the site?	
S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land		0
uses or cover that generate excess surface runoff?	Yes = 1 No = 0	U
Rating of Landscape Potential If score is: 1 = M 0 = L	Record the rating on	the first page
S 6.0. Are the hydrologic functions provided by the site valuable to society?		
S 6.1. Distance to the nearest areas downstream that have flooding problems:		
The sub-basin immediately down-gradient of site has flooding		
problems that result in damage to human or natural resources (e.g.,		1
houses or salmon redds)	points = 2	1
Surface flooding problems are in a sub-basin farther down-gradient	points = 1	
No flooding problems anywhere downstream	points = 0	
S 6.2. Has the site been identified as important for flood storage or flood		0
conveyance in a regional flood control plan?	Yes = 2 No = 0	0
Total for S 6 Add the points	in the boxes above	1
Rating of Value If score is: 2 - 4 = H 1 = M 0 = L	Record the rating on	the first page

NOTES and FIELD OBSERVATIONS:

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: <i>Indicators are Cowardin classes and strata within the Forested class.</i> Check the Cowardin plant classes in the wetland. <i>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.</i>	
 □ Aquatic bed □ Emergent □ Scrub-shrub (areas where shrubs have > 30% cover) □ Forested (areas where trees have > 30% cover) □ If the unit has a Forested class, check if: □ The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon 	0
H 1.2. Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime	
has to cover more than 10% of the wetland or ¼ ac to count (see text for descriptions of	
hydroperiods). □ Permanently flooded or inundated	0
☐ Freshwater tidal wetland 2 points 2 points 2 points	
H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft ² . Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 5 - 19 species points = 1 < 5 species points = 0	1
H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high.	
None = 0 points Low = 1 point Moderate = 2 points	0
All three diagrams in this row are HIGH = 3 points	

H 1.5. Special habitat features:	
Check the habitat features that are present in the wetland. The number of checks is the number	
of points.	
☑ Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long)	
☐ Standing snags (dbh > 4 in) within the wetland	
☐ Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends	
at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at	
least 33 ft (10 m)	2
☐ 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 (<i>cut shrubs or trees</i>	
that have not yet weathered where wood is exposed)	
☐ At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas	
that are permanently or seasonally inundated (structures for egg-laying by amphibians)	
☑ Invasive plants cover less than 25% of the wetland area in every stratum of plants (see	
H 1.1 for list of strata)	
Total for H 1 Add the points in the boxes above	3
Rating of Site Potential If Score is: 15 - 18 = H 7 - 14 = M 0 - 6 = L Record the rating on	the first page
H 2.0. Does the landscape have the potential to support the habitat function of the site?	
H 2.1 Accessible habitat (include only habitat that directly abuts wetland unit).	
Calculate:	
0 % undisturbed habitat + (10 % moderate & low intensity land uses / 2) = 5%	
If total accessible habitat is:	0
$> \frac{1}{3}$ (33.3%) of 1 km Polygon points = 3	
20 - 33% of 1 km Polygon points = 2	
10 - 19% of 1 km Polygon points = 1	
< 10 % of 1 km Polygon points = 0	
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.	
Calculate:	
0 % undisturbed habitat + (20 % moderate & low intensity land uses / 2) = 10%	
(<u>20</u> /0 moderate a few interiority faint according	_
Undisturbed habitat > 50% of Polygon points = 3	1
Undisturbed habitat 10 - 50% and in 1-3 patches points = 2	
Undisturbed habitat 10 - 50% and > 3 patches points = 1	
Undisturbed habitat < 10% of 1 km Polygon points = 0	
H 2.3 Land use intensity in 1 km Polygon: If	
> 50% of 1 km Polygon is high intensity land use points = (-2)	-2
≤ 50% of 1km Polygon is high intensity points = 0	- _
Total for H 2 Add the points in the boxes above	-1
Rating of Landscape Potential If Score is: 4 - 6 = H 1 - 3 = M 2 < 1 = L Record the rating on	
Taking of Lanuscape Folential if Score is 4 - 0 - 1 _ 1 - 3 - W _ < 1 = L Record the rating on	uie iiist page
H 3.0. Is the habitat provided by the site valuable to society?	
H 3.1. Does the site provided by the site valuable to society:	
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 has 3 of more priority habitats within 100 m (see next page) ☐ It provides habitat for Threatened or Endangered species (any plant	
or animal on the state or federal lists)	
☐ It is mapped as a location for an individual WDFW priority species	
☐ It is inapped as a location for all inalliated WEI W priority species ☐ It is a Wetland of High Conservation Value as determined by the	1
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) with in 100m points = 1	
Site does not meet any of the criteria above points = 0	
Rating of Value If Score is: 2 = H 1 = M 0 = L Record the rating on	the first page

Wetland Rating System for Western WA: 2014 Update Rating Form - Effective January 1, 2015

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.

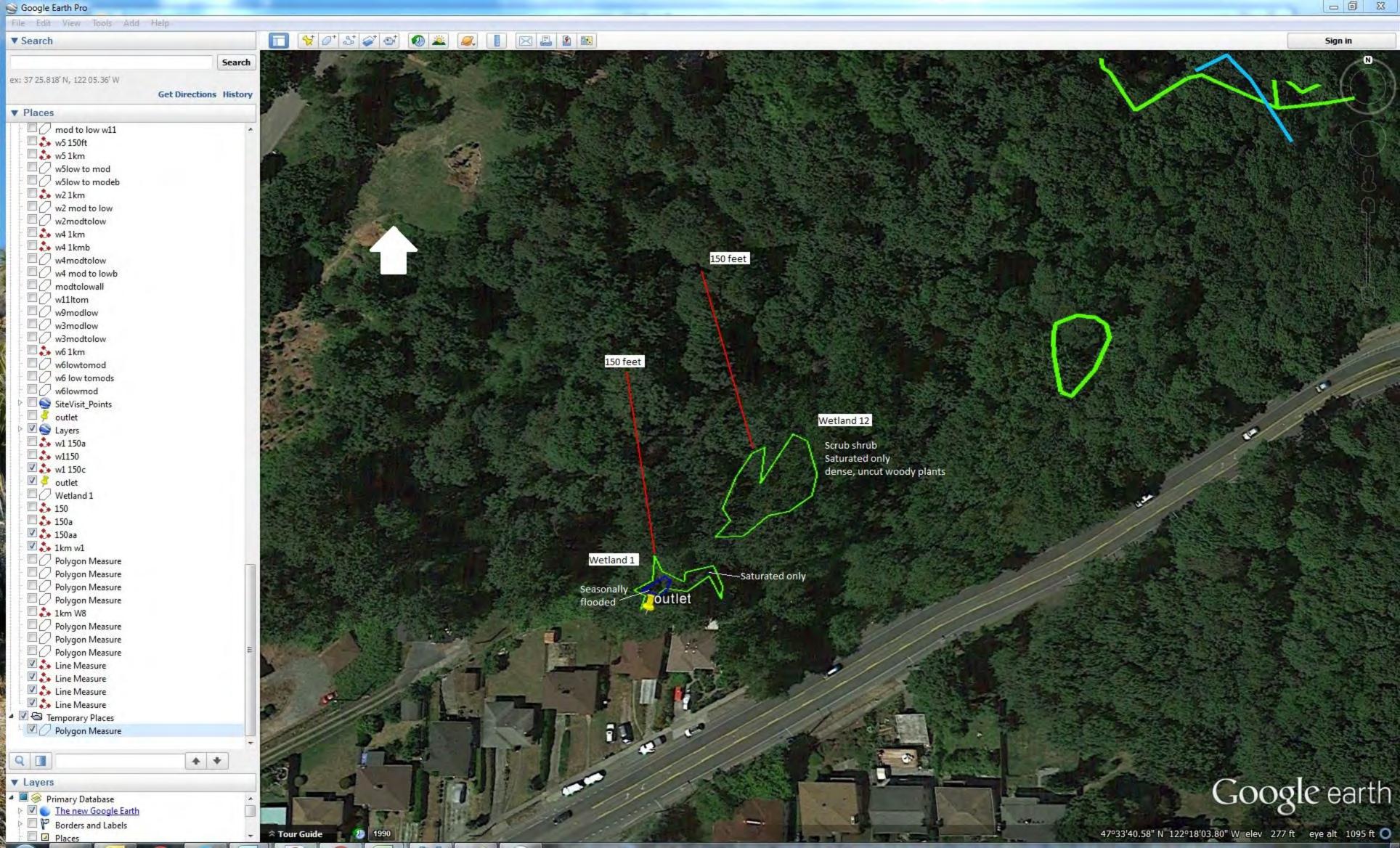
Ш	Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
7	Biodiversity Areas and Corridors : Areas of habitat that are relatively important to various species of native fish and wildlife (<i>full descriptions in WDFW PHS report</i>).
	Herbaceous Balds: Variable size patches of grass 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 (<i>full descriptions in WDFW PHS report p. 158</i> – 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 (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>).
	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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report</i> – 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.
7	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.

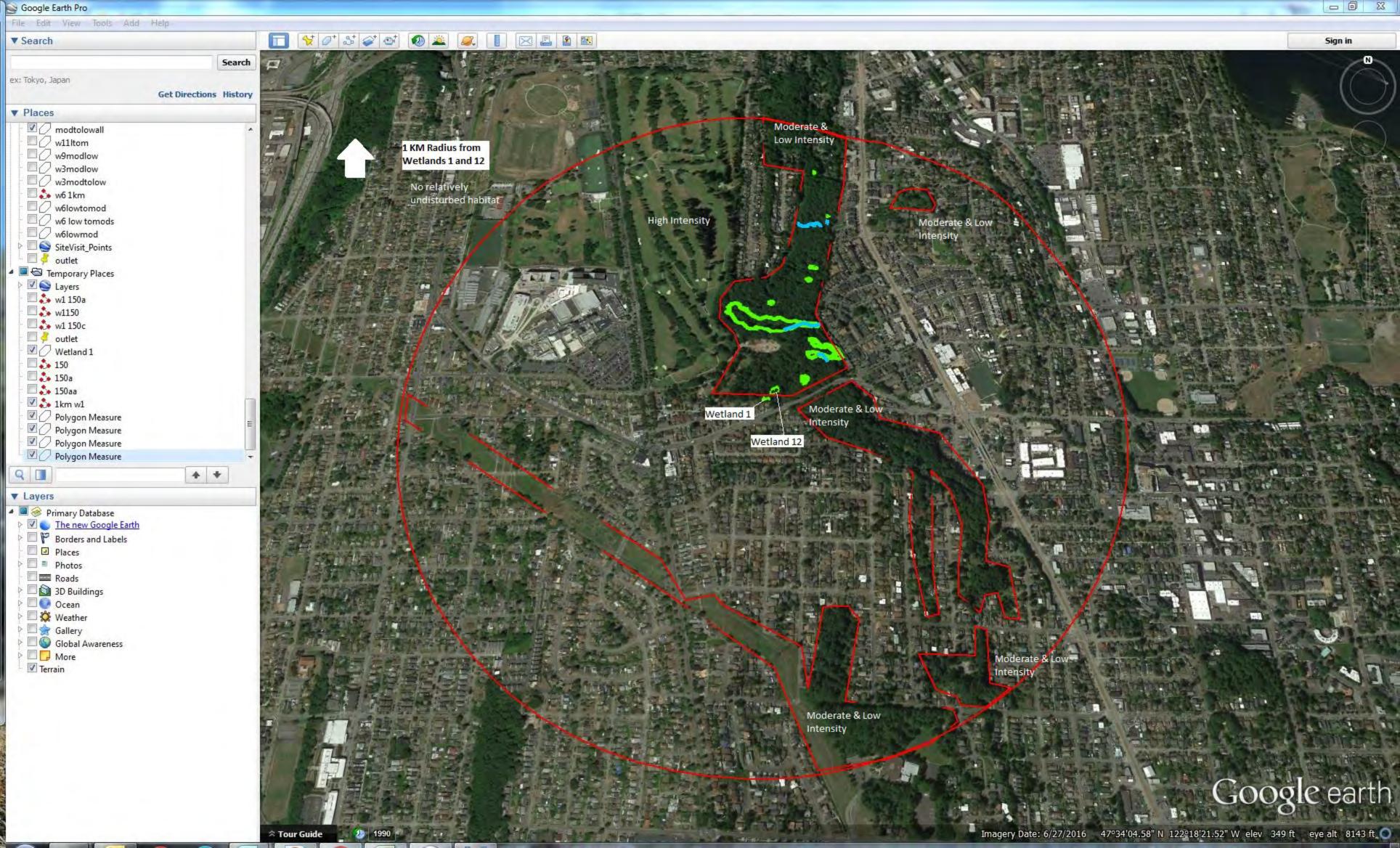
Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

