

March 16, 2020

Evergreen State Substantial Communities LLC  
dba Sunnyside Village Cohousing  
3007 Federal Avenue  
Everett, Washington 98201

Attention: Dean Smith

Subject: Critical Areas Assessment Report  
Sunnyside Village Cohousing Development  
Marysville, Washington  
GeoEngineers File No. 24145-001-00

## 1.0 INTRODUCTION

GeoEngineers, Inc. (GeoEngineers) was contracted by Evergreen State Substantial Communities LLC to perform wetland delineation and fish and wildlife habitat conservation areas (FWHCAs) assessment for the Sunnyside Village Cohousing Development Project (project) in Marysville, Washington. We understand that the property owner is planning to develop a 4.75-acre property located at 3121 66<sup>th</sup> Avenue NE with 30 to 34 cottages (700 to 1,200 square feet each) and a common house. We also understand that associated improvements for each site will consist of sidewalks/hardscape, parking stalls and access drive lanes, landscaping and community gardens, and new underground utility construction. This report is intended to provide baseline critical areas (wetlands, streams and other FWHCAs) data in accordance with Marysville Municipal Code (MMC), Chapter 22E.010 (Critical Areas Management).

### 1.1. Project Location and Site Description

The proposed project is located near 3121 66<sup>th</sup> Ave NE in Marysville, Washington within Snohomish County in Section 3 of Township 29 N and Range 5 E of the Willamette Meridian (W.M.) (Figure 1). The project is located within a suburban residential area. The assessment area (4.75-acres) included all areas within the boundaries of the parcel (Figure 2, Wetlands Site Plan). Areas outside the parcel and within 150 feet of the parcel boundary were visually assessed for wetlands and FWHCAs. No formal assessments were conducted outside the parcel.

The site contains multiple existing structures, upland habitat dominated by mowed grasses and mowed Himalayan blackberry (*Rubus armeniacus*), stands of Douglas fir (*Pseudotsuga menziesii*) at the northern and southern boundaries and a forested area dominated by red alder (*Alnus rubra*) along the eastern property boundary. Site photographs are included in Appendix A.



## 2.0 WETLAND DELINEATION

### 2.1. Data Review

Environmental maps of the project site were collected and reviewed as part of a paper inventory. The City of Marysville Critical Areas Map (City of Marysville 2020) depicts a Category III wetland with a 75-foot buffer located east of the project parcel with a small portion of the wetland located within the northeast corner of the project parcel. The United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) online mapper does not depict wetlands at the project site (USFWS 2020). The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey shows one soil type within the assessment area: Tokul gravelly medial loam, 0 to 8 percent slopes. Tokul gravelly medial loam is not on the National Hydric Soils List, but it does contain minor soil components with landforms consisting of depressions and drainageways (e.g., Norma and Mckenna) that are on the National Hydric Soils List, (USDA-NRCS 2020). The Marysville map (City of Marysville 2020) and NWI (USFWS 2020) and soils information are included in Appendix B, Background Data and Maps.

Additional information was obtained from the Washington State Department of Natural Resources (DNR) Forest Practices Application Mapping Tool (FPAMT) and the Washington State Department of Fish and Wildlife (WDFW) Priority Habitat and Species (PHS) Interactive map viewer (DNR 2020; WDFW 2020). FPAMT does not depict streams at the project site (DNR 2020). The WDFW PHS map viewer does not show priority species within the project parcel/assessment area but does depict the following species within one mile of the project parcel.

- Biodiversity areas (Ebey Island);
- Freshwater Forested/Shrub Wetland;
- Freshwater Emergent Wetland;
- Bull trout (*Salvelinus confluentus*);
- Chinook salmon (*Oncorhynchus tshawytscha*);
- Chum salmon (*Oncorhynchus keta*);
- Coho salmon (*Oncorhynchus kisutch*);
- Pink salmon (*Oncorhynchus gorbuscha*);
- Sockeye salmon (*Oncorhynchus nerka*);
- Cutthroat trout (*Oncorhynchus clarkii*); and
- Steelhead trout (*Oncorhynchus mykiss*)

Maps from FPAMT and PHS are included in Appendix B.

### 2.2. Field Assessment Methods

Two GeoEngineers' biologists conducted a field assessment on January 23, 2020, within the approximately 4.75-acre assessment area to characterize and delineate wetland features in the field. Figure 2 depicts the delineated wetland habitat. The delineation of wetlands was conducted in accordance with guidelines presented in MMC Chapter 22E.010.060, using the U.S. Army Corps of Engineers (USACE) *Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast* (USACE 2010).





### 2.3. Field Assessment Results

GeoEngineers identified four wetlands (Wetlands A-D) within the assessment area. Figure 2 shows the delineated wetland features and associated buffers within the assessment area.

The majority of the assessment area is characterized by upland habitat dominated by mowed grasses and mowed Himalayan blackberry (*Rubus armeniacus*). Stands of Douglas fir (*Pseudotsuga menziesii*) are located at the northern and southern boundaries and a forested area dominated by red alder (*Alnus rubra*) is located along the eastern property boundary. A gravel access road, a relict gravel road, and one single family residence are located on the property which slopes gradually to the south.

#### 2.3.1. Wetlands

Wetlands A and B were identified within the western portion of the parcel and are both characterized by a mowed mix of facultative grasses and other herbaceous species. A portion of Wetland C, a large alder forested slope wetland, is located within the northeastern corner of the property. Wetland D is located in the southeastern corner of the property and is characterized by mowed Japanese knotweed and facultative herbaceous species.

Thirteen formal wetland sample plots and 23 informal wetland sample plots were established to document wetland and upland conditions. Wetland determination datasheets for the formal wetland sample plot are attached in Appendix C. GeoEngineers used a Geo7x Trimble unit to record global position system (GPS) locations of the sample plots and delineated wetland boundaries. Wetland boundaries were not flagged in the field.

The wetlands were rated according to MMC 22E.010.060 which requires use of the *Washington State Wetland Rating System for Western Washington, revised 2014* (Hruby 2014). The wetland rating forms are included in Appendix D (Wetland Rating Forms). Wetland buffer widths were identified according to MMC 22E.010.100 (Wetland Buffer areas). Wetlands A, B, and D were rated as Category IV depressional wetlands with a standard minimum 35-foot buffer. Wetland C was rated as a Category III slope wetland with a standard minimum 75-foot buffer.

Per MMC 22E.010.080(2)(c) the director may waive compliance with wetland buffer and compensation requirements for Wetlands A and D if the criteria listed under MMC 22E.010.080(2)(c) are met. Both wetlands were rated as Category IV wetlands and are less than one-tenth of an acre in size. Neither Wetland A or D is contiguous with a freshwater or estuarine system, and both are situated more than 100 feet from one another and from other wetland areas, and therefore they are not considered to be a part of a mosaic wetland complex. During the site visit, standing water was not observed within Wetland A and no indicators of seasonal ponding were observed (e.g., sparsely vegetated depression or water stained leaves), however high water table and saturation were documented at the time of survey. Within Wetland D, 1 to 3 inches of ponded water was observed during the site visit, within less than half of the wetland area. The sources of hydrology for Wetland D were evaluated to be high groundwater and precipitation. Before the site visit, the area had experienced heavy rainfall and snow events. The site visit occurred before the breeding season for native amphibians that breed in ephemeral ponds [e.g., Pacific chorus frogs (*Pseudacris regilla*) and long-toed salamanders (*Ambystoma macrodactylum*)]. Since Wetland D is in an open area with little shade it is likely that the ponded area does not persist during prolonged periods without rain and therefore it likely does not provide standing water in sufficient amounts to support breeding amphibians. No amphibians were heard or seen during the survey. No federally or state endangered,




threatened or candidate species were observed or recorded to be within the wetland. If these two wetlands were filled, stormwater treatment or some other landscaping mitigation would be proposed to replace their hydrologic and water quality functions. Based on our assessment, Wetlands A and D appear to meet the requirements for an exemption according to MMC 22E.010.080.

Tables 1-4 on the following pages summarize information regarding the wetland features identified within the area of investigation.

**TABLE 1. WETLAND A**

| <b>Wetland A – Information</b> |  |
|--------------------------------|--|
| Location                       | 3121 66 <sup>th</sup> Ave NE, Marysville   |
| WRIA                           | 7 – Snohomish                              |
| Local Jurisdiction             | City of Marysville                         |
| Rating <sup>1</sup>            | IV   |
| Buffer Width <sup>2</sup>      | 35 feet                                    |
| Size                           | Approximately 860 square feet (0.02 acres) |
| Cowardin Class                 | Emergent                                   |
| HGM Class                      | Depressional                               |



| <b>Description Summary</b> |  |
|----------------------------|--|
| Vegetation                 | <b>Herbaceous:</b> Creeping buttercup ( <i>Ranunculus repens</i> ), meadow foxtail ( <i>Alopecurus pratensis</i> ), velvet grass ( <i>Holcus lanatus</i> ) |
| Soils                      | Meets criteria for hydric soil indicator Depleted Matrix (F3)  |
| Hydrology                  | <b>Indicators:</b> High water table, saturation<br><b>Sources:</b> High groundwater and precipitation  |

| <b>Western Washington Wetland Rating Functions Summary (15 points total)</b> |   |
|--|---|
| Water Quality  | <b>6 points:</b> Wetland is a depression with no outlet, there is a septic system within 250-ft of the wetland, and there is a TMDL for the basin in which the wetland is found               |
| Hydrologic   | <b>5 points:</b> Wetland is a depression with no outlet, the area of the basin is less than 10 times the area of the unit, surface flooding problems are in a sub-basin further down gradient |
| Habitat  | <b>4 points:</b> Emergent community; no habitat interspersed. The system abuts a moderate amount of undisturbed and moderate intensity land uses.   |
| Buffer Condition   | The buffer is impacted by regular mowing and a gravel access road.  |
| Status   | The wetland appears to meet the requirements for an exemption according to MMC 22E.010.080.   |

Notes:

- <sup>1</sup> Wetland rating in accordance with Washington State Wetlands Rating System for Western Washington (Hruby 2014).
- <sup>2</sup> Buffer width estimated based on Table 4.1 in MMC 22E.010.100. The final buffer width is subject to approval by Marysville



**TABLE 2. WETLAND B**

| <b>Wetland B – Information</b> |  |
|--------------------------------|--|
| Location                       | 3121 66 <sup>th</sup> Ave NE, Marysville     |
| WRIA                           | 7 – Snohomish                                |
| Local Jurisdiction             | City of Marysville                           |
| Rating <sup>1</sup>            | IV   |
| Buffer Width <sup>2</sup>      | 35 feet                                      |
| Size                           | Approximately 13,000 square feet (0.3 acres) |
| Cowardin Class                 | Emergent                                     |
| HGM Class                      | Depressional                                 |



| <b>Description Summary</b> |   |
|----------------------------|---|
| Vegetation                 | <b>Herbaceous:</b> Creeping buttercup ( <i>Ranunculus repens</i> ), meadow foxtail ( <i>Alopecurus pratensis</i> ), velvet grass ( <i>Holcus lanatus</i> ), Baltic rush ( <i>Juncus balticus</i> ), curly dock ( <i>Rumex crispus</i> ) |
| Soils                      | Meets criteria for hydric soil indicator Depleted Matrix (F3)   |
| Hydrology                  | <b>Indicators:</b> High water table, saturation, surface water<br><b>Sources:</b> High groundwater and precipitation  |


| <b>Western Washington Wetland Rating Functions Summary (15 points total)</b> |   |
|--|---|
| Water Quality  | <b>6 points:</b> Wetland is a depression with no outlet, there is a septic system within 250-ft of the wetland, and there is a TMDL for the basin in which the wetland is found               |
| Hydrologic   | <b>5 points:</b> Wetland is a depression with no outlet, the area of the basin is less than 10 times the area of the unit, surface flooding problems are in a sub-basin further down gradient |
| Habitat  | <b>4 points:</b> Emergent community; no habitat interspersions. The system abuts a moderate amount of undisturbed and moderate intensity land uses.   |
| Buffer Condition   | The buffer is impacted by regular mowing and a gravel access road.  |

Notes:

- <sup>1</sup> Wetland rating in accordance with Washington State Wetlands Rating System for Western Washington (Hruby 2014).
- <sup>2</sup> Buffer width estimated based on Table 41 in MMC 22E.010.100. The final buffer width is subject to approval by Marysville



**TABLE 3. WETLAND C**

| Wetland C – Information  |   |
|--|---|
| Location   | 3121 66 <sup>th</sup> Ave NE, Marysville  |
| WRIA   | 7 – Snohomish   |
| Local Jurisdiction   | City of Marysville  |
| Rating <sup>1</sup>  | III   |
| Buffer Width <sup>2</sup>  | 75 feet   |
| Size   | Approximately 320,000 square feet (7.3 acres)   |
| Cowardin Class   | Forested, scrub-shrub   |
| HGM Class  | Slope   |
|  |   |
| Description Summary  |   |
| Vegetation   | <p><b>Herbaceous:</b> Reed canary grass (<i>Phalaris arundinacea</i>)</p> <p><b>Shrub:</b> Dogwood (<i>Cornus sericea</i>), salmonberry (<i>Rubus spectabilis</i>), and Himalayan blackberry (<i>Rubus armeniacus</i>)</p> <p><b>Trees:</b> Red alder (<i>Alnus rubra</i>)</p>  |
| Soils  | Meets criteria for hydric soil indicator Depleted Matrix (F3)   |
| Hydrology  | <p><b>Indicators:</b> High water table, saturation, surface water</p> <p><b>Sources:</b> High groundwater and precipitation</p>   |
| Western Washington Wetland Rating Functions Summary (17 points total)              |   |
| Water Quality  | <b>6 points:</b> The slope of the wetland is between 1-2 percent, dense, woody plants cover more than 1/2 of the area of the wetland, and there is a TMDL for the basin in which the wetland is found   |
| Hydrologic   | <b>5 points:</b> Dense, uncut rigid plants cover more than 90% of the wetland and surface flooding problems are in a sub-basin further down-gradient.   |
| Habitat  | <b>6 points:</b> Forested and scrub-shrub community; seasonally flooded and saturated; moderate habitat interspersed. Large woody debris and standing snags are located within the wetland. The system abuts a moderate amount of undisturbed and moderate intensity land uses. The wetland is within 100-m of two priority habitats (riparian and instream). |
| Buffer Condition   | The buffer within the project area consists of mowed Himalayan blackberry, Japanese knotweed and a small garden. The buffer outside of the project area appears to be forested with little development within the actual buffer.  |

Notes:

<sup>1</sup> Wetland rating in accordance with Washington State Wetlands Rating System for Western Washington (Hruby 2014).


<sup>2</sup> Buffer width estimated based on Table 4.1 in MMC 22E.010.100. The final buffer width is subject to approval by Marysville





**TABLE 4. WETLAND D**

| Wetland D – Information   |  |
|---------------------------|--|
| Location                  | 3121 66 <sup>th</sup> Ave NE, Marysville     |
| WRIA                      | 7 – Snohomish                                |
| Local Jurisdiction        | City of Marysville                           |
| Rating <sup>1</sup>       | IV   |
| Buffer Width <sup>2</sup> | 35 feet                                      |
| Size                      | Approximately 1,050 square feet (0.02 acres) |
| Cowardin Class            | Emergent                                     |
| HGM Class                 | Depressional                                 |



| Description Summary |   |
|---------------------|---|
| Vegetation          | <b>Herbaceous:</b> Creeping buttercup ( <i>Ranunculus repens</i> ), meadow foxtail ( <i>Alopecurus pratensis</i> ), velvet grass ( <i>Holcus lanatus</i> ), reed canary grass ( <i>Phalaris arundinacea</i> ) |
| Soils               | Meets criteria for hydric soil indicator Depleted Matrix (F3)   |
| Hydrology           | <b>Indicators:</b> High water table, saturation, surface water<br><b>Sources:</b> High groundwater and precipitation  |

| Western Washington Wetland Rating Functions Summary (15 points total) |  |
|---|--|
| Water Quality   | <b>6 points:</b> Wetland is a depression with no outlet, there is a septic system within 250-ft of the wetland, and there is a TMDL for the basin in which the wetland is found                |
| Hydrologic  | <b>5 points:</b> Wetland is a depression with no outlet, the area of the basin is less than 10 times the area of the unit, surface flooding problems are in a sub-Obasin further down gradient |
| Habitat   | <b>4 points:</b> Emergent community; no habitat interspersions. The system abuts a moderate amount of undisturbed and moderate intensity land uses.  |
| Buffer Condition  | The buffer is impacted by regular mowing and invasive species control (Japanese knotweed).   |
| Status  | The wetland appears to meet the requirements for an exemption according to MMC 22E.010.080.  |

Notes:

<sup>1</sup> Wetland rating in accordance with Washington State Wetlands Rating System for Western Washington (Hruby 2014).

<sup>2</sup> Buffer width estimated based on Table 41 in MMC 22E.010.100. The final buffer width is subject to approval by Marysville

**3.0 POTENTIAL WETLAND IMPACTS AND MITIGATION OPTIONS**

Based on our review of the current development site plans, there are no proposed impacts to Wetland C but proposed development actions may impact Wetlands A, B, and D. Based on our review of MCC 22E.010 (Critical Areas Management), different types of compensation will be required by the City of Marysville for impacts to Wetlands A, B, and D. Due to the small size (less than 0.1 acre) of Wetlands A and D, the City may waive compliance with wetland buffer and compensation requirements for these wetlands (but must meet additional criteria) and proposed filling of these wetlands may only require mitigation for hydrologic and water quality functions (MCC 22E.010.080). Although the City of Marysville may waive compliance with



wetland buffer and compensation requirements for Wetlands A and D, they may be regulated by USACE and/or the Washington State Department of Ecology (Ecology), and these agencies may require full compensation for impacts to these wetlands.

Wetland B is too large to meet the criteria listed under the City's exemptions to wetland regulations (MCC 22E.010.080) and the City will require full mitigation sequencing for impacts to Wetland B (MCC 22E.010.110(1)). If development plans propose to fill Wetland B completely, options for compensation include onsite and offsite enhancement of Wetland C or purchasing wetland mitigation bank credits. If enhancement is the preferred option, approximately 1.8 acres of Wetland C would need to be enhanced, following an enhancement ratio of 6:1 per MMC 22E.010.120. For wetland and/or buffer mitigation projects, the City requires a monitoring and maintenance plan for a period of three to five growing seasons, depending on the complexity of the wetland system (MCC 22E.010.160) and the USACE would require at least five years of monitoring and maintenance. The majority of Wetland C is on city-owned property and city permission would be necessary for an enhancement compensation option. In addition, approval by the City and other agencies with jurisdiction over Wetland B, will be required for the filling of Wetland B. Filling Wetland B completely does not include the avoidance or minimization steps of mitigation sequencing (MCC 22E.010.110(1)).

The City also allows the purchase of wetland mitigation bank credits as suitable mitigation for wetland impacts (MCC 22E.010.130). Filling the entirety of Wetland B would require approximately 0.26 credits from a local bank (e.g., Skykomish Habitat Wetland Mitigation Bank) at an approximate cost of \$57,500. If approved, this option is the simplest as it does not require implementation of a mitigation project, or follow-up monitoring, maintenance and contingency actions. Regardless of the mitigation method, mitigation options will first require justification to demonstrate why impacts to Wetlands A, B, and D could not be avoided or minimized.

#### 4.0 SUMMARY

GeoEngineers conducted a wetland delineation and assessment within the assessment area shown on Figure 2. We understand that the property owner is planning to develop the 4.75-acre property with 30 to 34 cottages (700 to 1,200 square feet each) and a common house. This report is intended to provide baseline critical areas (wetland, stream and other FWCHAs) data in accordance with MMC 22E.010 (Critical Areas Management) (City of Marysville 2020) and in support of final design and permitting. Three Category IV wetlands (Wetlands A, B, and D) and one Category III wetland (Wetland C) were identified during the field investigation. The standard minimum buffer for Wetlands A, B, and D, per MMC 22E.010.100, is 35 feet and the buffer for Wetland C is 75 feet. Due to the small size (less than 0.1 acre) of Wetlands A and D, the City may waive compliance with wetland buffer and compensation requirements for these wetlands (if they meet additional criteria) and the City may only require mitigation for hydrologic and water quality functions if the filling of these wetlands is proposed (MCC 22E.010.080). Our assessment indicates that these wetlands meet the requirements for an exemption according to MMC 22E.010.080. USACE or Ecology may take jurisdiction over Wetlands A and D and they may require full mitigation for impacts. After project designs are finalized, potential wetland and buffer impacts should be assessed and, if needed, avoidance, minimization and mitigation options should be evaluated. If potential wetland and/or buffer impacts are identified, a Mitigation Plan and other development permits may be required.



## 5.0 LIMITATIONS

GeoEngineers has prepared this Critical Areas Assessment Report in general accordance with the scope and limitations of our proposal. Within the limitations of scope, schedule and budget, our services have been executed in accordance with the generally accepted practices for wetland delineation and assessment in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

This report has been prepared for the exclusive use of Evergreen State Substantial Communities LLC, authorized agents and regulatory agencies following the described methods and information available at the time of the work. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. The information contained herein should not be applied for any purpose or project except the one originally contemplated.

The applicant is advised to contact all appropriate regulatory agencies (local, state and federal) prior to design or construction of any development to obtain necessary permits and approvals.

## 6.0 REFERENCES

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.

Hruby, T. 2014. Washington State Wetland Rating System for Western Washington: 2014 Update. (Publication #14-06-029). Olympia, WA: Washington Department of Ecology.

City of Marysville 2020. Critical Areas Maps. Available at: <https://www.marysvillewa.gov/326/Maps>.

Marysville Municipal Code. Chapter 22E.010 Critical Areas Management. Available at: <https://www.codepublishing.com/WA/Marysville/html/Marysville22E/Marysville22E010.html#22E.010.060>.

United States Army Corps of Engineers (USACE). 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region, ed. J.S. Wakeley, R. W. Lichvar, and C.V. Noble. ERDC/EL TR-10-3. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center.

United States Department of Agriculture – National Resource Conservation Service (USDA-NRCS). 2020. Web Soil Survey. Available at: <http://websoilsurvey.nrcs.usda.gov/app/>.

United States Fish and Wildlife Service (USFWS). 2020. Wetlands Mapper. Available at: <http://www.fws.gov/wetlands/Data/mapper.html>.





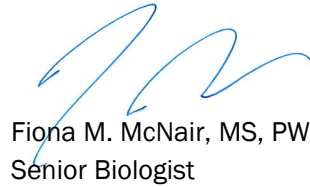
Washington Department of Fish and Wildlife (WDFW). 2020. Priority Habitats and Species (PHS) on the Web. Available at: <http://wdfw.wa.gov/mapping/phs/>.

Washington Department of Natural Resources (DNR). 2020. Forest Practices Application Mapping Tool (FPAMT). Available at: <https://fpamt.dnr.wa.gov/default.aspx#>.

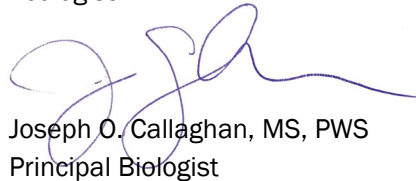
Sincerely,  
GeoEngineers, Inc.



Lydia R. Baldwin, MS  
Ecologist



Fiona M. McNair, MS, PWS  
Senior Biologist



Joseph O. Callaghan, MS, PWS  
Principal Biologist

LRB:FMM:JOC:leh

Attachments:

Figure 1. Vicinity Map

Figure 2. Site Plan

Appendix A. Site Photographs

Appendix B. Background Data and Maps

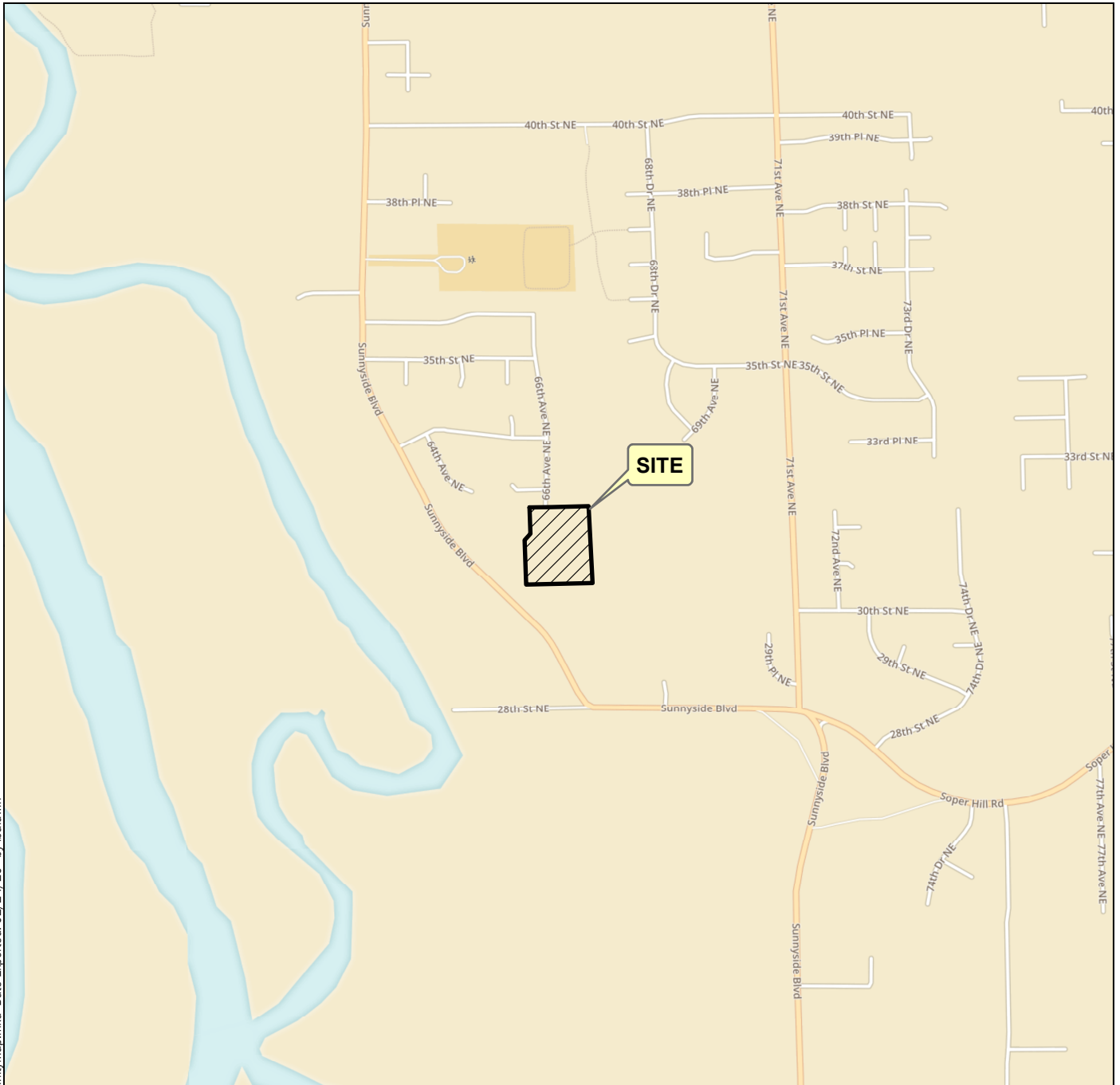
Appendix C. Wetland Determination Datasheets

Appendix D. Wetland Rating Forms

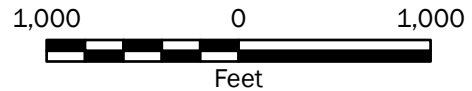
One electronic copy submitted

Disclaimer: Any electronic form, facsimile or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.





\\geoengineers.com\WANN\Projects\_24\24145001\GIS\MXD\24145001\_F01\_VicinityMap.mxd Date Exported: 02/24/20 by lbatwin



**Vicinity Map**

Sunnyside Village Cohousing Development  
Marysville, Washington



**Figure 1**

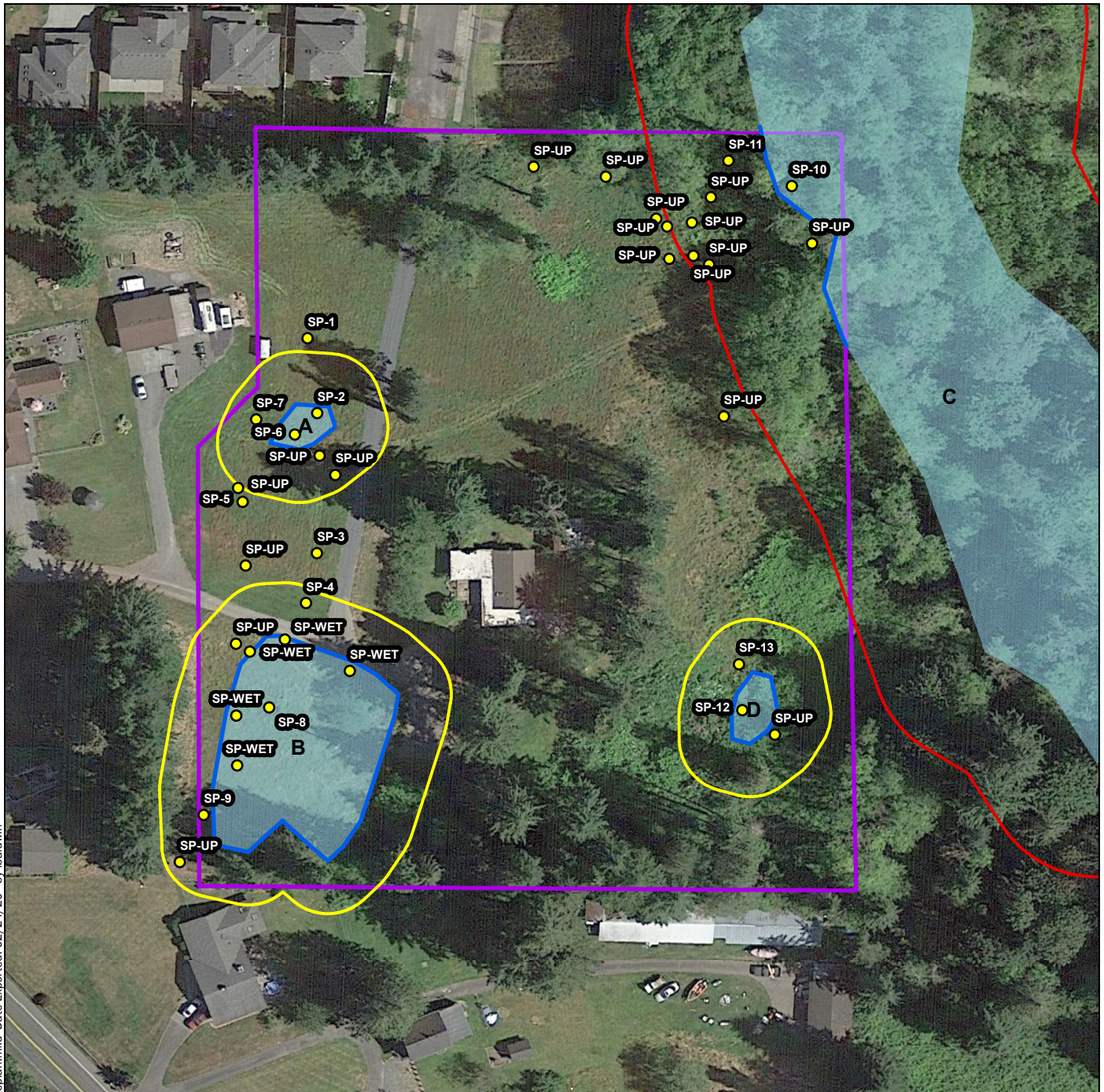
**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: Mapbox Open Street Map, 2016

Projection: NAD 1983 UTM Zone 10N

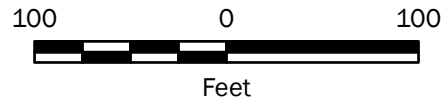
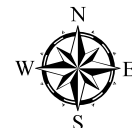




\geoengineers.com\WANA\Projects\_24\24145001\GIS\MXD\24145001\_f02\_siteplan.mxd Date Exported: 02/24/20 by lbalwin

**Legend**

- Sample Plot
- Wetland Buffer (35-ft)
- Assessment Area
- Wetland Buffer (75-ft)
- Wetland



**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. Wetland buffers estimated per MMC 22E.010.100

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet

|   |                 |
|---|-----------------|
| <b>Site Plan</b>  |                 |
| Sunnyside Village Cohousing Development<br>Marysville, Washington |                 |
|   | <b>Figure 2</b> |

**APPENDIX A**  
**Site Photographs**





Photograph 1. Looking east at the mowed fields north of the existing house. (January 23, 2020)



Photograph 2. Looking south at the small depression associated with Wetland A. (January 23, 2020)

### Site Photographs

Sunnyside Village Cohousing Development  
Marysville, Washington



Appendix  
A-1





Photograph 3. Wetland habitat was not observed within the mowed field north of the existing house. (January 23, 2020)



Photograph 4. Looking west toward Wetland B. Wetland B is located in the mowed field south of the abandoned gravel road that runs west to east across the property. (January 23, 2020)

|  |                         |
|--|-------------------------|
| <b>Site Photographs</b>  |                         |
| Sunnyside Village Cohousing Development<br>Marysville, Washington                    |                         |
|  | <b>Appendix<br/>A-2</b> |





Photograph 5. Wetland B had standing water in portion of the wetland. (January 23, 2020)



Photograph 6. High water tables were present throughout the majority of the project site. (January 23, 2020)

|  |                         |
|--|-------------------------|
| <b>Site Photographs</b>  |                         |
| Sunnyside Village Cohousing Development<br>Marysville, Washington                    |                         |
|  | <b>Appendix<br/>A-3</b> |





Photograph 7. Two crabapple trees were located within Wetland B. (January 23, 2020)



Photograph 8. View looking south into Wetland B. Standing water was located in the southern portion of Wetland B. (January 23, 2020)

|  |                         |
|--|-------------------------|
| <b>Site Photographs</b>  |                         |
| Sunnyside Village Cohousing Development<br>Marysville, Washington                    |                         |
|  | <b>Appendix<br/>A-4</b> |





Photograph 9. Red alder and salmonberry dominate Wetland C. (January 23, 2020)



Photograph 10. Water was slowly flowing south through Wetland C. (January 23, 2020)

### Site Photographs

Sunnyside Village Cohousing Development  
Marysville, Washington





Photograph 11. A large patch of Japanese knotweed is located in the southeastern portion of the property. (January 23, 2020)



Photograph 12. Wetland D is dominated by creeping buttercup and is located in the southeast portion of the property. Ponding visible within Wetland D. (January 23, 2020)

|  |                         |
|--|-------------------------|
| <b>Site Photographs</b>  |                         |
| Sunnyside Village Cohousing Development<br>Marysville, Washington                    |                         |
|  | <b>Appendix<br/>A-6</b> |

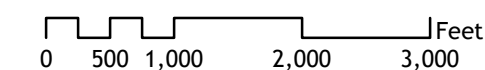
**APPENDIX B**  
**Background Data and Maps**



# Critical Areas

2012

1:18,000



Data shown on this map represents known critical areas however, other critical areas may exist. This map is meant for general information purposes only and is not meant to replace critical areas surveys by qualified consultants.