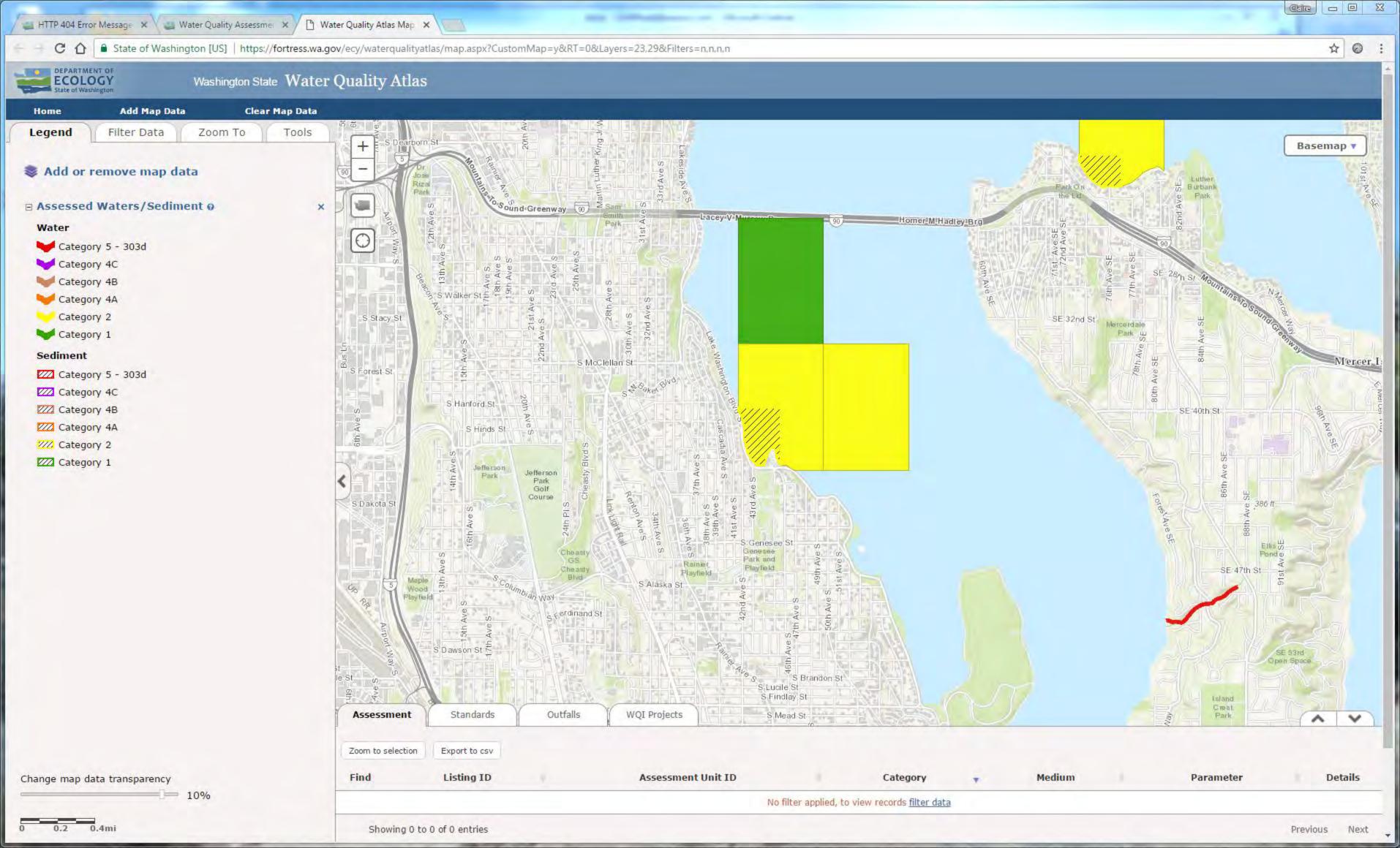
CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland	Туре	Category
	f any criteria that apply to the wetland. List the category when the appropriate criteria are met.	
SC 1.0.	Estuarine Wetlands	
	Does the wetland meet the following criteria for Estuarine wetlands?	
	The dominant water regime is tidal, Vegetated, and	
	With a salinity greater than 0.5 ppt	
	☐ Yes - Go to SC 1.1 ☐ No = Not an estuarine wetland	
SC 1.1.	Is the wetland within a National Wildlife Refuge, National Park, National Estuary	
	Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific	
	Reserve designated under WAC 332-30-151?	
	☐ Yes = Category I ☐ No - Go to SC 1.2	
SC 1.2.	Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
	The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing,	
	and has less than 10% cover of non-native plant species. (If non-native species are	
	Spartina, see page 25)	
	At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-	
	grazed or un-mowed grassland.	
	The wetland has at least two of the following features: tidal channels, depressions with	
	open water, or contiguous freshwater wetlands.	
	☐ Yes = Category I ☐ No = Category II	
	Wetlands of High Conservation Value (WHCV)	
SC 2.1.	Has the WA Department of Natural Resources updated their website to include the list	
	of Wetlands of High Conservation Value? ☐ Yes - Go to SC 2.2 ☐ No - Go to SC 2.3	
SC 2.2.		
30 2.2.	Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? ☐ Yes = Category I ☐ No = Not WHCV	
SC 2.3.	Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland?	
00 2.3.	http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf	
	☐ Yes - Contact WNHP/WDNR and to SC 2.4 ☐ No = Not WHCV	
SC 2.4.	Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation	
2.1.	Value and listed it on their website?	
	☐ Yes = Category I ☐ No = Not WHCV	
SC 3.0.		
	Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation	
	in bogs? Use the key below. If you answer YES you will still need to rate the	
	wetland based on its functions.	
SC 3.1.	Does an area within the wetland unit have organic soil horizons, either peats or mucks,	
	that compose 16 in or more of the first 32 in of the soil profile?	
	☐ Yes - Go to SC 3.3 ☐ No - Go to SC 3.2	
SC 3.2.	Does an area within the wetland unit have organic soils, either peats or mucks, that are	
	less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic	
	ash, or that are floating on top of a lake or pond?	
	\Box Yes - Go to SC 3.3 \Box No = Is not a bog	
SC 3.3.	Does an area with peats or mucks have more than 70% cover of mosses at ground	
	level, AND at least a 30% cover of plant species listed in Table 4?	
	 ☐ Yes = Is a Category I bog ☐ No - Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may 	
	substitute that criterion by measuring the pH of the water that seeps into a hole dug at	
	least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present,	
	the wetland is a bog.	
SC 3.4.	Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir,	
	western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann	
	spruce, or western white pine, AND any of the species (or combination of species) listed	
	in Table 4 provide more than 30% of the cover under the canopy?	
	☐ Yes = Is a Category I bog ☐ No = Is not a bog	

SC 4.0.	Forested Wetlands	
00 1101	Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these	
	criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you</i>	
	answer YES you will still need to rate the wetland based on its functions.	
	Old-growth forests (west of Cascade crest): Stands of at least two tree species,	
	forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac	
	(20 trees/ha) that are at least 200 years of age OR have a diameter at breast height	
	(dbh) of 32 in (81 cm) or more.	
	Mature forests (west of the Cascade Crest): Stands where the largest trees are 80-	
	200 years old OR the species that make up the canopy have an average diameter (dbh)	
	exceeding 21 in (53 cm).	
	☐ Yes = Category I ☐ No = Not a forested wetland for this section	
SC 5.0.	Wetlands in Coastal Lagoons	
	Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?	
	The wetland lies in a depression adjacent to marine waters that is wholly or partially	
	separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently,	
	rocks	
	The lagoon in which the wetland is located contains ponded water that is saline or	
	brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to</i>	
	be measured near the bottom)	
CC E 1	☐ Yes - Go to SC 5.1 ☐ No = Not a wetland in a coastal lagoon	
	Does the wetland meet all of the following three conditions? The wetland is relatively undisturbed (here no diking, ditables, filling, cultivation, grazing)	
Ш	The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing),	
	and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100).	
	At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-	
	grazed or un-mowed grassland.	
	The wetland is larger than ¹ / ₁₀ ac (4350 ft²)	
SC 6.0	☐ Yes = Category I ☐ No = Category III	
3C 0.0.	Is the wetland west of the 1889 line (also called the Western Boundary of Upland	
	Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland</i>	
	based on its habitat functions.	
	In practical terms that means the following geographic areas:	
	Long Beach Peninsula: Lands west of SR 103	
	Grayland-Westport: Lands west of SR 105	
	Ocean Shores-Copalis: Lands west of SR 115 and SR 109	
	☐ Yes - Go to SC 6.1 ☐ No = Not an interdunal wetland for rating	
SC 6.1.	Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form	
	(rates H,H,H or H,H,M for the three aspects of function)?	
	☐ Yes = Category I ☐ No - Go to SC 6.2	
SC 6.2.	Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?	
	☐ Yes = Category II ☐ No - Go to SC 6.3	
SC 6.3.	·	
	1 ac?	
	☐ Yes = Category III ☐ No = Category IV	
_	ry of wetland based on Special Characteristics	







LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
4672	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
4676	4C	WASHINGTON LAKE	Invasive Exotic Species	Habitat
500005	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500006	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500007	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
500038	2 RANK 4	WASHINGTON LAKE	Sediment Bioassay	Sediment
12193	5	WASHINGTON LAKE	Bacteria	Water
12206	5	WASHINGTON LAKE	Bacteria	Water
43482	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
51591	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51592	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51593	5	WASHINGTON LAKE	2,3,7,8-TCDD (Dioxin)	Tissue
51706	5	WASHINGTON LAKE	4,4'-DDD	Tissue
51767	5	WASHINGTON LAKE	4,4'-DDE	Tissue
52642	5	WASHINGTON LAKE	Mercury	Tissue
52703	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52704	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52705	5	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Tissue
52766	5	WASHINGTON LAKE	Total Chlordane	Tissue
52853	5	WASHINGTON LAKE	Total Phosphorus	Water
74460	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74461	5	WASHINGTON LAKE	4,4'-DDE	Tissue
74775	5	WASHINGTON LAKE	Bacteria	Water
76477		WASHINGTON LAKE	Dieldrin	Tissue
76478	5	WASHINGTON LAKE	Dieldrin	Tissue
76479		WASHINGTON LAKE	Dieldrin	Tissue
77049		WASHINGTON LAKE	Chlordane	Tissue
77050		WASHINGTON LAKE	Chlordane	Tissue
77064	5	WASHINGTON LAKE	Chlordane	Tissue
500009	5	WASHINGTON LAKE	Sediment Bioassay	Sediment
500010		WASHINGTON LAKE	Sediment Bioassay	Sediment
8078		WASHINGTON LAKE	Lead	Water
11960	2	WASHINGTON LAKE	Ammonia-N	Water
11963	2	WASHINGTON LAKE	Ammonia-N	Water

11964 2 WASHINGTON LAKE Ammonia-N Water 11970 2 WASHINGTON LAKE Ammonia-N Water 12207 2 WASHINGTON LAKE Bacteria Water 12264 2 WASHINGTON LAKE Mercury Water 12272 2 WASHINGTON LAKE Mercury Water 12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE POlychlorinated Biphenyls (PCBs) Water 1237,8-TCDD TEQ Tissue 1238 1 WASHINGTON LAKE Bacteria Water 1239 1 WASHINGTON LAKE Bacteria Water 1230 1 WASHINGTON LAKE Bacteria Water 1230 1 WASHINGTON LAKE Bacteria Water 12344	LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
12207 2 WASHINGTON LAKE Bacteria Water 12264 2 WASHINGTON LAKE Mercury Water Water 12272 2 WASHINGTON LAKE Mercury Water 12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Bacteria Water 12319 2 WASHINGTON LAKE Bacteria Water 12319 3 WASHINGTON LAKE Bacteria Water 12319 3 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 5 WASHINGTON LAKE Bacteria Water 12319 5 WASHINGTON LAKE Bacteria Water 12319 5 WASHINGTON LAKE Bacteria Water 12319 6 WASHINGTON LAKE Bacteria Water 12319 6 WASHINGTON LAKE Bacteria Water 12319 1 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE Bacteria Water 13348 1 WAS	11964	2	WASHINGTON LAKE	Ammonia-N	
12264 2 WASHINGTON LAKE 12272 2 WASHINGTON LAKE 12311 2 WASHINGTON LAKE 12312 2 WASHINGTON LAKE 12312 2 WASHINGTON LAKE 12313 2 WASHINGTON LAKE 12313 2 WASHINGTON LAKE 12314 2 WASHINGTON LAKE 12315 2 WASHINGTON LAKE 12315 2 WASHINGTON LAKE 12316 2 WASHINGTON LAKE 12317 2 WASHINGTON LAKE 12318 2 WASHINGTON LAKE 12319 2 WASHINGTON LAKE 12319 3 LWASHINGTON LAKE 11972 1 WASHINGTON LAKE 11972 1 WASHINGTON LAKE 11973 1 WASHINGTON LAKE 11973 1 WASHINGTON LAKE 11973 1 WASHINGTON LAKE 111973 1 WASHINGTON LAKE 111973 1 WASHINGTON LAKE 111973 1 WASHINGTON LAKE 111974 1 WASHINGTON LAKE 111975 1 WASHINGTON LAKE 111975 1 WASHINGTON LAKE 11199 1 WASHINGTON LAKE 11190 1 WASHINGTON LAKE	11970	2	WASHINGTON LAKE	Ammonia-N	Water
12272 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water Polychlorinated Biphenyls (PCBs)	12207	2	WASHINGTON LAKE	Bacteria	Water
12311 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12319 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12319 3 WASHINGTON LAKE Bacteria Water 12319 4 WASHINGTON LAKE Bacteria Water 12319 5 WASHINGTON LAKE Bacteria Water 12319 6 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE Bacteria Water 13348 1 WASHINGTON LAKE WASHINGTO	12264	2	WASHINGTON LAKE	Mercury	Water
12312 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12313 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12314 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 151645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12200	12272	2	WASHINGTON LAKE	Mercury	Water
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12315 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 151645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 123481 1 WASHINGTON LAKE Bacteria Tissue 12381 1 WASHINGTON LAKE Bacteria Tissue 12383 1 WASHINGTON LAKE Bacteria Tissue 12383 1 WASHINGTON LAKE Mercury Tissue 12384 1 WASH	12313	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12316 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Tissue 12483 1 WASHINGTON LAKE Bacteria Tissue 12484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 12504 1 WASHINGTON LAKE Hexachlorobenzene Tissue 12506 Tissue	12314	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12317 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12191 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12203 1 WASHINGTON LAKE Bacteria Water 12204 1 WASHINGTON LAKE Bacteria Tissue 12488 1 WASHINGTON LAKE Macteria Tissue 12488 1 WASHINGTON LAKE Mercury Tissue 12488 1 WASHINGTON LAKE Mercury Tissue 12506 1 WASHINGTON LAKE Mercury Tissue 12607 Tissue 12608 1 WASHINGTON LAKE Mercury Tissue 12709 Tissue 12709 Tissue 12709 Tissue 12709 Tissue 12709 Tissue 12709 Tissue	12315	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
12318 2 WASHINGTON LAKE Polychlorinated Biphenyls (PCBs) Water 51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12191 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12203 1 WASHINGTON LAKE Bacteria Water 12204 1 WASHINGTON LAKE Bacteria Water 12205 1 WASHINGTON LAKE Bacteria Water 12206 1 WASHINGTON LAKE Bacteria Tissue 123481 1 WASHINGTON LAKE Bacteria Tissue 124483 1 WASHINGTON LAKE Mercury Tissue 124484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 124485 1 WASHINGTON LAKE Hexachlor Epoxide Tissue	12316	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
51644 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Water 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Mercury Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12317	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
51645 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Bacteria Water 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Mercury Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12318	2	WASHINGTON LAKE	Polychlorinated Biphenyls (PCBs)	Water
51646 2 WASHINGTON LAKE 2,3,7,8-TCDD TEQ Tissue 11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12191 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 123481 1 WASHINGTON LAKE Mercury Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	51644	2	WASHINGTON LAKE	2,3,7,8-TCDD TEQ	Tissue
11972 1 WASHINGTON LAKE Ammonia-N Water 11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Bacteria Water 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Mercury Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	51645	2	WASHINGTON LAKE	2,3,7,8-TCDD TEQ	Tissue
11973 1 WASHINGTON LAKE Ammonia-N Water 12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Bacteria Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	51646	2	WASHINGTON LAKE	2,3,7,8-TCDD TEQ	Tissue
12183 1 WASHINGTON LAKE Bacteria Water 12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Bacteria Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Hexachlor Epoxide Tissue	11972	1	WASHINGTON LAKE	Ammonia-N	Water
12186 1 WASHINGTON LAKE Bacteria Water 12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13500	11973	1	WASHINGTON LAKE	Ammonia-N	Water
12189 1 WASHINGTON LAKE Bacteria Water 12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13584 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13685 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12183	1	WASHINGTON LAKE	Bacteria	Water
12190 1 WASHINGTON LAKE Bacteria Water 12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12186	1	WASHINGTON LAKE	Bacteria	Water
12194 1 WASHINGTON LAKE Bacteria Water 12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12189	1	WASHINGTON LAKE	Bacteria	Water
12195 1 WASHINGTON LAKE Bacteria Water 12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 124481 1 WASHINGTON LAKE Toxaphene Tissue 12483 1 WASHINGTON LAKE Mercury Tissue 12484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 12485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12190	1	WASHINGTON LAKE	Bacteria	Water
12196 1 WASHINGTON LAKE Bacteria Water 12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 13481 1 WASHINGTON LAKE Toxaphene Tissue 13483 1 WASHINGTON LAKE Mercury Tissue 13484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 13485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12194	1	WASHINGTON LAKE	Bacteria	Water
12197 1 WASHINGTON LAKE Bacteria Water 12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12195	1	WASHINGTON LAKE	Bacteria	Water
12200 1 WASHINGTON LAKE Bacteria Water 12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12196	1	WASHINGTON LAKE	Bacteria	Water
12201 1 WASHINGTON LAKE Bacteria Water 12202 1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12197	1	WASHINGTON LAKE	Bacteria	Water
1 WASHINGTON LAKE Bacteria Water 43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12200	1	WASHINGTON LAKE	Bacteria	Water
43481 1 WASHINGTON LAKE Toxaphene Tissue 43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12201	1	WASHINGTON LAKE	Bacteria	Water
43483 1 WASHINGTON LAKE Mercury Tissue 43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	12202	1	WASHINGTON LAKE	Bacteria	Water
43484 1 WASHINGTON LAKE Hexachlorobenzene Tissue 43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43481	1	WASHINGTON LAKE	Toxaphene	Tissue
43485 1 WASHINGTON LAKE Heptachlor Epoxide Tissue	43483	1	WASHINGTON LAKE	Mercury	Tissue
, ,	43484	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
43486 1 WASHINGTON LAKE Heptachlor Tissue	43485	1	WASHINGTON LAKE	Heptachlor Epoxide	Tissue
	43486	1	WASHINGTON LAKE	Heptachlor	Tissue

LISTING_ID	CATEGORY_2014	WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
43487	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
43488	1	WASHINGTON LAKE	Endrin	Tissue
43492	1	WASHINGTON LAKE	Beta-BHC	Tissue
43493	1	WASHINGTON LAKE	Alpha-BHC	Tissue
43494	1	WASHINGTON LAKE	4,4'-DDT	Tissue
43495	1	WASHINGTON LAKE	4,4'-DDE	Tissue
43496	1	WASHINGTON LAKE	4,4'-DDD	Tissue
51827	1	WASHINGTON LAKE	4,4'-DDT	Tissue
51949	1	WASHINGTON LAKE	Alpha-BHC	Tissue
52010	1	WASHINGTON LAKE	Beta-BHC	Tissue
52403	1	WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
52464	1	WASHINGTON LAKE	Heptachlor	Tissue
52585	1	WASHINGTON LAKE	Hexachlorobenzene	Tissue
52854	1	WASHINGTON LAKE	Total Phosphorus	Water
52855	1	WASHINGTON LAKE	Total Phosphorus	Water
52856	1	WASHINGTON LAKE	Total Phosphorus	Water
52857	1	WASHINGTON LAKE	Total Phosphorus	Water
52858	1	WASHINGTON LAKE	Total Phosphorus	Water
52859	1	WASHINGTON LAKE	Total Phosphorus	Water
52860	1	WASHINGTON LAKE	Total Phosphorus	Water
52861	1	WASHINGTON LAKE	Total Phosphorus	Water
52862	1	WASHINGTON LAKE	Total Phosphorus	Water
52863	1	WASHINGTON LAKE	Total Phosphorus	Water
52864	1	WASHINGTON LAKE	Total Phosphorus	Water
52865		WASHINGTON LAKE	Total Phosphorus	Water
74484		WASHINGTON LAKE	4,4'-DDD	Tissue
74485		WASHINGTON LAKE	4,4'-DDD	Tissue
74772		WASHINGTON LAKE	Bacteria	Water
74776		WASHINGTON LAKE	Bacteria	Water
75112		WASHINGTON LAKE	4,4'-DDT	Tissue
75114		WASHINGTON LAKE	4,4'-DDT	Tissue
75221		WASHINGTON LAKE	Beta-BHC	Tissue
75222		WASHINGTON LAKE	Beta-BHC	Tissue
75309	1	WASHINGTON LAKE	Endrin	Tissue