THE CITY OF MARYSVILLE DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS OF THIS DATA FOR ANY PARTICULAR PURPOSE. EITHER EXPRESSED OR IMPLIED. NO REPRESENTATION OR WARRANTY IS MADE CONCERNING THE ACCURACY, CURRENCY, COMPLETENESS OR QUALITY OF DATA DEPICTED. ANY USER OF THIS DATA ASSUMES ALL RESPONSIBILITY FOR USE THEREOF, AND FURTHER AGREES TO HOLD THE CITY OF MARYSVILLE HARMLESS FROM AND AGAINST ANY DAMAGE, LOSS, OR LIABILITY ARISING FROM ANY USE OF THIS DATA.

Printed: December 2019

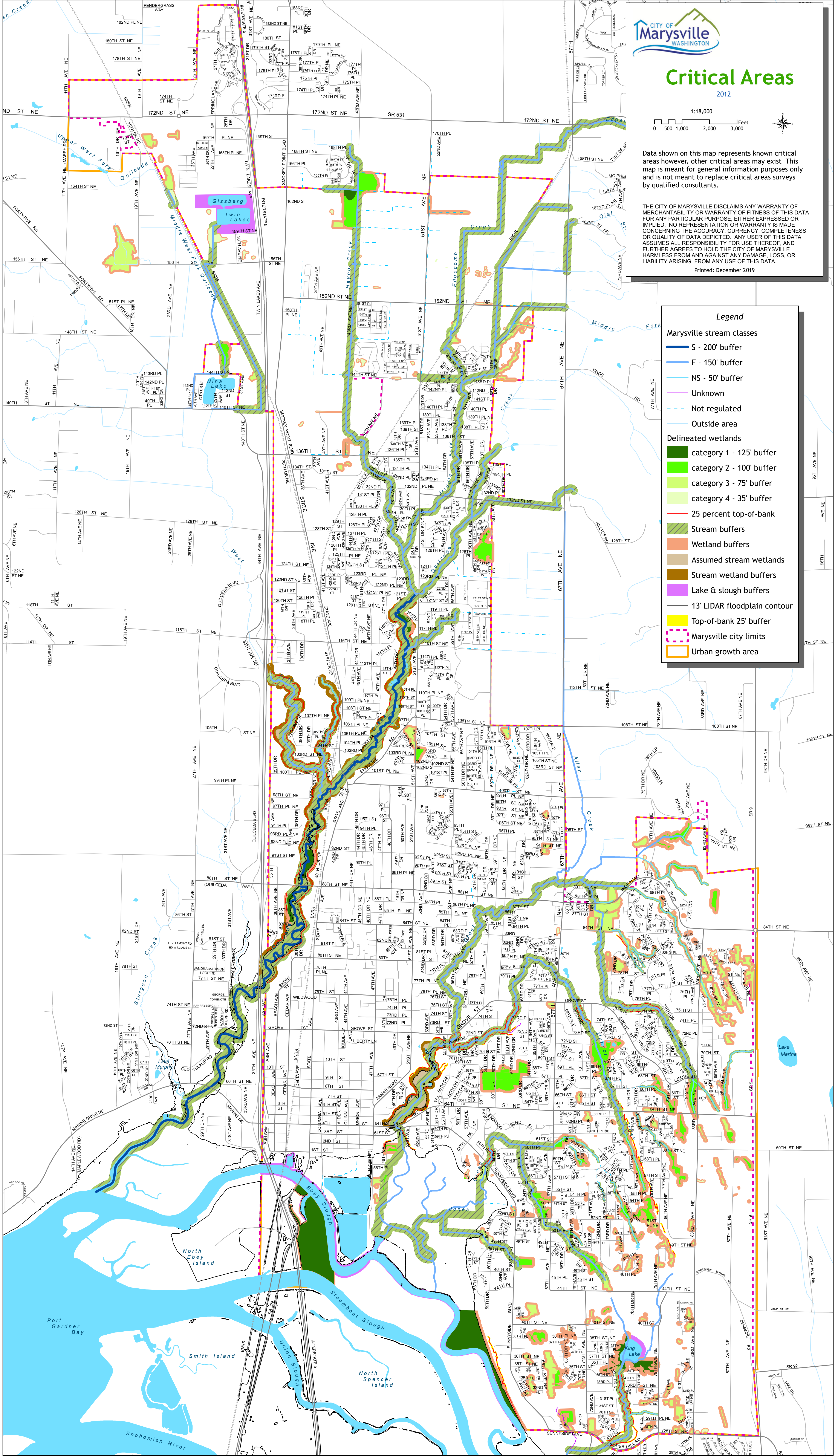
### Legend

**Marysville stream classes**

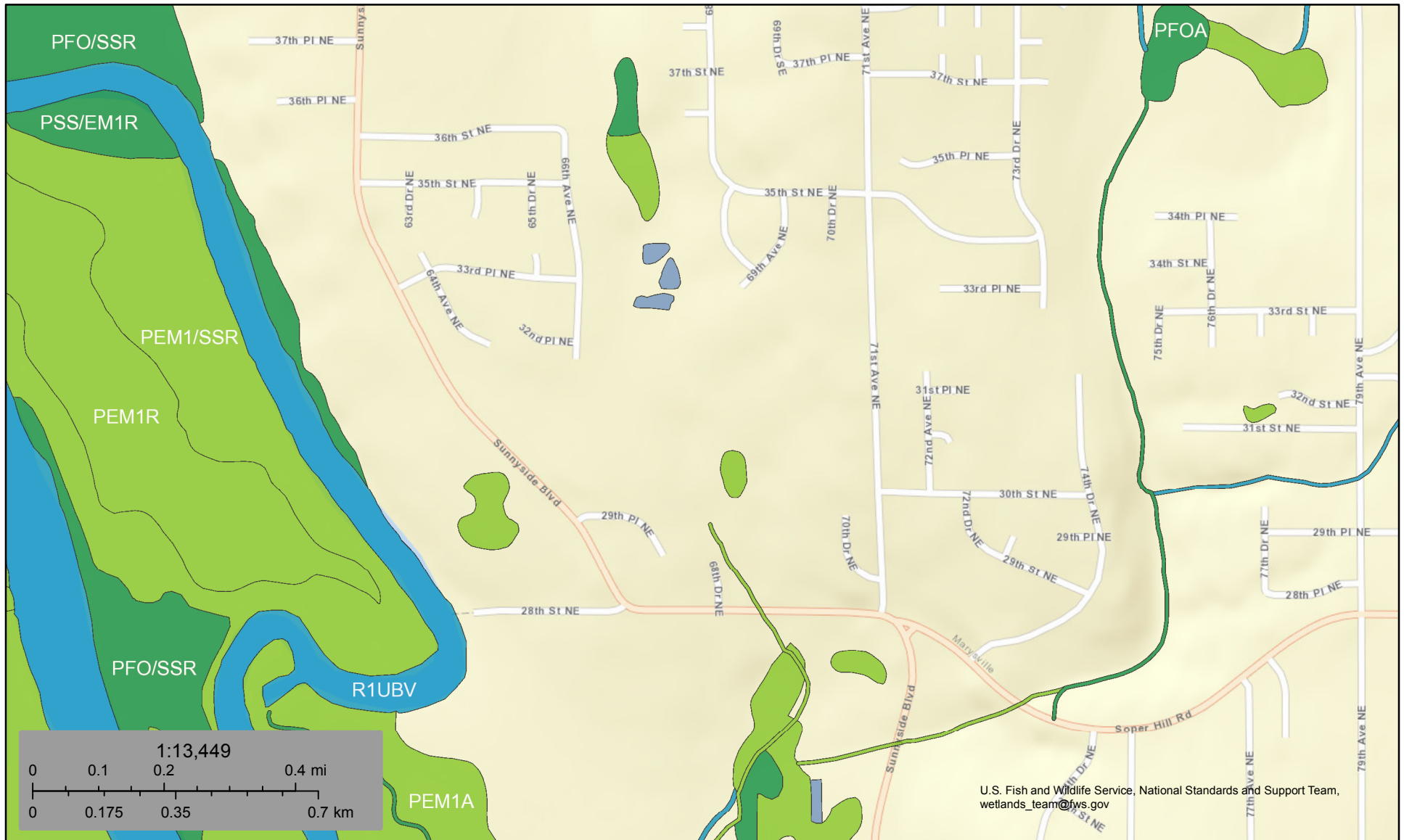
- S - 200' buffer
- F - 150' buffer
- NS - 50' buffer
- Unknown
- Not regulated
- Outside area

**Delineated wetlands**

- category 1 - 125' buffer
- category 2 - 100' buffer
- category 3 - 75' buffer
- category 4 - 35' buffer
- 25 percent top-of-bank
- Stream buffers
- Wetland buffers
- Assumed stream wetlands
- Stream wetland buffers
- Lake & slough buffers
- 13' LIDAR floodplain contour
- Top-of-bank 25' buffer
- Marysville city limits
- Urban growth area









January 13, 2020

**Wetlands**

- |   |                                |   |                                   |   |          |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland       |  | Lake     |
|  | Estuarine and Marine Wetland   |  | Freshwater Forested/Shrub Wetland |  | Other    |
|   |                                |  | Freshwater Pond                   |  | Riverine |

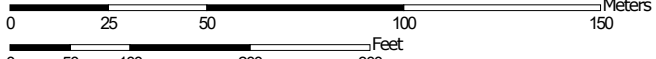
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Soil Map—Snohomish County Area, Washington



Soil Map may not be valid at this scale.

Map Scale: 1:1,920 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84




## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

**Warning:** Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Snohomish County Area, Washington

Survey Area Data: Version 21, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 26, 2018—Oct 16, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

| Map Unit Symbol                    | Map Unit Name                                     | Acres in AOI | Percent of AOI |
|------------------------------------|---|--------------|----------------|
| 72                                 | Tokul gravelly medial loam, 0 to 8 percent slopes | 15.2         | 100.0%         |
| <b>Totals for Area of Interest</b> |   | <b>15.2</b>  | <b>100.0%</b>  |

## Snohomish County Area, Washington

### 72—Tokul gravelly medial loam, 0 to 8 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2t61k

*Elevation:* 160 to 1,150 feet

*Mean annual precipitation:* 45 to 70 inches

*Mean annual air temperature:* 46 to 52 degrees F

*Frost-free period:* 140 to 200 days

*Farmland classification:* All areas are prime farmland

#### Map Unit Composition

*Tokul and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Tokul

##### Setting

*Landform:* Till plains, hillslopes

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Side slope, tread

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Volcanic ash mixed with loess over glacial till

##### Typical profile

*O<sub>i</sub> - 0 to 1 inches:* slightly decomposed plant material

*O<sub>a</sub> - 1 to 2 inches:* highly decomposed plant material

*A - 2 to 6 inches:* gravelly medial loam

*B<sub>s1</sub> - 6 to 9 inches:* gravelly medial loam

*B<sub>s2</sub> - 9 to 17 inches:* gravelly medial loam

*B<sub>s3</sub> - 17 to 24 inches:* gravelly medial loam

*BC - 24 to 33 inches:* gravelly medial fine sandy loam

*2B<sub>sm</sub> - 33 to 62 inches:* cemented material

##### Properties and qualities

*Slope:* 0 to 8 percent

*Depth to restrictive feature:* 20 to 39 inches to cemented horizon;  
20 to 39 inches to densic material

*Natural drainage class:* Moderately well drained

*Capacity of the most limiting layer to transmit water (K<sub>sat</sub>):* Very  
low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* About 18 to 36 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Moderate (about 8.7 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3s  
*Hydrologic Soil Group:* B  
*Forage suitability group:* Limited Depth Soils (G002XN302WA),  
Limited Depth Soils (G002XF303WA)  
*Hydric soil rating:* No

### **Minor Components**

#### **Pastik**

*Percent of map unit:* 5 percent  
*Landform:* Terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

#### **Barneston**

*Percent of map unit:* 5 percent  
*Landform:* Kames, eskers, moraines  
*Landform position (two-dimensional):* Summit, shoulder  
*Landform position (three-dimensional):* Crest, interfluvium  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### **Norma**

*Percent of map unit:* 3 percent  
*Landform:* Depressions, drainageways  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

#### **Mckenna**

*Percent of map unit:* 2 percent  
*Landform:* Depressions, drainageways  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

## **Data Source Information**

Soil Survey Area: Snohomish County Area, Washington  
Survey Area Data: Version 21, Sep 16, 2019



Data Active (4) Legend

Search for Layers

**Activity Map**

- Townships
- Section Survey Lines
- Map Registration Tics
- Water Type Break
- Roads
- Orphaned and Abandoned Roads
- Trails and Railroads
- Watershed Analysis
- WAU
- WRIA
- Streams
- Water Bodies

Map Themes

Map navigation and tool icons: info, full screen, zoom in, zoom out, pan, home, refresh, search, print, layers, link, settings, Township, Range, Section

S Steamboat Slough

S Ebey Slough

0 300 600ft

1:10,000

Earthstar Geographics





# WASHINGTON DEPARTMENT OF FISH AND WILDLIFE PRIORITY HABITATS AND SPECIES REPORT

SOURCE DATASET: PHSPublic  
REPORT DATE: 01/13/2020 9.36

Query ID: P200113093616

| Common Name                         | Site Name                                   | Priority Area   | Accuracy           | Federal Status                      | Sensitive Data | Source Entity                             |
|-------------------------------------|---|---|--------------------|-------------------------------------|----------------|---|
| Scientific Name                     | Source Dataset                              | Occurrence Type   |                    | State Status                        | Resolution     | Geometry Type                             |
| Notes                               | Source Record                               | More Information (URL)  |                    | PHS Listing Status                  |                |   |
|                                     | Source Date                                 | Mgmt Recommendations  |                    |                                     |                |   |
| Biodiversity Areas And              | EBEY ISLAND WILDLIFE<br>PHSREGION<br>902645 | Terrestrial Habitat<br>N/A<br><br><a href="http://wdfw.wa.gov/publications/pub.php?">http://wdfw.wa.gov/publications/pub.php?</a> | 1/4 mile (Quarter) | N/A<br>N/A<br><br>PHS LISTED        | N<br>AS MAPPED | WA Dept. of Fish and Wildlife<br>Polygons |
| Bull Trout<br>Salvelinus malma      | Steamboat Slough<br>SASI<br>8108            | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA                 | Threatened<br>N/A<br><br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines                |
| Bull Trout<br>Salvelinus malma      | Union Slough<br>SASI<br>8108                | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA                 | Threatened<br>N/A<br><br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines                |
| Chinook<br>Oncorhynchus tshawytscha | SASI<br>1106                                | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA                 | Threatened<br>N/A<br><br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines                |
| Chinook<br>Oncorhynchus tshawytscha | SASI<br>1108                                | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA                 | Threatened<br>N/A<br><br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines                |
| Chinook<br>Oncorhynchus tshawytscha | Steamboat Slough<br>SASI<br>1106            | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA                 | Threatened<br>N/A<br><br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines                |
| Chinook<br>Oncorhynchus tshawytscha | Steamboat Slough<br>SASI<br>1108            | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA                 | Threatened<br>N/A<br><br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines                |

| Common Name              | Site Name        | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity     |
|--------------------------|------------------|---|----------|--------------------|----------------|-------------------|
| Scientific Name          | Source Dataset   | Occurrence Type   |          | State Status       | Resolution     | Geometry Type     |
| Notes                    | Source Record    | More Information (URL)  |          | PHS Listing Status |                |                   |
|                          | Source Date      | Mgmt Recommendations  |          |                    |                |                   |
| Chinook                  | Union Slough     | Occurrence  | NA       | Threatened         | N              | WDFW Fish Program |
| Oncorhynchus tshawytscha | SASI             | Occurrence  |          | N/A                | AS MAPPED      | Lines             |
|                          | 1106             | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS Listed         |                |                   |
| Chinook                  | Union Slough     | Occurrence  | NA       | Threatened         | N              | WDFW Fish Program |
| Oncorhynchus tshawytscha | SASI             | Occurrence  |          | N/A                | AS MAPPED      | Lines             |
|                          | 1108             | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS Listed         |                |                   |
| Chinook                  |                  | Occurrence  | NA       | Threatened         | N              | WDFW Fish Program |
| Oncorhynchus tshawytscha | SASI             | Occurrence  |          | N/A                | AS MAPPED      | Lines             |
|                          | 1106             | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS Listed         |                |                   |
| Chinook                  |                  | Occurrence  | NA       | Threatened         | N              | WDFW Fish Program |
| Oncorhynchus tshawytscha | SASI             | Occurrence  |          | N/A                | AS MAPPED      | Lines             |
|                          | 1108             | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS Listed         |                |                   |
| Chum                     |                  | Occurrence  | NA       | Not Warranted      | N              | WDFW Fish Program |
| Oncorhynchus keta        | SASI             | Occurrence  |          | N/A                | AS MAPPED      | Lines             |
|                          | 2110             | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS Listed         |                |                   |
| Chum                     |                  | Occurrence  | NA       | Not Warranted      | N              | WDFW Fish Program |
| Oncorhynchus keta        | SASI             | Occurrence  |          | N/A                | AS MAPPED      | Lines             |
|                          | 2121             | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS Listed         |                |                   |
| Chum                     |                  | Occurrence  | NA       | Not Warranted      | N              | WDFW Fish Program |
| Oncorhynchus keta        | SASI             | Occurrence  |          | N/A                | AS MAPPED      | Lines             |
|                          | 2132             | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS Listed         |                |                   |
| Chum                     | Steamboat Slough | Occurrence  | NA       | Not Warranted      | N              | WDFW Fish Program |
| Oncorhynchus keta        | SASI             | Occurrence  |          | N/A                | AS MAPPED      | Lines             |
|                          | 2110             | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS Listed         |                |                   |



| Common Name               | Site Name                        | Priority Area   | Accuracy | Federal Status                     | Sensitive Data | Source Entity              |
|---------------------------|----------------------------------|---|----------|------------------------------------|----------------|----------------------------|
| Scientific Name           | Source Dataset                   | Occurrence Type   |          | State Status                       | Resolution     | Geometry Type              |
| Notes                     | Source Record                    | More Information (URL)  |          | PHS Listing Status                 |                |                            |
|                           | Source Date                      | Mgmt Recommendations  |          |                                    |                |                            |
| Chum<br>Oncorhynchus keta | Steamboat Slough<br>SASI<br>2121 | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Not Warranted<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Chum<br>Oncorhynchus keta | Steamboat Slough<br>SASI<br>2132 | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Not Warranted<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Chum<br>Oncorhynchus keta | Union Slough<br>SASI<br>2110     | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Not Warranted<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Chum<br>Oncorhynchus keta | Union Slough<br>SASI<br>2121     | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Not Warranted<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Chum<br>Oncorhynchus keta | Union Slough<br>SASI<br>2132     | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Not Warranted<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Chum<br>Oncorhynchus keta | SASI<br>2110                     | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Not Warranted<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Chum<br>Oncorhynchus keta | SASI<br>2121                     | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Not Warranted<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Chum<br>Oncorhynchus keta | SASI<br>2132                     | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Not Warranted<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |

| Common Name          | Site Name      | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity |
|----------------------|----------------|---|----------|--------------------|----------------|---------------|
| Scientific Name      | Source Dataset | Occurrence Type   |          | State Status       | Resolution     | Geometry Type |
| Notes                | Source Record  | More Information (URL)  |          | PHS Listing Status |                |               |
|                      | Source Date    | Mgmt Recommendations  |          |                    |                |               |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 31695          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 31718          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 32380          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 32387          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 32437          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 32630          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 32640          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 32646          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |

| Common Name          | Site Name        | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity |
|----------------------|------------------|---|----------|--------------------|----------------|---------------|
| Scientific Name      | Source Dataset   | Occurrence Type   |          | State Status       | Resolution     | Geometry Type |
| Notes                | Source Record    | More Information (URL)  |          | PHS Listing Status |                |               |
|                      | Source Date      | Mgmt Recommendations  |          |                    |                |               |
| Coho                 |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 32714            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 32715            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 | Steamboat Slough | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 32819            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 32998            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 33011            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 33315            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 33419            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 33431            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |

| Common Name          | Site Name      | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity |
|----------------------|----------------|---|----------|--------------------|----------------|---------------|
| Scientific Name      | Source Dataset | Occurrence Type   |          | State Status       | Resolution     | Geometry Type |
| Notes                | Source Record  | More Information (URL)  |          | PHS Listing Status |                |               |
|                      | Source Date    | Mgmt Recommendations  |          |                    |                |               |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 33464          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 33465          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 33519          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 33535          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 33857          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 33919          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                      | 33944          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Coho                 |                | Breeding Area   | NA       | N/A                | N              |               |
| Oncorhynchus kisutch | SWIFD          | Breeding area   |          | N/A                | AS MAPPED      | Lines         |
|                      | 33954          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |

| Common Name          | Site Name      | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity     |
|----------------------|----------------|---|----------|--------------------|----------------|-------------------|
| Scientific Name      | Source Dataset | Occurrence Type   |          | State Status       | Resolution     | Geometry Type     |
| Notes                | Source Record  | More Information (URL)  |          | PHS Listing Status |                |                   |
|                      | Source Date    | Mgmt Recommendations  |          |                    |                |                   |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |                   |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines             |
|                      | 33981          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |                   |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |                   |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines             |
|                      | 34143          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |                   |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |                   |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines             |
|                      | 34239          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |                   |
| Coho                 | Union Slough   | Occurrence/Migration  | NA       | N/A                | N              |                   |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines             |
|                      | 35337          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |                   |
| Coho                 |                | Occurrence/Migration  | NA       | N/A                | N              |                   |
| Oncorhynchus kisutch | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines             |
|                      | 36500          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |                   |
| Coho                 |                | Occurrence  | NA       | Candidate          | N              | WDFW Fish Program |
| Oncorhynchus kisutch | SASI           | Occurrence  |          | N/A                | AS MAPPED      | Lines             |
|                      | 3080           | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS Listed         |                |                   |
| Coho                 |                | Occurrence  | NA       | Candidate          | N              | WDFW Fish Program |
| Oncorhynchus kisutch | SASI           | Occurrence  |          | N/A                | AS MAPPED      | Lines             |
|                      | 3080           | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS Listed         |                |                   |
| Coho                 |                | Occurrence  | NA       | Candidate          | N              | WDFW Fish Program |
| Oncorhynchus kisutch | SASI           | Occurrence  |          | N/A                | AS MAPPED      | Lines             |
|                      | 3080           | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS Listed         |                |                   |



| Common Name                  | Site Name                        | Priority Area   | Accuracy | Federal Status                 | Sensitive Data | Source Entity              |
|------------------------------|----------------------------------|---|----------|--------------------------------|----------------|----------------------------|
| Scientific Name              | Source Dataset                   | Occurrence Type   |          | State Status                   | Resolution     | Geometry Type              |
| Notes                        | Source Record                    | More Information (URL)  |          | PHS Listing Status             |                |                            |
|                              | Source Date                      | Mgmt Recommendations  |          |                                |                |                            |
| Coho<br>Oncorhynchus kisutch | Steamboat Slough<br>SASI<br>3080 | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Candidate<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Coho<br>Oncorhynchus kisutch | Steamboat Slough<br>SASI<br>3090 | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Candidate<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Coho<br>Oncorhynchus kisutch | Steamboat Slough<br>SASI<br>3100 | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Candidate<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Coho<br>Oncorhynchus kisutch | Steamboat Slough<br>SASI<br>3110 | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Candidate<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Coho<br>Oncorhynchus kisutch | SASI<br>3080                     | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Candidate<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Coho<br>Oncorhynchus kisutch | Union Slough<br>SASI<br>3080     | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Candidate<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Coho<br>Oncorhynchus kisutch | Union Slough<br>SASI<br>3090     | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Candidate<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Coho<br>Oncorhynchus kisutch | Union Slough<br>SASI<br>3100     | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Candidate<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |

| Common Name<br>Scientific Name               | Site Name<br>Source Dataset<br>Source Record | Priority Area<br>Occurrence Type<br>More Information (URL)  | Accuracy | Federal Status<br>State Status<br>PHS Listing Status | Sensitive Data<br>Resolution | Source Entity<br>Geometry Type |
|--|--|---|----------|--|------------------------------|--------------------------------|
| Notes  | Source Date                                  | Mgmt Recommendations  |          |  |                              |                                |
| Coho<br>Oncorhynchus kisutch                 | Union Slough<br>SASI<br>3110                 | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a>                     | NA       | Candidate<br>N/A<br>PHS Listed                       | N<br>AS MAPPED               | WDFW Fish Program<br>Lines     |
| Coho<br>Oncorhynchus kisutch                 | SASI<br>3080                                 | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a>                     | NA       | Candidate<br>N/A<br>PHS Listed                       | N<br>AS MAPPED               | WDFW Fish Program<br>Lines     |
| Cutthroat<br>Oncorhynchus clarki             | Steamboat Slough<br>SASI<br>7360             | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a>                     | NA       | Not Warranted<br>N/A<br>PHS Listed                   | N<br>AS MAPPED               | WDFW Fish Program<br>Lines     |
| Cutthroat<br>Oncorhynchus clarki             | Union Slough<br>SASI<br>7360                 | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a>                     | NA       | Not Warranted<br>N/A<br>PHS Listed                   | N<br>AS MAPPED               | WDFW Fish Program<br>Lines     |
| Dolly Varden/ Bull Trout<br>Salvelinus malma | SWIFD<br>31696                               | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED                             | N<br>AS MAPPED               | Lines                          |
| Dolly Varden/ Bull Trout<br>Salvelinus malma | SWIFD<br>31719                               | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED                             | N<br>AS MAPPED               | Lines                          |
| Dolly Varden/ Bull Trout<br>Salvelinus malma | SWIFD<br>32382                               | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED                             | N<br>AS MAPPED               | Lines                          |
| Dolly Varden/ Bull Trout<br>Salvelinus malma | SWIFD<br>32388                               | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED                             | N<br>AS MAPPED               | Lines                          |

| Common Name              | Site Name        | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity |
|--------------------------|------------------|---|----------|--------------------|----------------|---------------|
| Scientific Name          | Source Dataset   | Occurrence Type   |          | State Status       | Resolution     | Geometry Type |
| Notes                    | Source Record    | More Information (URL)  |          | PHS Listing Status |                |               |
|                          | Source Date      | Mgmt Recommendations  |          |                    |                |               |
| Dolly Varden/ Bull Trout |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 32438            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 32631            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 32632            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 32641            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 32649            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 32716            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 32717            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout | Steamboat Slough | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 32821            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |

| Common Name              | Site Name      | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity |
|--------------------------|----------------|---|----------|--------------------|----------------|---------------|
| Scientific Name          | Source Dataset | Occurrence Type   |          | State Status       | Resolution     | Geometry Type |
| Notes                    | Source Record  | More Information (URL)  |          | PHS Listing Status |                |               |
|                          | Source Date    | Mgmt Recommendations  |          |                    |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 32999          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33013          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33014          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33083          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33098          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33316          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33420          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33432          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |



| Common Name              | Site Name      | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity |
|--------------------------|----------------|---|----------|--------------------|----------------|---------------|
| Scientific Name          | Source Dataset | Occurrence Type   |          | State Status       | Resolution     | Geometry Type |
| Notes                    | Source Record  | More Information (URL)  |          | PHS Listing Status |                |               |
|                          | Source Date    | Mgmt Recommendations  |          |                    |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33466          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33467          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33520          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33536          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33858          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33920          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33945          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33957          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |

| Common Name              | Site Name      | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity |
|--------------------------|----------------|---|----------|--------------------|----------------|---------------|
| Scientific Name          | Source Dataset | Occurrence Type   |          | State Status       | Resolution     | Geometry Type |
| Notes                    | Source Record  | More Information (URL)  |          | PHS Listing Status |                |               |
|                          | Source Date    | Mgmt Recommendations  |          |                    |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33982          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 34144          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 34241          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout | Union Slough   | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 35338          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Dolly Varden/ Bull Trout |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Salvelinus malma         | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 36501          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 31693          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 31716          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 32385          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |

| Common Name              | Site Name        | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity |
|--------------------------|------------------|---|----------|--------------------|----------------|---------------|
| Scientific Name          | Source Dataset   | Occurrence Type   |          | State Status       | Resolution     | Geometry Type |
| Notes                    | Source Record    | More Information (URL)  |          | PHS Listing Status |                |               |
|                          | Source Date      | Mgmt Recommendations  |          |                    |                |               |
| Fall Chinook             |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 32435            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 32627            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 32638            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 32710            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 32711            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             | Steamboat Slough | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 32815            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 32996            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33007            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |

| Common Name              | Site Name      | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity |
|--------------------------|----------------|---|----------|--------------------|----------------|---------------|
| Scientific Name          | Source Dataset | Occurrence Type   |          | State Status       | Resolution     | Geometry Type |
| Notes                    | Source Record  | More Information (URL)  |          | PHS Listing Status |                |               |
|                          | Source Date    | Mgmt Recommendations  |          |                    |                |               |
| Fall Chinook             |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33313          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33417          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33429          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33460          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33461          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33517          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33533          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33855          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |

| Common Name              | Site Name      | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity |
|--------------------------|----------------|---|----------|--------------------|----------------|---------------|
| Scientific Name          | Source Dataset | Occurrence Type   |          | State Status       | Resolution     | Geometry Type |
| Notes                    | Source Date    | More Information (URL)  |          | PHS Listing Status |                |               |
|                          |                | Mgmt Recommendations  |          |                    |                |               |
| Fall Chinook             |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33917          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33942          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 33979          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 34141          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 34235          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             | Union Slough   | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 35334          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chinook             |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus tshawytscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 36497          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Fall Chum                |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus keta        | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                          | 31694          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |

| Common Name                    | Site Name                          | Priority Area   | Accuracy | Federal Status           | Sensitive Data | Source Entity |
|--------------------------------|------------------------------------|---|----------|--------------------------|----------------|---------------|
| Scientific Name                | Source Dataset                     | Occurrence Type   |          | State Status             | Resolution     | Geometry Type |
| Notes                          | Source Record                      | More Information (URL)  |          | PHS Listing Status       |                |               |
|                                | Source Date                        | Mgmt Recommendations  |          |                          |                |               |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>31717                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>32386                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>32436                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>32628                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>32639                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>32712                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>32713                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | Steamboat Slough<br>SWIFD<br>32817 | Breeding Area<br>Breeding area<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a>               | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |



| Common Name                    | Site Name      | Priority Area   | Accuracy | Federal Status           | Sensitive Data | Source Entity |
|--------------------------------|----------------|---|----------|--------------------------|----------------|---------------|
| Scientific Name                | Source Dataset | Occurrence Type   |          | State Status             | Resolution     | Geometry Type |
| Notes                          | Source Record  | More Information (URL)  |          | PHS Listing Status       |                |               |
|                                | Source Date    | Mgmt Recommendations  |          |                          |                |               |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>32997 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>33009 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>33314 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>33418 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>33430 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>33462 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>33463 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>33518 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |

| Common Name                    | Site Name                      | Priority Area   | Accuracy | Federal Status           | Sensitive Data | Source Entity |
|--------------------------------|--------------------------------|---|----------|--------------------------|----------------|---------------|
| Scientific Name                | Source Dataset                 | Occurrence Type   |          | State Status             | Resolution     | Geometry Type |
| Notes                          | Source Record                  | More Information (URL)  |          | PHS Listing Status       |                |               |
|                                | Source Date                    | Mgmt Recommendations  |          |                          |                |               |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>33534                 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>33856                 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>33918                 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>33943                 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>33980                 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>34142                 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | SWIFD<br>34237                 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Fall Chum<br>Oncorhynchus keta | Union Slough<br>SWIFD<br>35335 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |

| Common Name         | Site Name      | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity                |
|---------------------|----------------|---|----------|--------------------|----------------|------------------------------|
| Scientific Name     | Source Dataset | Occurrence Type   |          | State Status       | Resolution     | Geometry Type                |
| Notes               | Source Record  | More Information (URL)  |          | PHS Listing Status |                |                              |
|                     | Source Date    | Mgmt Recommendations  |          |                    |                |                              |
| Fall Chum           |                | Occurrence/Migration  | NA       | N/A                | N              |                              |
| Oncorhynchus keta   | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines                        |
|                     | 36498          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a>   |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a>   |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a>   |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a>   |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a>   |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a>   |          | PHS Listed         |                |                              |

| Common Name         | Site Name      | Priority Area                                     | Accuracy | Federal Status     | Sensitive Data | Source Entity                |
|---------------------|----------------|---|----------|--------------------|----------------|------------------------------|
| Scientific Name     | Source Dataset | Occurrence Type                                   |          | State Status       | Resolution     | Geometry Type                |
| Notes               | Source Record  | More Information (URL)                            |          | PHS Listing Status |                |                              |
|                     | Source Date    | Mgmt Recommendations                              |          |                    |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |

| Common Name         | Site Name          | Priority Area   | Accuracy | Federal Status               | Sensitive Data | Source Entity                            |
|---------------------|--------------------|---|----------|------------------------------|----------------|--|
| Scientific Name     | Source Dataset     | Occurrence Type   |          | State Status                 | Resolution     | Geometry Type                            |
| Notes               | Source Record      | More Information (URL)  |          | PHS Listing Status           |                |  |
|                     | Source Date        | Mgmt Recommendations  |          |                              |                |  |
| Freshwater Emergent | N/A<br>NWIWetlands | Aquatic Habitat<br>Aquatic habitat<br><br><a href="http://www.ecy.wa">http://www.ecy.wa</a> | NA       | N/A<br>N/A<br><br>PHS Listed | N<br>AS MAPPED | US Fish and Wildlife Service<br>Polygons |
| Freshwater Emergent | N/A<br>NWIWetlands | Aquatic Habitat<br>Aquatic habitat<br><br><a href="http://www.ecy.wa">http://www.ecy.wa</a> | NA       | N/A<br>N/A<br><br>PHS Listed | N<br>AS MAPPED | US Fish and Wildlife Service<br>Polygons |
| Freshwater Emergent | N/A<br>NWIWetlands | Aquatic Habitat<br>Aquatic habitat<br><br><a href="http://www.ecy.wa">http://www.ecy.wa</a> | NA       | N/A<br>N/A<br><br>PHS Listed | N<br>AS MAPPED | US Fish and Wildlife Service<br>Polygons |
| Freshwater Emergent | N/A<br>NWIWetlands | Aquatic Habitat<br>Aquatic habitat<br><br><a href="http://www.ecy.wa">http://www.ecy.wa</a> | NA       | N/A<br>N/A<br><br>PHS Listed | N<br>AS MAPPED | US Fish and Wildlife Service<br>Polygons |
| Freshwater Emergent | N/A<br>NWIWetlands | Aquatic Habitat<br>Aquatic habitat<br><br><a href="http://www.ecy.wa">http://www.ecy.wa</a> | NA       | N/A<br>N/A<br><br>PHS Listed | N<br>AS MAPPED | US Fish and Wildlife Service<br>Polygons |
| Freshwater Emergent | N/A<br>NWIWetlands | Aquatic Habitat<br>Aquatic habitat<br><br><a href="http://www.ecy.wa">http://www.ecy.wa</a> | NA       | N/A<br>N/A<br><br>PHS Listed | N<br>AS MAPPED | US Fish and Wildlife Service<br>Polygons |
| Freshwater Emergent | N/A<br>NWIWetlands | Aquatic Habitat<br>Aquatic habitat<br><br><a href="http://www.ecy.wa">http://www.ecy.wa</a> | NA       | N/A<br>N/A<br><br>PHS Listed | N<br>AS MAPPED | US Fish and Wildlife Service<br>Polygons |
| Freshwater Emergent | N/A<br>NWIWetlands | Aquatic Habitat<br>Aquatic habitat<br><br><a href="http://www.ecy.wa">http://www.ecy.wa</a> | NA       | N/A<br>N/A<br><br>PHS Listed | N<br>AS MAPPED | US Fish and Wildlife Service<br>Polygons |