LISTING_ID CATEGORY_20	14 WATERBODY_NAME	PARAMETER_NAME	MEDIUM_NAME
75310	1 WASHINGTON LAKE	Endrin	Tissue
75311	1 WASHINGTON LAKE	Endrin	Tissue
75400	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75401	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75402	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75403	1 WASHINGTON LAKE	Endrin Aldehyde	Tissue
75486	1 WASHINGTON LAKE	Heptachlor	Tissue
75487	1 WASHINGTON LAKE	Heptachlor	Tissue
75563	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75564	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75565	1 WASHINGTON LAKE	Heptachlor Epoxide	Tissue
75645	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75646	1 WASHINGTON LAKE	Hexachlorobenzene	Tissue
75791	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75792	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75793	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
75794	1 WASHINGTON LAKE	Hexachlorocyclohexane (Lindane)	Tissue
77219	1 WASHINGTON LAKE	Toxaphene	Tissue
77220	1 WASHINGTON LAKE	Toxaphene	Tissue
77236	1 WASHINGTON LAKE	Toxaphene	Tissue
77243	1 WASHINGTON LAKE	Endosulfan	Tissue
78987	1 WASHINGTON LAKE	Endosulfan	Tissue
78988	1 WASHINGTON LAKE	Endosulfan	Tissue
78989	1 WASHINGTON LAKE	Endosulfan	Tissue
79488	1 WASHINGTON LAKE	Mercury	Tissue
79502	1 WASHINGTON LAKE	Mercury	Tissue

APPENDIX D: BIRD SURVEY DATA SHEETS

BIRD SURVEY DATA SHEET

Project / Site: CHE	EASTY GREENSPACE 140744.0	Date: 12 -13 -16
Scope / Purpose:	WINTER SLAVEY	Time: 8:30 am - 11:00 am
Observers: FLO	V LOGAN & PETER CARR	County / State: WING / WA
	Cold & calm, occ. light wind	Site Activity Notes: High level of ambient noise - planes overhead (every 1-3 mins)
TEMPERATURE ~ 3	15°	itraffic on Cheasty Blud 4 others
WEATHER	CLEAR FARTLY-CLOUDY OVERCAST	-planes overhead (every 1-3 mins) -traffic on Cheasty Blvd & others -light rail regular noise from bells
PRECIPITATION	NONE MIST DRIZZLE RAIN	& crossings

4-ltr	Species	ecies Initial Detection If AUD Ser		Sex		Behavior / Notes		
code		Position	Method	SorC	М	F	U	
ack1	Golden-crowned kinglet	FLT / GRD)	(VIS)/ AUD		X	X		F
OSP	Song sparrow	FLT / GRD	VIS / AUD	14			X	F
BCCH	Black capped-chickadea	FLT / GRD	(VIS)/ AUD	X			X	FFL
BCH	Chestant-backed chickadae	FLT/GRD	(VIS)/ AUD				X	par .
EWR	Bawick's wren	FLT / GRD	(VIS)/ AUD				X	facility (Salver
VOFL	Northern flicker	(FLT) GRD	(VIS) / AUD)	X			×	F.FL, AL
CKI	Ruby-crowned kinglet	FLT / GRD	(VIS)/ AUD				X	F
AWR	Pacific wren	FLT / GRD	VIS 7 AUD				X	<i>[=</i>
BRCK	Brown creeper	FLT / GRD)	(VIS)/ AUD				X	face.
91160	American goldfing	FLT / GRD	VIS /(AUD)	×	9		X	FL
AMRO		FLT / GRD	VIS / AUD	X	1		×	fically.
BSA	Red-breasted supsucker	FLT (GRD)	VIS / AUD				X	F, FL excavations obs
PTO	Spotted towhere	FLT / GRD	(VIS) (AUD)	X			X	F
THA	Red-tailed hank	FLT/ GRD	(VIS) (AUD)	X			X	FL over Send of greenspace
cco	Double-crested cormorant	FLT/ GRD	VIS)/ AUD				X	FL
AEA	Bald eagle	(FLT)/ GRD	(VIS)/ AUD				X	FL west of greenspace
TJA		FLT GRD	VIS / AUD				X	FL F
NHL		FLT (GRD)	VIS)/ (AUD)	X			X	Perched & Vocalizing
OWO	Downy wood pecker	FLT / GRD	(VIS / AUB)	X			X	F
EJU	Dark-eyed junco	FLT GRD	(VIS)/ AUD		_ '		X	FL, F

Data Codes Initial Position (choose one): FLT = in flight GRD = on ground

Detection Method: VIS = visual/seen AUD = aural/heard

If AUD (pick one): S = song C = call

Behavior Codes: F = Forage, FL = flying, R= resting/roosting, FS = flushed, AL = alert posture (erect w/neck extended, not vocalizing), A = antagonistic behavior (chase or aggressive contact), CO = copulation, NM = carrying nest material

Other notes: Eastern gray squirral (2) Project/Site: CHERSTY GREENS PACE 140744.01 Date: 12-13-16

Observers: 1LON LOGAN & PETER CARR Time: 8:30a START

Transect		Initial Position	Detection Method	If AUD		Sex		Behavior / Notes	
				S or C	M	F	U		
GWXN	Glaucous x Western gull	FLT// GRD	(VIS)/ AUD				X	FL over	green space
	Wingael	FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD		-				
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD					Q_0	
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD		H			4	
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						

Data	Initial Position (choose one): FLT = in flight GRD = on ground	Other notes:
Codes	Detection Method: VIS = visual/seen AUD = aural/heard If AUD (pick one): S = song C = call	
	Behavior Codes: F = Forage, FL = flying, R= resting/roosting, FS = flushed, AL = alert posture (erect w/neck extended, not vocalizing), A = antagonistic behavior (chase or aggressive contact), CO = copulation, NM = carrying nest material	

BIRD SURVEY DATA SHEET

Project / Site: CH	EASTY GREEN	ISPACE 14074	4.01 Date: 4-4-17
Scope / Purpose: 5	PRING SURV	EV	Time: 6:35a - 8:40a
Observers: FLO	N LOGAN & 1	PETER CARR	County / State: LING / WA
	Overcast, no .	wind	Site Activity Notes: High level of background noise as previously noted.
TEMPERATURE ~ 4	12. 1		
WEATHER	CLEAR PART	LY-CLOUDY OVERCAST	Spring conditions - plants leating
PRECIPITATION	NONE MIST	DRIZZLE RAIN	Spring conditions - plants leafing out, flowers blooming (red current, solma
			bury, skunk cabbaga, etc.)

Fransect	Species	Initial Position	Detection	If A	UD		Sex		Behavior / Notes
/ Point			Method	So	r C	M	F	U	
AMRO	American robin	FLT / GRD	VIS/(AUD)					X	AL, F, FL
HOFI	House finch	FLT / GRD	VIS / AUD	X		X			Singing west of greenspace
RCKI	Ruby-crowned kinglet	FLT / GRD	VIS / AUD	×		×			F
BEWR	Bewick's wren	FLT / GRD)	VIS (AUD)	X		X		X	F
AMCR	American crow	FLT (GRD)	VIŞ" / AUD					X	Some individ in park; flyovers
GW×W	Glaucins Wingled x Western hybrid gull	ELT/ GRD	VIS)/ AUD					X	
SOSP	Song sparrow	FLT (GRD)	(VIS)/ AUD	×		1			<i>f</i> =
SPTO	Spotted towhere	FLT /GRD	VIS)/(AUD)			J		Χ	F
BCCH	Black-capped chickedge	FLT/GRD	VIS) AUD	X	,	X			Several & singing
STJA	Steller's Jay	SELT) GRD	VIS)/ AUD	[4]				X	
NOFL	Northern flicker	FLT (GRD)	VIS / AUD					X	Several drumming
DEJU	Dark-eyed junco	FLT / GRD	VIS / AUD					×	*
ANHU	Anna's humming bird	FLT GRD	ODA / SIV	X		×			Several individuals (~5)
COHA	Coopers hawk	FLT / GRD	US / AUD			×	X		Nm; Pair in courtship, extremely active, vocalizing, moving, inter-
PAWR	Pacific wren	FLT / GRD	VIS / AUD	X		X			F acting,
AM60	American goldfinch	FLT/ GRD	VIS / AUD					X	FL
BRCR	frown creaper	FLT / GRD	VIS/ AUD					X	F
RBNU	Red-preasted nuthatch	FLT / GRD	VIS / AUD					X	7
RBSA	Reb-breasted sapsucker	FLT / GRD	(VIS) / AUD				П	X	F
VATH	Varied thrush	FLT / GRD	VIS / AUD				ij	X	5 notes heard only

Data

Initial Position (choose one): FLT = in flight GRD = on ground /+ FLL

Codes

Detection Method: VIS = visual/seen AUD = aural/heard

If AUD (pick one): S = song C = call

Behavior Codes: F = Forage, FL = flying, R= resting/roosting, FS = flushed, AL = alert posture (erect w/neck extended, not vocalizing), A = antagonistic behavior (chase or aggressive contact), CO = copulation, NM = carrying nest material

Sunrise 6:43a Eastern gray squirrel (2)

Project/Site: CHEASTY GREENSPACE 140744.01 4-4-17 Date: 6:35a START Observers: ILON LOGAN & PETER CARR Time:

Transect / Point	Species	Initial Position	Detection	If AUD		Sex			Behavior / Notes
			Method	Soi	С	М	F	U	
BUSH	Bushtit	FLT / GRD	VIS / AUD					X	F
CBCH	Chestnut-backed chickadoe	FLT (GRD	(VIS) AUD					X	F
RWA	Yellow rumped warblar	FLT / GRD	VIS / AUD	X		X		ı.	V .
SCKI	Yellow rumped warblar Golden-crowned kingled European starting	FLT / GRD	(VIS AUD					X	F
EUST	European Starting	FLT (GRD)	VIS / AUD					X	NM
	,	FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD			E.			
		FLT / GRD	VIS / AUD			Ц			
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD			1			
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD				Ш		
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD	14.					
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						

Data Codes

Initial Position (choose one): FLT = in flight GRD = on ground

Detection Method: VIS = visual/seen AUD = aural/heard

If AUD (pick one): S = song C = call

Behavior Codes: F = Forage, FL = flying, R= resting/roosting, FS = flushed, AL = alert posture (erect W/neck extended, not vocalizing), A = antagonistic behavior (chase or aggressive contact), CO = copulation, NM = carrying nest material

Aux alternate nesting building: they have an alternate nest Site in vicinity (according to pedestrian on cheasty blvd).