| Common Name         | Site Name      | Priority Area                                     | Accuracy | Federal Status     | Sensitive Data | Source Entity                |
|---------------------|----------------|---|----------|--------------------|----------------|------------------------------|
| Scientific Name     | Source Dataset | Occurrence Type                                   |          | State Status       | Resolution     | Geometry Type                |
| Notes               | Source Record  | More Information (URL)                            |          | PHS Listing Status |                |                              |
|                     | Source Date    | Mgmt Recommendations                              |          |                    |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |



| Common Name         | Site Name      | Priority Area                                     | Accuracy | Federal Status     | Sensitive Data | Source Entity                |
|---------------------|----------------|---|----------|--------------------|----------------|------------------------------|
| Scientific Name     | Source Dataset | Occurrence Type                                   |          | State Status       | Resolution     | Geometry Type                |
| Notes               | Source Record  | More Information (URL)                            |          | PHS Listing Status |                |                              |
|                     | Source Date    | Mgmt Recommendations                              |          |                    |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                     | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                     |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |

| Common Name               | Site Name      | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity                |
|---------------------------|----------------|---|----------|--------------------|----------------|------------------------------|
| Scientific Name           | Source Dataset | Occurrence Type   |          | State Status       | Resolution     | Geometry Type                |
| Notes                     | Source Record  | More Information (URL)                                    |          | PHS Listing Status |                |                              |
|                           | Source Date    | Mgmt Recommendations                                      |          |                    |                |                              |
| Freshwater Emergent       | N/A            | Aquatic Habitat   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa.gov">http://www.ecy.wa.gov</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent       | N/A            | Aquatic Habitat   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa.gov">http://www.ecy.wa.gov</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent       | N/A            | Aquatic Habitat   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa.gov">http://www.ecy.wa.gov</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent       | N/A            | Aquatic Habitat   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa.gov">http://www.ecy.wa.gov</a> |          | PHS Listed         |                |                              |
| Freshwater Emergent       | N/A            | Aquatic Habitat   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa.gov">http://www.ecy.wa.gov</a> |          | PHS Listed         |                |                              |
| Freshwater Forested/Shrub | N/A            | Aquatic Habitat   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa.gov">http://www.ecy.wa.gov</a> |          | PHS Listed         |                |                              |
| Freshwater Forested/Shrub | N/A            | Aquatic Habitat   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa.gov">http://www.ecy.wa.gov</a> |          | PHS Listed         |                |                              |

| Common Name               | Site Name      | Priority Area                                     | Accuracy | Federal Status     | Sensitive Data | Source Entity                |
|---------------------------|----------------|---|----------|--------------------|----------------|------------------------------|
| Scientific Name           | Source Dataset | Occurrence Type                                   |          | State Status       | Resolution     | Geometry Type                |
| Notes                     | Source Record  | More Information (URL)                            |          | PHS Listing Status |                |                              |
|                           | Source Date    | Mgmt Recommendations                              |          |                    |                |                              |
| Freshwater Forested/Shrub | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Forested/Shrub | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Forested/Shrub | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Forested/Shrub | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Forested/Shrub | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Forested/Shrub | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |

| Common Name               | Site Name      | Priority Area                                     | Accuracy | Federal Status     | Sensitive Data | Source Entity                |
|---------------------------|----------------|---|----------|--------------------|----------------|------------------------------|
| Scientific Name           | Source Dataset | Occurrence Type                                   |          | State Status       | Resolution     | Geometry Type                |
| Notes                     | Source Record  | More Information (URL)                            |          | PHS Listing Status |                |                              |
|                           | Source Date    | Mgmt Recommendations                              |          |                    |                |                              |
| Freshwater Forested/Shrub | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Forested/Shrub | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Forested/Shrub | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Forested/Shrub | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Forested/Shrub | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |
| Freshwater Forested/Shrub | N/A            | Aquatic Habitat                                   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands   | Aquatic habitat                                   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                | <a href="http://www.ecy.wa">http://www.ecy.wa</a> |          | PHS Listed         |                |                              |

| Common Name               | Site Name        | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity                |
|---------------------------|------------------|---|----------|--------------------|----------------|------------------------------|
| Scientific Name           | Source Dataset   | Occurrence Type   |          | State Status       | Resolution     | Geometry Type                |
| Notes                     | Source Record    | More Information (URL)  |          | PHS Listing Status |                |                              |
|                           | Source Date      | Mgmt Recommendations  |          |                    |                |                              |
| Freshwater Forested/Shrub | N/A              | Aquatic Habitat   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands     | Aquatic habitat   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                  | <a href="http://www.ecy.wa.gov">http://www.ecy.wa.gov</a>   |          | PHS Listed         |                |                              |
| Freshwater Forested/Shrub | N/A              | Aquatic Habitat   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands     | Aquatic habitat   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                  | <a href="http://www.ecy.wa.gov">http://www.ecy.wa.gov</a>   |          | PHS Listed         |                |                              |
| Freshwater Pond           | N/A              | Aquatic Habitat   | NA       | N/A                | N              | US Fish and Wildlife Service |
|                           | NWIIWetlands     | Aquatic habitat   |          | N/A                | AS MAPPED      | Polygons                     |
|                           |                  | <a href="http://www.ecy.wa.gov">http://www.ecy.wa.gov</a>   |          | PHS Listed         |                |                              |
| Pink                      |                  | Occurrence  | NA       | Not Warranted      | N              | WDFW Fish Program            |
| Oncorhynchus gorbuscha    | SASI             | Occurrence  |          | N/A                | AS MAPPED      | Lines                        |
|                           | 4455             | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS Listed         |                |                              |
| Pink                      |                  | Occurrence  | NA       | Not Warranted      | N              | WDFW Fish Program            |
| Oncorhynchus gorbuscha    | SASI             | Occurrence  |          | N/A                | AS MAPPED      | Lines                        |
|                           | 4465             | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS Listed         |                |                              |
| Pink                      | Steamboat Slough | Occurrence  | NA       | Not Warranted      | N              | WDFW Fish Program            |
| Oncorhynchus gorbuscha    | SASI             | Occurrence  |          | N/A                | AS MAPPED      | Lines                        |
|                           | 4455             | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS Listed         |                |                              |
| Pink                      | Steamboat Slough | Occurrence  | NA       | Not Warranted      | N              | WDFW Fish Program            |
| Oncorhynchus gorbuscha    | SASI             | Occurrence  |          | N/A                | AS MAPPED      | Lines                        |
|                           | 4465             | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS Listed         |                |                              |
| Pink                      | Union Slough     | Occurrence  | NA       | Not Warranted      | N              | WDFW Fish Program            |
| Oncorhynchus gorbuscha    | SASI             | Occurrence  |          | N/A                | AS MAPPED      | Lines                        |
|                           | 4455             | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS Listed         |                |                              |



| Common Name                                     | Site Name                          | Priority Area   | Accuracy | Federal Status                     | Sensitive Data | Source Entity              |
|---|------------------------------------|---|----------|------------------------------------|----------------|----------------------------|
| Scientific Name                                 | Source Dataset                     | Occurrence Type   |          | State Status                       | Resolution     | Geometry Type              |
| Notes   | Source Record                      | More Information (URL)  |          | PHS Listing Status                 |                |                            |
|   | Source Date                        | Mgmt Recommendations  |          |                                    |                |                            |
| Pink<br>Oncorhynchus gorbuscha                  | Union Slough<br>SASI<br>4465       | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a>                     | NA       | Not Warranted<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Pink<br>Oncorhynchus gorbuscha                  | SASI<br>4455                       | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a>                     | NA       | Not Warranted<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Pink<br>Oncorhynchus gorbuscha                  | SASI<br>4465                       | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a>                     | NA       | Not Warranted<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Pink Salmon Even Year<br>Oncorhynchus gorbuscha | SWIFD<br>32633                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED           | N<br>AS MAPPED | Lines                      |
| Pink Salmon Even Year<br>Oncorhynchus gorbuscha | Steamboat Slough<br>SWIFD<br>32822 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED           | N<br>AS MAPPED | Lines                      |
| Pink Salmon Even Year<br>Oncorhynchus gorbuscha | Union Slough<br>SWIFD<br>35339     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED           | N<br>AS MAPPED | Lines                      |
| Pink Salmon Even Year<br>Oncorhynchus gorbuscha | SWIFD<br>36502                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED           | N<br>AS MAPPED | Lines                      |
| Pink Salmon Odd Year<br>Oncorhynchus gorbuscha  | SWIFD<br>31697                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED           | N<br>AS MAPPED | Lines                      |

| Common Name                                    | Site Name                          | Priority Area   | Accuracy | Federal Status           | Sensitive Data | Source Entity |
|--|------------------------------------|---|----------|--------------------------|----------------|---------------|
| Scientific Name                                | Source Dataset                     | Occurrence Type   |          | State Status             | Resolution     | Geometry Type |
| Notes  | Source Record                      | More Information (URL)  |          | PHS Listing Status       |                |               |
|  | Source Date                        | Mgmt Recommendations  |          |                          |                |               |
| Pink Salmon Odd Year<br>Oncorhynchus gorbuscha | SWIFD<br>31720                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Pink Salmon Odd Year<br>Oncorhynchus gorbuscha | SWIFD<br>32389                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Pink Salmon Odd Year<br>Oncorhynchus gorbuscha | SWIFD<br>32439                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Pink Salmon Odd Year<br>Oncorhynchus gorbuscha | SWIFD<br>32634                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Pink Salmon Odd Year<br>Oncorhynchus gorbuscha | SWIFD<br>32642                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Pink Salmon Odd Year<br>Oncorhynchus gorbuscha | SWIFD<br>32718                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Pink Salmon Odd Year<br>Oncorhynchus gorbuscha | SWIFD<br>32719                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Pink Salmon Odd Year<br>Oncorhynchus gorbuscha | Steamboat Slough<br>SWIFD<br>32823 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |

| Common Name            | Site Name      | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity |
|------------------------|----------------|---|----------|--------------------|----------------|---------------|
| Scientific Name        | Source Dataset | Occurrence Type   |          | State Status       | Resolution     | Geometry Type |
| Notes                  | Source Record  | More Information (URL)  |          | PHS Listing Status |                |               |
|                        | Source Date    | Mgmt Recommendations  |          |                    |                |               |
| Pink Salmon Odd Year   |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus gorbuscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                        | 33000          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Pink Salmon Odd Year   |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus gorbuscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                        | 33015          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Pink Salmon Odd Year   |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus gorbuscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                        | 33317          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Pink Salmon Odd Year   |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus gorbuscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                        | 33421          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Pink Salmon Odd Year   |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus gorbuscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                        | 33433          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Pink Salmon Odd Year   |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus gorbuscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                        | 33468          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Pink Salmon Odd Year   |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus gorbuscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                        | 33521          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Pink Salmon Odd Year   |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus gorbuscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                        | 33537          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |

| Common Name            | Site Name      | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity |
|------------------------|----------------|---|----------|--------------------|----------------|---------------|
| Scientific Name        | Source Dataset | Occurrence Type   |          | State Status       | Resolution     | Geometry Type |
| Notes                  | Source Record  | More Information (URL)  |          | PHS Listing Status |                |               |
|                        | Source Date    | Mgmt Recommendations  |          |                    |                |               |
| Pink Salmon Odd Year   |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus gorbuscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                        | 33859          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Pink Salmon Odd Year   |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus gorbuscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                        | 33921          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Pink Salmon Odd Year   |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus gorbuscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                        | 33946          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Pink Salmon Odd Year   |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus gorbuscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                        | 33983          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Pink Salmon Odd Year   |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus gorbuscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                        | 34145          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Pink Salmon Odd Year   |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus gorbuscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                        | 34243          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Pink Salmon Odd Year   | Union Slough   | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus gorbuscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                        | 35340          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Pink Salmon Odd Year   |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus gorbuscha | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                        | 36503          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |

| Common Name                                       | Site Name                          | Priority Area   | Accuracy | Federal Status           | Sensitive Data | Source Entity |
|---|------------------------------------|---|----------|--------------------------|----------------|---------------|
| Scientific Name                                   | Source Dataset                     | Occurrence Type   |          | State Status             | Resolution     | Geometry Type |
| Notes   | Source Record                      | More Information (URL)  |          | PHS Listing Status       |                |               |
|   | Source Date                        | Mgmt Recommendations  |          |                          |                |               |
| Resident Coastal Cutthroat<br>Oncorhynchus clarki | SWIFD<br>32626                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Resident Coastal Cutthroat<br>Oncorhynchus clarki | Steamboat Slough<br>SWIFD<br>32814 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Resident Coastal Cutthroat<br>Oncorhynchus clarki | SWIFD<br>33948                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Resident Coastal Cutthroat<br>Oncorhynchus clarki | Union Slough<br>SWIFD<br>35333     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Resident Coastal Cutthroat<br>Oncorhynchus clarki | SWIFD<br>36496                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Sockeye<br>Oncorhynchus nerka                     | SWIFD<br>32635                     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Sockeye<br>Oncorhynchus nerka                     | Steamboat Slough<br>SWIFD<br>32824 | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |
| Sockeye<br>Oncorhynchus nerka                     | Union Slough<br>SWIFD<br>35341     | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED | N<br>AS MAPPED | Lines         |



| Common Name<br>Scientific Name   | Site Name<br>Source Dataset<br>Source Record | Priority Area<br>Occurrence Type<br>More Information (URL)  | Accuracy | Federal Status<br>State Status<br>PHS Listing Status | Sensitive Data<br>Resolution | Source Entity<br>Geometry Type |
|----------------------------------|--|---|----------|--|------------------------------|--------------------------------|
| Notes                            | Source Date                                  | Mgmt Recommendations  |          |  |                              |                                |
| Sockeye<br>Oncorhynchus nerka    | SWIFD<br>36504                               | Occurrence/Migration<br>Occurrence/migration<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | N/A<br>N/A<br>PHS LISTED                             | N<br>AS MAPPED               | Lines                          |
| Steelhead<br>Oncorhynchus mykiss | SASI<br>6125                                 | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a>                     | NA       | Threatened<br>N/A<br>PHS Listed                      | N<br>AS MAPPED               | WDFW Fish Program<br>Lines     |
| Steelhead<br>Oncorhynchus mykiss | SASI<br>6129                                 | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a>                     | NA       | Threatened<br>N/A<br>PHS Listed                      | N<br>AS MAPPED               | WDFW Fish Program<br>Lines     |
| Steelhead<br>Oncorhynchus mykiss | Steamboat Slough<br>SASI<br>6125             | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a>                     | NA       | Threatened<br>N/A<br>PHS Listed                      | N<br>AS MAPPED               | WDFW Fish Program<br>Lines     |
| Steelhead<br>Oncorhynchus mykiss | Steamboat Slough<br>SASI<br>6129             | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a>                     | NA       | Threatened<br>N/A<br>PHS Listed                      | N<br>AS MAPPED               | WDFW Fish Program<br>Lines     |
| Steelhead<br>Oncorhynchus mykiss | Steamboat Slough<br>SASI<br>6147             | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a>                     | NA       | Threatened<br>N/A<br>PHS Listed                      | N<br>AS MAPPED               | WDFW Fish Program<br>Lines     |
| Steelhead<br>Oncorhynchus mykiss | Steamboat Slough<br>SASI<br>6117             | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a>                     | NA       | Threatened<br>N/A<br>PHS Listed                      | N<br>AS MAPPED               | WDFW Fish Program<br>Lines     |
| Steelhead<br>Oncorhynchus mykiss | Steamboat Slough<br>SASI<br>6121             | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a>                     | NA       | Threatened<br>N/A<br>PHS Listed                      | N<br>AS MAPPED               | WDFW Fish Program<br>Lines     |

| Common Name                      | Site Name                        | Priority Area   | Accuracy | Federal Status                  | Sensitive Data | Source Entity              |
|----------------------------------|----------------------------------|---|----------|---------------------------------|----------------|----------------------------|
| Scientific Name                  | Source Dataset                   | Occurrence Type   |          | State Status                    | Resolution     | Geometry Type              |
| Notes                            | Source Record                    | More Information (URL)  |          | PHS Listing Status              |                |                            |
|                                  | Source Date                      | Mgmt Recommendations  |          |                                 |                |                            |
| Steelhead<br>Oncorhynchus mykiss | Steamboat Slough<br>SASI<br>6140 | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Threatened<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Steelhead<br>Oncorhynchus mykiss | Union Slough<br>SASI<br>6125     | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Threatened<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Steelhead<br>Oncorhynchus mykiss | Union Slough<br>SASI<br>6129     | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Threatened<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Steelhead<br>Oncorhynchus mykiss | Union Slough<br>SASI<br>6147     | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Threatened<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Steelhead<br>Oncorhynchus mykiss | Union Slough<br>SASI<br>6117     | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Threatened<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Steelhead<br>Oncorhynchus mykiss | Union Slough<br>SASI<br>6121     | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Threatened<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Steelhead<br>Oncorhynchus mykiss | Union Slough<br>SASI<br>6140     | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Threatened<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |
| Steelhead<br>Oncorhynchus mykiss | SASI<br>6125                     | Occurrence<br>Occurrence<br><a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> | NA       | Threatened<br>N/A<br>PHS Listed | N<br>AS MAPPED | WDFW Fish Program<br>Lines |

| Common Name              | Site Name        | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity     |
|--------------------------|------------------|---|----------|--------------------|----------------|-------------------|
| Scientific Name          | Source Dataset   | Occurrence Type   |          | State Status       | Resolution     | Geometry Type     |
| Notes                    | Source Record    | More Information (URL)  |          | PHS Listing Status |                |                   |
|                          | Source Date      | Mgmt Recommendations  |          |                    |                |                   |
| Steelhead                |                  | Occurrence  | NA       | Threatened         | N              | WDFW Fish Program |
| Oncorhynchus mykiss      | SASI             | Occurrence  |          | N/A                | AS MAPPED      | Lines             |
|                          | 6129             | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS Listed         |                |                   |
| Summer Chinook           |                  | Occurrence/Migration  | NA       | N/A                | N              |                   |
| Oncorhynchus tshawytscha | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines             |
|                          | 32629            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |                   |
| Summer Chinook           | Steamboat Slough | Occurrence/Migration  | NA       | N/A                | N              |                   |
| Oncorhynchus tshawytscha | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines             |
|                          | 32818            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |                   |
| Summer Chinook           | Union Slough     | Occurrence/Migration  | NA       | N/A                | N              |                   |
| Oncorhynchus tshawytscha | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines             |
|                          | 35336            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |                   |
| Summer Chinook           |                  | Occurrence/Migration  | NA       | N/A                | N              |                   |
| Oncorhynchus tshawytscha | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines             |
|                          | 36499            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |                   |
| Summer Steelhead         |                  | Occurrence/Migration  | NA       | N/A                | N              |                   |
| Oncorhynchus mykiss      | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines             |
|                          | 32636            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |                   |
| Summer Steelhead         | Steamboat Slough | Occurrence/Migration  | NA       | N/A                | N              |                   |
| Oncorhynchus mykiss      | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines             |
|                          | 32825            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |                   |
| Summer Steelhead         | Union Slough     | Occurrence/Migration  | NA       | N/A                | N              |                   |
| Oncorhynchus mykiss      | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines             |
|                          | 35342            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |                   |

| Common Name              | Site Name       | Priority Area   | Accuracy          | Federal Status     | Sensitive Data | Source Entity                 |
|--------------------------|-----------------|---|-------------------|--------------------|----------------|-------------------------------|
| Scientific Name          | Source Dataset  | Occurrence Type   |                   | State Status       | Resolution     | Geometry Type                 |
| Notes                    | Source Record   | More Information (URL)  |                   | PHS Listing Status |                |                               |
|                          | Source Date     | Mgmt Recommendations  |                   |                    |                |                               |
| Summer Steelhead         |                 | Occurrence/Migration  | NA                | N/A                | N              |                               |
| Oncorhynchus mykiss      | SWIFD           | Occurrence/migration  |                   | N/A                | AS MAPPED      | Lines                         |
|                          | 36505           | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |                   | PHS LISTED         |                |                               |
| Waterfowl Concentrations | SNOHOMISH RIVER | Regular Concentration   | 1/4 mile (Quarter | N/A                | N              | WA Dept. of Fish and Wildlife |
|                          | PHSREGION       | Regular concentration   |                   | N/A                | AS MAPPED      | Polygons                      |
|                          | 902077          | <a href="http://wdfw.wa.gov/publications/pub.php?">http://wdfw.wa.gov/publications/pub.php?</a>       |                   | PHS LISTED         |                |                               |
| Wetlands                 | SNOHOMISH RIVER | Aquatic Habitat   | 1/4 mile (Quarter | N/A                | N              | WA Dept. of Fish and Wildlife |
|                          | PHSREGION       | N/A   |                   | N/A                | AS MAPPED      | Polygons                      |
|                          | 902531          | <a href="http://www.ecy.wa.">http://www.ecy.wa.</a>   |                   | PHS LISTED         |                |                               |
| Winter Steelhead         |                 | Occurrence/Migration  | NA                | N/A                | N              |                               |
| Oncorhynchus mykiss      | SWIFD           | Occurrence/migration  |                   | N/A                | AS MAPPED      | Lines                         |
|                          | 31698           | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |                   | PHS LISTED         |                |                               |
| Winter Steelhead         |                 | Occurrence/Migration  | NA                | N/A                | N              |                               |
| Oncorhynchus mykiss      | SWIFD           | Occurrence/migration  |                   | N/A                | AS MAPPED      | Lines                         |
|                          | 31721           | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |                   | PHS LISTED         |                |                               |
| Winter Steelhead         |                 | Occurrence/Migration  | NA                | N/A                | N              |                               |
| Oncorhynchus mykiss      | SWIFD           | Occurrence/migration  |                   | N/A                | AS MAPPED      | Lines                         |
|                          | 32390           | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |                   | PHS LISTED         |                |                               |
| Winter Steelhead         |                 | Occurrence/Migration  | NA                | N/A                | N              |                               |
| Oncorhynchus mykiss      | SWIFD           | Occurrence/migration  |                   | N/A                | AS MAPPED      | Lines                         |
|                          | 32440           | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |                   | PHS LISTED         |                |                               |
| Winter Steelhead         |                 | Occurrence/Migration  | NA                | N/A                | N              |                               |
| Oncorhynchus mykiss      | SWIFD           | Occurrence/migration  |                   | N/A                | AS MAPPED      | Lines                         |
|                          | 32637           | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |                   | PHS LISTED         |                |                               |

| Common Name         | Site Name        | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity |
|---------------------|------------------|---|----------|--------------------|----------------|---------------|
| Scientific Name     | Source Dataset   | Occurrence Type   |          | State Status       | Resolution     | Geometry Type |
| Notes               | Source Record    | More Information (URL)  |          | PHS Listing Status |                |               |
|                     | Source Date      | Mgmt Recommendations  |          |                    |                |               |
| Winter Steelhead    |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 32643            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 32720            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 32721            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    | Steamboat Slough | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 32826            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 33001            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 33017            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 33318            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    |                  | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD            | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 33422            | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |

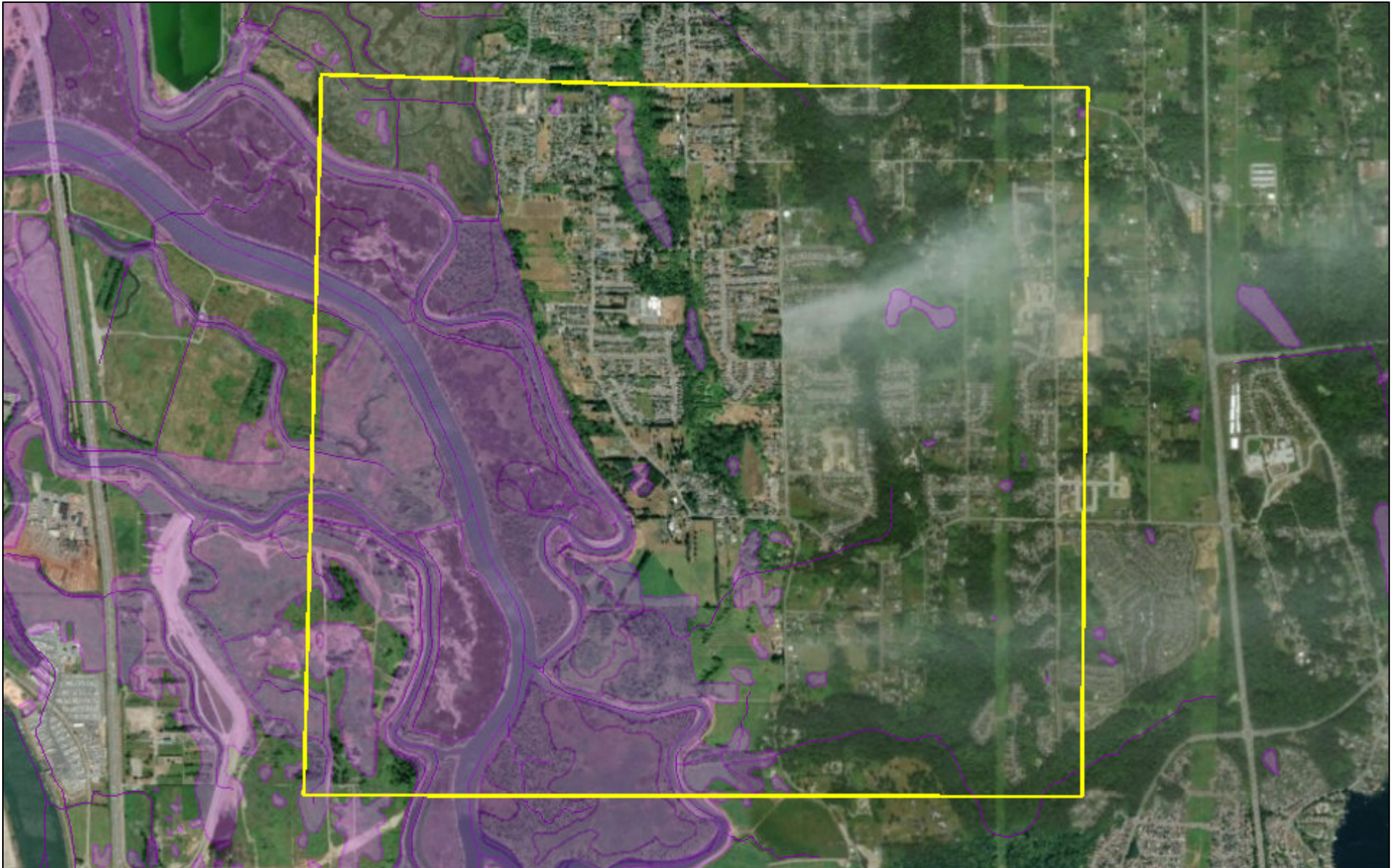
| Common Name         | Site Name      | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity |
|---------------------|----------------|---|----------|--------------------|----------------|---------------|
| Scientific Name     | Source Dataset | Occurrence Type   |          | State Status       | Resolution     | Geometry Type |
| Notes               | Source Record  | More Information (URL)  |          | PHS Listing Status |                |               |
|                     | Source Date    | Mgmt Recommendations  |          |                    |                |               |
| Winter Steelhead    |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 33434          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 33470          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 33471          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 33522          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 33538          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 33860          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 33922          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 33947          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |










| Common Name         | Site Name      | Priority Area   | Accuracy | Federal Status     | Sensitive Data | Source Entity |
|---------------------|----------------|---|----------|--------------------|----------------|---------------|
| Scientific Name     | Source Dataset | Occurrence Type   |          | State Status       | Resolution     | Geometry Type |
| Notes               | Source Record  | More Information (URL)  |          | PHS Listing Status |                |               |
|                     | Source Date    | Mgmt Recommendations  |          |                    |                |               |
| Winter Steelhead    |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 33984          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 34146          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 34245          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    | Union Slough   | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 35343          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |
| Winter Steelhead    |                | Occurrence/Migration  | NA       | N/A                | N              |               |
| Oncorhynchus mykiss | SWIFD          | Occurrence/migration  |          | N/A                | AS MAPPED      | Lines         |
|                     | 36506          | <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a> |          | PHS LISTED         |                |               |

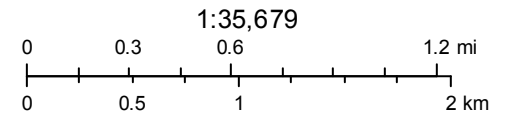
DISCLAIMER. This report includes information that the Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. It is not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife. This information only documents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

# WDFW Test Map



January 13, 2020

- |  |   |  |
|--|---|--|
|  PHS Report Clip Area | <b>POLY</b>   |  QTR-TWP  |
|  PT                   |  AS MAPPED |  TOWNSHIP |
|  LN                   |  SECTION   |  |



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

**APPENDIX C**  
**Wetland Determination Datasheets**

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

Project Site: 3121 66<sup>th</sup> Ave NE City/County: Marysville/Snohomish Sampling Date: 1/23/20  
 Applicant/Owner: Sunnyside Village Cohousing State: WA Sampling Point: 1  
 Investigator(s): L. Baldwin, F. McNair Section, Township, Range: Sec. 5, T39N, R4E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): none Slope (%): 0-1  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: WGS 1984  
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|  |   |  |  |                              |  |
|--|---|--|--|------------------------------|--|
| Hydrophytic Vegetation Present?                          | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | <b>Is the Sampled Area within a Wetland?</b> | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Hydric Soil Present?                                     | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |  | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |  | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Remarks: <b>Vegetation appears to be regularly mowed</b> |   |  |  |                              |  |

**VEGETATION – Use scientific names of plants**

| Stratum  | Absolute % Cover    | Dominant Species? | Indicator Status |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
|--|---------------------|-------------------|------------------|---|--------------------------|---------------------|-------------------|------------|--------------------|------------|------------------------|-----------------|--------------------|------------|-------------------|------------|-------------------------------|----------------|-----------------------------------|--|
| <u>Tree Stratum</u> (Plot size: <u>30ft</u> )          |                     |                   |                  | <b>Dominance Test Worksheet:</b><br>Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>2</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 1. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 2. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 3. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 4. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 50% = _____, 20% = _____                               | _____               | = Total Cover     |                  |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| <u>Sapling/Shrub Stratum</u> (Plot size: <u>30ft</u> ) |                     |                   |                  | <b>Prevalence Index worksheet:</b><br><table style="width: 100%; border: none;"> <tr> <td style="text-align: center;"><u>Total % Cover of:</u></td> <td style="text-align: center;"><u>Multiply by:</u></td> </tr> <tr> <td>OBL species _____</td> <td>x1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x2 = _____</td> </tr> <tr> <td>FAC species <u>100</u></td> <td>x3 = <u>300</u></td> </tr> <tr> <td>FACU species _____</td> <td>x4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x5 = _____</td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>300</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3</u></td> </tr> </table> | <u>Total % Cover of:</u> | <u>Multiply by:</u> | OBL species _____ | x1 = _____ | FACW species _____ | x2 = _____ | FAC species <u>100</u> | x3 = <u>300</u> | FACU species _____ | x4 = _____ | UPL species _____ | x5 = _____ | Column Totals: <u>100</u> (A) | <u>300</u> (B) | Prevalence Index = B/A = <u>3</u> |  |
| <u>Total % Cover of:</u>                               | <u>Multiply by:</u> |                   |                  |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| OBL species _____                                      | x1 = _____          |                   |                  |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| FACW species _____                                     | x2 = _____          |                   |                  |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| FAC species <u>100</u>                                 | x3 = <u>300</u>     |                   |                  |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| FACU species _____                                     | x4 = _____          |                   |                  |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| UPL species _____                                      | x5 = _____          |                   |                  |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| Column Totals: <u>100</u> (A)                          | <u>300</u> (B)      |                   |                  |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| Prevalence Index = B/A = <u>3</u>                      |                     |                   |                  |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 1. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 2. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 3. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 4. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 5. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 50% = _____, 20% = _____                               | _____               | = Total Cover     |                  |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| <u>Herb Stratum</u> (Plot size: <u>10ft</u> )          |                     |                   |                  |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 1. <u>Holcus lanatus</u>                               | <u>80</u>           | <u>yes</u>        | <u>FAC</u>       |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 2. <u>Ranunculus repens</u>                            | <u>20</u>           | <u>yes</u>        | <u>FAC</u>       |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 3. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 4. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 5. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 6. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 7. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 8. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 9. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 10. _____  | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 11. _____  | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 50% = <u>50</u> , 20% = <u>20</u>                      | <u>100</u>          | = Total Cover     |                  |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| <u>Woody Vine Stratum</u> (Plot size: _____)           |                     |                   |                  |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 1. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 2. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| 50% = _____, 20% = _____                               | _____               | = Total Cover     |                  |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| % Bare Ground in Herb Stratum _____                    |                     |                   |                  |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
| Remarks:   |                     |                   |                  | <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |
|  |                     |                   |                  |   |                          |                     |                   |            |                    |            |                        |                 |                    |            |                   |            |                               |                |                                   |  |



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

Project Site: 3121 66<sup>th</sup> Ave NE City/County: Marysville/Snohomish Sampling Date: 1/23/20  
 Applicant/Owner: Sunnyside Village Cohousing State: WA Sampling Point: 2  
 Investigator(s): L. Baldwin, F. McNair Section, Township, Range: Sec. 5, T39N, R4E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): concave Slope (%): 0-1  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: WGS 1984  
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|  |   |                             |  |   |                             |
|--|---|-----------------------------|--|---|-----------------------------|
| Hydrophytic Vegetation Present?                          | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | <b>Is the Sampled Area within a Wetland?</b> | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Hydric Soil Present?                                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Wetland Hydrology Present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Remarks: <b>Vegetation appears to be regularly mowed</b> |   |                             |  |   |                             |