BIRD SURVEY DATA SHEET

Project / Site: CHE	ASTY GREENSPACE 140744.0	Date: 5-4-17
Scope / Purpose: Sp	PRING SURVEY (3)	Time: 6:00a - 9:30a
Observers: ILON	LOGAN & PETER CARR	County / State: KING / WA
	Heavy fog, no wind	Site Activity Notes: Abundant spring plant growth
WEATHER PRECIPITATION	CLEAR PARTLY-CLOUDY OVERCAS	

Fransect	Species	Initial	Detection	If AUD		Sex			Behavior / Notes	
ransect LTR Point		Position	Method	Sc	r C	M	F	U		
	Red breasted sapsucker	FLT /GRD	(VIS)/ AUD			×		X	N-Nesting in snag sof maint.	
	American robin	FLT / GRD	(VIS)/(AUD)	X				X	7+ in greens pace singing.	
TEJU	Dark-eyed junco	FLT /GRD	VIS / AUD	X				X	F	
	European starting	FLT / GRD)	VIS / AUD					X	N-In snag in meadow-mainty	
BCCH	Black-capped chickadee	FLT /GRD	VIS / AUD	X				X	F	
AM60	American gold Finch	FLT) GRD	(VIS) / AUD	1	X			X	FL	
	Spotted towher	FLT / GRD	(VIS)/AUD		X			X	F	
SOSP	Song sparrow	FLT / GRD	VIS / AUD	X		X	*		AL, F	
9mcR	1	(FLT) GRD	VIS (AUD		X			X		
A60	Canada goase	FLT// GRD	VIS / AUD	,	X			X	FL	
BEWR	Bewickir wren	FLT /GRD	VIS / AUD	X		X				
HOFI	House finch	FLT (GRD	VIS / AUD	X		X				
WIWA	Wilsons warbler	FLT GRD	VIS / AUD	×		X			F	
PAWR	Pacific wren	FLT /(GRD)	VIS /(AUD)	×		X			F	
STJA	Stellers jay	FLT) GRD	VIS / AUD		X	•		X	4	
SWTH		FLT / GRD	(VIS)/ AUD					X	F	
PSFL	Pacific slope flycatcher	FLT (GRD)	VIS / (AUD)	X		X				
NOFL	2	FLT// GRD	VIS /AUD					X		
DOWO	Downy woodpedor	FLT / GRD	VIS / AUD		X	X			F	
6WWG	4	ELT/GRD	VIS / AUD					X		

Data Initial Position (choose one): FLT = in flight GRD = on ground / FLL Codes

Detection Method: VIS = visual/seen AUD = aural/heard

If AUD (pick one): S = song C = call

Behavior Codes: F = Forage, FL = flying, R= resting/roosting, FS = flushed, AL = alert posture (erect w/neck extended, not vocalizing), A = antagonistic behavior (chase or aggressive contact), CO = copulation, NM = carrying nest material

N= necting confirmed

SunRISEC 5,48 Am

Project/Site: CHEASTY GREENSPACE 140744.01 Date: 5-4-17

Observers: 110N LOGAN & PETER CAPR Time: 6:00a START

Transect	Species	Initial	Detection	If A	AUD		Sex		Behavior / Notes
/ Point		Position	Method	S	or C	М	F	U	7
COHA	Coopers hawk	FLT GRD	AUD / ELD			X	X		N- 9 likely on eggs. With
ANHU	Annis humming big	FLT/ GRD	VIS / AUD	X		X			N- & likely on eggs. Wha
RBNU	Red-breasted nuthack	FLT / GRD	VIS /(AUD)	X		X			F
BusH	Bullit	FLT / GRD	VIS / AUD		X			X	F
CBCH	Chestnut backed chick	FLT / GRD	VIS / AUD			-		X	F
VIRED	DIRED SP.	FLTY GRD	VIS AUD					X	Probable/unconformed
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
1_1		FLT / GRD	VIS / AUD	E.					
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						1
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		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						
		FLT / GRD	VIS / AUD						

Data	Initial Position (choose one): FLT = in flight GRD = on ground	Other notes:
Codes	Detection Method: VIS = visual/seen AUD = aural/heard	A State Change
	If AUD (pick one): S = song C = call	
1.4	Behavior Codes: F = Forage, FL = flying, R= resting/roosting, FS = flushed, AL = alert posture (erect w/neck extended, not vocalizing), A = antagonistic behavior (chase or aggressive contact), CO = copulation, NM = carrying nest material	

APPENDIX E: TREE INVENTORY

Table E-1. Trees in along Cheasty South portion of the Trail

Tree ID	Species	DBH	Condition	Exceptional	Notes
1	Acer macrophyllum	7	Good	No	
2	Alnus rubra	19	Poor	No	Phytophora
3	Acer macrophyllum	40	Good	Likely, grove	
4	Acer macrophyllum	40	Poor	No	
5	Acer macrophyllum	29	Fair	Likely, grove	
6	Acer macrophyllum	24	Good	Likely, grove	
7	Acer macrophyllum	76	Fair	Likely, grove	
8	Acer macrophyllum	17	Fair	Likely, grove	
9	Acer macrophyllum	70	Fair	Likely, grove	
10	Acer macrophyllum	10	Good	No	
11	Prunus avium	11	Good	No	
12	Prunus avium	12	Good	No	
13	Prunus avium	9	Good	No	
14	Picea sp	18	Fair	Unknown	
15	Acer macrophyllum	32	Fair	Likely, grove	
16	Acer macrophyllum	28	Dead	No	
!1	Acer macrophyllum	52	Good	Likely, grove	
!10	Alnus rubra	12	Dead	No	
!11	Alnus rubra	13	Good	Likely, grove	
!12	Alnus rubra	18	Poor	No	Phytophora
!13	Alnus rubra	19	Fair	Likely, grove	Phytophora
!14	Acer macrophyllum	22	Dead	No	
!15	Acer macrophyllum	34	Poor	No	Kretz,
!16	Alnus rubra	16	Poor	No	Phytophora
!17	Acer macrophyllum	86	Good	Likely, grove	Co doms, kretz
!18	Acer macrophyllum	28	Good	Likely, grove	
!19	Acer macrophyllum	10	Good	No	
!2	Acer macrophyllum	6	Good	No	
!20	Acer macrophyllum	39	Good	Likely, grove	Codom
!21	Acer macrophyllum	13	Good	Likely, grove	Hollow cavity at base
!22	Acer macrophyllum	49	Very Poor	No	Kretz, stringy, codom, arm?
!23	Acer macrophyllum	57	Poor	No	Heave root, decline, lean,
					should be removed if trail
					over roots.
!24	Acer macrophyllum	21	Good	Likely, grove	
!25	Acer macrophyllum	14	Good	Likely, grove	
!26	Acer macrophyllum	32	Good	Likely, grove	Codom
!27	Acer macrophyllum	16	Good	Likely, grove	
!28	Acer macrophyllum	14	Good	Likely, grove	
!29	Acer macrophyllum	13	Fair	Likely, grove	
!3	Acer macrophyllum	9	Good	No	
!30	Acer macrophyllum	27	Good	Likely, grove	
!31	Acer macrophyllum	30	Good	Likely, grove	
!32	Acer macrophyllum	10	Good	No	
!33	Acer macrophyllum	56	Good	Likely, grove	

Tree ID	Species	DBH	Condition	Exceptional	Notes
!33	Acer macrophyllum	20	Good	Likely, grove	
!34	Acer macrophyllum	8	Good	Likely, grove	
!35	Acer macrophyllum	24	Good	Likely, grove	
!36	Acer macrophyllum	42	Good	Likely, grove	
!36	Acer macrophyllum	30	Poor	No	Heaving
!37	Salix lasiandra	9	Very Poor	No	
!38	Acer platanoides	27	Good	No	
!39	Malus sp	21	Good	Yes	
!39	Acer macrophyllum	8	Good	No	
!4	Acer macrophyllum	10	Good	No	
!40	Acer macrophyllum	15	Good	Likely, grove	
!41	Corylus cornuta	10	Good	No	
!42	Corylus cornuta	14	Good	No	
!43	Acer macrophyllum	19	Good	Likely, grove	
!44	Acer macrophyllum	40	Good	Likely, grove	
!5	Acer macrophyllum	11	Good	No	
!6	Acer macrophyllum	80	Poor	No	Kretz
!7	Alnus rubra	12	Poor	No	Phytophora
!8	Alnus rubra	18	Poor	No	Phytophora
!9	Acer macrophyllum	14	Good	Likely, grove	
?1	Salix lasiandra	6	Fair	No	
?10	Ilex aquifolium	14	Dead	No	
?11	Acer macrophyllum	23	Fair	Likely, grove	
?12	Acer macrophyllum	62	Good	Likely, grove	
?13	Acer macrophyllum	18	Good	Likely, grove	
?14	Acer macrophyllum	21	Good	Likely, grove	
?15	Acer macrophyllum	23	Good	Likely, grove	
?16	Acer macrophyllum	6	Fair	No	
?16	Acer macrophyllum	30	Good	Likely, grove	
?18	Populus trichocarpa	41	Good	Likely, grove	
?2	Populus trichocarpa	25	Fair	Likely, grove	
?3	Populus trichocarpa	21	Fair	Likely, grove	
?4	Populus trichocarpa	31	Good	Likely, grove	
?5	Populus trichocarpa	32	Poor	No	
?6	Populus trichocarpa	24	Poor	No	
?7	llex aquifolium	14	Very Poor	No	
?8	Acer macrophyllum	10	Good	No	
?9	Acer macrophyllum	18	Fair	Likely, grove	

Table E-2. Trees in along Cheasty North portion of the Trail

Tree ID	Species	DBH	Condition	Exceptional	Notes
17	Acer macrophyllum	16	Fair	Likely, grove	
19	Acer macrophyllum	13	Dead	No	
20	Acer macrophyllum	26	Poor	No	
21	Acer macrophyllum	8	Dead	No	
22	Acer macrophyllum	36	Good	Likely, grove	
23	Acer macrophyllum	11	Dead	No	
24	Acer macrophyllum	17	Good	Likely, grove	
25	Acer macrophyllum	14	Fair	Likely, grove	
26	Acer macrophyllum	10	Dead	No	
28	Acer macrophyllum	108	Fair	Likely, grove	Multi-stemmed
28	Acer macrophyllum	11	Poor	No	
29	Acer macrophyllum	11	Fair	No	
30	Acer macrophyllum	11	Fair	No	
31	Acer macrophyllum	27	Good	No	
32	Acer macrophyllum	63	Fair	Likely, grove	
33	Prunus avium	17	Fair	No	
33	Unknown	27	Poor	No	
35	Acer macrophyllum	18	Good	Likely, grove	
36	Acer macrophyllum	12	Fair	No	
37	Acer macrophyllum	11	Fair	No	
38	Acer macrophyllum	34	Good	Likely, grove	
39	Acer macrophyllum	11	Fair	No	
40	Acer macrophyllum	11	Fair	No	
41	Acer macrophyllum	17	Fair	Likely, grove	
42	Acer macrophyllum	33	Good	Likely, grove	
44	Acer macrophyllum	17	Fair	Likely, grove	
45	Acer macrophyllum	21	Good	Likely, grove	
45	Acer macrophyllum	17	Poor	No	
46	Acer macrophyllum	12	Poor	No	
47	Acer macrophyllum	10	Dead	No	
48	Acer macrophyllum	20	Fair	Likely, grove	
49	Acer macrophyllum	12	Fair	No	
50	Acer macrophyllum	17	Good	Likely, grove	
51	Acer macrophyllum	27	Good	Likely, grove	
52	Acer macrophyllum	21	Dead	No	
52	Arbutus menziesii	12	Good	No	
53	Acer macrophyllum	12	Fair	No	
54	Acer macrophyllum	27	Fair	Likely, grove	
55	Prunus avium	8	Good	No	
56	Acer macrophyllum	21	Dead	No	
57	Acer macrophyllum	15	Good	Likely, grove	
58	Acer macrophyllum	14	Dead	No	
59	Acer macrophyllum	47	Good	Likely, grove	
60	Acer macrophyllum	11	Good	No	
61	Acer macrophyllum	9	Fair	No	
62	Acer macrophyllum	35	Fair	Likely, grove	