**VEGETATION – Use scientific names of plants**

| Stratum  | Absolute % Cover | Dominant Species? | Indicator Status | Dominance Test Worksheet:  |
|--|------------------|-------------------|------------------|--|
| <u>Tree Stratum</u> (Plot size: <u>30ft</u> )          |                  |                   |                  | Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>2</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)  |
| 1. _____   | _____            | _____             | _____            |  |
| 2. _____   | _____            | _____             | _____            |  |
| 3. _____   | _____            | _____             | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: <span style="float: right;">Multiply by:</span><br>OBL species _____ x1 = _____<br>FACW species _____ x2 = _____<br>FAC species <u>100</u> x3 = <u>300</u><br>FACU species _____ x4 = _____<br>UPL species _____ x5 = _____<br>Column Totals: <u>100</u> (A) <u>300</u> (B)<br>Prevalence Index = B/A = <u>3</u>   |
| 4. _____   | _____            | _____             | _____            |  |
| 50% = _____, 20% = _____                               | _____            | = Total Cover     |                  |  |
| <u>Sapling/Shrub Stratum</u> (Plot size: <u>30ft</u> ) |                  |                   |                  | <b>Hydrophytic Vegetation Indicators:</b><br><input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation<br><input checked="" type="checkbox"/> 2 - Dominance Test is >50%<br><input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup><br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)<br><br><sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 1. _____   | _____            | _____             | _____            |  |
| 2. _____   | _____            | _____             | _____            |  |
| 3. _____   | _____            | _____             | _____            |  |
| 4. _____   | _____            | _____             | _____            |  |
| 5. _____   | _____            | _____             | _____            |  |
| 6. _____   | _____            | _____             | _____            |  |
| 7. _____   | _____            | _____             | _____            |  |
| 8. _____   | _____            | _____             | _____            |  |
| 9. _____   | _____            | _____             | _____            |  |
| 10. _____  | _____            | _____             | _____            |  |
| 11. _____  | _____            | _____             | _____            |  |
| 50% = <u>50</u> , 20% = <u>20</u>                      | <u>100</u>       | = Total Cover     |                  |  |
| <u>Woody Vine Stratum</u> (Plot size: _____)           |                  |                   |                  | <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |
| 1. _____   | _____            | _____             | _____            |  |
| 2. _____   | _____            | _____             | _____            |  |
| 50% = _____, 20% = _____                               | _____            | = Total Cover     |                  |  |
| % Bare Ground in Herb Stratum _____                    |                  |                   |                  |  |
| Remarks:   |                  |                   |                  |  |





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

Project Site: 3121 66<sup>th</sup> Ave NE City/County: Marysville/Snohomish Sampling Date: 1/23/20  
 Applicant/Owner: Sunnyside Village Cohousing State: WA Sampling Point: 2  
 Investigator(s): L. Baldwin, F. McNair Section, Township, Range: Sec. 5, T39N, R4E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): concave Slope (%): 0-1  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: WGS 1984  
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|  |   |                             |  |   |                             |
|--|---|-----------------------------|--|---|-----------------------------|
| Hydrophytic Vegetation Present?                          | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | <b>Is the Sampled Area within a Wetland?</b> | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Hydric Soil Present?                                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Wetland Hydrology Present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Remarks: <b>Vegetation appears to be regularly mowed</b> |   |                             |  |   |                             |

**VEGETATION – Use scientific names of plants**

| Stratum (Plot size: 30ft)                      | Absolute % Cover | Dominant Species? | Indicator Status |  |   |
|--|------------------|-------------------|------------------|--|---|
| <u>Tree Stratum</u> (Plot size: 30ft)          |                  |                   |                  | <b>Dominance Test Worksheet:</b>   |   |
| 1. _____                                       | _____            | _____             | _____            |  | Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)   |
| 2. _____                                       | _____            | _____             | _____            |  | Total Number of Dominant Species Across All Strata: <u>2</u> (B)  |
| 3. _____                                       | _____            | _____             | _____            |  | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)  |
| 4. _____                                       | _____            | _____             | _____            |  |   |
| 50% = _____, 20% = _____                       | _____            | = Total Cover     |                  |  |   |
| <u>Sapling/Shrub Stratum</u> (Plot size: 30ft) |                  |                   |                  | <b>Prevalence Index worksheet:</b>   |   |
| 1. _____                                       | _____            | _____             | _____            |  | <u>Total % Cover of:</u>  |
| 2. _____                                       | _____            | _____             | _____            |  | <u>Multiply by:</u>   |
| 3. _____                                       | _____            | _____             | _____            |  | OBL species _____ x1 = _____  |
| 4. _____                                       | _____            | _____             | _____            |  | FACW species _____ x2 = _____   |
| 5. _____                                       | _____            | _____             | _____            |  | FAC species <u>100</u> x3 = <u>300</u>  |
| 50% = _____, 20% = _____                       | _____            | = Total Cover     |                  | FACU species _____ x4 = _____  |   |
| <u>Herb Stratum</u> (Plot size: 10ft)          |                  |                   |                  | UPL species _____ x5 = _____   |   |
| 1. <u>Festuca rubra</u>                        | <u>45</u>        | <u>yes</u>        | <u>FAC</u>       | Column Totals: <u>100</u> (A) <u>300</u> (B)   |   |
| 2. <u>Ranunculus repens</u>                    | <u>20</u>        | <u>no</u>         | <u>FAC</u>       | Prevalence Index = B/A = <u>3</u>  |   |
| 3. <u>Poa pratensis</u>                        | <u>35</u>        | <u>yes</u>        | <u>FAC</u>       |  |   |
| 4. _____                                       | _____            | _____             | _____            | <b>Hydrophytic Vegetation Indicators:</b>  |   |
| 5. _____                                       | _____            | _____             | _____            |  | <input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation  |
| 6. _____                                       | _____            | _____             | _____            |  | <input checked="" type="checkbox"/> 2 - Dominance Test is >50%  |
| 7. _____                                       | _____            | _____             | _____            |  | <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>   |
| 8. _____                                       | _____            | _____             | _____            |  | <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) |
| 9. _____                                       | _____            | _____             | _____            |  | <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>   |
| 10. _____                                      | _____            | _____             | _____            |  | <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 11. _____                                      | _____            | _____             | _____            |  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.                  |
| 50% = <u>50</u> , 20% = <u>20</u>              | <u>100</u>       | = Total Cover     |                  |  |   |
| <u>Woody Vine Stratum</u> (Plot size: _____)   |                  |                   |                  | <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |   |
| 1. _____                                       | _____            | _____             | _____            |  |   |
| 2. _____                                       | _____            | _____             | _____            |  |   |
| 50% = _____, 20% = _____                       | _____            | = Total Cover     |                  |  |   |
| % Bare Ground in Herb Stratum _____            |                  |                   |                  |  |   |
| Remarks:                                       |                  |                   |                  |  |   |



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

Project Site: 3121 66<sup>th</sup> Ave NE City/County: Marysville/Snohomish Sampling Date: 1/23/20  
 Applicant/Owner: Sunnyside Village Cohousing State: WA Sampling Point: 4  
 Investigator(s): L. Baldwin, F. McNair Section, Township, Range: Sec. 5, T39N, R4E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): concave Slope (%): 0-1  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: WGS 1984  
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|  |   |  |  |                              |  |
|--|---|--|--|------------------------------|--|
| Hydrophytic Vegetation Present?                          | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | <b>Is the Sampled Area within a Wetland?</b> | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Hydric Soil Present?                                     | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |  | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |  | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Remarks: <b>Vegetation appears to be regularly mowed</b> |   |  |  |                              |  |

**VEGETATION – Use scientific names of plants**

| Stratum  | Absolute % Cover | Dominant Species?   | Indicator Status |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
|--|------------------|---------------------|------------------|---|--------------------------|--|---------------------|--|-------------|-------|------|-------|--------------|-------|------|-------|-------------|------------|------|------------|--------------|-------|------|-------|-------------|-------|------|-------|----------------|----------------|--|----------------|-----------------------------------|--|--|--|
| <b>Tree Stratum</b> (Plot size: <u>30ft</u> )          |                  |                     |                  | <b>Dominance Test Worksheet:</b><br>Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>2</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 1. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 2. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 3. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 4. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 50% = _____, 20% = _____                               | _____            | = Total Cover       |                  |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| <b>Sapling/Shrub Stratum</b> (Plot size: <u>30ft</u> ) |                  |                     |                  |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 1. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 2. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 3. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 4. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 5. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 50% = _____, 20% = _____                               | _____            | = Total Cover       |                  |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| <b>Herb Stratum</b> (Plot size: <u>10ft</u> )          |                  |                     |                  | <b>Prevalence Index worksheet:</b><br><table style="width: 100%; border: none;"> <tr><td colspan="2" style="text-align: center;"><u>Total % Cover of:</u></td><td colspan="2" style="text-align: center;"><u>Multiply by:</u></td></tr> <tr><td>OBL species</td><td>_____</td><td>x1 =</td><td>_____</td></tr> <tr><td>FACW species</td><td>_____</td><td>x2 =</td><td>_____</td></tr> <tr><td>FAC species</td><td><u>100</u></td><td>x3 =</td><td><u>300</u></td></tr> <tr><td>FACU species</td><td>_____</td><td>x4 =</td><td>_____</td></tr> <tr><td>UPL species</td><td>_____</td><td>x5 =</td><td>_____</td></tr> <tr><td>Column Totals:</td><td><u>100</u> (A)</td><td></td><td><u>300</u> (B)</td></tr> <tr><td colspan="4" style="text-align: center;">Prevalence Index = B/A = <u>3</u></td></tr> </table> | <u>Total % Cover of:</u> |  | <u>Multiply by:</u> |  | OBL species | _____ | x1 = | _____ | FACW species | _____ | x2 = | _____ | FAC species | <u>100</u> | x3 = | <u>300</u> | FACU species | _____ | x4 = | _____ | UPL species | _____ | x5 = | _____ | Column Totals: | <u>100</u> (A) |  | <u>300</u> (B) | Prevalence Index = B/A = <u>3</u> |  |  |  |
| <u>Total % Cover of:</u>                               |                  | <u>Multiply by:</u> |                  |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| OBL species  | _____            | x1 =                | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| FACW species   | _____            | x2 =                | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| FAC species  | <u>100</u>       | x3 =                | <u>300</u>       |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| FACU species   | _____            | x4 =                | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| UPL species  | _____            | x5 =                | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| Column Totals:   | <u>100</u> (A)   |                     | <u>300</u> (B)   |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| Prevalence Index = B/A = <u>3</u>                      |                  |                     |                  |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 1. <u>Festuca rubra</u>                                | <u>60</u>        | <u>yes</u>          | <u>FAC</u>       |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 2. <u>Holcus lanatus</u>                               | <u>25</u>        | <u>yes</u>          | <u>FAC</u>       |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 3. <u>Alopecurus pratensis</u>                         | <u>15</u>        | <u>no</u>           | <u>FAC</u>       |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 4. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 5. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 6. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 7. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 8. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 9. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 10. _____  | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 11. _____  | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 50% = <u>50</u> , 20% = <u>20</u>                      | <u>100</u>       | = Total Cover       |                  |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| <b>Woody Vine Stratum</b> (Plot size: _____)           |                  |                     |                  |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 1. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 2. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| 50% = _____, 20% = _____                               | _____            | = Total Cover       |                  |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| % Bare Ground in Herb Stratum _____                    |                  |                     |                  |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
| Remarks:   |                  |                     |                  | <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |
|  |                  |                     |                  |   |                          |  |                     |  |             |       |      |       |              |       |      |       |             |            |      |            |              |       |      |       |             |       |      |       |                |                |  |                |                                   |  |  |  |

**SOIL**

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)                                    |                 |            |  |       |   |   |                      |         |
|--|-----------------|------------|--|-------|---|---|----------------------|---------|
| Depth<br>(inches)  | Matrix          |            | Redox Features   |       |   |   | Texture              | Remarks |
|  | Color (moist)   | %          | Color (moist)  | %     | Type <sup>1</sup>   | Loc <sup>2</sup>  |                      |         |
| 0-12   | <u>10YR 2/1</u> | <u>100</u> | _____  | _____ | _____   | _____   | <u>gravelly silt</u> | \       |
| 12-16  | <u>10YR 4/3</u> | <u>100</u> | _____  | _____ | _____   | _____   | <u>gravelly silt</u> | _____   |
| _____  | _____           | _____      | _____  | _____ | _____   | _____   | _____                | _____   |
| _____  | _____           | _____      | _____  | _____ | _____   | _____   | _____                | _____   |
| _____  | _____           | _____      | _____  | _____ | _____   | _____   | _____                | _____   |
| _____  | _____           | _____      | _____  | _____ | _____   | _____   | _____                | _____   |
| _____  | _____           | _____      | _____  | _____ | _____   | _____   | _____                | _____   |
| <sup>1</sup> Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix |                 |            |  |       |   |   |                      |         |
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>   |                 |            |  |       |   | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>   |                      |         |
| <input type="checkbox"/> Histosol (A1)   |                 |            | <input type="checkbox"/> Sandy Redox (S5)                                |       |   | <input type="checkbox"/> 2 cm Muck (A10)  |                      |         |
| <input type="checkbox"/> Histic Epipedon (A2)  |                 |            | <input type="checkbox"/> Stripped Matrix (S6)                            |       |   | <input type="checkbox"/> Red Parent Material (TF2)  |                      |         |
| <input type="checkbox"/> Black Histic (A3)   |                 |            | <input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(except MLRA 1)</b> |       |   | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |                      |         |
| <input type="checkbox"/> Hydrogen Sulfide (A4)   |                 |            | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                        |       |   | <input type="checkbox"/> Other (Explain in Remarks)   |                      |         |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)   |                 |            | <input type="checkbox"/> Depleted Matrix (F3)                            |       |   | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |                      |         |
| <input type="checkbox"/> Thick Dark Surface (A12)  |                 |            | <input type="checkbox"/> Redox Dark Surface (F6)                         |       |   |   |                      |         |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)  |                 |            | <input type="checkbox"/> Depleted Dark Surface (F7)                      |       |   |   |                      |         |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)  |                 |            | <input type="checkbox"/> Redox Depressions (F8)                          |       |   |   |                      |         |
| <b>Restrictive Layer (if present):</b>   |                 |            |  |       | <b>Hydric Soils Present?</b>  |   |                      |         |
| Type: _____  |                 |            |  |       | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |   |                      |         |
| Depth (inches): _____  |                 |            |  |       |   |   |                      |         |
| Remarks:   |                 |            |  |       |   |   |                      |         |

**HYDROLOGY**

| Wetland Hydrology Indicators:  |   |  |  |  |  |
|--|---|--|--|--|--|
| Primary Indicators (minimum of one required; check all that apply)   |   |  | Secondary Indicators (2 or more required)                          |  |  |
| <input type="checkbox"/> Surface Water (A1)  | <input type="checkbox"/> Water-Stained Leaves (B9)                      | <input type="checkbox"/> Water-Stained Leaves (B9)                 | <input type="checkbox"/> High Water Table (A2)                     | <input type="checkbox"/> Salt Crust (B11)                              | <input type="checkbox"/> Drainage Patterns (B10)     |
| <input checked="" type="checkbox"/> Saturation (A3)  | <b>(except MLRA 1, 2, 4A, and 4B)</b>                                   | <b>(MLRA 1, 2, 4A, and 4B)</b>                                     | <input type="checkbox"/> Water Marks (B1)                          | <input type="checkbox"/> Aquatic Invertebrates (B13)                   | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Sediment Deposits (B2)  | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                     | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) | <input type="checkbox"/> Drift Deposits (B3)                       | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2)    |
| <input type="checkbox"/> Algal Mat or Crust (B4)   | <input type="checkbox"/> Presence of Reduced Iron (C4)                  | <input type="checkbox"/> Shallow Aquitard (D3)                     | <input type="checkbox"/> Iron Deposits (B5)                        | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)    | <input type="checkbox"/> FAC-Neutral Test (D5)       |
| <input type="checkbox"/> Surface Soil Cracks (B6)  | <input type="checkbox"/> Stunted or Stresses Plants (D1) <b>(LRR A)</b> | <input type="checkbox"/> Raised Ant Mounds (D6) <b>(LRR A)</b>     | <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks)                    | <input type="checkbox"/> Frost-Heave Hummocks (D7)   |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |  |  |  |  |
| <b>Field Observations:</b>   |   |  |  | <b>Wetland Hydrology Present?</b>                                      |  |
| Surface Water Present?   | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>     | Depth (inches):  | _____  | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>    |  |
| Water Table Present?   | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>     | Depth (inches):  | <u>  7  </u>   |  |  |
| Saturation Present?<br>(includes capillary fringe)   | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>     | Depth (inches):  | <u>  0  </u>   |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: |   |  |  |  |  |
| Remarks:   |   |  |  |  |  |

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

Project Site: 3121 66<sup>th</sup> Ave NE City/County: Marysville/Snohomish Sampling Date: 1/23/20  
 Applicant/Owner: Sunnyside Village Cohousing State: WA Sampling Point: 5  
 Investigator(s): L. Baldwin, F. McNair Section, Township, Range: Sec. 5, T39N, R4E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): concave Slope (%): 0-1  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: WGS 1984  
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

|  |   |  |   |
|--|---|--|---|
| Hydrophytic Vegetation Present?                          | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | <b>Is the Sampled Area within a Wetland?</b> | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Hydric Soil Present?                                     | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |  | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?                               | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |  |   |
| Remarks: <b>Vegetation appears to be regularly mowed</b> |   |  |   |

## VEGETATION – Use scientific names of plants

| Stratum  | Absolute % Cover | Dominant Species? | Indicator Status | Dominance Test Worksheet:  |
|--|------------------|-------------------|------------------|--|
| <u>Tree Stratum</u> (Plot size: <u>30ft</u> )          |                  |                   |                  | Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>2</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)  |
| 1. _____   | _____            | _____             | _____            |  |
| 2. _____   | _____            | _____             | _____            |  |
| 3. _____   | _____            | _____             | _____            |  |
| 4. _____   | _____            | _____             | _____            |  |
| 50% = _____, 20% = _____                               | _____            | = Total Cover     |                  |  |
| <u>Sapling/Shrub Stratum</u> (Plot size: <u>30ft</u> ) |                  |                   |                  | <b>Prevalence Index worksheet:</b><br>Total % Cover of: <span style="float: right;">Multiply by:</span><br>OBL species _____ x1 = _____<br>FACW species _____ x2 = _____<br>FAC species <u>80</u> x3 = <u>240</u><br>FACU species _____ x4 = _____<br>UPL species _____ x5 = _____<br>Column Totals: <u>80</u> (A) <u>240</u> (B)<br>Prevalence Index = B/A = <u>3</u>   |
| 1. _____   | _____            | _____             | _____            |  |
| 2. _____   | _____            | _____             | _____            |  |
| 3. _____   | _____            | _____             | _____            |  |
| 4. _____   | _____            | _____             | _____            |  |
| 5. _____   | _____            | _____             | _____            |  |
| 50% = _____, 20% = _____                               | _____            | = Total Cover     |                  |  |
| <u>Herb Stratum</u> (Plot size: <u>10ft</u> )          |                  |                   |                  | <b>Hydrophytic Vegetation Indicators:</b><br><input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation<br><input checked="" type="checkbox"/> 2 - Dominance Test is >50%<br><input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup><br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)<br><br><sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 1. <u>Festuca rubra</u>                                | <u>15</u>        | <u>no</u>         | <u>FAC</u>       |  |
| 2. <u>Holcus lanatus</u>                               | <u>5</u>         | <u>no</u>         | <u>FAC</u>       |  |
| 3. <u>Alopecurus pratensis</u>                         | <u>35</u>        | <u>yes</u>        | <u>FAC</u>       |  |
| 4. <u>Ranunculus repens</u>                            | <u>25</u>        | <u>yes</u>        | <u>FAC</u>       |  |
| 5. _____   | _____            | _____             | _____            |  |
| 6. _____   | _____            | _____             | _____            |  |
| 7. _____   | _____            | _____             | _____            |  |
| 8. _____   | _____            | _____             | _____            |  |
| 9. _____   | _____            | _____             | _____            |  |
| 10. _____  | _____            | _____             | _____            |  |
| 11. _____  | _____            | _____             | _____            |  |
| 50% = <u>40</u> , 20% = <u>16</u>                      | <u>80</u>        | = Total Cover     |                  |  |
| <u>Woody Vine Stratum</u> (Plot size: _____)           |                  |                   |                  | <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |
| 1. _____   | _____            | _____             | _____            |  |
| 2. _____   | _____            | _____             | _____            |  |
| 50% = _____, 20% = _____                               | _____            | = Total Cover     |                  |  |
| % Bare Ground in Herb Stratum _____                    |                  |                   |                  |  |
| Remarks:   |                  |                   |                  |  |

**SOIL**

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)                                    |               |       |  |       |  |   |               |         |
|--|---------------|-------|--|-------|--|---|---------------|---------|
| Depth<br>(inches)  | Matrix        |       | Redox Features   |       |  |   | Texture       | Remarks |
|  | Color (moist) | %     | Color (moist)  | %     | Type <sup>1</sup>  | Loc <sup>2</sup>  |               |         |
| 0-16   | 10YR 2/1      | 100   | _____  | _____ | _____  | _____   | gravelly silt | sandy   |
| _____  | _____         | _____ | _____  | _____ | _____  | _____   | _____         | _____   |
| _____  | _____         | _____ | _____  | _____ | _____  | _____   | _____         | _____   |
| _____  | _____         | _____ | _____  | _____ | _____  | _____   | _____         | _____   |
| _____  | _____         | _____ | _____  | _____ | _____  | _____   | _____         | _____   |
| _____  | _____         | _____ | _____  | _____ | _____  | _____   | _____         | _____   |
| <sup>1</sup> Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix |               |       |  |       |  |   |               |         |
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>   |               |       |  |       |  | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>   |               |         |
| <input type="checkbox"/> Histosol (A1)   |               |       | <input type="checkbox"/> Sandy Redox (S5)                                |       |  | <input type="checkbox"/> 2 cm Muck (A10)  |               |         |
| <input type="checkbox"/> Histic Epipedon (A2)  |               |       | <input type="checkbox"/> Stripped Matrix (S6)                            |       |  | <input type="checkbox"/> Red Parent Material (TF2)  |               |         |
| <input type="checkbox"/> Black Histic (A3)   |               |       | <input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(except MLRA 1)</b> |       |  | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |               |         |
| <input type="checkbox"/> Hydrogen Sulfide (A4)   |               |       | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                        |       |  | <input type="checkbox"/> Other (Explain in Remarks)   |               |         |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)   |               |       | <input type="checkbox"/> Depleted Matrix (F3)                            |       |  | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |               |         |
| <input type="checkbox"/> Thick Dark Surface (A12)  |               |       | <input type="checkbox"/> Redox Dark Surface (F6)                         |       |  |   |               |         |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)  |               |       | <input type="checkbox"/> Depleted Dark Surface (F7)                      |       |  |   |               |         |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)  |               |       | <input type="checkbox"/> Redox Depressions (F8)                          |       |  |   |               |         |
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____   |               |       |  |       | <b>Hydric Soils Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |   |               |         |
| Remarks:   |               |       |  |       |  |   |               |         |

**HYDROLOGY**

| Wetland Hydrology Indicators:   |   |  |   |  |  |
|---|---|--|---|--|--|
| Primary Indicators (minimum of one required; check all that apply)  |   |  | Secondary Indicators (2 or more required)   |  |  |
| <input type="checkbox"/> Surface Water (A1)   | <input type="checkbox"/> Water-Stained Leaves (B9)                      |  | <input type="checkbox"/> Water-Stained Leaves (B9)  |  |  |
| <input checked="" type="checkbox"/> High Water Table (A2)   | <b>(except MLRA 1, 2, 4A, and 4B)</b>                                   |  | <b>(MLRA 1, 2, 4A, and 4B)</b>  |  |  |
| <input checked="" type="checkbox"/> Saturation (A3)   | <input type="checkbox"/> Salt Crust (B11)                               |  | <input type="checkbox"/> Drainage Patterns (B10)  |  |  |
| <input type="checkbox"/> Water Marks (B1)   | <input type="checkbox"/> Aquatic Invertebrates (B13)                    |  | <input type="checkbox"/> Dry-Season Water Table (C2)  |  |  |
| <input type="checkbox"/> Sediment Deposits (B2)   | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                     |  | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)                                    |  |  |
| <input type="checkbox"/> Drift Deposits (B3)  | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)  |  | <input type="checkbox"/> Geomorphic Position (D2)   |  |  |
| <input type="checkbox"/> Algal Mat or Crust (B4)  | <input type="checkbox"/> Presence of Reduced Iron (C4)                  |  | <input type="checkbox"/> Shallow Aquitard (D3)  |  |  |
| <input type="checkbox"/> Iron Deposits (B5)   | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)     |  | <input type="checkbox"/> FAC-Neutral Test (D5)  |  |  |
| <input type="checkbox"/> Surface Soil Cracks (B6)   | <input type="checkbox"/> Stunted or Stresses Plants (D1) <b>(LRR A)</b> |  | <input type="checkbox"/> Raised Ant Mounds (D6) <b>(LRR A)</b>  |  |  |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)  | <input type="checkbox"/> Other (Explain in Remarks)                     |  | <input type="checkbox"/> Frost-Heave Hummocks (D7)  |  |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)  |   |  |   |  |  |
| <b>Field Observations:</b><br>Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?      Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>10</u><br>Saturation Present? (includes capillary fringe)    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> |   |  | <b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  |   |  |   |  |  |
| Remarks:  |   |  |   |  |  |

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

Project Site: 3121 66<sup>th</sup> Ave NE City/County: Marysville/Snohomish Sampling Date: 1/23/20  
 Applicant/Owner: Sunnyside Village Cohousing State: WA Sampling Point: 6  
 Investigator(s): L. Baldwin, F. McNair Section, Township, Range: Sec. 5, T39N, R4E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): concave Slope (%): 0-1  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: WGS 1984  
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|  |   |                             |  |   |                             |
|--|---|-----------------------------|--|---|-----------------------------|
| Hydrophytic Vegetation Present?                          | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | <b>Is the Sampled Area within a Wetland?</b> | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Hydric Soil Present?                                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Wetland Hydrology Present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Remarks: <b>Vegetation appears to be regularly mowed</b> |   |                             |  |   |                             |

**VEGETATION – Use scientific names of plants**

| Stratum  | Absolute % Cover    | Dominant Species? | Indicator Status | Dominance Test Worksheet:   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
|--|---------------------|-------------------|------------------|---|--------------------------|---------------------|-------------------|------------|--------------------|------------|-----------------------|-----------------|--------------------|------------|-------------------|------------|------------------------------|----------------|-----------------------------------|--|
| <u>Tree Stratum</u> (Plot size: <u>30ft</u> )          |                     |                   |                  | Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>3</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 1. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 2. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 3. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 4. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 50% = _____, 20% = _____                               | _____               | = Total Cover     |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| <u>Sapling/Shrub Stratum</u> (Plot size: <u>30ft</u> ) |                     |                   |                  | <b>Prevalence Index worksheet:</b><br><table style="width: 100%; border: none;"> <tr> <td style="text-align: center;"><u>Total % Cover of:</u></td> <td style="text-align: center;"><u>Multiply by:</u></td> </tr> <tr> <td>OBL species _____</td> <td>x1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x2 = _____</td> </tr> <tr> <td>FAC species <u>90</u></td> <td>x3 = <u>270</u></td> </tr> <tr> <td>FACU species _____</td> <td>x4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x5 = _____</td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>270</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3</u></td> </tr> </table> | <u>Total % Cover of:</u> | <u>Multiply by:</u> | OBL species _____ | x1 = _____ | FACW species _____ | x2 = _____ | FAC species <u>90</u> | x3 = <u>270</u> | FACU species _____ | x4 = _____ | UPL species _____ | x5 = _____ | Column Totals: <u>90</u> (A) | <u>270</u> (B) | Prevalence Index = B/A = <u>3</u> |  |
| <u>Total % Cover of:</u>                               | <u>Multiply by:</u> |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| OBL species _____                                      | x1 = _____          |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| FACW species _____                                     | x2 = _____          |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| FAC species <u>90</u>                                  | x3 = <u>270</u>     |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| FACU species _____                                     | x4 = _____          |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| UPL species _____                                      | x5 = _____          |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| Column Totals: <u>90</u> (A)                           | <u>270</u> (B)      |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| Prevalence Index = B/A = <u>3</u>                      |                     |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 1. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 2. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 3. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 4. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 5. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 50% = _____, 20% = _____                               | _____               | = Total Cover     |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| <u>Herb Stratum</u> (Plot size: <u>10ft</u> )          |                     |                   |                  | <b>Hydrophytic Vegetation Indicators:</b><br><input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation<br><input checked="" type="checkbox"/> 2 - Dominance Test is >50%<br><input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup><br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)<br><br><sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.                      |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 1. <u>Ranunculus repens</u>                            | <u>30</u>           | <u>yes</u>        | <u>FAC</u>       |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 2. <u>Holcus lanatus</u>                               | <u>30</u>           | <u>yes</u>        | <u>FAC</u>       |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 3. <u>Festuca rubra</u>                                | <u>30</u>           | <u>yes</u>        | <u>FAC</u>       |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 4. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 5. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 6. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 7. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 8. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 9. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 10. _____  | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 11. _____  | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 50% = <u>45</u> , 20% = <u>18</u>                      | <u>90</u>           | = Total Cover     |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| <u>Woody Vine Stratum</u> (Plot size: _____)           |                     |                   |                  | <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 1. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 2. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 50% = _____, 20% = _____                               | _____               | = Total Cover     |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| % Bare Ground in Herb Stratum _____                    |                     |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| Remarks:   |                     |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |



**SOIL**

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) |               |       |                |       |                   |                  |               |         |
|---|---------------|-------|----------------|-------|-------------------|------------------|---------------|---------|
| Depth<br>(inches)   | Matrix        |       | Redox Features |       |                   |                  | Texture       | Remarks |
|   | Color (moist) | %     | Color (moist)  | %     | Type <sup>1</sup> | Loc <sup>2</sup> |               |         |
| 0-10  | 10YR 3/1      | 100   |                |       |                   |                  | gravelly silt | sandy   |
| 10-16   | 10YR 5/2      | 98    | 5YR 4/6        | 2     | C                 | M                | gravelly silt | sandy   |
| _____   | _____         | _____ | _____          | _____ | _____             | _____            | _____         | _____   |
| _____   | _____         | _____ | _____          | _____ | _____             | _____            | _____         | _____   |
| _____   | _____         | _____ | _____          | _____ | _____             | _____            | _____         | _____   |
| _____   | _____         | _____ | _____          | _____ | _____             | _____            | _____         | _____   |
| _____   | _____         | _____ | _____          | _____ | _____             | _____            | _____         | _____   |

<sup>1</sup>Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|  |   |   |  |   |   |   |  |
|--|---|---|--|---|---|---|--|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b> |   |   |  | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> |   |   |  |
| <input type="checkbox"/> Histosol (A1)   | <input type="checkbox"/> Sandy Redox (S5)                         | <input type="checkbox"/> 2 cm Muck (A10)                  |  | <input type="checkbox"/> Histic Epipedon (A2)               | <input type="checkbox"/> Stripped Matrix (S6)     | <input type="checkbox"/> Red Parent Material (TF2)  |  |
| <input type="checkbox"/> Black Histic (A3)                                       | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |  | <input type="checkbox"/> Hydrogen Sulfide (A4)              | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Other (Explain in Remarks) |  |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)                       | <input checked="" type="checkbox"/> Depleted Matrix (F3)          |   |  | <input type="checkbox"/> Thick Dark Surface (A12)           | <input type="checkbox"/> Redox Dark Surface (F6)  |   |  |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)                                | <input type="checkbox"/> Depleted Dark Surface (F7)               |   |  | <input type="checkbox"/> Sandy Gleyed Matrix (S4)           | <input type="checkbox"/> Redox Depressions (F8)   |   |  |

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

|  |  |
|--|--|
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____ | <b>Hydric Soils Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
|--|--|

Remarks:

**HYDROLOGY**

|  |  |  |  |  |  |
|--|--|--|--|--|--|
| <b>Wetland Hydrology Indicators:</b>                               |  |  |  |  |  |
| Primary Indicators (minimum of one required; check all that apply) |  |  | Secondary Indicators (2 or more required)                          |  |  |
| <input type="checkbox"/> Surface Water (A1)                        | <input type="checkbox"/> Water-Stained Leaves (B9)                     |  | <input type="checkbox"/> Water-Stained Leaves (B9)                 |  |  |
| <input checked="" type="checkbox"/> High Water Table (A2)          | <b>(except MLRA 1, 2, 4A, and 4B)</b>                                  |  | <b>(MLRA 1, 2, 4A, and 4B)</b>                                     |  |  |
| <input checked="" type="checkbox"/> Saturation (A3)                | <input type="checkbox"/> Salt Crust (B11)                              |  | <input type="checkbox"/> Drainage Patterns (B10)                   |  |  |
| <input type="checkbox"/> Water Marks (B1)                          | <input type="checkbox"/> Aquatic Invertebrates (B13)                   |  | <input type="checkbox"/> Dry-Season Water Table (C2)               |  |  |
| <input type="checkbox"/> Sediment Deposits (B2)                    | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                    |  | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |  |  |
| <input type="checkbox"/> Drift Deposits (B3)                       | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |  | <input type="checkbox"/> Geomorphic Position (D2)                  |  |  |
| <input type="checkbox"/> Algal Mat or Crust (B4)                   | <input type="checkbox"/> Presence of Reduced Iron (C4)                 |  | <input type="checkbox"/> Shallow Aquitard (D3)                     |  |  |
| <input type="checkbox"/> Iron Deposits (B5)                        | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)    |  | <input type="checkbox"/> FAC-Neutral Test (D5)                     |  |  |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> Stunted or Stresses Plants (D1) (LRR A)       |  | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)            |  |  |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks)                    |  | <input type="checkbox"/> Frost-Heave Hummocks (D7)                 |  |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |  |  |  |  |  |

|  |     |                                     |    |                                     |                          |
|--|-----|-------------------------------------|----|-------------------------------------|--------------------------|
| <b>Field Observations:</b>                         |     |                                     |    |                                     |                          |
| Surface Water Present?                             | Yes | <input type="checkbox"/>            | No | <input checked="" type="checkbox"/> | Depth (inches): _____    |
| Water Table Present?                               | Yes | <input checked="" type="checkbox"/> | No | <input type="checkbox"/>            | Depth (inches): <u>5</u> |
| Saturation Present?<br>(includes capillary fringe) | Yes | <input checked="" type="checkbox"/> | No | <input type="checkbox"/>            | Depth (inches): <u>0</u> |

|   |
|---|
| <b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
|---|

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

Remarks:

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

Project Site: 3121 66<sup>th</sup> Ave NE City/County: Marysville/Snohomish Sampling Date: 1/23/20  
 Applicant/Owner: Sunnyside Village Cohousing State: WA Sampling Point: 7  
 Investigator(s): L. Baldwin, F. McNair Section, Township, Range: Sec. 5, T39N, R4E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): concave Slope (%): 0-1  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: WGS 1984  
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

|  |   |                             |  |   |                             |
|--|---|-----------------------------|--|---|-----------------------------|
| Hydrophytic Vegetation Present?                          | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | <b>Is the Sampled Area within a Wetland?</b> | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Hydric Soil Present?                                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Wetland Hydrology Present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Remarks: <b>Vegetation appears to be regularly mowed</b> |   |                             |  |   |                             |

### VEGETATION – Use scientific names of plants

| Stratum  | Absolute % Cover    | Dominant Species? | Indicator Status | Dominance Test Worksheet:   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
|--|---------------------|-------------------|------------------|---|--------------------------|---------------------|-------------------|------------|--------------------|------------|-----------------------|-----------------|--------------------|------------|-------------------|------------|------------------------------|----------------|-----------------------------------|--|
| <u>Tree Stratum</u> (Plot size: <u>30ft</u> )          |                     |                   |                  | Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)<br><br>Total Number of Dominant Species Across All Strata: <u>2</u> (B)<br><br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 1. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 2. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 3. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 4. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 50% = _____, 20% = _____                               | _____               | = Total Cover     |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| <u>Sapling/Shrub Stratum</u> (Plot size: <u>30ft</u> ) |                     |                   |                  | <b>Prevalence Index worksheet:</b><br><br><table style="width: 100%; border: none;"> <tr> <td style="text-align: center;"><u>Total % Cover of:</u></td> <td style="text-align: center;"><u>Multiply by:</u></td> </tr> <tr> <td>OBL species _____</td> <td>x1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x2 = _____</td> </tr> <tr> <td>FAC species <u>90</u></td> <td>x3 = <u>270</u></td> </tr> <tr> <td>FACU species _____</td> <td>x4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x5 = _____</td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>270</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3</u></td> </tr> </table> | <u>Total % Cover of:</u> | <u>Multiply by:</u> | OBL species _____ | x1 = _____ | FACW species _____ | x2 = _____ | FAC species <u>90</u> | x3 = <u>270</u> | FACU species _____ | x4 = _____ | UPL species _____ | x5 = _____ | Column Totals: <u>90</u> (A) | <u>270</u> (B) | Prevalence Index = B/A = <u>3</u> |  |
| <u>Total % Cover of:</u>                               | <u>Multiply by:</u> |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| OBL species _____                                      | x1 = _____          |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| FACW species _____                                     | x2 = _____          |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| FAC species <u>90</u>                                  | x3 = <u>270</u>     |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| FACU species _____                                     | x4 = _____          |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| UPL species _____                                      | x5 = _____          |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| Column Totals: <u>90</u> (A)                           | <u>270</u> (B)      |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| Prevalence Index = B/A = <u>3</u>                      |                     |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 1. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 2. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 3. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 4. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 5. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 50% = _____, 20% = _____                               | _____               | = Total Cover     |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| <u>Herb Stratum</u> (Plot size: <u>10ft</u> )          |                     |                   |                  | <b>Hydrophytic Vegetation Indicators:</b><br><input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation<br><input checked="" type="checkbox"/> 2 - Dominance Test is >50%<br><input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup><br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)<br><br><sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.                          |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 1. <u>Ranunculus repens</u>                            | <u>15</u>           | <u>yes</u>        | <u>FAC</u>       |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 2. <u>Holcus lanatus</u>                               | <u>80</u>           | <u>yes</u>        | <u>FAC</u>       |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 3. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 4. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 5. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 6. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 7. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 8. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 9. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 10. _____  | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 11. _____  | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 50% = <u>45</u> , 20% = <u>18</u>                      | <u>90</u>           | = Total Cover     |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| <u>Woody Vine Stratum</u> (Plot size: _____)           |                     |                   |                  | <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 1. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 2. _____   | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| 50% = _____, 20% = _____                               | _____               | = Total Cover     |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| % Bare Ground in Herb Stratum _____                    |                     |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |
| Remarks:   |                     |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                    |            |                   |            |                              |                |                                   |  |

**SOIL**

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)                                    |                 |            |  |          |                   |   |                      |              |
|--|-----------------|------------|--|----------|-------------------|---|----------------------|--------------|
| Depth<br>(inches)  | Matrix          |            | Redox Features   |          |                   |   | Texture              | Remarks      |
|  | Color (moist)   | %          | Color (moist)  | %        | Type <sup>1</sup> | Loc <sup>2</sup>  |                      |              |
| 0-11   | <u>10YR 3/1</u> | <u>100</u> | _____  | _____    | _____             | _____   | <u>gravelly silt</u> | <u>sandy</u> |
| 11-15  | <u>10YR 3/1</u> | <u>98</u>  | <u>5YR 4/4</u>   | <u>2</u> | <u>C</u>          | <u>M</u>  | <u>gravelly silt</u> | <u>sandy</u> |
| _____  | _____           | _____      | _____  | _____    | _____             | _____   | _____                | _____        |
| _____  | _____           | _____      | _____  | _____    | _____             | _____   | _____                | _____        |
| _____  | _____           | _____      | _____  | _____    | _____             | _____   | _____                | _____        |
| _____  | _____           | _____      | _____  | _____    | _____             | _____   | _____                | _____        |
| _____  | _____           | _____      | _____  | _____    | _____             | _____   | _____                | _____        |
| <sup>1</sup> Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix |                 |            |  |          |                   |   |                      |              |
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>   |                 |            |  |          |                   | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>   |                      |              |
| <input type="checkbox"/> Histosol (A1)   |                 |            | <input type="checkbox"/> Sandy Redox (S5)                                |          |                   | <input type="checkbox"/> 2 cm Muck (A10)  |                      |              |
| <input type="checkbox"/> Histic Epipedon (A2)  |                 |            | <input type="checkbox"/> Stripped Matrix (S6)                            |          |                   | <input type="checkbox"/> Red Parent Material (TF2)  |                      |              |
| <input type="checkbox"/> Black Histic (A3)   |                 |            | <input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(except MLRA 1)</b> |          |                   | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |                      |              |
| <input type="checkbox"/> Hydrogen Sulfide (A4)   |                 |            | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                        |          |                   | <input type="checkbox"/> Other (Explain in Remarks)   |                      |              |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)   |                 |            | <input type="checkbox"/> Depleted Matrix (F3)                            |          |                   | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |                      |              |
| <input type="checkbox"/> Thick Dark Surface (A12)  |                 |            | <input checked="" type="checkbox"/> Redox Dark Surface (F6)              |          |                   |   |                      |              |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)  |                 |            | <input type="checkbox"/> Depleted Dark Surface (F7)                      |          |                   |   |                      |              |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)  |                 |            | <input type="checkbox"/> Redox Depressions (F8)                          |          |                   |   |                      |              |
| <b>Restrictive Layer (if present):</b>   |                 |            |  |          |                   | <b>Hydric Soils Present?</b>  |                      |              |
| Type: _____  |                 |            |  |          |                   | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |                      |              |
| Depth (inches): _____  |                 |            |  |          |                   |   |                      |              |
| Remarks:   |                 |            |  |          |                   |   |                      |              |

**HYDROLOGY**

| Wetland Hydrology Indicators:  |   |                          |   |  |  |
|--|---|--------------------------|---|--|--|
| Primary Indicators (minimum of one required; check all that apply)   |   |                          | Secondary Indicators (2 or more required)                           |  |  |
| <input type="checkbox"/> Surface Water (A1)  | <input type="checkbox"/> Water-Stained Leaves (B9)                      |                          | <input type="checkbox"/> Water-Stained Leaves (B9)                  |  |  |
| <input checked="" type="checkbox"/> High Water Table (A2)  | <b>(except MLRA 1, 2, 4A, and 4B)</b>                                   |                          | <b>(MLRA 1, 2, 4A, and 4B)</b>                                      |  |  |
| <input checked="" type="checkbox"/> Saturation (A3)  | <input type="checkbox"/> Salt Crust (B11)                               |                          | <input type="checkbox"/> Drainage Patterns (B10)                    |  |  |
| <input type="checkbox"/> Water Marks (B1)  | <input type="checkbox"/> Aquatic Invertebrates (B13)                    |                          | <input type="checkbox"/> Dry-Season Water Table (C2)                |  |  |
| <input type="checkbox"/> Sediment Deposits (B2)  | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                     |                          | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)  |  |  |
| <input type="checkbox"/> Drift Deposits (B3)   | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)  |                          | <input type="checkbox"/> Geomorphic Position (D2)                   |  |  |
| <input type="checkbox"/> Algal Mat or Crust (B4)   | <input type="checkbox"/> Presence of Reduced Iron (C4)                  |                          | <input type="checkbox"/> Shallow Aquitard (D3)                      |  |  |
| <input type="checkbox"/> Iron Deposits (B5)  | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)     |                          | <input type="checkbox"/> FAC-Neutral Test (D5)                      |  |  |
| <input type="checkbox"/> Surface Soil Cracks (B6)  | <input type="checkbox"/> Stunted or Stresses Plants (D1) <b>(LRR A)</b> |                          | <input type="checkbox"/> Raised Ant Mounds (D6) <b>(LRR A)</b>      |  |  |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)   | <input type="checkbox"/> Other (Explain in Remarks)                     |                          | <input type="checkbox"/> Frost-Heave Hummocks (D7)                  |  |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |                          |   |  |  |
| <b>Field Observations:</b>   |   |                          | <b>Wetland Hydrology Present?</b>                                   |  |  |
| Surface Water Present?   | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>     | Depth (inches): _____    | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |  |  |
| Water Table Present?   | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>     | Depth (inches): <u>8</u> |   |  |  |
| Saturation Present?<br>(includes capillary fringe)   | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>     | Depth (inches): <u>0</u> |   |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: |   |                          |   |  |  |
| Remarks:   |   |                          |   |  |  |

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

Project Site: 3121 66<sup>th</sup> Ave NE City/County: Marysville/Snohomish Sampling Date: 1/23/20  
 Applicant/Owner: Sunnyside Village Cohousing State: WA Sampling Point: 8  
 Investigator(s): L. Baldwin, F. McNair Section, Township, Range: Sec. 5, T39N, R4E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): concave Slope (%): 0-1  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: WGS 1984  
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|  |   |                             |  |   |                             |
|--|---|-----------------------------|--|---|-----------------------------|
| Hydrophytic Vegetation Present?                          | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | <b>Is the Sampled Area within a Wetland?</b> | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Hydric Soil Present?                                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Wetland Hydrology Present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Remarks: <b>Vegetation appears to be regularly mowed</b> |   |                             |  |   |                             |

**VEGETATION – Use scientific names of plants**

| Stratum  | Absolute % Cover | Dominant Species? | Indicator Status | Dominance Test Worksheet:  |
|--|------------------|-------------------|------------------|--|
| <u>Tree Stratum</u> (Plot size: <u>30ft</u> )          |                  |                   |                  | Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>2</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)  |
| 1. _____   | _____            | _____             | _____            |  |
| 2. _____   | _____            | _____             | _____            |  |
| 3. _____   | _____            | _____             | _____            |  |
| 4. _____   | _____            | _____             | _____            |  |
| 50% = _____, 20% = _____                               | _____            | = Total Cover     |                  |  |
| <u>Sapling/Shrub Stratum</u> (Plot size: <u>30ft</u> ) |                  |                   |                  | <b>Prevalence Index worksheet:</b><br>Total % Cover of: <span style="float: right;">Multiply by:</span><br>OBL species _____ x1 = _____<br>FACW species <u>5</u> x2 = <u>10</u><br>FAC species <u>95</u> x3 = <u>285</u><br>FACU species _____ x4 = _____<br>UPL species _____ x5 = _____<br>Column Totals: <u>100</u> (A) <u>295</u> (B)<br>Prevalence Index = B/A = <u>2.95</u>  |
| 1. _____   | _____            | _____             | _____            |  |
| 2. _____   | _____            | _____             | _____            |  |
| 3. _____   | _____            | _____             | _____            |  |
| 4. _____   | _____            | _____             | _____            |  |
| 5. _____   | _____            | _____             | _____            |  |
| 50% = _____, 20% = _____                               | _____            | = Total Cover     |                  |  |
| <u>Herb Stratum</u> (Plot size: <u>10ft</u> )          |                  |                   |                  | <b>Hydrophytic Vegetation Indicators:</b><br><input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation<br><input checked="" type="checkbox"/> 2 - Dominance Test is >50%<br><input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup><br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)<br><br><sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 1. <u>Ranunculus repens</u>                            | <u>60</u>        | <u>yes</u>        | <u>FAC</u>       |  |
| 2. <u>Holcus lanatus</u>                               | <u>35</u>        | <u>yes</u>        | <u>FAC</u>       |  |
| 3. <u>Juncus balticus</u>                              | <u>5</u>         | <u>yes</u>        | <u>FACW</u>      |  |
| 4. _____   | _____            | _____             | _____            |  |
| 5. _____   | _____            | _____             | _____            |  |
| 6. _____   | _____            | _____             | _____            |  |
| 7. _____   | _____            | _____             | _____            |  |
| 8. _____   | _____            | _____             | _____            |  |
| 9. _____   | _____            | _____             | _____            |  |
| 10. _____  | _____            | _____             | _____            |  |
| 11. _____  | _____            | _____             | _____            |  |
| 50% = <u>50</u> , 20% = <u>20</u>                      | <u>100</u>       | = Total Cover     |                  |  |
| <u>Woody Vine Stratum</u> (Plot size: _____)           |                  |                   |                  | <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |
| 1. _____   | _____            | _____             | _____            |  |
| 2. _____   | _____            | _____             | _____            |  |
| 50% = _____, 20% = _____                               | _____            | = Total Cover     |                  |  |
| % Bare Ground in Herb Stratum _____                    |                  |                   |                  |  |
| Remarks:   |                  |                   |                  |  |

**SOIL**

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)                                    |                 |            |  |          |                   |   |                      |              |
|--|-----------------|------------|--|----------|-------------------|---|----------------------|--------------|
| Depth<br>(inches)  | Matrix          |            | Redox Features   |          |                   |   | Texture              | Remarks      |
|  | Color (moist)   | %          | Color (moist)  | %        | Type <sup>1</sup> | Loc <sup>2</sup>  |                      |              |
| 0-11   | <u>10YR 2/1</u> | <u>100</u> | _____  | _____    | _____             | _____   | <u>gravelly silt</u> | <u>sandy</u> |
| 11-16  | <u>10YR 4/2</u> | <u>98</u>  | <u>5YR 4/6</u>   | <u>2</u> | <u>C</u>          | <u>M</u>  | <u>gravelly silt</u> | <u>sandy</u> |
| _____  | _____           | _____      | _____  | _____    | _____             | _____   | _____                | _____        |
| _____  | _____           | _____      | _____  | _____    | _____             | _____   | _____                | _____        |
| _____  | _____           | _____      | _____  | _____    | _____             | _____   | _____                | _____        |
| _____  | _____           | _____      | _____  | _____    | _____             | _____   | _____                | _____        |
| _____  | _____           | _____      | _____  | _____    | _____             | _____   | _____                | _____        |
| <sup>1</sup> Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix |                 |            |  |          |                   |   |                      |              |
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>   |                 |            |  |          |                   | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>   |                      |              |
| <input type="checkbox"/> Histosol (A1)   |                 |            | <input type="checkbox"/> Sandy Redox (S5)                                |          |                   | <input type="checkbox"/> 2 cm Muck (A10)  |                      |              |
| <input type="checkbox"/> Histic Epipedon (A2)  |                 |            | <input type="checkbox"/> Stripped Matrix (S6)                            |          |                   | <input type="checkbox"/> Red Parent Material (TF2)  |                      |              |
| <input type="checkbox"/> Black Histic (A3)   |                 |            | <input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(except MLRA 1)</b> |          |                   | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |                      |              |
| <input type="checkbox"/> Hydrogen Sulfide (A4)   |                 |            | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                        |          |                   | <input type="checkbox"/> Other (Explain in Remarks)   |                      |              |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)   |                 |            | <input checked="" type="checkbox"/> Depleted Matrix (F3)                 |          |                   | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |                      |              |
| <input type="checkbox"/> Thick Dark Surface (A12)  |                 |            | <input type="checkbox"/> Redox Dark Surface (F6)                         |          |                   |   |                      |              |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)  |                 |            | <input type="checkbox"/> Depleted Dark Surface (F7)                      |          |                   |   |                      |              |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)  |                 |            | <input type="checkbox"/> Redox Depressions (F8)                          |          |                   |   |                      |              |
| <b>Restrictive Layer (if present):</b>   |                 |            |  |          |                   | <b>Hydric Soils Present?</b>  |                      |              |
| Type: _____  |                 |            |  |          |                   | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |                      |              |
| Depth (inches): _____  |                 |            |  |          |                   |   |                      |              |
| Remarks:   |                 |            |  |          |                   |   |                      |              |

**HYDROLOGY**

| Wetland Hydrology Indicators:  |   |  |   |  |  |
|--|---|--|---|--|--|
| Primary Indicators (minimum of one required; check all that apply)   |   |  | Secondary Indicators (2 or more required)                           |  |  |
| <input checked="" type="checkbox"/> Surface Water (A1)   | <input checked="" type="checkbox"/> Water-Stained Leaves (B9)           | <input type="checkbox"/> Water-Stained Leaves (B9)                 | <input type="checkbox"/> High Water Table (A2)                      | <b>(except MLRA 1, 2, 4A, and 4B)</b>                                  | <b>(MLRA 1, 2, 4A, and 4B)</b>                       |
| <input checked="" type="checkbox"/> Saturation (A3)  | <input type="checkbox"/> Salt Crust (B11)                               | <input type="checkbox"/> Drainage Patterns (B10)                   | <input type="checkbox"/> Water Marks (B1)                           | <input type="checkbox"/> Aquatic Invertebrates (B13)                   | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Sediment Deposits (B2)  | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                     | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) | <input type="checkbox"/> Drift Deposits (B3)                        | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2)    |
| <input type="checkbox"/> Algal Mat or Crust (B4)   | <input type="checkbox"/> Presence of Reduced Iron (C4)                  | <input type="checkbox"/> Shallow Aquitard (D3)                     | <input type="checkbox"/> Iron Deposits (B5)                         | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)    | <input type="checkbox"/> FAC-Neutral Test (D5)       |
| <input type="checkbox"/> Surface Soil Cracks (B6)  | <input type="checkbox"/> Stunted or Stresses Plants (D1) <b>(LRR A)</b> | <input type="checkbox"/> Raised Ant Mounds (D6) <b>(LRR A)</b>     | <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)  | <input type="checkbox"/> Other (Explain in Remarks)                    | <input type="checkbox"/> Frost-Heave Hummocks (D7)   |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |  |   |  |  |
| <b>Field Observations:</b>   |   |  | <b>Wetland Hydrology Present?</b>                                   |  |  |
| Surface Water Present?   | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>     | Depth (inches): _____  | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |  |  |
| Water Table Present?   | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>     | Depth (inches): <u>0</u>   |   |  |  |
| Saturation Present?<br>(includes capillary fringe)   | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>     | Depth (inches): <u>0</u>   |   |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:           |   |  |   |  |  |
| Remarks: Surface water was located at the southern end of the wetland area and just outside of the sample plot area. |   |  |   |  |  |

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

Project Site: 3121 66<sup>th</sup> Ave NE City/County: Marysville/Snohomish Sampling Date: 1/23/20  
 Applicant/Owner: Sunnyside Village Cohousing State: WA Sampling Point: 9  
 Investigator(s): L. Baldwin, F. McNair Section, Township, Range: Sec. 5, T39N, R4E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): concave Slope (%): 0-1  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: WGS 1984  
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|  |   |  |   |
|--|---|--|---|
| Hydrophytic Vegetation Present?                          | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | <b>Is the Sampled Area<br/>within a Wetland?</b> | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Hydric Soil Present?                                     | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |  | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?                               | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |  | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Remarks: <b>Vegetation appears to be regularly mowed</b> |   |  |   |

**VEGETATION – Use scientific names of plants**

| Stratum (Plot size: <u>30ft</u> )              | Absolute % Cover    | Dominant Species? | Indicator Status | Dominance Test Worksheet:   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
|--|---------------------|-------------------|------------------|---|--------------------------|---------------------|-------------------|------------|--------------------|------------|-----------------------|-----------------|------------------------|----------------|-------------------|------------|------------------------------|----------------|-------------------------------------|--|
| 1. _____                                       | _____               | _____             | _____            | Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)<br><br>Total Number of Dominant Species Across All Strata: <u>2</u> (B)<br><br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 2. _____                                       | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 3. _____                                       | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 4. _____                                       | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 50% = _____, 20% = _____                       | _____               | = Total Cover     |                  | <b>Prevalence Index worksheet:</b><br><br><table style="width: 100%; border: none;"> <tr> <td style="text-align: center;"><u>Total % Cover of:</u></td> <td style="text-align: center;"><u>Multiply by:</u></td> </tr> <tr> <td>OBL species _____</td> <td>x1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x2 = _____</td> </tr> <tr> <td>FAC species <u>70</u></td> <td>x3 = <u>210</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x4 = <u>40</u></td> </tr> <tr> <td>UPL species _____</td> <td>x5 = _____</td> </tr> <tr> <td>Column Totals: <u>80</u> (A)</td> <td><u>250</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.1</u></td> </tr> </table> | <u>Total % Cover of:</u> | <u>Multiply by:</u> | OBL species _____ | x1 = _____ | FACW species _____ | x2 = _____ | FAC species <u>70</u> | x3 = <u>210</u> | FACU species <u>10</u> | x4 = <u>40</u> | UPL species _____ | x5 = _____ | Column Totals: <u>80</u> (A) | <u>250</u> (B) | Prevalence Index = B/A = <u>3.1</u> |  |
| <u>Total % Cover of:</u>                       | <u>Multiply by:</u> |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| OBL species _____                              | x1 = _____          |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| FACW species _____                             | x2 = _____          |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| FAC species <u>70</u>                          | x3 = <u>210</u>     |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| FACU species <u>10</u>                         | x4 = <u>40</u>      |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| UPL species _____                              | x5 = _____          |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| Column Totals: <u>80</u> (A)                   | <u>250</u> (B)      |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| Prevalence Index = B/A = <u>3.1</u>            |                     |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| <b>Sapling/Shrub Stratum (Plot size: 30ft)</b> |                     |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 1. _____                                       | _____               | _____             | _____            | <b>Hydrophytic Vegetation Indicators:</b><br><input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation<br><input checked="" type="checkbox"/> 2 - Dominance Test is >50%<br><input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup><br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)<br><br><sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 2. _____                                       | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 3. _____                                       | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 4. _____                                       | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 5. _____                                       | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 50% = _____, 20% = _____                       | _____               | = Total Cover     |                  |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| <b>Herb Stratum (Plot size: 10ft)</b>          |                     |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 1. <u>Ranunculus repens</u>                    | <u>20</u>           | <u>yes</u>        | <u>FAC</u>       |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 2. <u>Holcus lanatus</u>                       | <u>5</u>            | <u>no</u>         | <u>FAC</u>       |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 3. <u>Vicia americana</u>                      | <u>40</u>           | <u>yes</u>        | <u>FAC</u>       |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 4. <u>Festuca rubra</u>                        | <u>5</u>            | <u>no</u>         | <u>FAC</u>       |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 5. <u>taraxacum officinale</u>                 | <u>10</u>           | <u>no</u>         | <u>FACU</u>      |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 6. _____                                       | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 7. _____                                       | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 8. _____                                       | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 9. _____                                       | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 10. _____                                      | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 11. _____                                      | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 50% = <u>40</u> , 20% = <u>20</u>              | <u>80</u>           | = Total Cover     |                  |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| <b>Woody Vine Stratum (Plot size: _____)</b>   |                     |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 1. _____                                       | _____               | _____             | _____            | <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 2. _____                                       | _____               | _____             | _____            |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| 50% = _____, 20% = _____                       | _____               | = Total Cover     |                  |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| % Bare Ground in Herb Stratum _____            |                     |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |
| Remarks:                                       |                     |                   |                  |   |                          |                     |                   |            |                    |            |                       |                 |                        |                |                   |            |                              |                |                                     |  |

**SOIL**

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)                                    |                  |            |  |       |   |   |                      |              |
|--|------------------|------------|--|-------|---|---|----------------------|--------------|
| Depth<br>(inches)  | Matrix           |            | Redox Features   |       |   |   | Texture              | Remarks      |
|  | Color (moist)    | %          | Color (moist)  | %     | Type <sup>1</sup>   | Loc <sup>2</sup>  |                      |              |
| 0-13   | <u>10YR 3/2</u>  | <u>100</u> | _____  | _____ | _____   | _____   | <u>gravelly silt</u> | <u>sandy</u> |
| 13-16  | <u>7.5YR 4/4</u> | <u>100</u> | _____  | _____ | _____   | _____   | <u>gravelly silt</u> | <u>sandy</u> |
| _____  | _____            | _____      | _____  | _____ | _____   | _____   | _____                | _____        |
| _____  | _____            | _____      | _____  | _____ | _____   | _____   | _____                | _____        |
| _____  | _____            | _____      | _____  | _____ | _____   | _____   | _____                | _____        |
| _____  | _____            | _____      | _____  | _____ | _____   | _____   | _____                | _____        |
| _____  | _____            | _____      | _____  | _____ | _____   | _____   | _____                | _____        |
| <sup>1</sup> Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix |                  |            |  |       |   |   |                      |              |
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>   |                  |            |  |       |   | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>   |                      |              |
| <input type="checkbox"/> Histosol (A1)   |                  |            | <input type="checkbox"/> Sandy Redox (S5)                                |       |   | <input type="checkbox"/> 2 cm Muck (A10)  |                      |              |
| <input type="checkbox"/> Histic Epipedon (A2)  |                  |            | <input type="checkbox"/> Stripped Matrix (S6)                            |       |   | <input type="checkbox"/> Red Parent Material (TF2)  |                      |              |
| <input type="checkbox"/> Black Histic (A3)   |                  |            | <input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(except MLRA 1)</b> |       |   | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |                      |              |
| <input type="checkbox"/> Hydrogen Sulfide (A4)   |                  |            | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                        |       |   | <input type="checkbox"/> Other (Explain in Remarks)   |                      |              |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)   |                  |            | <input type="checkbox"/> Depleted Matrix (F3)                            |       |   | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |                      |              |
| <input type="checkbox"/> Thick Dark Surface (A12)  |                  |            | <input type="checkbox"/> Redox Dark Surface (F6)                         |       |   |   |                      |              |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)  |                  |            | <input type="checkbox"/> Depleted Dark Surface (F7)                      |       |   |   |                      |              |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)  |                  |            | <input type="checkbox"/> Redox Depressions (F8)                          |       |   |   |                      |              |
| <b>Restrictive Layer (if present):</b>   |                  |            |  |       | <b>Hydric Soils Present?</b>  |   |                      |              |
| Type: _____  |                  |            |  |       | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |   |                      |              |
| Depth (inches): _____  |                  |            |  |       |   |   |                      |              |
| Remarks:   |                  |            |  |       |   |   |                      |              |

**HYDROLOGY**

| Wetland Hydrology Indicators:  |   |   |   |  |  |
|--|---|---|---|--|--|
| Primary Indicators (minimum of one required; check all that apply)   |   |   | Secondary Indicators (2 or more required)                               |  |  |
| <input type="checkbox"/> Surface Water (A1)  | <input type="checkbox"/> High Water Table (A2)                      | <input type="checkbox"/> Saturation (A3)          | <input type="checkbox"/> Water-Stained Leaves (B9)                      | <input type="checkbox"/> Water-Stained Leaves (B9)                 | <input type="checkbox"/> Water-Stained Leaves (B9)                 |
| <input type="checkbox"/> Water Marks (B1)  | <input type="checkbox"/> Sediment Deposits (B2)                     | <input type="checkbox"/> Drift Deposits (B3)      | <input type="checkbox"/> Salt Crust (B11)                               | <input type="checkbox"/> Drainage Patterns (B10)                   | <input type="checkbox"/> Drainage Patterns (B10)                   |
| <input type="checkbox"/> Algal Mat or Crust (B4)   | <input type="checkbox"/> Iron Deposits (B5)                         | <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Aquatic Invertebrates (B13)                    | <input type="checkbox"/> Dry-Season Water Table (C2)               | <input type="checkbox"/> Dry-Season Water Table (C2)               |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)   | <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)    |   | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                     | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
|  |   |   | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)  | <input type="checkbox"/> Geomorphic Position (D2)                  | <input type="checkbox"/> Geomorphic Position (D2)                  |
|  |   |   | <input type="checkbox"/> Presence of Reduced Iron (C4)                  | <input type="checkbox"/> Shallow Aquitard (D3)                     | <input type="checkbox"/> Shallow Aquitard (D3)                     |
|  |   |   | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)     | <input type="checkbox"/> FAC-Neutral Test (D5)                     | <input type="checkbox"/> FAC-Neutral Test (D5)                     |
|  |   |   | <input type="checkbox"/> Stunted or Stresses Plants (D1) <b>(LRR A)</b> | <input type="checkbox"/> Raised Ant Mounds (D6) <b>(LRR A)</b>     | <input type="checkbox"/> Raised Ant Mounds (D6) <b>(LRR A)</b>     |
|  |   |   | <input type="checkbox"/> Other (Explain in Remarks)                     | <input type="checkbox"/> Frost-Heave Hummocks (D7)                 | <input type="checkbox"/> Frost-Heave Hummocks (D7)                 |
| <b>Field Observations:</b>   |   |   | <b>Wetland Hydrology Present?</b>                                       |  |  |
| Surface Water Present?   | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Depth (inches): _____                             | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>     |  |  |
| Water Table Present?   | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Depth (inches): _____                             |   |  |  |
| Saturation Present?<br>(includes capillary fringe)   | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Depth (inches): _____                             |   |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: |   |   |   |  |  |
| Remarks:   |   |   |   |  |  |



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

Project Site: 3121 66<sup>th</sup> Ave NE City/County: Marysville/Snohomish Sampling Date: 1/23/20  
 Applicant/Owner: Sunnyside Village Cohousing State: WA Sampling Point: 10  
 Investigator(s): L. Baldwin, F. McNair Section, Township, Range: Sec. 5, T39N, R4E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): concave Slope (%): 0-1  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: WGS 1984  
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|  |   |                             |  |   |                             |
|--|---|-----------------------------|--|---|-----------------------------|
| Hydrophytic Vegetation Present?                          | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | <b>Is the Sampled Area within a Wetland?</b> | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Hydric Soil Present?                                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Wetland Hydrology Present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Remarks: <b>Vegetation appears to be regularly mowed</b> |   |                             |  |   |                             |

**VEGETATION – Use scientific names of plants**

| Stratum  | Absolute % Cover    | Dominant Species?                   | Indicator Status | Dominance Test Worksheet:  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
|--|---------------------|-------------------------------------|------------------|--|--------------------------|---------------------|-------------------------------------|------------|--------------------------|----------------|-----------------------|-----------------|--------------------|------------|-------------------|------------|-------------------------------|----------------|-------------------------------------|--|
| <u>Tree Stratum</u> (Plot size: <u>30ft</u> )          |                     |                                     |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 1. <u><i>Alnus rubra</i></u>                           | <u>60</u>           | <u>yes</u>                          | <u>FAC</u>       | Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 2. _____   | _____               | _____                               | _____            | Total Number of Dominant Species Across All Strata: <u>4</u> (B)   |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 3. _____   | _____               | _____                               | _____            | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)   |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 4. _____   | _____               | _____                               | _____            |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 50% = _____, 20% = _____                               | <u>69</u>           | = Total Cover                       |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| <u>Sapling/Shrub Stratum</u> (Plot size: <u>30ft</u> ) |                     |                                     |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 1. <u><i>Rubus armeniacus</i></u>                      | <u>15</u>           | <u>yes</u>                          | <u>FAC</u>       | <b>Prevalence Index worksheet:</b><br><table style="width: 100%; border: none;"> <tr> <td style="text-align: center;"><u>Total % Cover of:</u></td> <td style="text-align: center;"><u>Multiply by:</u></td> </tr> <tr> <td>OBL species _____</td> <td>x1 = _____</td> </tr> <tr> <td>FACW species <u>45</u></td> <td>x2 = <u>90</u></td> </tr> <tr> <td>FAC species <u>95</u></td> <td>x3 = <u>285</u></td> </tr> <tr> <td>FACU species _____</td> <td>x4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x5 = _____</td> </tr> <tr> <td>Column Totals: <u>140</u> (A)</td> <td><u>375</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.7</u></td> </tr> </table> | <u>Total % Cover of:</u> | <u>Multiply by:</u> | OBL species _____                   | x1 = _____ | FACW species <u>45</u>   | x2 = <u>90</u> | FAC species <u>95</u> | x3 = <u>285</u> | FACU species _____ | x4 = _____ | UPL species _____ | x5 = _____ | Column Totals: <u>140</u> (A) | <u>375</u> (B) | Prevalence Index = B/A = <u>2.7</u> |  |
| <u>Total % Cover of:</u>                               | <u>Multiply by:</u> |                                     |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| OBL species _____                                      | x1 = _____          |                                     |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| FACW species <u>45</u>                                 | x2 = <u>90</u>      |                                     |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| FAC species <u>95</u>                                  | x3 = <u>285</u>     |                                     |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| FACU species _____                                     | x4 = _____          |                                     |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| UPL species _____                                      | x5 = _____          |                                     |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| Column Totals: <u>140</u> (A)                          | <u>375</u> (B)      |                                     |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| Prevalence Index = B/A = <u>2.7</u>                    |                     |                                     |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 2. <u><i>Rubus spectabilis</i></u>                     | <u>10</u>           | <u>yes</u>                          | <u>FAC</u>       |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 3. _____   | _____               | _____                               | _____            |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 4. _____   | _____               | _____                               | _____            |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 5. _____   | _____               | _____                               | _____            |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 50% = _____, 20% = _____                               | <u>25</u>           | = Total Cover                       |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| <u>Herb Stratum</u> (Plot size: <u>10ft</u> )          |                     |                                     |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 1. <u><i>Phalaris arundinacea</i></u>                  | <u>45</u>           | <u>yes</u>                          | <u>FACW</u>      | <b>Hydrophytic Vegetation Indicators:</b><br><input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation<br><input checked="" type="checkbox"/> 2 - Dominance Test is >50%<br><input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup><br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)<br><br><sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.                                 |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 2. <u><i>Oxalis stricta</i></u>                        | <u>10</u>           | <u>no</u>                           | <u>FAC</u>       |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 3. _____   | _____               | _____                               | _____            |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 4. _____   | _____               | _____                               | _____            |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 5. _____   | _____               | _____                               | _____            |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 6. _____   | _____               | _____                               | _____            |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 7. _____   | _____               | _____                               | _____            |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 8. _____   | _____               | _____                               | _____            |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 9. _____   | _____               | _____                               | _____            |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 10. _____  | _____               | _____                               | _____            |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 11. _____  | _____               | _____                               | _____            |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 50% = <u>27.5</u> , 20% = <u>11</u>                    | <u>55</u>           | = Total Cover                       |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| <u>Woody Vine Stratum</u> (Plot size: _____)           |                     |                                     |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 1. _____   | _____               | _____                               | _____            | <b>Hydrophytic Vegetation Present?</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;"></td> <td style="width: 10%;">Yes</td> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 10%;">No</td> <td style="width: 10%; text-align: center;"><input type="checkbox"/></td> </tr> </table>  |                          | Yes                 | <input checked="" type="checkbox"/> | No         | <input type="checkbox"/> |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
|  | Yes                 | <input checked="" type="checkbox"/> | No               |  | <input type="checkbox"/> |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 2. _____   | _____               | _____                               | _____            |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| 50% = _____, 20% = _____                               | _____               | = Total Cover                       |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| % Bare Ground in Herb Stratum _____                    |                     |                                     |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |
| Remarks:   |                     |                                     |                  |  |                          |                     |                                     |            |                          |                |                       |                 |                    |            |                   |            |                               |                |                                     |  |