Tree ID	Species	DBH	Condition	Exceptional	Notes
63	Acer macrophyllum	7	Good	No	
64	Acer macrophyllum	16	Good	Likely, grove	
65	Acer macrophyllum	11	Fair	No	
66	Acer macrophyllum	9	Dead	No	
67	Acer macrophyllum	14	Good	Likely, grove	
68	Acer macrophyllum	24	Good	Likely, grove	
69	Arbutus menziesii	10	Dead	No	
70	Acer macrophyllum	34	Fair	Likely, grove	
71	Acer macrophyllum	14	Dead	No	
72	Acer macrophyllum	25	Dead	No	
73	Acer macrophyllum	17	Good	Likely, grove	
74	Acer macrophyllum	35	Fair	Likely, grove	
75	Acer macrophyllum	18	Good	Likely, grove	
76	Acer macrophyllum	16	Good	Likely, grove	
!45	Alnus rubra	15	Good	Likely, grove	
!46	Alnus rubra	18	Good	Likely, grove	
!47	Alnus rubra	11	Good	No	
!48	Acer macrophyllum	8	Good	No	
!49	Acer macrophyllum	54	Poor	Likely, grove	
!50	Acer macrophyllum	34	Good	Likely, grove	
!50	Acer macrophyllum	9	Good	No	
!52	Acer macrophyllum	17	Good	Likely, grove	
!53	Acer macrophyllum	24	Good	Likely, grove	
!54	Prunus emarginata	8	Good	Likely, grove	
!55	Acer macrophyllum	30	Good	Likely, grove	
!56	Acer macrophyllum	32	Poor	No	
!57	Acer macrophyllum	13	Poor	No	
!58	Acer macrophyllum	12	Good	No	
!59	Acer macrophyllum	28	Good	Likely, grove	
!60	Acer macrophyllum	50	Good	Likely, grove	
!61	Acer macrophyllum	21	Good	Likely, grove	
!62	Acer macrophyllum	11	Good	No	
!63	Acer macrophyllum	7	Good	No	
!64	Acer macrophyllum	41	Good	Likely, grove	
!65	Acer macrophyllum	10	Good	No	
!66	Acer macrophyllum	47	Good	Likely, grove	
!66	Acer macrophyllum	44	Good	Likely, grove	
!67	Acer macrophyllum	7	Good	No	
!68	Acer macrophyllum	20	Good	Likely, grove	
!69	Acer macrophyllum	28	Good	Likely, grove	
!71	Acer macrophyllum	19	Poor	No	
!72	Acer macrophyllum	19	Fair	Likely, grove	
!73	Acer macrophyllum	22	Good	Likely, grove	
!74	Acer macrophyllum	13	Good	Likely, grove	
!75	Acer macrophyllum	72	Fair	Likely, grove	378 post
!76	Acer macrophyllum	9	Dead	No	

Tree ID	Species	DBH	Condition	Exceptional	Notes
!77	Acer macrophyllum	8	Good	No	
!78	Acer macrophyllum	6	Good	No	
!79	Acer macrophyllum	10	Good	No	
!80	Acer macrophyllum	25	Fair	Likely, grove	
!81	Acer macrophyllum	23	Poor	No	
!82	Acer macrophyllum	17	Good	Likely, grove	
!83	Acer macrophyllum	21	Good	Likely, grove	
!84	Acer macrophyllum	15	Poor	No	
!85	Acer macrophyllum	38	Good	Likely, grove	
!86	Acer macrophyllum	9	Good	No	
!87	Acer macrophyllum	11	Good	No	
!88	Acer macrophyllum	11	Good	No	
!89	Acer macrophyllum	45	Poor	No	
!90	Acer macrophyllum	19	Dead	No	
!91	Acer macrophyllum	28	Very Poor	No	
!92	Acer macrophyllum	32	Fair	Likely, grove	
!93	Acer macrophyllum	22	Good	Likely, grove	
?19	Prunus avium	7	Good	No	
?20	Unknown	11	Good	No	
?21	Acer macrophyllum	19	Fair	Likely, grove	452
?22	Acer macrophyllum	18	Good	Likely, grove	
?23	Acer macrophyllum	11	Dead	No	
?23	Acer macrophyllum		Poor	No	Almost dead, partially failed, remove with trail construction 450
?24	Acer macrophyllum	26	Fair	Likely, grove	3 stems
?25	Acer macrophyllum	10	Poor	No	
?26	Acer macrophyllum	7	Fair	No	
?26	Acer macrophyllum	12	Poor	No	
?27	Acer macrophyllum	11	Fair	No	
?27	Acer macrophyllum	8	Poor	No	
?29	Acer macrophyllum	6	Poor	No	
?30	Acer macrophyllum	19	Fair	Likely, grove	2 stems
?31	Acer macrophyllum	25	Poor	No	448
?32	Acer macrophyllum		Fair	Unknown	
?33	Acer macrophyllum	26	Fair	Likely, grove	3 stems
?34	Salix lasiandra	24	Poor	No	
?35	Populus trichocarpa	30	Fair	Likely, grove	2 stems
?36	Prunus avium	20	Good	No	11 stems-prunus
?37	Acer macrophyllum	22	Excellent	Likely, grove	
?37	Populus trichocarpa	7	Good	No	
?38	Acer macrophyllum	13	Poor	No	
?39	Acer macrophyllum	12	Good	No	435
?40	Acer macrophyllum	11	Fair	No	2stems
?41	Acer macrophyllum	6	Fair	No	
?42	Acer macrophyllum	25	Good	Likely, grove	3stems

Species	Condition	DBH DB	H_2 DBH	_3 Excep_Stat	DBH_4 DBH_5	DBH_6	;
ACMA	F	24	0	0 Exceptional	0	0	0
ACMA	F	21	0	0 Exceptional	0	0	0
ACMA	F	9	0	0 Exceptional	0	0	0
ACMA	F	23	0	0 Exceptional	0	0	0
ACMA	G	21	0	0 Exceptional	0	0	0
ACMA	G	19	0	0 Exceptional	0	0	0
ACMA	dead	9	0	0 Exceptional	0	0	0
ACMA	Р	26	0	0 Exceptional	0	0	0
ACMA	F	14	0	0 Exceptional	0	0	0
ACMA	F	15	0	0 Exceptional grove	0	0	0
ACMA	F	12	0	0 Exceptional grove	0	0	0
ACMA	F	12	0	0 Exceptional grove	0	0	0
ACMA	F	9	0	0 Exceptional grove	0	0	0
ACMA	F	19	0	0 Exceptional grove	0	0	0
ACMA	F	7	0	0 Exceptional grove	0	0	0
ACMA	F	15	0	0 Exceptional grove	0	0	0
ACMA	F	15	0	0 Exceptional grove	0	0	0
ACMA	F	30	0	0 Exceptional grove	0	0	0
ACMA	dead	14	0	0 Exceptional grove	0	0	0
ACMA	G	8.5	0	0 Exceptional grove	0	0	0
ACMA	G	10	0	0 Exceptional grove	0	0	0
ACMA	Р	8.5	0	0 Exceptional grove	0	0	0
ACMA	Р	9	0	0 Exceptional grove	0	0	0
ACMA	F	13	0	O Exceptional grove	0	0	0
ACMA	G	18.5	0	0 Exceptional grove	0	0	0
ARME	F	8	0	0 Exceptional grove	0	0	0
ACMA	G	12	12.5	0 Exceptional grove	0	0	0
ACMA	F	9	0	0 Exceptional grove	0	0	0
ACMA	F	18	0	0 Exceptional grove	0	0	0
ACMA	Р	7.5	8.5	0 Exceptional grove	0	0	0
ACMA	Р	12.5	0	0 Exceptional grove	0	0	0
ACMA	F	8	0	0 Exceptional grove	0	0	0
ACMA	F	9	0	0 Exceptional grove	0	0	0
ACMA	F	11	0	0 Exceptional grove	0	0	0
ACMA	Р	8	9	0 Exceptional grove	0	0	0
ACMA	Р	8	8	0 Exceptional grove	0	0	0
SASC	G	9	0	0 Exceptional grove	0	0	0
ACMA	Р	12	0	0 Exceptional grove	0	0	0
ACMA	G	18	0	0 Exceptional grove	0	0	0
SASC	G	14	0	0 Exceptional grove	0	0	0
PREM	G	18	0	0 Exceptional grove	0	0	0
ALRU	Р	14	11	0 Exceptional grove	0	0	0
ALRU	G	13	0	0 Exceptional grove	0	0	0
ALRU	F	18	0	0 Exceptional grove	0	0	0
ACMA	F	18	19	16 Exceptional grove	0	0	0
ACMA	F	22	21	16 Exceptional grove	0	0	0

ACMA	G	24	0	0 Exceptional grove	0	0	0
ACMA	F	11	0	0 Exceptional grove	0	0	0
ACMA	Р	12	0	0 Exceptional grove	0	0	0
ACMA	F	10	12	12 Exceptional grove	0	0	0
ACMA	F	10	0	0 Exceptional grove	0	0	0
				•	_		
ACMA	F	12	12	0 Exceptional grove	0	0	0
SAsp	G	9	0	0 Exceptional grove	0	0	0
ACMA	F	18	18	0 Exceptional grove	0	0	0
ACMA	F	18	0	0 Exceptional grove	0	0	0
ACMA	G	8	8	0 Exceptional grove	0	0	0
POBA	G	18	0	0 Exceptional grove	0	0	0
ALRU	G	9	0	0 Exceptional grove	0	0	0
CRDO	G	8.5	0	0 Exceptional grove	0	0	0
ALRU	Р	11.5	0	0 Exceptional grove	0	0	0
POBA	G	21	0	0 Exceptional grove	0	0	0
SAsp	F	13	14	0 Exceptional grove	0	0	0
ALRU	G	13	0	0 Exceptional grove	0	0	0
ALRU	G	14	0	0 Exceptional grove	0	0	0
ACMA	G	14	0	0 Exceptional grove	0	0	0
ACMA	F	11	12	0 Exceptional grove	0	0	0
ACMA	Р	11	9	0 Exceptional grove	0	0	0
ACMA	F	12	0	0 Exceptional grove	0	0	0
ACMA	F	19	19	18 Exceptional grove	0	0	0
ACMA	G	20	0	0 Exceptional grove	0	0	0
ACMA		19	22	•	_		
	F			0 Exceptional grove	0	0	0
ALRU	P -	10	0	0 Exceptional grove	0	0	0
ACMA	F	18.5	0	0 Exceptional grove	0	0	0
ACMA	F	30	0	0 Exceptional grove	0	0	0
ACMA	G	27	0	0 Exceptional grove	0	0	0
ACMA	F	30	0	0 Exceptional grove	0	0	0
ACMA	G	15	0	0 Exceptional grove	0	0	0
ACMA	G	13	0	0 Exceptional grove	0	0	0
ACMA	F	31	15	0 Exceptional grove	0	0	0
ACMA	G	11	0	0 Exceptional grove	0	0	0
ACMA	Р	8	0	0 Exceptional grove	0	0	0
ACMA	F	21	0	0 Exceptional grove	0		0
			_		_	0	
ACMA	f	17	12	0 Exceptional grove	0	0	0
PRsp	F	9	0	0 Exceptional grove	0	0	0
ACMA	G	13	19	18 Exceptional grove	18	17	0
ACMA	F	17	17	18 Exceptional grove	0	0	0
PREM	G	10	0	0 Exceptional grove	0	0	0
ACMA	G	28	29	0 Exceptional grove	0	0	0
ACMA	G	26	0	0 Exceptional grove	0	0	0
ACMA	G	27	0	0 Exceptional grove	0	0	0
ACMA	G	13	12	0 Exceptional grove	0	0	0
ACMA	P	9.5	0	0 Exceptional grove	0	0	0
ACMA	G	17	0	0 Exceptional grove	0	0	0

ACMA	G	13.5	0	0	Exceptional grove	0	0	0
ACMA	G	8.5	9	0	Exceptional grove	0	0	0
ACMA	G	11	0	0	Exceptional grove	0	0	0
ACMA	F	29	0	0	Exceptional grove	0	0	0
ACMA	F	11	0	0	Exceptional grove	0	0	0
ACMA	G	17	0	0	Exceptional grove	0	0	0
ACMA	G	16	16		Exceptional grove	0	0	0
ACMA	G	16	0		Exceptional grove	0	0	0
ACMA	F	12	0		Exceptional grove	0	_	0
ACMA	Р	12	13		Exceptional grove	0	0	0
ACMA	F	11	0		Exceptional grove	0	0	0
ACMA	F	9	0		Exceptional grove	0		0
ACMA	F	18	0		Exceptional grove	0		0
ACMA	Р	9.5	0		Exceptional grove	0		0
ACMA	F	14	19		Exceptional grove	0	_	0
ACMA	F	17.5	0		Exceptional grove	0	_	0
THPL	G	21.5	0		Exceptional grove	0		0
ALRU	F	9.5	0		Exceptional grove	0		0
ACMA	F	23	0		Exceptional grove	0		0
ACMA	F	39.5	0		Exceptional grove	0	_	0
ACMA	F	15.5	0		Exceptional grove	0		0
ACMA	F	18.5	0		Exceptional grove	0	_	0
ACMA	F	24	0		Exceptional grove	0	_	0
ACMA	' P	9	10		Exceptional grove	0		0
ACMA	F	11	0		Exceptional grove	0	_	0
ACMA	, F	36	0		Exceptional grove	0		0
ACMA	F	15	0			0	_	
ACMA		9.5	13.5		Exceptional grove Exceptional grove	_	_	0
	F G					0	_	0
ACMA		18	0		Exceptional grove	_	_	0
ACMA	F	16	0		Exceptional grove	0		0
ACMA	G	13	0		Exceptional grove	0	•	0
ACMA	F	12	0		Exceptional grove	0	0	0
ACMA	G	21	24		Exceptional grove	0	_	0
SAsp	G	8.5	0		Exceptional grove	0		0
SAsp	G	10	0		Exceptional grove	0		0
SAsp	G	8	0		Exceptional grove	0		0
ACMA	_	31	0		Exceptional grove	0	_	0
ACMA	F	10	0		Exceptional grove	0		0
ACMA	F	13	0		Exceptional grove	0		0
ACMA	F	11.5	11		Exceptional grove	0	_	0
ACMA	F	9.5	0		Exceptional grove	0	0	0
ACMA	Р	19	0		Exceptional grove	0	0	0
ACMA	G	14.5	0		Exceptional grove	0	0	0
ACMA	F	12.5	0		Exceptional grove	0	0	0
ACMA	Р	10.5	0		Exceptional grove	0	0	0
ACMA	Р	8.5	0		Exceptional grove	0	_	0
ACMA	F	15.5	14	12	Exceptional grove	0	0	0

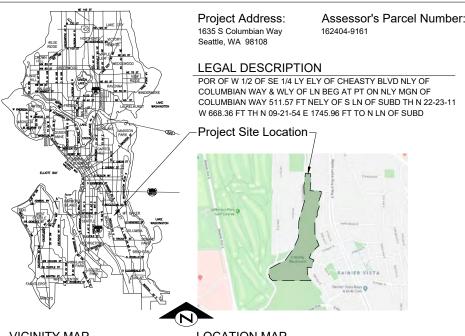
ACMA	G	14	18	0 Exceptional grove	0	0	0
ACMA	Р	28	0	0 Exceptional grove	0	0	0
ACMA	Р	15	0	0 Exceptional grove	0	0	0
ACMA	F	8	0	0 Exceptional grove	0	0	0
ACMA	F	17	8	0 Exceptional grove	0	0	0
ACMA	F	17	0	0 Exceptional grove	0	0	0
ACMA	F	14.5	0	0 Exceptional grove	0	0	0
THPL	G	23	0	0 Exceptional grove	0	0	0
ACMA	F	12	14	27 Exceptional grove	17	0	0
ACMA	F	21	0	0 Exceptional grove	0	0	0
ACMA	F	21	0	0 Exceptional grove	0	0	0
ACMA	r F	19	19	21 Exceptional grove	0	0	0
ACMA			0		0	-	
	F	14		0 Exceptional grove	_	0	0
PRsp	G	8	0	0 Exceptional grove	0	0	0
ALRU	F	9	0	0 Exceptional grove	0	0	0
SAsp	G	10	15	0 Exceptional grove	0	0	0
ACMA	Р	20	0	0 Exceptional grove	0	0	0
ACMA	F	12.5	0	0 Exceptional grove	0	0	0
ALRU	branch	10	0	0 Exceptional grove	0	0	0
ACMA	F	18	16	0 Exceptional grove	0	0	0
CRDO	G	8	0	0 Exceptional grove	0	0	0
ACMA	Р	12	0	0 Exceptional grove	0	0	0
ACMA	Р	9.5	12	0 Exceptional grove	0	0	0
ACMA	F	11.5	0	0 Exceptional grove	0	0	0
ACMA	F	12	0	0 Exceptional grove	0	0	0
ACMA	F	17	0	0 Exceptional grove	0	0	0
ACMA	F	11	0	0 Exceptional grove	0	0	0
ACMA	F	21	0	0 Exceptional grove	0	0	0
ACMA	G	18	0	0 Exceptional grove	0	0	0
ACMA	G	16	0	0 Exceptional grove	0	0	0
ACMA	G	17	12	0 Exceptional grove	0	0	0
ACMA	P	17	0	0 Exceptional grove	0	0	0
ACMA	P	14.5	0	0 Exceptional grove	0	0	0
ACMA	G	17	0	0 Exceptional grove	0	0	0
ACMA	G	16.5	0	0 Exceptional grove	0	0	0
ACMA	F	9	12	Exceptional grove Exceptional grove	0	0	0
ACMA	P	8.5	0	0 Exceptional grove	0	0	0
ACMA	F	10	0	0 Not Exceptional	0	0	0
		8	_	•	_		_
ACMA	F		0	0 Not Exceptional	0	0	0
ACMA	F	16	0	0 Not Exceptional	0	0	0
ARME	G	16.5	0	0 Not Exceptional	0	0	0
ACMA	F	13	0	0 Not Exceptional	0	0	0
ACMA	P -	8.5	0	0 Not Exceptional	0	0	0
ACMA	F	13	0	0 Not Exceptional	0	0	0
ACMA	F	8.5	0	0 Not Exceptional	0	0	0
ACMA	Р	17	0	0 Not Exceptional	0	0	0
ACMA	F	21	12	11 Not Exceptional	0	0	0

ACMA	F	11	0	0	Not Exceptional	0	0	0
ACMA	G	13	0	0	Not Exceptional	0	0	0
ACMA	F	15	0		Not Exceptional	0	0	0
ACMA	G	18	12		Not Exceptional	0	0	0
ACMA	F	11	0		•	0		_
					Not Exceptional		0	0
ACMA	G	14	0		Not Exceptional	0	0	0
ACMA	F	32	0		Not Exceptional	0	0	0
ACMA	F	16	0	0	Not Exceptional	0	0	0
ACMA	F	20	0	0	Not Exceptional	0	0	0
ACMA	F	13	15	16	Not Exceptional	0	0	0
ACMA	F	13.5	14	0	Not Exceptional	0	0	0
ACMA	Р	10.5	12	15	Not Exceptional	14	0	0
ACMA	F	16	0		Not Exceptional	0	0	0
ACMA	F	34	0		Not Exceptional	0	0	0
ACMA	F	9	0		Not Exceptional	0	0	0
ACMA	F	14	0		Not Exceptional	0	0	0
			_		•	_		
ACMA	F	11	0		Not Exceptional	0	0	0
ACMA	F	13	0		Not Exceptional	0	0	0
ACMA	F	13	0	0	Not Exceptional	0	0	0
ACMA	G	36	0	0	Not Exceptional	0	0	0
ACMA	F	26	0	0	Not Exceptional	0	0	0
ACMA	Р	9	24	0	Not Exceptional	0	0	0
ACMA	G	32	22	23	Not Exceptional	24	23	13
ACMA	G	32	0		Not Exceptional	0	0	0
ACMA	F	16	0		Not Exceptional	0	0	0
ACMA	F	26	0		Not Exceptional	0	0	0
FRLA	F	16	0		Not Exceptional	0	0	0
					•			
ACMA	F	16	0		Not Exceptional	0	0	0
ACMA	P	15.5	14		Not Exceptional	0	0	0
ACMA	F	20	0		Not Exceptional	0	0	0
ACMA	F	16	12		Not Exceptional	0	0	0
ACMA	F	15	0	0	Not Exceptional	0	0	0
ACMA	F	24	17	18	Not Exceptional	0	0	0
ACMA	F	25	0	0	Not Exceptional	0	0	0
ACsp	G	8.5	0	0	Not Exceptional	0	0	0
ACMA	F	18.5	0	0	Not Exceptional	0	0	0
ACMA	Р	14.5	0		Not Exceptional	0	0	0
ACMA	F	10	0		Not Exceptional	0	0	0
THPL	G	39	0		Not Exceptional	0	0	0
	G		15.5		•	0		
ACMA		15			Not Exceptional	_	0	0
ACMA	F	8	0		Not Exceptional	0	0	0
ACMA	F	15	0		Not Exceptional	0	0	0
ACMA	F	16	14		Not Exceptional	0	0	0
ACMA	Р	30	0		Not Exceptional	0	0	0
ACMA	F	19	18	0	Not Exceptional	0	0	0
ACMA	F	17.5	11.5	0	Not Exceptional	0	0	0
ACMA	F	14	0	0	Not Exceptional	0	0	0