**SOIL**

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)                                    |                 |            |  |           |   |   |                      |              |
|--|-----------------|------------|--|-----------|---|---|----------------------|--------------|
| Depth<br>(inches)  | Matrix          |            | Redox Features   |           |   |   | Texture              | Remarks      |
|  | Color (moist)   | %          | Color (moist)  | %         | Type <sup>1</sup>   | Loc <sup>2</sup>  |                      |              |
| 0-9  | <u>10YR 2/2</u> | <u>100</u> | _____  | _____     | _____   | _____   | <u>gravelly silt</u> | <u>sandy</u> |
| 9-15   | <u>10YR 4/2</u> | <u>70</u>  | <u>10YR 5/8</u>  | <u>30</u> | <u>C</u>  | <u>M</u>  | <u>gravelly silt</u> | <u>sandy</u> |
| _____  | _____           | _____      | _____  | _____     | _____   | _____   | _____                | _____        |
| _____  | _____           | _____      | _____  | _____     | _____   | _____   | _____                | _____        |
| _____  | _____           | _____      | _____  | _____     | _____   | _____   | _____                | _____        |
| _____  | _____           | _____      | _____  | _____     | _____   | _____   | _____                | _____        |
| <sup>1</sup> Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix |                 |            |  |           |   |   |                      |              |
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>   |                 |            |  |           |   | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>   |                      |              |
| <input type="checkbox"/> Histosol (A1)   |                 |            | <input type="checkbox"/> Sandy Redox (S5)                                |           |   | <input type="checkbox"/> 2 cm Muck (A10)  |                      |              |
| <input type="checkbox"/> Histic Epipedon (A2)  |                 |            | <input type="checkbox"/> Stripped Matrix (S6)                            |           |   | <input type="checkbox"/> Red Parent Material (TF2)  |                      |              |
| <input type="checkbox"/> Black Histic (A3)   |                 |            | <input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(except MLRA 1)</b> |           |   | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |                      |              |
| <input type="checkbox"/> Hydrogen Sulfide (A4)   |                 |            | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                        |           |   | <input type="checkbox"/> Other (Explain in Remarks)   |                      |              |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)   |                 |            | <input checked="" type="checkbox"/> Depleted Matrix (F3)                 |           |   | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |                      |              |
| <input type="checkbox"/> Thick Dark Surface (A12)  |                 |            | <input type="checkbox"/> Redox Dark Surface (F6)                         |           |   |   |                      |              |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)  |                 |            | <input type="checkbox"/> Depleted Dark Surface (F7)                      |           |   |   |                      |              |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)  |                 |            | <input type="checkbox"/> Redox Depressions (F8)                          |           |   |   |                      |              |
| <b>Restrictive Layer (if present):</b>   |                 |            |  |           | <b>Hydric Soils Present?</b>  |   |                      |              |
| Type: _____  |                 |            |  |           | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |   |                      |              |
| Depth (inches): _____  |                 |            |  |           |   |   |                      |              |
| Remarks:   |                 |            |  |           |   |   |                      |              |

**HYDROLOGY**

| Wetland Hydrology Indicators:  |   |                           |   |  |  |
|--|---|---------------------------|---|--|--|
| Primary Indicators (minimum of one required; check all that apply)   |   |                           | Secondary Indicators (2 or more required)                           |  |  |
| <input checked="" type="checkbox"/> Surface Water (A1)   | <input type="checkbox"/> Water-Stained Leaves (B9)                      |                           | <input type="checkbox"/> Water-Stained Leaves (B9)                  |  |  |
| <input checked="" type="checkbox"/> High Water Table (A2)  | <b>(except MLRA 1, 2, 4A, and 4B)</b>                                   |                           | <b>(MLRA 1, 2, 4A, and 4B)</b>                                      |  |  |
| <input checked="" type="checkbox"/> Saturation (A3)  | <input type="checkbox"/> Salt Crust (B11)                               |                           | <input type="checkbox"/> Drainage Patterns (B10)                    |  |  |
| <input type="checkbox"/> Water Marks (B1)  | <input type="checkbox"/> Aquatic Invertebrates (B13)                    |                           | <input type="checkbox"/> Dry-Season Water Table (C2)                |  |  |
| <input type="checkbox"/> Sediment Deposits (B2)  | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                     |                           | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)  |  |  |
| <input type="checkbox"/> Drift Deposits (B3)   | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)  |                           | <input type="checkbox"/> Geomorphic Position (D2)                   |  |  |
| <input type="checkbox"/> Algal Mat or Crust (B4)   | <input type="checkbox"/> Presence of Reduced Iron (C4)                  |                           | <input type="checkbox"/> Shallow Aquitard (D3)                      |  |  |
| <input type="checkbox"/> Iron Deposits (B5)  | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)     |                           | <input type="checkbox"/> FAC-Neutral Test (D5)                      |  |  |
| <input type="checkbox"/> Surface Soil Cracks (B6)  | <input type="checkbox"/> Stunted or Stresses Plants (D1) <b>(LRR A)</b> |                           | <input type="checkbox"/> Raised Ant Mounds (D6) <b>(LRR A)</b>      |  |  |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)   | <input type="checkbox"/> Other (Explain in Remarks)                     |                           | <input type="checkbox"/> Frost-Heave Hummocks (D7)                  |  |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |                           |   |  |  |
| <b>Field Observations:</b>   |   |                           | <b>Wetland Hydrology Present?</b>                                   |  |  |
| Surface Water Present?   | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>     | Depth (inches): _____     | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |  |  |
| Water Table Present?   | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>     | Depth (inches): <u>11</u> |   |  |  |
| Saturation Present?<br>(includes capillary fringe)   | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>     | Depth (inches): <u>3</u>  |   |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: |   |                           |   |  |  |
| Remarks:   |   |                           |   |  |  |

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

Project Site: 3121 66<sup>th</sup> Ave NE City/County: Marysville/Snohomish Sampling Date: 1/23/20  
 Applicant/Owner: Sunnyside Village Cohousing State: WA Sampling Point: 11  
 Investigator(s): L. Baldwin, F. McNair Section, Township, Range: Sec. 5, T39N, R4E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): concave Slope (%): 0-1  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: WGS 1984  
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|  |   |  |  |                              |  |
|--|---|--|--|------------------------------|--|
| Hydrophytic Vegetation Present?                          | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | <b>Is the Sampled Area within a Wetland?</b> | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Hydric Soil Present?                                     | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |  | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?                               | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |  | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Remarks: <b>Vegetation appears to be regularly mowed</b> |   |  |  |                              |  |

**VEGETATION – Use scientific names of plants**

| Stratum  | Absolute % Cover                        | Dominant Species?           | Indicator Status | Dominance Test Worksheet:   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
|--|---|-----------------------------|------------------|---|--------------------------|---|-----------------------------|------------|------------------------|----------------|-----------------------|-----------------|--------------------|------------|-------------------|------------|------------------------------|----------------|-------------------------------------|--|
| <u>Tree Stratum</u> (Plot size: <u>30ft</u> )          |   |                             |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 1. <u><i>Alnus rubra</i></u>                           | <u>20</u>                               | <u>yes</u>                  | <u>FAC</u>       | Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 2. <u><i>Populus balsamifera</i></u>                   | <u>30</u>                               | <u>yes</u>                  | <u>FAC</u>       |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 3. _____   | _____                                   | _____                       | _____            |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 4. <u>40</u>   | _____                                   | _____                       | _____            | Total Number of Dominant Species Across All Strata: <u>520</u> (B)  |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 50% = <u>25</u> , 20% = <u>10</u>                      | <u>50</u>                               | = Total Cover               |                  | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)  |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| <u>Sapling/Shrub Stratum</u> (Plot size: <u>30ft</u> ) |   |                             |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 1. <u><i>Rubus armeniacus</i></u>                      | <u>20</u>                               | <u>yes</u>                  | <u>FAC</u>       | <b>Prevalence Index worksheet:</b><br><table style="width: 100%; border: none;"> <tr> <td style="text-align: center;"><u>Total % Cover of:</u></td> <td style="text-align: center;"><u>Multiply by:</u></td> </tr> <tr> <td>OBL species _____</td> <td>x1 = _____</td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>75</u></td> <td>x3 = <u>225</u></td> </tr> <tr> <td>FACU species _____</td> <td>x4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x5 = _____</td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>265</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.8</u></td> </tr> </table> | <u>Total % Cover of:</u> | <u>Multiply by:</u>                     | OBL species _____           | x1 = _____ | FACW species <u>20</u> | x2 = <u>40</u> | FAC species <u>75</u> | x3 = <u>225</u> | FACU species _____ | x4 = _____ | UPL species _____ | x5 = _____ | Column Totals: <u>95</u> (A) | <u>265</u> (B) | Prevalence Index = B/A = <u>2.8</u> |  |
| <u>Total % Cover of:</u>                               | <u>Multiply by:</u>                     |                             |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| OBL species _____                                      | x1 = _____                              |                             |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| FACW species <u>20</u>                                 | x2 = <u>40</u>                          |                             |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| FAC species <u>75</u>                                  | x3 = <u>225</u>                         |                             |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| FACU species _____                                     | x4 = _____                              |                             |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| UPL species _____                                      | x5 = _____                              |                             |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| Column Totals: <u>95</u> (A)                           | <u>265</u> (B)                          |                             |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| Prevalence Index = B/A = <u>2.8</u>                    |   |                             |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 2. _____   | _____                                   | _____                       | _____            |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 3. _____   | _____                                   | _____                       | _____            |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 4. _____   | _____                                   | _____                       | _____            |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 5. _____   | _____                                   | _____                       | _____            |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 50% = _____, 20% = _____                               | <u>20</u>                               | = Total Cover               |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| <u>Herb Stratum</u> (Plot size: <u>10ft</u> )          |   |                             |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 1. <u><i>Phalaris arundinacea</i></u>                  | <u>20</u>                               | <u>yes</u>                  | <u>FACW</u>      | <b>Hydrophytic Vegetation Indicators:</b><br><input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation<br><input checked="" type="checkbox"/> 2 - Dominance Test is >50%<br><input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup><br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)<br><br><sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.                                |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 2. <u><i>Ranunculus repens</i></u>                     | <u>5</u>                                | <u>yes</u>                  | <u>FAC</u>       |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 3. _____   | _____                                   | _____                       | _____            |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 4. _____   | _____                                   | _____                       | _____            |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 5. _____   | _____                                   | _____                       | _____            |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 6. _____   | _____                                   | _____                       | _____            |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 7. _____   | _____                                   | _____                       | _____            |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 8. _____   | _____                                   | _____                       | _____            |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 9. _____   | _____                                   | _____                       | _____            |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 10. _____  | _____                                   | _____                       | _____            |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 11. _____  | _____                                   | _____                       | _____            |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 50% = <u>12.5</u> , 20% = <u>5</u>                     | <u>25</u>                               | = Total Cover               |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| <u>Woody Vine Stratum</u> (Plot size: _____)           |   |                             |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 1. _____   | _____                                   | _____                       | _____            | <b>Hydrophytic Vegetation Present?</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;"></td> <td style="width: 10%;">Yes <input checked="" type="checkbox"/></td> <td style="width: 10%;">No <input type="checkbox"/></td> </tr> </table>   |                          | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
|  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 2. _____   | _____                                   | _____                       | _____            |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| 50% = _____, 20% = _____                               | _____                                   | = Total Cover               |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| % Bare Ground in Herb Stratum _____                    |   |                             |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |
| Remarks:   |   |                             |                  |   |                          |   |                             |            |                        |                |                       |                 |                    |            |                   |            |                              |                |                                     |  |

**SOIL**

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)                                    |                 |            |  |          |   |   |                      |              |
|--|-----------------|------------|--|----------|---|---|----------------------|--------------|
| Depth<br>(inches)  | Matrix          |            | Redox Features   |          |   |   | Texture              | Remarks      |
|  | Color (moist)   | %          | Color (moist)  | %        | Type <sup>1</sup>   | Loc <sup>2</sup>  |                      |              |
| 0-11   | <u>10YR 3/2</u> | <u>100</u> | _____  | _____    | _____   | _____   | <u>gravelly silt</u> | <u>sandy</u> |
| 11-15  | <u>10YR 4/6</u> | <u>95</u>  | <u>10YR 4/2</u>  | <u>5</u> | <u>D</u>  | <u>M</u>  | <u>gravelly silt</u> | <u>sandy</u> |
| _____  | _____           | _____      | _____  | _____    | _____   | _____   | _____                | _____        |
| _____  | _____           | _____      | _____  | _____    | _____   | _____   | _____                | _____        |
| _____  | _____           | _____      | _____  | _____    | _____   | _____   | _____                | _____        |
| _____  | _____           | _____      | _____  | _____    | _____   | _____   | _____                | _____        |
| _____  | _____           | _____      | _____  | _____    | _____   | _____   | _____                | _____        |
| <sup>1</sup> Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix |                 |            |  |          |   |   |                      |              |
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>   |                 |            |  |          |   | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>   |                      |              |
| <input type="checkbox"/> Histosol (A1)   |                 |            | <input type="checkbox"/> Sandy Redox (S5)                                |          |   | <input type="checkbox"/> 2 cm Muck (A10)  |                      |              |
| <input type="checkbox"/> Histic Epipedon (A2)  |                 |            | <input type="checkbox"/> Stripped Matrix (S6)                            |          |   | <input type="checkbox"/> Red Parent Material (TF2)  |                      |              |
| <input type="checkbox"/> Black Histic (A3)   |                 |            | <input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(except MLRA 1)</b> |          |   | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |                      |              |
| <input type="checkbox"/> Hydrogen Sulfide (A4)   |                 |            | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                        |          |   | <input type="checkbox"/> Other (Explain in Remarks)   |                      |              |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)   |                 |            | <input type="checkbox"/> Depleted Matrix (F3)                            |          |   | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |                      |              |
| <input type="checkbox"/> Thick Dark Surface (A12)  |                 |            | <input type="checkbox"/> Redox Dark Surface (F6)                         |          |   |   |                      |              |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)  |                 |            | <input type="checkbox"/> Depleted Dark Surface (F7)                      |          |   |   |                      |              |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)  |                 |            | <input type="checkbox"/> Redox Depressions (F8)                          |          |   |   |                      |              |
| <b>Restrictive Layer (if present):</b>   |                 |            |  |          | <b>Hydric Soils Present?</b>  |   |                      |              |
| Type: _____  |                 |            |  |          | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |   |                      |              |
| Depth (inches): _____  |                 |            |  |          |   |   |                      |              |
| Remarks:   |                 |            |  |          |   |   |                      |              |

**HYDROLOGY**

| Wetland Hydrology Indicators:  |   |                       |   |  |  |
|--|---|-----------------------|---|--|--|
| Primary Indicators (minimum of one required; check all that apply)   |   |                       | Secondary Indicators (2 or more required)                           |  |  |
| <input type="checkbox"/> Surface Water (A1)  | <input type="checkbox"/> Water-Stained Leaves (B9)                      |                       | <input type="checkbox"/> Water-Stained Leaves (B9)                  |  |  |
| <input type="checkbox"/> High Water Table (A2)   | <b>(except MLRA 1, 2, 4A, and 4B)</b>                                   |                       | <b>(MLRA 1, 2, 4A, and 4B)</b>                                      |  |  |
| <input type="checkbox"/> Saturation (A3)   | <input type="checkbox"/> Salt Crust (B11)                               |                       | <input type="checkbox"/> Drainage Patterns (B10)                    |  |  |
| <input type="checkbox"/> Water Marks (B1)  | <input type="checkbox"/> Aquatic Invertebrates (B13)                    |                       | <input type="checkbox"/> Dry-Season Water Table (C2)                |  |  |
| <input type="checkbox"/> Sediment Deposits (B2)  | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                     |                       | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)  |  |  |
| <input type="checkbox"/> Drift Deposits (B3)   | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)  |                       | <input type="checkbox"/> Geomorphic Position (D2)                   |  |  |
| <input type="checkbox"/> Algal Mat or Crust (B4)   | <input type="checkbox"/> Presence of Reduced Iron (C4)                  |                       | <input type="checkbox"/> Shallow Aquitard (D3)                      |  |  |
| <input type="checkbox"/> Iron Deposits (B5)  | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)     |                       | <input type="checkbox"/> FAC-Neutral Test (D5)                      |  |  |
| <input type="checkbox"/> Surface Soil Cracks (B6)  | <input type="checkbox"/> Stunted or Stresses Plants (D1) <b>(LRR A)</b> |                       | <input type="checkbox"/> Raised Ant Mounds (D6) <b>(LRR A)</b>      |  |  |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)   | <input type="checkbox"/> Other (Explain in Remarks)                     |                       | <input type="checkbox"/> Frost-Heave Hummocks (D7)                  |  |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |                       |   |  |  |
| <b>Field Observations:</b>   |   |                       | <b>Wetland Hydrology Present?</b>                                   |  |  |
| Surface Water Present?   | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>     | Depth (inches): _____ | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |  |  |
| Water Table Present?   | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>     | Depth (inches): _____ |   |  |  |
| Saturation Present?<br>(includes capillary fringe)   | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>     | Depth (inches): _____ |   |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: |   |                       |   |  |  |
| Remarks:   |   |                       |   |  |  |

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

Project Site: 3121 66<sup>th</sup> Ave NE City/County: Marysville/Snohomish Sampling Date: 1/23/20  
 Applicant/Owner: Sunnyside Village Cohousing State: WA Sampling Point: 12  
 Investigator(s): L. Baldwin, F. McNair Section, Township, Range: Sec. 5, T39N, R4E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): concave Slope (%): 0-1  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: WGS 1984  
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

|  |   |  |  |                              |  |
|--|---|--|--|------------------------------|--|
| Hydrophytic Vegetation Present?                          | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | <b>Is the Sampled Area within a Wetland?</b> | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Hydric Soil Present?                                     | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |  | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?                               | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |  | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Remarks: <b>Vegetation appears to be regularly mowed</b> |   |  |  |                              |  |

### VEGETATION – Use scientific names of plants

| Stratum  | Absolute % Cover | Dominant Species?   | Indicator Status |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
|--|------------------|---------------------|------------------|---|--------------------------|--|---------------------|--|-------------|-------|------|-------|--------------|----------|------|-----------|-------------|-----------|------|------------|--------------|-----------|------|-----------|-------------|-------|------|-------|----------------|----------------|--|----------------|--------------------------------------|--|--|--|
| <u>Tree Stratum</u> (Plot size: <u>30ft</u> )          |                  |                     |                  | <b>Dominance Test Worksheet:</b><br>Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>1</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 1. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 2. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 3. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 4. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 50% = _____, 20% = _____                               | _____            | = Total Cover       |                  |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| <u>Sapling/Shrub Stratum</u> (Plot size: <u>30ft</u> ) |                  |                     |                  | <b>Prevalence Index worksheet:</b><br><table style="width: 100%;"><tr><td colspan="2" style="text-align: center;"><u>Total % Cover of:</u></td><td colspan="2" style="text-align: center;"><u>Multiply by:</u></td></tr><tr><td>OBL species</td><td>_____</td><td>x1 =</td><td>_____</td></tr><tr><td>FACW species</td><td><u>5</u></td><td>x2 =</td><td><u>10</u></td></tr><tr><td>FAC species</td><td><u>95</u></td><td>x3 =</td><td><u>285</u></td></tr><tr><td>FACU species</td><td><u>10</u></td><td>x4 =</td><td><u>40</u></td></tr><tr><td>UPL species</td><td>_____</td><td>x5 =</td><td>_____</td></tr><tr><td>Column Totals:</td><td><u>110</u> (A)</td><td></td><td><u>335</u> (B)</td></tr><tr><td colspan="4" style="text-align: center;">Prevalence Index = B/A = <u>3.04</u></td></tr></table> | <u>Total % Cover of:</u> |  | <u>Multiply by:</u> |  | OBL species | _____ | x1 = | _____ | FACW species | <u>5</u> | x2 = | <u>10</u> | FAC species | <u>95</u> | x3 = | <u>285</u> | FACU species | <u>10</u> | x4 = | <u>40</u> | UPL species | _____ | x5 = | _____ | Column Totals: | <u>110</u> (A) |  | <u>335</u> (B) | Prevalence Index = B/A = <u>3.04</u> |  |  |  |
| <u>Total % Cover of:</u>                               |                  | <u>Multiply by:</u> |                  |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| OBL species  | _____            | x1 =                | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| FACW species   | <u>5</u>         | x2 =                | <u>10</u>        |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| FAC species  | <u>95</u>        | x3 =                | <u>285</u>       |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| FACU species   | <u>10</u>        | x4 =                | <u>40</u>        |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| UPL species  | _____            | x5 =                | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| Column Totals:   | <u>110</u> (A)   |                     | <u>335</u> (B)   |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| Prevalence Index = B/A = <u>3.04</u>                   |                  |                     |                  |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 1. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 2. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 3. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 4. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 5. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 50% = _____, 20% = _____                               | _____            | = Total Cover       |                  |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| <u>Herb Stratum</u> (Plot size: <u>10ft</u> )          |                  |                     |                  | <b>Hydrophytic Vegetation Indicators:</b><br><input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation<br><input checked="" type="checkbox"/> 2 - Dominance Test is >50%<br><input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup><br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)<br><br><sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 1. <u>Phalaris arundinacea</u>                         | <u>5</u>         | <u>no</u>           | <u>FACW</u>      |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 2. <u>Ranunculus repens</u>                            | <u>95</u>        | <u>yes</u>          | <u>FAC</u>       |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 3. <u>Reynoutria japonica</u>                          | <u>10</u>        | <u>no</u>           | <u>FACU</u>      |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 4. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 5. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 6. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 7. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 8. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 9. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 10. _____  | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 11. _____  | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 50% = <u>55</u> , 20% = <u>22</u>                      | <u>110</u>       | = Total Cover       |                  |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| <u>Woody Vine Stratum</u> (Plot size: _____)           |                  |                     |                  | <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 1. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 2. _____   | _____            | _____               | _____            |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| 50% = _____, 20% = _____                               | _____            | = Total Cover       |                  |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| % Bare Ground in Herb Stratum _____                    |                  |                     |                  |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |
| Remarks:   |                  |                     |                  |   |                          |  |                     |  |             |       |      |       |              |          |      |           |             |           |      |            |              |           |      |           |             |       |      |       |                |                |  |                |                                      |  |  |  |



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

Project Site: 3121 66<sup>th</sup> Ave NE City/County: Marysville/Snohomish Sampling Date: 1/23/20  
 Applicant/Owner: Sunnyside Village Cohousing State: WA Sampling Point: 13  
 Investigator(s): L. Baldwin, F. McNair Section, Township, Range: Sec. 5, T39N, R4E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): concave Slope (%): 0-1  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: WGS 1984  
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

|  |   |  |  |                              |  |
|--|---|--|--|------------------------------|--|
| Hydrophytic Vegetation Present?                          | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | <b>Is the Sampled Area within a Wetland?</b> | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Hydric Soil Present?                                     | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |  | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |  | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Remarks: <b>Vegetation appears to be regularly mowed</b> |   |  |  |                              |  |

## VEGETATION – Use scientific names of plants

| Tree Stratum (Plot size: 30ft)          | Absolute % Cover | Dominant Species? | Indicator Status | Dominance Test Worksheet:  |                                     |
|---|------------------|-------------------|------------------|--|-------------------------------------|
| 1. _____                                | _____            | _____             | _____            | Number of Dominant Species That Are OBL, FACW, or FAC:   | 2 (A)                               |
| 2. _____                                | _____            | _____             | _____            | Total Number of Dominant Species Across All Strata:  | 2 (B)                               |
| 3. _____                                | _____            | _____             | _____            | Percent of Dominant Species That Are OBL, FACW, or FAC:  | 100 (A/B)                           |
| 4. _____                                | _____            | _____             | _____            |  |                                     |
| 50% = _____, 20% = _____                | _____            | = Total Cover     |                  |  |                                     |
| Sapling/Shrub Stratum (Plot size: 30ft) | Absolute % Cover | Dominant Species? | Indicator Status | Prevalence Index worksheet:  |                                     |
| 1. <u>Rubus armeniacus</u>              | 5                | yes               | FAC              | Total % Cover of:  | Multiply by:                        |
| 2. _____                                | _____            | _____             | _____            | OBL species _____  | x1 = _____                          |
| 3. _____                                | _____            | _____             | _____            | FACW species _____   | x2 = _____                          |
| 4. _____                                | _____            | _____             | _____            | FAC species <u>95</u>  | x3 = <u>285</u>                     |
| 5. _____                                | _____            | _____             | _____            | FACU species <u>10</u>   | x4 = <u>40</u>                      |
| 50% = _____, 20% = _____                | _____            | = Total Cover     |                  | UPL species _____  | x5 = _____                          |
| Herb Stratum (Plot size: 10ft)          |                  |                   |                  | Column Totals: <u>110</u> (A)  | <u>325</u> (B)                      |
| 1. <u>Holcus lanatus</u>                | 10               | no                | FAC              | Prevalence Index = B/A = <u>2.95</u>   |                                     |
| 2. <u>Ranunculus repens</u>             | 80               | yes               | FAC              | <b>Hydrophytic Vegetation Indicators:</b><br><input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation<br><input checked="" type="checkbox"/> 2 - Dominance Test is >50%<br><input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup><br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)<br><br><sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |                                     |
| 3. <u>Reynoutria japonica</u>           | 10               | no                | FACU             |  |                                     |
| 4. _____                                | _____            | _____             | _____            |  |                                     |
| 5. _____                                | _____            | _____             | _____            |  |                                     |
| 6. _____                                | _____            | _____             | _____            |  |                                     |
| 7. _____                                | _____            | _____             | _____            |  |                                     |
| 8. _____                                | _____            | _____             | _____            |  |                                     |
| 9. _____                                | _____            | _____             | _____            |  |                                     |
| 10. _____                               | _____            | _____             | _____            |  |                                     |
| 11. _____                               | _____            | _____             | _____            |  |                                     |
| 50% = <u>50</u> , 20% = <u>20</u>       | <u>100</u>       | = Total Cover     |                  |  |                                     |
| Woody Vine Stratum (Plot size: _____)   | Absolute % Cover | Dominant Species? | Indicator Status | Hydrophytic Vegetation Present?  |                                     |
| 1. _____                                | _____            | _____             | _____            | Yes  | <input checked="" type="checkbox"/> |
| 2. _____                                | _____            | _____             | _____            | No   | <input type="checkbox"/>            |
| 50% = _____, 20% = _____                | _____            | = Total Cover     |                  |  |                                     |
| % Bare Ground in Herb Stratum _____     |                  |                   |                  |  |                                     |
| Remarks:                                |                  |                   |                  |  |                                     |





**APPENDIX D**  
**Wetland Rating Forms**

Wetland name or number A

## RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland A Date of site visit: 1/23/20  
 Rated by L. Baldwin, E. Hurn Trained by Ecology?  Yes \_\_\_ No Date of training 10/20/18  
 HGM Class used for rating Depressional Wetland has multiple HGM classes? \_\_\_ Y  N

**NOTE: Form is not complete without the figures requested (figures can be combined).**  
 Source of base aerial photo/map ESRI basemap

**OVERALL WETLAND CATEGORY IV** (based on functions  or special characteristics \_\_\_)

### 1. Category of wetland based on FUNCTIONS

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

| FUNCTION                              | Improving Water Quality |            | Hydrologic |   | Habitat    |            |              |            |            |
|---------------------------------------|-------------------------|------------|------------|---|------------|------------|--------------|------------|------------|
| <i>Circle the appropriate ratings</i> |                         |            |            |   |            |            |              |            |            |
| Site Potential                        | H                       | M          | <u>(L)</u> | H | <u>(M)</u> | L          | H            | M          | <u>(L)</u> |
| Landscape Potential                   | H                       | <u>(M)</u> | L          | H | M          | <u>(L)</u> | H            | <u>(M)</u> | L          |
| Value                                 | <u>(H)</u>              | M          | L          | H | <u>(M)</u> | L          | H            | M          | <u>(L)</u> |
| Score Based on Ratings                | <u>6</u>                |            | <u>5</u>   |   | <u>4</u>   |            | <b>TOTAL</b> | <u>15</u>  |            |

**Score for each function based on three ratings (order of ratings is not important)**

- 9 = H,H,H
- 8 = H,H,M
- 7 = H,H,L
- 7 = H,M,M
- 6 = H,M,L
- 6 = M,M,M
- 5 = H,L,L
- 5 = M,M,L
- 4 = M,L,L
- 3 = L,L,L

### 2. Category based on SPECIAL CHARACTERISTICS of wetland

| CHARACTERISTIC                     | CATEGORY    |
|------------------------------------|-------------|
| Estuarine                          | I II        |
| Wetland of High Conservation Value | I           |
| Bog                                | I           |
| Mature Forest                      | I           |
| Old Growth Forest                  | I           |
| Coastal Lagoon                     | I II        |
| Interdunal                         | I II III IV |
| None of the above                  | <u>NA</u>   |

Wetland name or number A

## Maps and figures required to answer questions correctly for Western Washington

### Depressional Wetlands

| Map of:   | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes  | D 1.3, H 1.1, H 1.4  | 1        |
| Hydroperiods  | D 1.4, H 1.2         | 2        |
| Location of outlet ( <i>can be added to map of hydroperiods</i> )   | D 1.1, D 4.1         | NA       |
| Boundary of area within 150 ft of the wetland ( <i>can be added to another figure</i> )   | D 2.2, D 5.2         | 1        |
| Map of the contributing basin   | D 4.3, D 5.3         | 3        |
| 1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat | H 2.1, H 2.2, H 2.3  | 4        |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website)   | D 3.1, D 3.2         | 5        |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web)  | D 3.3                | 6        |

### 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 ( <i>can be added to another figure</i> )   | R 2.4                |          |
| Plant cover of trees, shrubs, and herbaceous plants   | R 1.2, R 4.2         |          |
| Width of unit vs. width of stream ( <i>can be added to another figure</i> )   | R 4.1                |          |
| Map of the contributing basin   | R 2.2, R 2.3, R 5.2  |          |
| 1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat | H 2.1, H 2.2, H 2.3  |          |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website)   | R 3.1                |          |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web)  | R 3.2, R 3.3         |          |

### Lake Fringe Wetlands

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

### Slope Wetlands

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

Wetland name or number A

## HGM Classification of Wetlands in Western Washington

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

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

1. Are the water levels in the entire unit usually controlled by tides except during floods?

NO - go to 2

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

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

NO - **Saltwater Tidal Fringe (Estuarine)**

YES - **Freshwater Tidal Fringe**

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

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

NO - go to 3

YES - The wetland class is **Flats**

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

3. Does the entire wetland unit **meet all** of the following criteria?

- The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;
- At least 30% of the open water area is deeper than 6.6 ft (2 m).

NO - go to 4

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

4. Does the entire wetland unit **meet all** of the following criteria?

- The wetland is on a slope (*slope can be very gradual*),
- The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,
- The water leaves the wetland **without being impounded**.

NO - go to 5

YES - The wetland class is **Slope**

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

5. Does the entire wetland unit **meet all** of the following criteria?

- The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,
- The overbank flooding occurs at least once every 2 years.