ACMA	F	16	16	16 Not Exceptional	0	0	0
ACMA	F	11	0	0 Not Exceptional	0	0	0
ACMA	Р	11	0	0 Not Exceptional	0	0	0
			_	·			
ACMA	F	11	0	0 Not Exceptional	0	0	0
ACMA	Р	12.5	0	0 Not Exceptional	0	0	0
ACMA	F	16.5	0	0 Not Exceptional	0	0	0
ACMA	F	11	0	0 Not Exceptional	0	0	0
ACMA	G	15	0	0 Not Exceptional	0	0	0
ACsp	G	10.5	0	0 Not Exceptional	0	0	0
ACMA	F	11	13.5	0 Not Exceptional	0	0	0
ACMA	F	18		•	0		
			0	0 Not Exceptional	_	0	0
ACMA	Р	14	0	0 Not Exceptional	0	0	0
ACMA	F	18	0	0 Not Exceptional	0	0	0
ACMA	F	15	0	0 Not Exceptional	0	0	0
ACMA	F	18.5	0	0 Not Exceptional	0	0	0
ACMA	F	16	14	18 Not Exceptional	0	0	0
ACMA	F	22.5	0	0 Not Exceptional	0	0	0
ACMA	F	14.5	0	0 Not Exceptional	0	0	0
			_	·	_		_
ACMA	F	14.5	0	0 Not Exceptional	0	0	0
ACMA	F	15	17.5	0 Not Exceptional	0	0	0
ACMA	F	17.5	0	0 Not Exceptional	0	0	0
ALRU	G	22	0	0 Not Exceptional	0	0	0
ACMA	F	39.5	0	0 Not Exceptional	0	0	0
ACMA	F	13	15	21 Not Exceptional	15	0	0
ACMA	F	19	18.5	0 Not Exceptional	0	0	0
ACMA			19.5	·			
	F	23		0 Not Exceptional	0	0	0
ACMA	F	12	13	14 Not Exceptional	17	17	0
ACMA	Р	15	16	11 Not Exceptional	13	10	0
ACMA	F	17	0	0 Not Exceptional	0	0	0
ACMA	F	14	0	0 Not Exceptional	0	0	0
ACMA	F	20	0	0 Not Exceptional	0	0	0
ACMA	F	14	15	0 Not Exceptional	0	0	0
ACMA	F	15	0	0 Not Exceptional	0	0	0
ACMA	F	11	0	0 Not Exceptional	0	0	0
ACMA	F	14	0	0 Not Exceptional	0	0	0
ACMA	Р	16	0	0 Not Exceptional	0	0	0
ACMA	F	12	11	0 Not Exceptional	0	0	0
ACMA	F	14	0	0 Not Exceptional	0	0	0
ACMA	Р	17	17	0 Not Exceptional	0	0	0
ACMA	Р	12.5	18	0 Not Exceptional	0	0	0
ACMA	Р	22	0	0 Not Exceptional	0	0	0
THPL	G	10	0	0 Not Exceptional	0	0	0
ACMA		32	0	·	_		
	Р		_	0 Not Exceptional	0	0	0
ACMA	F	13	0	0 Not Exceptional	0	0	0
ACMA	F	15	0	0 Not Exceptional	0	0	0
PRsp	G	8	0	0 Not Exceptional	0	0	0
ACMA	Р	17	16.5	0 Not Exceptional	0	0	0

ACMA	F	27	0	0 Not Exceptional	0	0	0
ACMA	F	18	0	0 Not Exceptional	0	0	0
ACMA	F	15.5	0	0 Not Exceptional	0	0	0
ACMA	F	13.5	0	0 Not Exceptional	0	0	0

APPENDIX F: TRAIL DESIGN



LOCATION MAP VICINITY MAP

CITY OF SEATTLE - NOT TO SCALE

BEACON HILL - SCALE 1"=1.000

STANDARD ABBREVIATIONS Electric Duct Electric Manhole Electric Vault Manual Drain Valve Maximum Mechanical Joint Abandon(ed) Americans with Disabilities Act Subgrade Service Drain Aerial Interconnect Elevation Mercury Vapor Light Elevation Side Sewer — Combined Side Sewer — Sanitary Angle Point Enclosure End of Curb Approx Approximate Asphalt Asphalt Bike Way Asphalt Treated Base Automatic Control Valve Equal Existing Expansion Sleeve Spaces Specification(s) Sprinkler Head Automatic Vacumn Breaker Square Standard Field Light Pole OC OD On Center Outside Diameter Figure Finished Floor Steel Steel Pipe BV BOC BO BF Br POPBP POSS DD DP POSS DD POSS Street Pedestrian Push Button Beginning of Curb Blow Off Bottom Face Brick Street Designation Sign Finished Surface (paving) Perforated Drain Pipe Pipe Sewer Combined Pipe Sewer Sanitary Pipe Storm Drain Gal GPM Struct Structural/Structure Gallons Per Minute Bulkhead Pipe Storm Drain Detention Butterfly Valve Plain End Tee Telephone Plate Point of Compound Curvature Point of Curvature Galvanized Steel Pipe Telephone Cable Telephone Conduit Top of Curb Telephone Handhole Television Cable Caliper Cast Iron Pipe Catch Basin Gas Meter GM Gas Meter G Reg Gas Regulator Gas V Gas Valve Gr Grade Gnd Ground GP Guy Pole Point of Intersection Point of Reverse Curve Point of Tangency Polyvinyl Chloride Ground Guy Pole Chain Link Fence Television Handhole Temporary Testhole Top Face Traffic Chamber Pounds Handhole High Pressure Gas High Pressure Sodium Horizontal Pounds per Sauare Inch Power Pole Power Pole with Light Pressure Reducing Valve Conc CBW CC CW Cond Cd Concrete Traffic Cable Traffic Cable Traffic Conduit Traffic Handhole Traffic Signal Box Traffic Signal Pole Transmission Pole Concrete Bike Way Pressure Vacumn Breaker Property Line Hvdrant Qty Quantity XP Typ Conduit Con Conduit Conn Connect CMP Corrugated Cont Continuous Cr Cross Cu Ft Cubic Feet Inch/Inches Corrugated Metal Pipe Continuous Railroad Railway VCh Valve Chamber Inside Diameter V/Var Variable Vert Vertical VB Valve Bo Reconn Reconnect Red Reducer Ref Refer/Refe Invert (Line) Cubic Yard Culvert Curb and Gutter Curb Radius Valve Box Iron Pine Refer/Reference Irrg IRC Irrg IH V/C Vertical Curve Reinforced Concrete Pine Irriaation Head Water Mete Department Remove WCR Wheel Chair Ramp Remove and Replace Direct Burial Cable Double Check Valve ΚV Kilovolt Retire(d) Retire(a) Right Right of Way Rigid Galvanized Steel Rigid Steel Roadway Driveway Ductile Iron Pipe LIT Lt LP LF Ea Light Pole Lineal Feet Electric/Electrical

Cheasty Greenspace North Loop Trail

Record # 000207-22PA

Building & Land Use Pre-Application

City of Seattle Department of Finance & Administrative Services, City Purchasing & Contracting Services

Administering Department:

City of Seattle Department of Parks and Recreation, Planning & Development Division 300 Elliott Avenue West, Suite 100, Seattle, WA 98119 Project Manager: Mike Schwindeller 206-615-1165

Project Design Team:

Environmental Science Associates 2801 Alaskan Way, Suite 200, Seattle, WA 98121 Primary Contact: Sona Greenberg 206-789-9658

SHEET INDEX						
SHEET NO.	DWG NO.	TITLE				
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2	L-1	SITE PLAN				
3	L-2	TRAIL DETAILS AND NOTES				
4	ESC-1	STORMWATER CONTROL PLAN				
5	ESC-2	STORMWATER CONTROL DETAILS				
6	ESC-3	ESC COVER SHEET				
7	ESC-4	STORMWATER CONTROL 1				
8	ESC-5	STORMWATER CONTROL 2				
9	ESC-6	STORMWATER CONTROL 3				
10	ESC-7	STORMWATER CONTROL 4				
11	ESC-8	STORMWATER CONTROL 5				
12	ESC-9	STORMWATER CONTROL 6				
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14	ESC-11	STORMWATER CONTROL 8				
15	ESC-12	STORMWATER CONTROL 9				
16	ESC-13	STORMWATER CONTROL 10				
17	ESC-14	STORMWATER CONTROL 11				
18	ESC-15	STORMWATER CONTROL 12				
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20	ESC-17	STORMWATER CONTROL 14				

CLIEFT INDEV

Project Description:

This project proposes constructing a 1.0-mile, one-loop bike trail, 0.4-mile multi-use trail, and 0.1 mile hike-only connector trail in Cheasty Greenspace in the Beacon Hill neighborhood of Seattle (see Vicinity Map and Location Map, this sheet). In 2012, a group of neighbors proposed the development of pedestrian and mountain bike trails at Cheasty Greenspace as a project through the Parks and Green Spaces Levy Opportunity Fund process. The Opportunity Fund is funded through the 2008 Parks and Green Spaces Levy approved by voters and allows the community to initiate park projects in neighborhoods. The project was contrary to Seattle Parks and Recreation (SPR)'s bicycle policy, and thus the original project was not successful in the Opportunity Fund process. However, there was significant community interest for the trails project, with the North Beacon Hill Community Council voting to support it. Additionally, the North Beacon Hill Neighborhood Plan, in the Comprehensive Plan (City of Seattle, 2016b), includes policy NBH-P34: Consider the development of pedestrian and bicycle trails through publicly owned greenbelts throughout North Beacon Hill. In 2013, the group Friends of Cheasty Greenspace at Mountain View secured funding through the Department of Neighborhoods. The group used this funding to hire a landscape architect to develop a preliminary trail design.

The trail is designed to avoid impacts to wetlands, and minimize impacts to steep slopes, wetland buffers, the watercourse, and the riparian management area (watercourse buffer) The proposed North Loop trail design provides a one-direction bicycle loop, multi-use connector trail, and hike-only trail that connects to an existing hike-only trail. Cheasty Greenspace North Loop provides two public hiking-only access points, two bicycle-only access points, and three multi-use access points. All proposed trail would be soft surface, with native mineral soils. The trails have been designed to minimize impacts to wetland and watercourse buffers. The bicycle trails are for beginner to intermediate riders and are not anticipated to be a mountain biking destination.

>>>CAUTION - CALL 811< **UTILITY NOTIFICATION CENTER BEFORE YOU DIG!** WWW.CALL811.COM

Also, verify all underground utilities not located by the 811 service by using a commercial location service and call SPR Inspection Request Line (206) 684-7034.

NO.	REVISION - AS BUILT	DATE	
1			
2			
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Manual Control Valve

ADDRESS OF PROPERTY: 1635 S COLUMBIAN WAY, SEATTLE, WA 98108
OWNER: CITY OF SEATTLE DEPARTMENT OF FINANCE & ADMINISTRATIVE SERVICES, CITY

PARK ENGINEER



90% DESIGN NOT FOR CONSTRUCTION



SEATTLE PARKS DEPARTMENT	D
CHEASTY NORTH LOOP	C
COVER SHEET	SPI

DESIGNED	ABG		
DRAWN	ABG/TTF		DATE 12/30/2022
CHECKED	SAR		SHEET 1 OF 20
			3HEE1 _1_0F _20
ORDINANCE	NO	G-1	
SPECIFICATION	NO.		
SCALE _	AS SHOWN		