Wetland name or number A

**NO** - go to 6

**YES** - The wetland class is **Riverine**

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

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

**NO** - go to 7

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

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

**NO** - go to 8

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

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

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

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

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



Wetland name or number A

**DEPRESSIONAL AND FLATS WETLANDS**

**Water Quality Functions - Indicators that the site functions to improve water quality**

|   |                                   |   |
|---|-----------------------------------|---|
| <b>D 1.0. Does the site have the potential to improve water quality?</b>  |                                   |   |
| <b>D 1.1. Characteristics of surface water outflows from the wetland:</b>   |                                   |   |
| Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet).<br>points = 3        |                                   | 3 |
| Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet.<br>points = 2            |                                   |   |
| Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing<br>points = 1                   |                                   |   |
| Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch.<br>points = 1                      |                                   |   |
| <b>D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). Yes = 4 No = 0</b> |                                   | 0 |
| <b>D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</b>    |                                   |   |
| Wetland has persistent, ungrazed, plants > 95% of area<br>points = 5  |                                   | 0 |
| Wetland has persistent, ungrazed, plants > 1/2 of area<br>points = 3  |                                   |   |
| Wetland has persistent, ungrazed plants > 1/10 of area<br>points = 1  |                                   |   |
| Wetland has persistent, ungrazed plants < 1/10 of area<br>points = 0  |                                   |   |
| <b>D 1.4. Characteristics of seasonal ponding or inundation:</b>  |                                   |   |
| <i>This is the area that is ponded for at least 2 months. See description in manual.</i>  |                                   |   |
| Area seasonally ponded is > 1/2 total area of wetland<br>points = 4   |                                   | 0 |
| Area seasonally ponded is > 1/4 total area of wetland<br>points = 2   |                                   |   |
| Area seasonally ponded is < 1/4 total area of wetland<br>points = 0   |                                   |   |
| <b>Total for D 1</b>  | Add the points in the boxes above | 3 |

**Rating of Site Potential** If score is: 12-16 = H 6-11 = M  0-5 = L Record the rating on the first page

|   |                                   |   |
|---|-----------------------------------|---|
| <b>D 2.0. Does the landscape have the potential to support the water quality function of the site?</b>                    |                                   |   |
| <b>D 2.1. Does the wetland unit receive stormwater discharges?</b>  | Yes = 1 No = 0                    | 0 |
| <b>D 2.2. Is &gt; 10% of the area within 150 ft of the wetland in land uses that generate pollutants?</b>                 | Yes = 1 No = 0                    | 0 |
| <b>D 2.3. Are there septic systems within 250 ft of the wetland?</b>  | Yes = 1 No = 0                    | 1 |
| <b>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?</b> |                                   |   |
| Source _____  | Yes = 1 No = 0                    | 0 |
| <b>Total for D 2</b>  | Add the points in the boxes above | 1 |

**Rating of Landscape Potential** If score is: 3 or 4 = H  1 or 2 = M 0 = L Record the rating on the first page

|  |                                   |   |
|--|-----------------------------------|---|
| <b>D 3.0. Is the water quality improvement provided by the site valuable to society?</b>   |                                   |   |
| <b>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?</b>  | Yes = 1 No = 0                    | 0 |
| <b>D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?</b>  | Yes = 1 No = 0                    | 1 |
| <b>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)?</b> | Yes = 2 No = 0                    | 2 |
| <b>Total for D 3</b>   | Add the points in the boxes above | 3 |

**Rating of Value** If score is:  2-4 = H 1 = M 0 = L Record the rating on the first page



Wetland name or number A

**DEPRESSIONAL AND FLATS WETLANDS**

**Hydrologic Functions** - Indicators that the site functions to reduce flooding and stream degradation

|   |  |          |
|---|--|----------|
| <b>D 4.0. Does the site have the potential to reduce flooding and erosion?</b>  |  |          |
| <b>D 4.1. Characteristics of surface water outflows from the wetland:</b>   |  |          |
| Wetland is a depression or flat depression with no surface water leaving it (no outlet)   | points = 4                               | 4        |
| Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet   | points = 2                               |          |
| Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch   | points = 1                               |          |
| Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing   | points = 0                               |          |
| <b>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.</b> |  |          |
| Marks of ponding are 3 ft or more above the surface or bottom of outlet   | points = 7                               | 0        |
| Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet  | points = 5                               |          |
| Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet  | points = 3                               |          |
| The wetland is a "headwater" wetland  | points = 3                               |          |
| Wetland is flat but has small depressions on the surface that trap water  | points = 1                               |          |
| Marks of ponding less than 0.5 ft (6 in)  | points = 0                               |          |
| <b>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.</b>               |  |          |
| The area of the basin is less than 10 times the area of the unit  | points = 5                               | 3        |
| 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                               |          |
| <b>Total for D 4</b>  | <b>Add the points in the boxes above</b> | <b>7</b> |

**Rating of Site Potential** If score is: 12-16 = H  6-11 = M  0-5 = L Record the rating on the first page

|   |  |          |
|---|--|----------|
| <b>D 5.0. Does the landscape have the potential to support hydrologic functions of the site?</b>  |  |          |
| <b>D 5.1. Does the wetland receive stormwater discharges?</b>   | Yes = 1 No = 0                           | 0        |
| <b>D 5.2. Is &gt;10% of the area within 150 ft of the wetland in land uses that generate excess runoff?</b>   | Yes = 1 No = 0                           | 0        |
| <b>D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at &gt;1 residence/ac, urban, commercial, agriculture, etc.)?</b> | Yes = 1 No = 0                           | 0        |
| <b>Total for D 5</b>  | <b>Add the points in the boxes above</b> | <b>0</b> |

**Rating of Landscape Potential** If score is:  3 = H  1 or 2 = M  0 = L Record the rating on the first page

|  |  |          |
|--|--|----------|
| <b>D 6.0. Are the hydrologic functions provided by the site valuable to society?</b>   |  |          |
| <b>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.</b> |  |          |
| 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                               |          |
| <b>D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?</b>  | Yes = 2 No = 0                           | 0        |
| <b>Total for D 6</b>   | <b>Add the points in the boxes above</b> | <b>1</b> |

**Rating of Value** If score is:  2-4 = H  1 = M  0 = L Record the rating on the first page

Wetland name or number A

**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.*

- |  |                                  |
|--|----------------------------------|
| <input type="checkbox"/> Aquatic bed                                       | 4 structures or more: points = 4 |
| <input checked="" type="checkbox"/> Emergent                               | 3 structures: points = 2         |
| <input type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover) | 2 structures: points = 1         |
| <input type="checkbox"/> 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

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*).

- |  |                                     |
|--|-------------------------------------|
| <input type="checkbox"/> Permanently flooded or inundated                                    | 4 or more types present: points = 3 |
| <input checked="" type="checkbox"/> Seasonally flooded or inundated                          | 3 types present: points = 2         |
| <input type="checkbox"/> Occasionally flooded or inundated                                   | 2 types present: points = 1         |
| <input checked="" type="checkbox"/> Saturated only   | 1 type present: points = 0          |
| <input type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland |                                     |
| <input type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland           |                                     |
| <input type="checkbox"/> <b>Lake Fringe wetland</b>  | <b>2 points</b>                     |
| <input type="checkbox"/> <b>Freshwater tidal wetland</b>                                     | <b>2 points</b>                     |

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft<sup>2</sup>.

*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 |

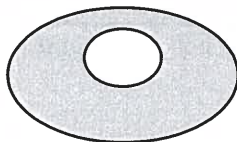
10

H 1.4. Interspersion of habitats

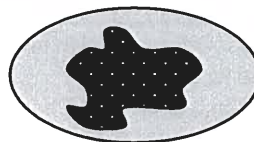
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



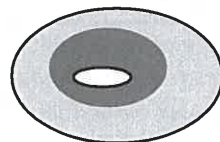
None = 0 points



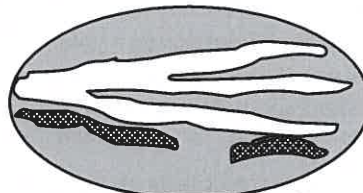
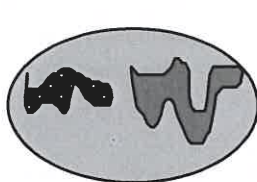
Low = 1 point



Moderate = 2 points



All three diagrams in this row are **HIGH** = 3points



0

Wetland name or number A

|   |                                   |   |
|---|-----------------------------------|---|
| <b>H 1.5. Special habitat features:</b><br>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i><br><input type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).<br><input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland<br><input type="checkbox"/> Undercut banks are present for at least 6.6 ft (2 m) <b>and/or</b> 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)<br><input type="checkbox"/> 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 that have not yet weathered where wood is exposed</i> )<br><input type="checkbox"/> 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> )<br><input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants ( <i>see H 1.1 for list of strata</i> ) |                                   | 0 |
| Total for H 1   | Add the points in the boxes above | 1 |

**Rating of Site Potential** If score is: 15-18 = H 7-14 = M  0-6 = L *Record the rating on the first page*

|   |                                   |   |
|---|-----------------------------------|---|
| <b>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</b>   |                                   |   |
| <b>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</b><br><i>Calculate:</i> % undisturbed habitat <u>5</u> + [(% moderate and low intensity land uses)/2] <u>5</u> = <u>55</u> %<br>If total accessible habitat is:<br>> 1/3 (33.3%) of 1 km Polygon <span style="float: right;">points = 3</span><br>20-33% of 1 km Polygon <span style="float: right;">points = 2</span><br>10-19% of 1 km Polygon <span style="float: right;">points = 1</span><br>< 10% of 1 km Polygon <span style="float: right;">points = 0</span>           |                                   | 0 |
| <b>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</b><br><i>Calculate:</i> % undisturbed habitat <u>34</u> + [(% moderate and low intensity land uses)/2] <u>10</u> = <u>44</u> %<br>Undisturbed habitat > 50% of Polygon <span style="float: right;">points = 3</span><br>Undisturbed habitat 10-50% and in 1-3 patches <span style="float: right;">points = 2</span><br>Undisturbed habitat 10-50% and > 3 patches <span style="float: right;">points = 1</span><br>Undisturbed habitat < 10% of 1 km Polygon <span style="float: right;">points = 0</span> |                                   | 1 |
| <b>H 2.3. Land use intensity in 1 km Polygon: If</b><br>> 50% of 1 km Polygon is high intensity land use <span style="float: right;">points = (-2)</span><br>≤ 50% of 1 km Polygon is high intensity <span style="float: right;">points = 0</span>  |                                   | 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*

|   |  |   |
|---|--|---|
| <b>H 3.0. Is the habitat provided by the site valuable to society?</b>  |  |   |
| <b>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></b><br>Site meets ANY of the following criteria: <span style="float: right;">points = 2</span><br><input type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)<br><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)<br><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species<br><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources<br><input type="checkbox"/> 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<br>Site has 1 or 2 priority habitats (listed on next page) within 100 m <span style="float: right;">points = 1</span><br>Site does not meet any of the criteria above <span style="float: right;">points = 0</span> |  | 0 |

**Rating of Value** If score is: 2 = H 1 = M  0 = L *Record the rating on the first page*

Wetland name or number A

## WDFW Priority Habitats

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

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

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

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



Wetland name or number A

**CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

| Wetland Type   | Category              |
|--|-----------------------|
| <i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>  |                       |
| <b>SC 1.0. Estuarine wetlands</b><br>Does the wetland meet the following criteria for Estuarine wetlands?<br>— The dominant water regime is tidal,<br>— Vegetated, and<br>— With a salinity greater than 0.5 ppt   |                       |
| Yes –Go to <b>SC 1.1</b> <b>No = Not an estuarine wetland</b>  |                       |
| <b>SC 1.1.</b> 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?  | Cat. I                |
| Yes = <b>Category I</b> No - Go to <b>SC 1.2</b>   |                       |
| <b>SC 1.2.</b> Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?<br>— 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 <i>Spartina</i> , see page 25)<br>— 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.<br>— The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. | Cat. I<br><br>Cat. II |
| Yes = <b>Category I</b> No = <b>Category II</b>  |                       |
| <b>SC 2.0. Wetlands of High Conservation Value (WHCV)</b><br><b>SC 2.1.</b> Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?   | Cat. I                |
| Yes – Go to <b>SC 2.2</b> No – Go to <b>SC 2.3</b>   |                       |
| <b>SC 2.2.</b> Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?   | Cat. I                |
| Yes = <b>Category I</b> <b>No = Not a WHCV</b>   |                       |
| <b>SC 2.3.</b> Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland?<br><a href="http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf">http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</a>   | Cat. I                |
| Yes – <b>Contact WNHP/WDNR and go to SC 2.4</b> No = <b>Not a WHCV</b>   |                       |
| <b>SC 2.4.</b> Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?  | Cat. I                |
| Yes = <b>Category I</b> No = <b>Not a WHCV</b>   |                       |
| <b>SC 3.0. Bogs</b><br>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i>   |                       |
| <b>SC 3.1.</b> 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?  | Cat. I                |
| Yes – Go to <b>SC 3.3</b> <b>No – Go to SC 3.2</b>   |                       |
| <b>SC 3.2.</b> 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?  | Cat. I                |
| Yes – Go to <b>SC 3.3</b> <b>No = Is not a bog</b>   |                       |
| <b>SC 3.3.</b> 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?   | Cat. I                |
| Yes = <b>Is a Category I bog</b> No – Go to <b>SC 3.4</b>  |                       |
| <b>NOTE:</b> 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.  |                       |
| <b>SC 3.4.</b> 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?   | Cat. I                |
| Yes = <b>Is a Category I bog</b> No = <b>Is not a bog</b>  |                       |

Wetland name or number A

|   |  |
|---|--|
| <p><b>SC 4.0. Forested Wetlands</b></p> <p>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 answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> <li>— <b>Old-growth forests</b> (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.</li> <li>— <b>Mature forests</b> (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).</li> </ul> <p>Yes = <b>Category I</b>    No = <b>Not a forested wetland for this section</b></p>  | <p><b>Cat. I</b></p>   |
| <p><b>SC 5.0. Wetlands in Coastal Lagoons</b></p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> <li>— 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</li> <li>— The lagoon in which the wetland is located contains ponded water that is saline or brackish (&gt; 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>)</li> </ul> <p>Yes – Go to <b>SC 5.1</b>    No = <b>Not a wetland in a coastal lagoon</b></p> <p><b>SC 5.1. Does the wetland meet all of the following three conditions?</b></p> <ul style="list-style-type: none"> <li>— 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).</li> <li>— 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.</li> <li>— The wetland is larger than 1/10 ac (4350 ft<sup>2</sup>)</li> </ul> <p>Yes = <b>Category I</b>    No = <b>Category II</b></p> | <p><b>Cat. I</b></p> <p><b>Cat. II</b></p>   |
| <p><b>SC 6.0. Interdunal Wetlands</b></p> <p>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 based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> <li>— Long Beach Peninsula: Lands west of SR 103</li> <li>— Grayland-Westport: Lands west of SR 105</li> <li>— Ocean Shores-Copalis: Lands west of SR 115 and SR 109</li> </ul> <p>Yes – Go to <b>SC 6.1</b>    No = <b>not an interdunal wetland for rating</b></p> <p><b>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)?</b><br/>Yes = <b>Category I</b>    No – Go to <b>SC 6.2</b></p> <p><b>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?</b><br/>Yes = <b>Category II</b>    No – Go to <b>SC 6.3</b></p> <p><b>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?</b><br/>Yes = <b>Category III</b>    No = <b>Category IV</b></p>   | <p><b>Cat I</b></p> <p><b>Cat. II</b></p> <p><b>Cat. III</b></p> <p><b>Cat. IV</b></p> |
| <p><b>Category of wetland based on Special Characteristics</b><br/>If you answered No for all types, enter "Not Applicable" on Summary Form</p>   | <p><b>NA</b></p>   |



Wetland name or number \_\_\_\_\_

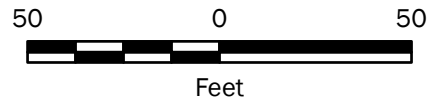
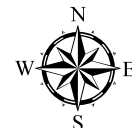
*This page left blank intentionally*



\\geoengineers.com\WANN\Projects\_24\24145001\GIS\MXD\24145001\_WetlandA\_F01\_cowardin.mxd Date Exported: 01/24/20 by lbaldrin

**Legend**

- Emergent
- 150-ft Boundary



**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet

**Wetland A Cowardin**

Sunnyside Village - Cottage Housing  
Marysville, Washington




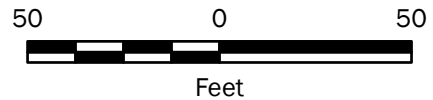
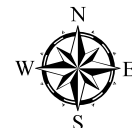
**Figure 1**

\\geoengineers.com\WANN\Projects\_24\24145001\GIS\MXD\24145001\_WetlandA\_F02\_hydroperiods.mxd Date Exported: 01/24/20 by lbaldwin



**Legend**

 Seasonally Inundated



**Notes:**

- 1. The locations of all features shown are approximate.
- 2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet

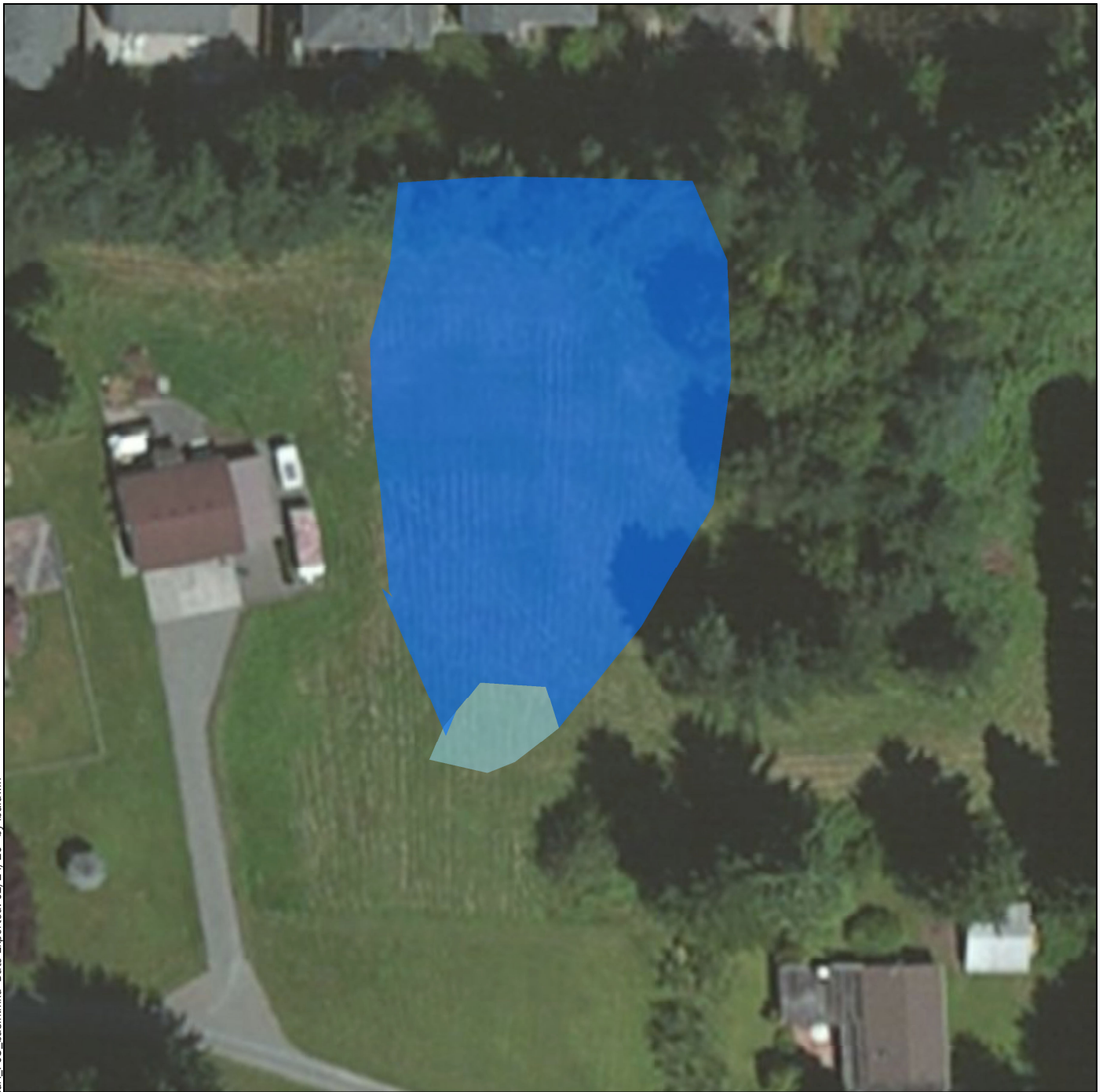
**Wetland A Hydroperiods**

Sunnyside Village - Cottage Housing  
Marysville, Washington



**Figure 2**

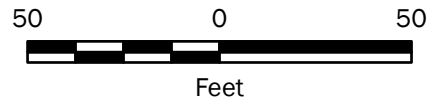
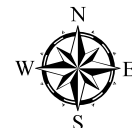




\\geoengineers.com\WANN\Projects\_24\24145001\GIS\MXD\24145001\_WetlandA\_F03\_basin.mxd Date Exported: 01/24/20 by lbaldwin

**Legend**

- Wetland
- Basin



**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet

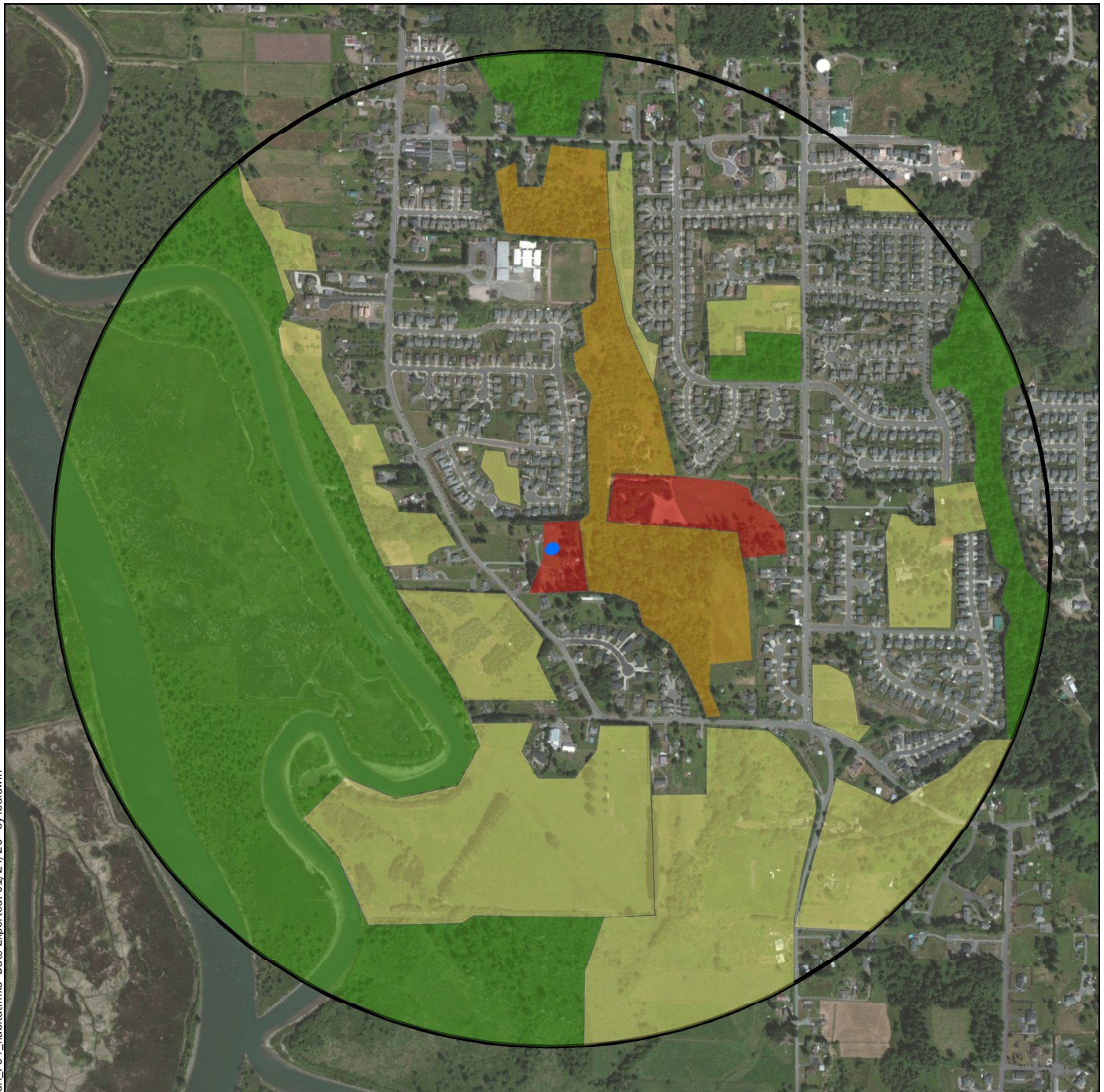
**Wetland A Contributing Basin**

Sunnyside Village - Cottage Housing  
Marysville, Washington



**Figure 3**





\\geoengineers.com\WANN\Projects\24\24145001\GIS\MXD\24145001\_WetlandA\_F04\_habitat.mxd Date Exported: 01/24/20 by lbaidwin

**Legend**

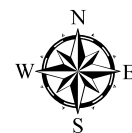
- Wetland
- Accessible low/moderate intensity use
- Accessible undisturbed
- Low/moderate intensity use
- Undisturbed

**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet



1,000                      0                      1,000



Feet

**Wetland A Habitat**

Sunnyside Village - Cottage Housing  
Marysville, Washington



**Figure 4**



Add or remove map data

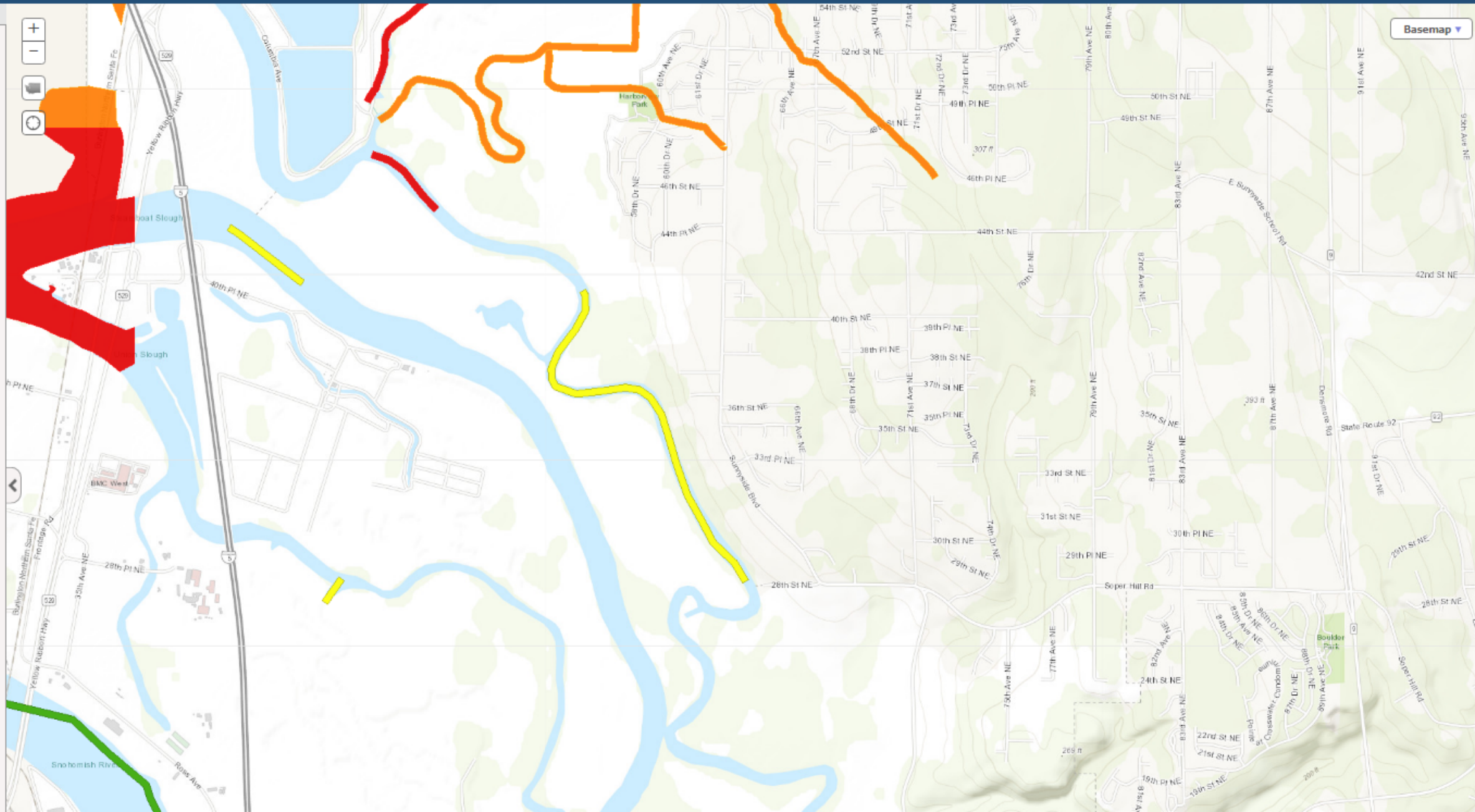
Assessed Waters/Sediment

Water

- Category 5 - 303d
- Category 4C
- Category 4B
- Category 4A
- Category 2
- Category 1

Sediment

- Category 5 - 303d
- Category 4C
- Category 4B
- Category 4A
- Category 2
- Category 1





## Publication Summary

Our Ecology website has changed, which can cause broken links.  
 To report these, please [contact us](#) with the publication and broken link.

|                      |  |                |              |
|----------------------|--|----------------|--------------|
| TITLE                | <b>Snohomish River Tributaries Fecal Coliform Total Maximum Daily Load Submittal Report</b>  |                |              |
|                      | Publication number   | Date Published | Date Revised |
|                      | 00-10-087  | November 2000  | June 2001    |
| VIEW NOW:            | <a href="#">Snohomish River Tributaries Fecal Coliform Total Maximum Daily Load Submittal Report</a> (Number of pages: 85) (Publication Size: 720KB) <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;">           Trouble viewing? Try these free options.           <ul style="list-style-type: none"> <li>Get the latest <a href="#">Adobe Reader</a> for PDFs.</li> <li>For Excel or Word viewing get <a href="#">Open Office</a>, <a href="#">Microsoft OneDrive</a>, <a href="#">DropBox Basic</a> or a mobile app at your favorite app store.</li> </ul> </div> |                |              |
| AUTHOR(S)            | Robert Wright, Randy Coots, and Robert Cusimano  |                |              |
| DESCRIPTION          | <p>The Snohomish River basin drains 1,978 square miles and discharges to Possession Sound near the City of Everett. The junction of two major rivers, the Skykomish and Snoqualmie, forms the Snohomish River. The TMDL study area is comprised of the main Snohomish River tributaries: Quilceda, Allen, Woods, French Creek, the Marshlands and Pilchuck River and is referred to as the Snohomish River Tributaries Watershed in this document.</p>   |                |              |
| REQUEST A COPY       | <p>The mission of the Department of Ecology is to protect, preserve, and enhance Washington's environment. To help us meet that goal, please consider the environment before you print or request a copy.</p> <p><b>Accessibility Options</b><br/>         Persons with hearing loss can call 711 for Washington Relay Service<br/>         Persons with a speech disability can call 877-833-6341</p> <ul style="list-style-type: none"> <li><a href="#">Water Quality Order Form</a></li> </ul>  |                |              |
| CONTACT              | Ralph Svrjcek at 425-649-7165 or <a href="mailto:ralph.svrjcek@ecy.wa.gov">ralph.svrjcek@ecy.wa.gov</a>  |                |              |
| KEYWORDS             | creek, Snohomish River, report, study, basin, cleanup, river, water cleanup plan, plan, water, watershed, wood, Total Maximum Daily Load, fecal coliform   |                |              |
| RELATED PUBLICATIONS | <p>Title:</p> <p><a href="#">Snohomish County - Controlling Pet Waste in Suburban Areas</a></p> <p><a href="#">Lower Snohomish River Tributaries Fecal Coliform Bacteria Total Maximum Daily Load:Detailed Implementation Plan</a></p> <p><a href="#">Focus on Pet Waste Management</a></p> <p><a href="#">Water Cleanup Plans: Ecology seeks comments on plan to clean up bacteria in Snohomish River tributaries</a></p> <p><a href="#">Water Quality Assessment of Tributaries to the Snohomish River and Nonpoint Source Pollution TMDL</a></p>                                      |                |              |



Wetland name or number B

## RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland B Date of site visit: 1/25/20  
 Rated by L Baldwin Trained by Ecology?  Yes  No Date of training 10/20/18  
 HGM Class used for rating Depressional Wetland has multiple HGM classes?  Y  N

NOTE: Form is not complete without the figures requested (figures can be combined).

Source of base aerial photo/map ESRI basemap

OVERALL WETLAND CATEGORY IV (based on functions  or special characteristics )

### 1. Category of wetland based on FUNCTIONS

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

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

| FUNCTION                              | Improving Water Quality |          |          | Hydrologic |          |          | Habitat  |          |          |           |
|---------------------------------------|-------------------------|----------|----------|------------|----------|----------|----------|----------|----------|-----------|
| <i>Circle the appropriate ratings</i> |                         |          |          |            |          |          |          |          |          |           |
| Site Potential                        | H                       | M        | <u>L</u> | H          | <u>M</u> | L        | H        | M        | <u>L</u> |           |
| Landscape Potential                   | H                       | <u>M</u> | L        | H          | <u>M</u> | <u>L</u> | H        | <u>M</u> | L        |           |
| Value                                 | <u>H</u>                | M        | L        | H          | <u>M</u> | L        | H        | M        | <u>L</u> |           |
| Score Based on Ratings                | <u>6</u>                |          |          | <u>5</u>   |          |          | <u>4</u> |          |          | <u>15</u> |

### 2. Category based on SPECIAL CHARACTERISTICS of wetland

| CHARACTERISTIC                     | CATEGORY    |
|------------------------------------|-------------|
| Estuarine                          | I II        |
| Wetland of High Conservation Value | I           |
| Bog                                | I           |
| Mature Forest                      | I           |
| Old Growth Forest                  | I           |
| Coastal Lagoon                     | I II        |
| Interdunal                         | I II III IV |
| None of the above                  | <u>NA</u>   |

Wetland name or number B

## Maps and figures required to answer questions correctly for Western Washington

### Depressional Wetlands

| Map of:   | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes  | D 1.3, H 1.1, H 1.4  | 1        |
| Hydroperiods  | D 1.4, H 1.2         | 2        |
| Location of outlet ( <i>can be added to map of hydroperiods</i> )   | D 1.1, D 4.1         | NA       |
| Boundary of area within 150 ft of the wetland ( <i>can be added to another figure</i> )   | D 2.2, D 5.2         | 2        |
| Map of the contributing basin   | D 4.3, D 5.3         | 3        |
| 1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat | H 2.1, H 2.2, H 2.3  | 4        |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website)   | D 3.1, D 3.2         | 5        |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web)  | D 3.3                | 6        |

### 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 ( <i>can be added to another figure</i> )   | R 2.4                |          |
| Plant cover of trees, shrubs, and herbaceous plants   | R 1.2, R 4.2         |          |
| Width of unit vs. width of stream ( <i>can be added to another figure</i> )   | R 4.1                |          |
| Map of the contributing basin   | R 2.2, R 2.3, R 5.2  |          |
| 1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat | H 2.1, H 2.2, H 2.3  |          |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website)   | R 3.1                |          |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web)  | R 3.2, R 3.3         |          |

### Lake Fringe Wetlands

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

### Slope Wetlands

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

Wetland name or number B

## HGM Classification of Wetlands in Western Washington

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

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

1. Are the water levels in the entire unit usually controlled by tides except during floods?

NO - go to 2

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

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

**NO - Saltwater Tidal Fringe (Estuarine)**

**YES - Freshwater Tidal Fringe**

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

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

NO - go to 3

**YES** - The wetland class is **Flats**

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

3. Does the entire wetland unit **meet all** of the following criteria?

The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;

At least 30% of the open water area is deeper than 6.6 ft (2 m).

NO - go to 4

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

4. Does the entire wetland unit **meet all** of the following criteria?

The wetland is on a slope (*slope can be very gradual*),

The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,

The water leaves the wetland **without being impounded**.

NO - go to 5

YES - The wetland class is **Slope**

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

5. Does the entire wetland unit **meet all** of the following criteria?

The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

The overbank flooding occurs at least once every 2 years.

Wetland name or number B

NO - go to 6

YES - The wetland class is **Riverine**

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

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

NO - go to 7

YES - The wetland class is **Depressional**

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

NO - go to 8

YES - The wetland class is **Depressional**

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

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

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

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



Wetland name or number B

**DEPRESSIONAL AND FLATS WETLANDS**

**Water Quality Functions - Indicators that the site functions to improve water quality**

|   |  |          |
|---|--|----------|
| <b>D 1.0. Does the site have the potential to improve water quality?</b>  |  |          |
| <b>D 1.1. Characteristics of surface water outflows from the wetland:</b>   |  |          |
| Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet).<br>points = 3        |  |          |
| Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet.<br>points = 2            |  |          |
| Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing<br>points = 1                   |  | 3        |
| Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch.<br>points = 1                      |  |          |
| <b>D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). Yes = 4 No = 0</b> |  | 0        |
| <b>D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</b>    |  |          |
| Wetland has persistent, ungrazed, plants > 95% of area<br>points = 5  |  |          |
| Wetland has persistent, ungrazed, plants > 1/2 of area<br>points = 3  |  |          |
| Wetland has persistent, ungrazed plants > 1/10 of area<br>points = 1  |  |          |
| Wetland has persistent, ungrazed plants < 1/10 of area<br>points = 0  |  | 0        |
| <b>D 1.4. Characteristics of seasonal ponding or inundation:</b>  |  |          |
| <i>This is the area that is ponded for at least 2 months. See description in manual.</i>  |  |          |
| Area seasonally ponded is > 1/2 total area of wetland<br>points = 4   |  |          |
| Area seasonally ponded is > 1/4 total area of wetland<br>points = 2   |  |          |
| Area seasonally ponded is < 1/4 total area of wetland<br>points = 0   |  | 0        |
| <b>Total for D 1</b>  | <b>Add the points in the boxes above</b> | <b>3</b> |

**Rating of Site Potential** If score is: 12-16 = H 6-11 = M  0-5 = L Record the rating on the first page

|   |  |          |
|---|--|----------|
| <b>D 2.0. Does the landscape have the potential to support the water quality function of the site?</b>                    |  |          |
| <b>D 2.1. Does the wetland unit receive stormwater discharges?</b>  | Yes = 1 No = 0                           | 0        |
| <b>D 2.2. Is &gt; 10% of the area within 150 ft of the wetland in land uses that generate pollutants?</b>                 | Yes = 1 No = 0                           | 0        |
| <b>D 2.3. Are there septic systems within 250 ft of the wetland?</b>  | Yes = 1 No = 0                           | 1        |
| <b>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?</b> |  |          |
| Source _____  | Yes = 1 No = 0                           | 0        |
| <b>Total for D 2</b>  | <b>Add the points in the boxes above</b> | <b>1</b> |

**Rating of Landscape Potential** If score is: 3 or 4 = H  1 or 2 = M 0 = L Record the rating on the first page

|  |  |          |
|--|--|----------|
| <b>D 3.0. Is the water quality improvement provided by the site valuable to society?</b>   |  |          |
| <b>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?</b>  | Yes = 1 No = 0                           | 0        |
| <b>D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?</b>  | Yes = 1 No = 0                           | 1        |
| <b>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)?</b> | Yes = 2 No = 0                           | 2        |
| <b>Total for D 3</b>   | <b>Add the points in the boxes above</b> | <b>3</b> |

**Rating of Value** If score is:  2-4 = H 1 = M 0 = L Record the rating on the first page

Wetland name or number B

### DEPRESSIONAL AND FLATS WETLANDS

#### Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation

|   |                                   |   |
|---|-----------------------------------|---|
| <b>D 4.0. Does the site have the potential to reduce flooding and erosion?</b>  |                                   |   |
| <b>D 4.1. Characteristics of surface water outflows from the wetland:</b>   |                                   |   |
| Wetland is a depression or flat depression with no surface water leaving it (no outlet)   | points = 4                        | 4 |
| Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet   | points = 2                        |   |
| Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch   | points = 1                        |   |
| Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing   | points = 0                        |   |
| <b>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.</b> |                                   |   |
| Marks of ponding are 3 ft or more above the surface or bottom of outlet   | points = 7                        | 0 |
| Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet  | points = 5                        |   |
| Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet  | points = 3                        |   |
| The wetland is a "headwater" wetland  | points = 3                        |   |
| Wetland is flat but has small depressions on the surface that trap water  | points = 1                        |   |
| Marks of ponding less than 0.5 ft (6 in)  | points = 0                        |   |
| <b>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.</b>               |                                   |   |
| 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                        |   |
| <b>Total for D 4</b>  | Add the points in the boxes above | 9 |

**Rating of Site Potential** If score is: 12-16 = H  6-11 = M  0-5 = L Record the rating on the first page

|   |                                   |   |
|---|-----------------------------------|---|
| <b>D 5.0. Does the landscape have the potential to support hydrologic functions of the site?</b>  |                                   |   |
| <b>D 5.1. Does the wetland receive stormwater discharges?</b>   | Yes = 1 No = 0                    | 0 |
| <b>D 5.2. Is &gt;10% of the area within 150 ft of the wetland in land uses that generate excess runoff?</b>   | Yes = 1 No = 0                    | 0 |
| <b>D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at &gt;1 residence/ac, urban, commercial, agriculture, etc.)?</b> | Yes = 1 No = 0                    | 0 |
| <b>Total for D 5</b>  | Add the points in the boxes above | 0 |

**Rating of Landscape Potential** If score is:  3 = H  1 or 2 = M  0 = L Record the rating on the first page

|  |                                   |   |
|--|-----------------------------------|---|
| <b>D 6.0. Are the hydrologic functions provided by the site valuable to society?</b>   |                                   |   |
| <b>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.</b> |                                   |   |
| 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                        |   |
| <b>D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?</b>  | Yes = 2 No = 0                    | 0 |
| <b>Total for D 6</b>   | 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

Wetland name or number B

**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.*

- |   |                                  |
|---|----------------------------------|
| <input type="checkbox"/> Aquatic bed  | 4 structures or more: points = 4 |
| <input checked="" type="checkbox"/> Emergent  | 3 structures: points = 2         |
| <input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover) | 2 structures: points = 1         |
| <input type="checkbox"/> Forested (areas where trees have > 30% cover)                | 1 structure: points = 0          |

*If the unit has a Forested class, check if:*

- The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon

1

H 1.2. Hydroperiods

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (*see text for descriptions of hydroperiods*).

- |   |                                     |
|---|-------------------------------------|
| <input type="checkbox"/> Permanently flooded or inundated           | 4 or more types present: points = 3 |
| <input checked="" type="checkbox"/> Seasonally flooded or inundated | 3 types present: points = 2         |
| <input type="checkbox"/> Occasionally flooded or inundated          | 2 types present: points = 1         |
| <input checked="" type="checkbox"/> Saturated only                  | 1 type present: points = 0          |

Permanently flowing stream or river in, or adjacent to, the wetland

Seasonally flowing stream in, or adjacent to, the wetland

**Lake Fringe wetland**

**2 points**

**Freshwater tidal wetland**

**2 points**

1

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft<sup>2</sup>.

*Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle*

- |                              |            |
|------------------------------|------------|
| If you counted: > 19 species | points = 2 |
| 5 - 19 species               | points = 1 |
| < 5 species                  | points = 0 |

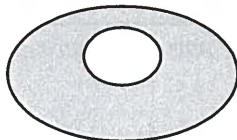
1

H 1.4. Interspersion of habitats

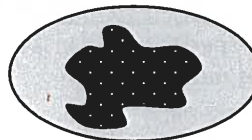
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



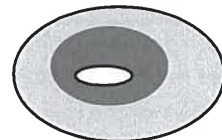
**None = 0 points**



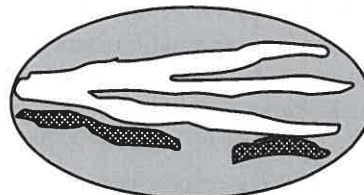
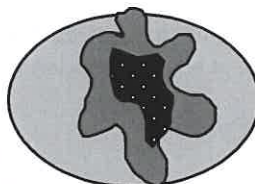
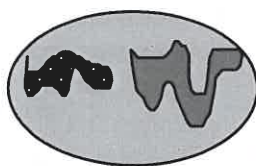
**Low = 1 point**



**Moderate = 2 points**



All three diagrams in this row are **HIGH = 3points**



0



Wetland name or number B

|  |                                   |   |
|--|-----------------------------------|---|
| <p>H 1.5. Special habitat features:<br/>         Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i><br/> <input type="checkbox"/> Large, downed, woody debris within the wetland (&gt; 4 in diameter and 6 ft long).<br/> <input type="checkbox"/> Standing snags (dbh &gt; 4 in) within the wetland<br/> <input type="checkbox"/> Undercut banks are present for at least 6.6 ft (2 m) <b>and/or</b> 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)<br/> <input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (&gt; 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>)<br/> <input type="checkbox"/> 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>)<br/> <input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p> |                                   | 0 |
| Total for H 1  | Add the points in the boxes above | 3 |

**Rating of Site Potential** If score is: 15-18 = H 7-14 = M  0-6 = L *Record the rating on the first page*

|  |                                   |
|--|-----------------------------------|
| <p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>  |                                   |
| <p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).<br/> <i>Calculate:</i> % undisturbed habitat ___ + [(% moderate and low intensity land uses)/2] ___ = ___ %<br/>         If total accessible habitat is:<br/>         &gt; 1/3 (33.3%) of 1 km Polygon <span style="float: right;">points = 3</span><br/>         20-33% of 1 km Polygon <span style="float: right;">points = 2</span><br/>         10-19% of 1 km Polygon <span style="float: right;">points = 1</span><br/>         &lt; 10% of 1 km Polygon <span style="float: right;">points = 0</span></p>  |                                   |
| <p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.<br/> <i>Calculate:</i> % undisturbed habitat ___ + [(% moderate and low intensity land uses)/2] ___ = ___ %<br/>         Undisturbed habitat &gt; 50% of Polygon <span style="float: right;">points = 3</span><br/>         Undisturbed habitat 10-50% and in 1-3 patches <span style="float: right;">points = 2</span><br/>         Undisturbed habitat 10-50% and &gt; 3 patches <span style="float: right;">points = 1</span><br/>         Undisturbed habitat &lt; 10% of 1 km Polygon <span style="float: right;">points = 0</span></p> |                                   |
| <p>H 2.3. Land use intensity in 1 km Polygon: If<br/>         &gt; 50% of 1 km Polygon is high intensity land use <span style="float: right;">points = (- 2)</span><br/>         ≤ 50% of 1 km Polygon is high intensity <span style="float: right;">points = 0</span></p>   |                                   |
| Total for H 2  | Add the points in the boxes above |

**Rating of Landscape Potential** If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

|   |  |
|---|--|
| <p>H 3.0. Is the habitat provided by the site valuable to society?</p>  |  |
| <p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i><br/>         Site meets ANY of the following criteria: <span style="float: right;">points = 2</span><br/> <input type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)<br/> <input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)<br/> <input type="checkbox"/> It is mapped as a location for an individual WDFW priority species<br/> <input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources<br/> <input type="checkbox"/> 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<br/>         Site has 1 or 2 priority habitats (listed on next page) within 100 m <span style="float: right;">points = 1</span><br/>         Site does not meet any of the criteria above <span style="float: right;">points = 0</span></p> |  |

**Rating of Value** If score is: 2 = H 1 = M  0 = L *Record the rating on the first page*

Wetland name or number B

## WDFW Priority Habitats

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

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

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

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



Wetland name or number B

**CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

| Wetland Type  | Category              |
|---|-----------------------|
| <i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>   |                       |
| <b>SC 1.0. Estuarine wetlands</b><br>Does the wetland meet the following criteria for Estuarine wetlands?<br>— The dominant water regime is tidal,<br>— Vegetated, and<br>— With a salinity greater than 0.5 ppt  |                       |
| Yes – Go to <b>SC 1.1</b> No = <b>Not an estuarine wetland</b>  |                       |
| <b>SC 1.1.</b> 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?   | Cat. I                |
| Yes = <b>Category I</b> No - Go to <b>SC 1.2</b>  |                       |
| <b>SC 1.2.</b> Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?<br>— 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 <i>Spartina</i> , see page 25)<br>— 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.<br>— The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.  | Cat. I<br><br>Cat. II |
| Yes = <b>Category I</b> No = <b>Category II</b>   |                       |
| <b>SC 2.0. Wetlands of High Conservation Value (WHCV)</b><br><b>SC 2.1.</b> Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?<br><b>SC 2.2.</b> Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?<br><b>SC 2.3.</b> Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland?<br><a href="http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf">http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</a><br><b>SC 2.4.</b> Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?   | Cat. I                |
| Yes – Go to <b>SC 2.2</b> No – Go to <b>SC 2.3</b><br>Yes = <b>Category I</b> No = <b>Not a WHCV</b><br>Yes – <b>Contact WNHP/WDNR and go to SC 2.4</b> No = <b>Not a WHCV</b><br>Yes = <b>Category I</b> No = <b>Not a WHCV</b>  |                       |
| <b>SC 3.0. Bogs</b><br>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i><br><b>SC 3.1.</b> 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?<br><b>SC 3.2.</b> 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?<br><b>SC 3.3.</b> 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?<br><b>NOTE:</b> 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.<br><b>SC 3.4.</b> 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? | Cat. I                |
| Yes – Go to <b>SC 3.3</b> No – Go to <b>SC 3.2</b><br>Yes – Go to <b>SC 3.3</b> No = <b>Is not a bog</b><br>Yes = <b>Is a Category I bog</b> No – Go to <b>SC 3.4</b><br>Yes = <b>Is a Category I bog</b> No = <b>Is not a bog</b>  |                       |

Wetland name or number B

|   |  |
|---|--|
| <p><b>SC 4.0. Forested Wetlands</b></p> <p>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 answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> <li>— <b>Old-growth forests</b> (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.</li> <li>— <b>Mature forests</b> (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).</li> </ul> <p>Yes = <b>Category I</b>    No = <b>Not a forested wetland for this section</b></p>  | <p><b>Cat. I</b></p>   |
| <p><b>SC 5.0. Wetlands in Coastal Lagoons</b></p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> <li>— 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</li> <li>— The lagoon in which the wetland is located contains ponded water that is saline or brackish (&gt; 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>)</li> </ul> <p>Yes – Go to <b>SC 5.1</b>    No = <b>Not a wetland in a coastal lagoon</b></p> <p><b>SC 5.1. Does the wetland meet all of the following three conditions?</b></p> <ul style="list-style-type: none"> <li>— 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).</li> <li>— 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.</li> <li>— The wetland is larger than 1/10 ac (4350 ft<sup>2</sup>)</li> </ul> <p>Yes = <b>Category I</b>    No = <b>Category II</b></p> | <p><b>Cat. I</b></p> <p><b>Cat. II</b></p>   |
| <p><b>SC 6.0. Interdunal Wetlands</b></p> <p>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 based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> <li>— Long Beach Peninsula: Lands west of SR 103</li> <li>— Grayland-Westport: Lands west of SR 105</li> <li>— Ocean Shores-Copalis: Lands west of SR 115 and SR 109</li> </ul> <p>Yes – Go to <b>SC 6.1</b>    No = <b>not an interdunal wetland for rating</b></p> <p><b>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)?</b><br/>Yes = <b>Category I</b>    No – Go to <b>SC 6.2</b></p> <p><b>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?</b><br/>Yes = <b>Category II</b>    No – Go to <b>SC 6.3</b></p> <p><b>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?</b><br/>Yes = <b>Category III</b>    No = <b>Category IV</b></p>   | <p><b>Cat I</b></p> <p><b>Cat. II</b></p> <p><b>Cat. III</b></p> <p><b>Cat. IV</b></p> |
| <p><b>Category of wetland based on Special Characteristics</b><br/>If you answered No for all types, enter "Not Applicable" on Summary Form</p>   | <p><b>NA</b></p>   |

Wetland name or number \_\_\_\_\_

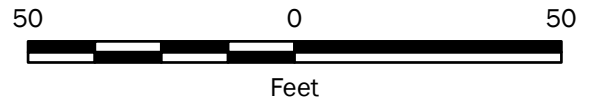
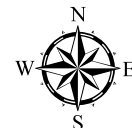
*This page left blank intentionally*



\\geoengineers.com\WANN\Projects\_24\24145001\GIS\MXD\24145001\_WetlandB\_F01\_cowardin.mxd Date Exported: 01/24/20 by lbalclwin

**Legend**

- Emergent
- Scrub-Shrub



**Notes:**

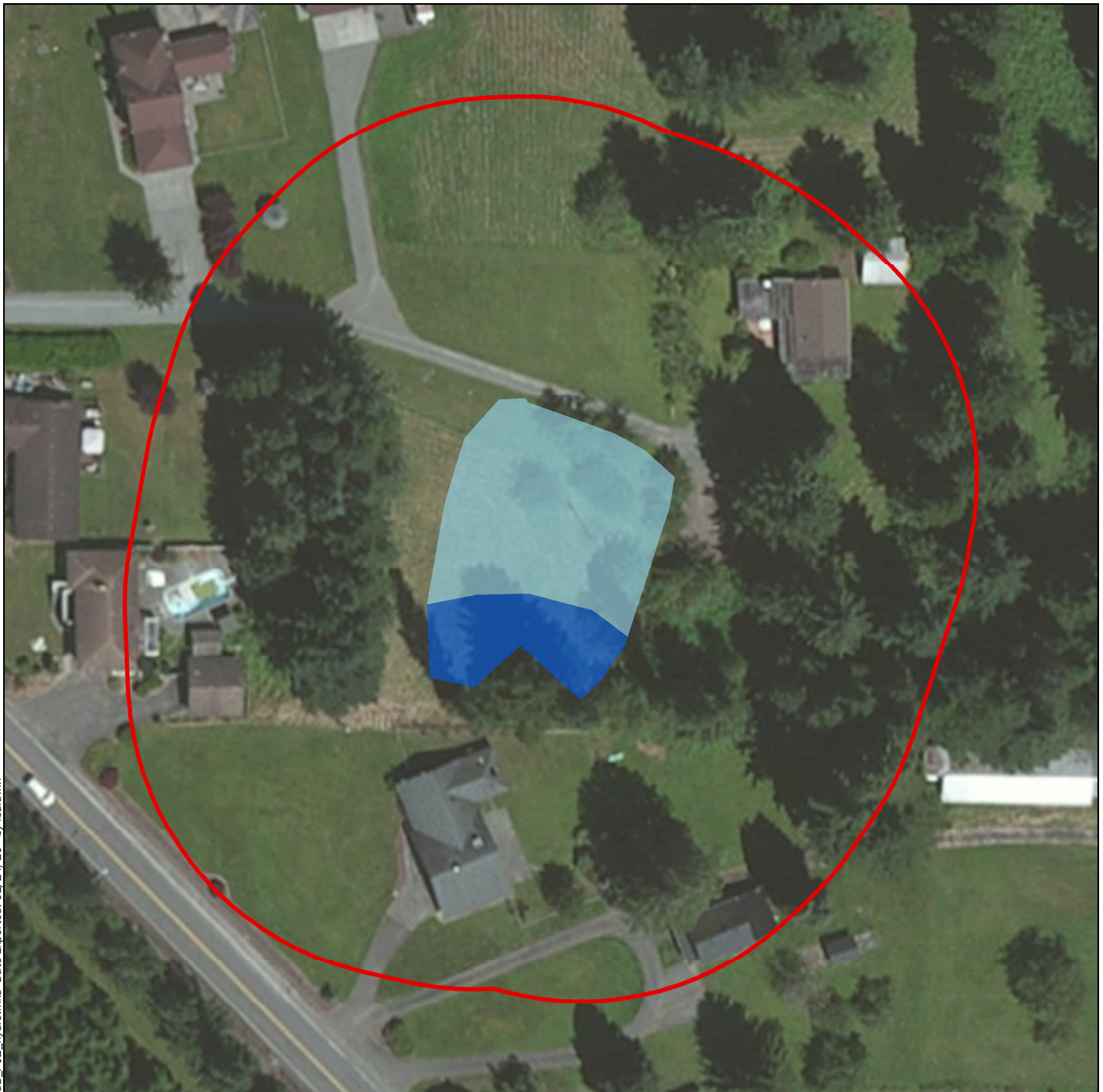
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet

|   |                 |
|---|-----------------|
| <b>Wetland B Cowardin</b>                                     |                 |
| Sunnyside Village - Cottage Housing<br>Marysville, Washington |                 |
|   | <b>Figure 1</b> |

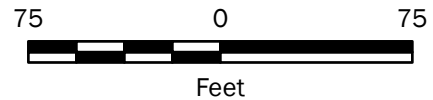
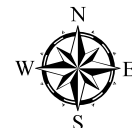




\\geoengineers.com\WANN\Projects\24\24145001\GIS\MXD\24145001\_WetlandB\_F02\_hydro.mxd Date Exported: 01/24/20 by lbaldwin

**Legend**

- Saturated
- Seasonally inundated
- 150-ft Boundary



**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet

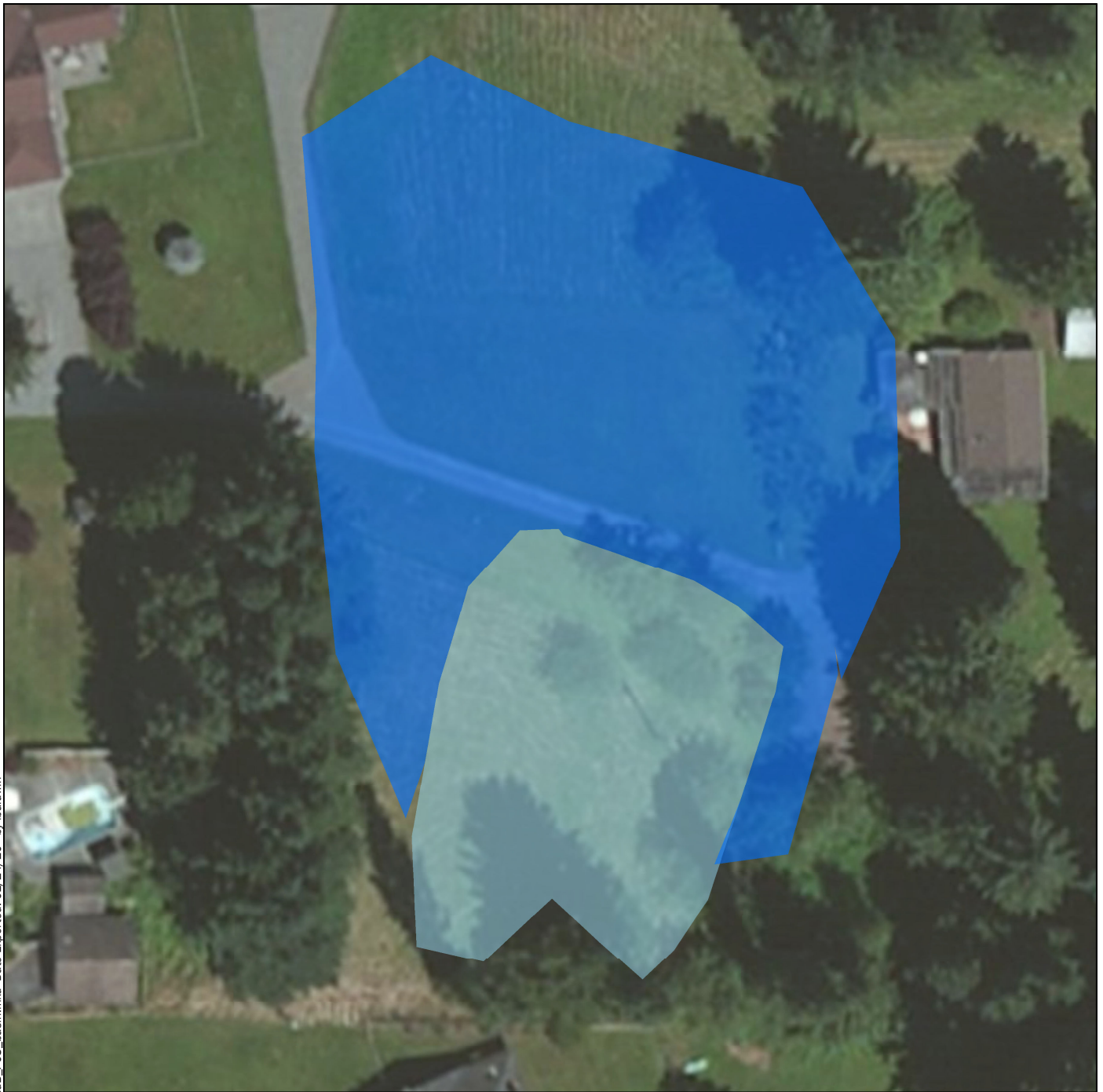
**Wetland B Hydroperiods**

Sunnyside Village - Cottage Housing  
Marysville, Washington



**Figure 2**

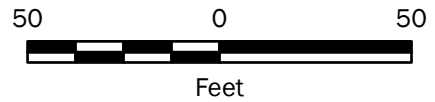
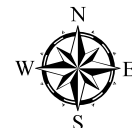




\\geoengineers.com\WANN\Projects\24\24145001\GIS\MXD\24145001\_WetlandB\_F03\_basin.mxd Date Exported: 01/24/20 by lbaldwin

**Legend**

- Wetland
- Basin



**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet

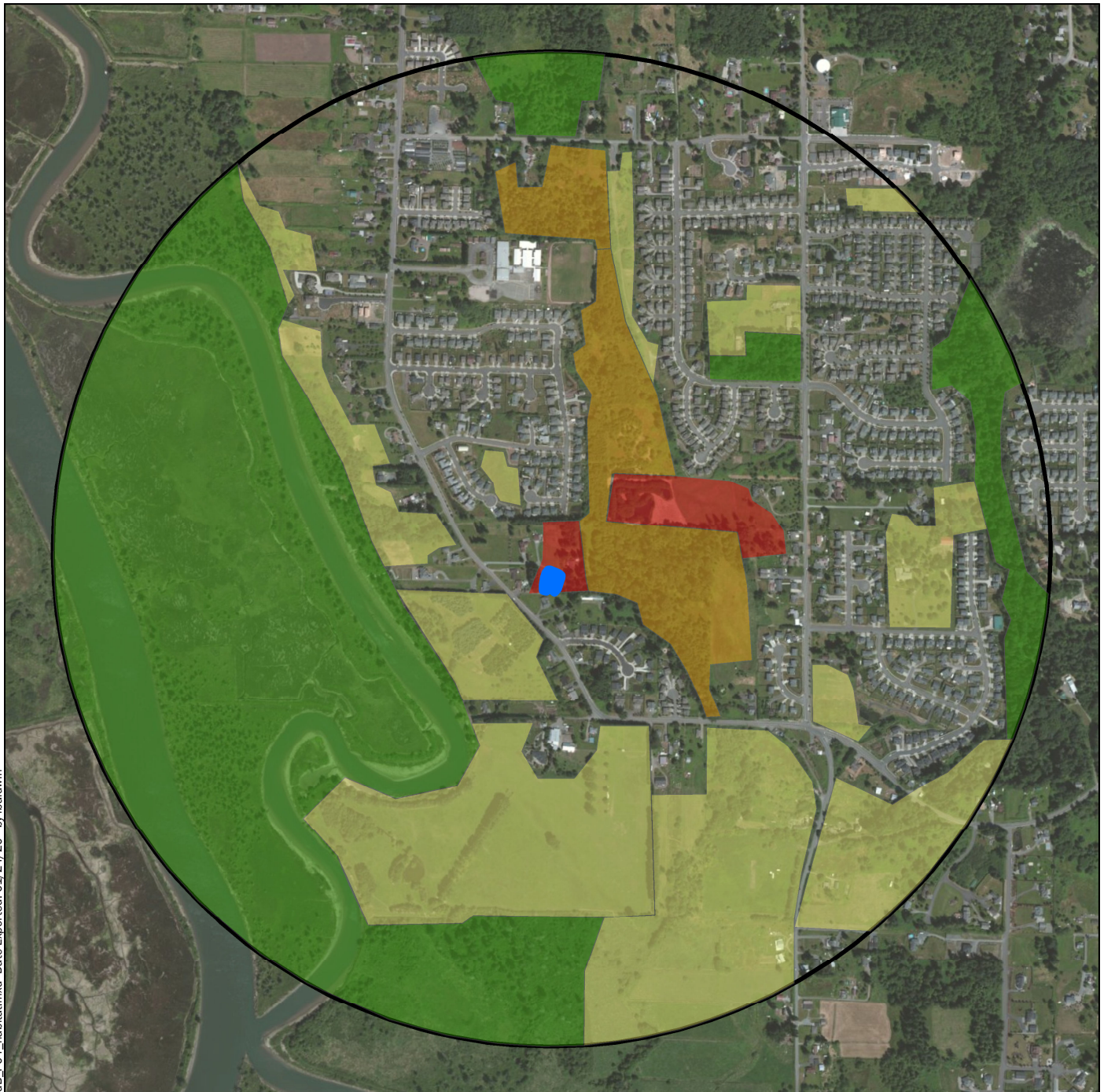
**Wetland B Contributing Basin**

Sunnyside Village - Cottage Housing  
Marysville, Washington



**Figure 3**





\\geoengineers.com\WANN\Projects\24\24145001\GIS\MXD\24145001\_WetlandB\_F04\_habitat.mxd Date Exported: 01/24/20 by lbaldwin

**Legend**

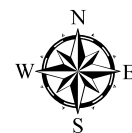
- Wetland
- Accessible low/moderate intensity use
- Accessible undisturbed
- Low/moderate intensity use
- Undisturbed

**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet



1,000                      0                      1,000



Feet

**Wetland B Habitat**

Sunnyside Village - Cottage Housing  
Marysville, Washington



**Figure 4**



Add or remove map data

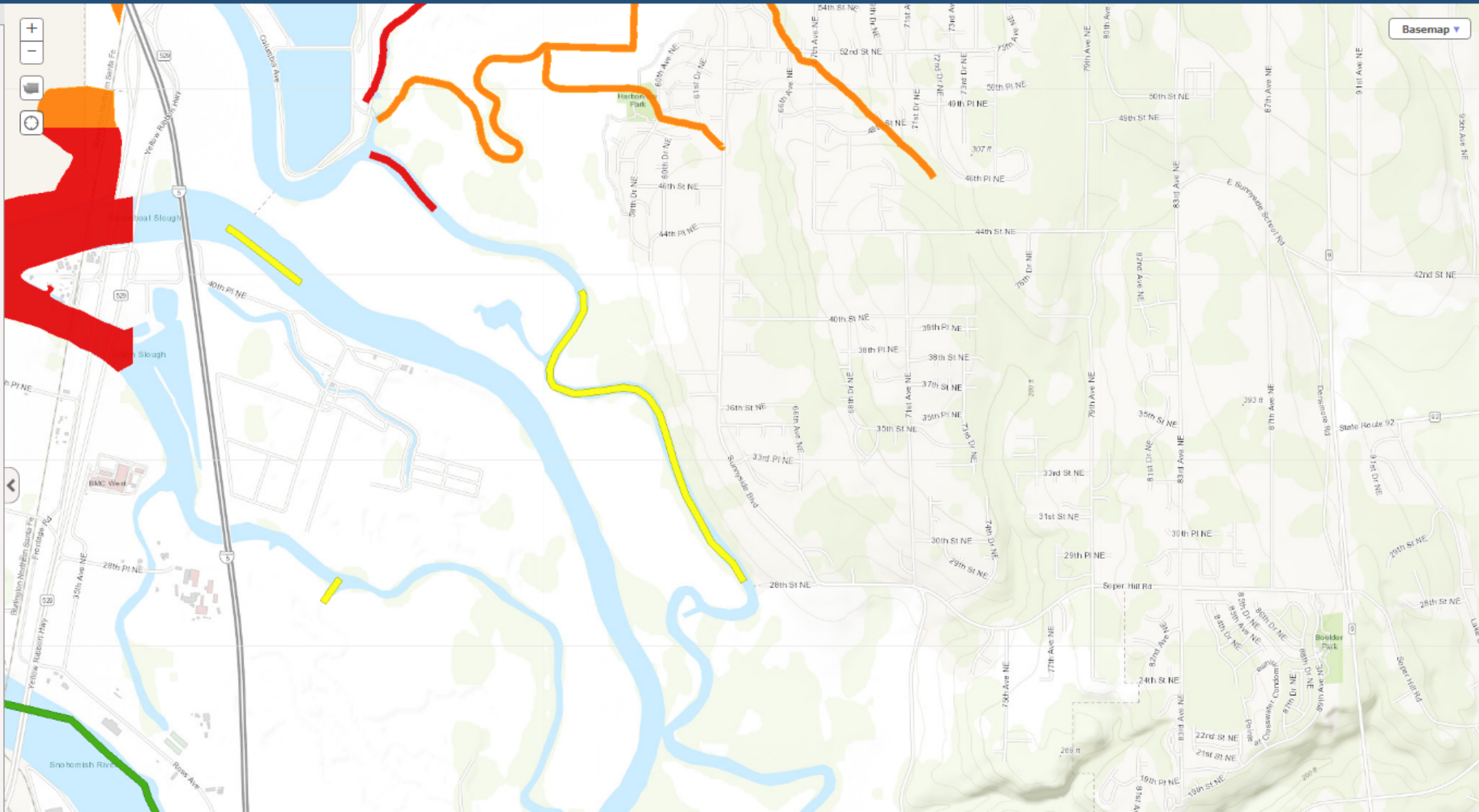
Assessed Waters/Sediment

Water

- Category 5 - 303d
- Category 4C
- Category 4B
- Category 4A
- Category 2
- Category 1

Sediment

- Category 5 - 303d
- Category 4C
- Category 4B
- Category 4A
- Category 2
- Category 1



## Publication Summary

Our Ecology website has changed, which can cause broken links.  
 To report these, please [contact us](#) with the publication and broken link.

|                      |  |                |              |
|----------------------|--|----------------|--------------|
| TITLE                | <b>Snohomish River Tributaries Fecal Coliform Total Maximum Daily Load Submittal Report</b>  |                |              |
|                      | Publication number   | Date Published | Date Revised |
|                      | 00-10-087  | November 2000  | June 2001    |
| VIEW NOW:            | <p><a href="#">Snohomish River Tributaries Fecal Coliform Total Maximum Daily Load Submittal Report</a> (Number of pages: 85) (Publication Size: 720KB)</p> <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>Trouble viewing? Try these free options.</p> <ul style="list-style-type: none"> <li>Get the latest <a href="#">Adobe Reader</a> for PDFs.</li> <li>For Excel or Word viewing get <a href="#">Open Office</a>, <a href="#">Microsoft OneDrive</a>, <a href="#">DropBox Basic</a> or a mobile app at your favorite app store.</li> </ul> </div> |                |              |
| AUTHOR(S)            | Robert Wright, Randy Coots, and Robert Cusimano  |                |              |
| DESCRIPTION          | <p>The Snohomish River basin drains 1,978 square miles and discharges to Possession Sound near the City of Everett. The junction of two major rivers, the Skykomish and Snoqualmie, forms the Snohomish River. The TMDL study area is comprised of the main Snohomish River tributaries: Quilceda, Allen, Woods, French Creek, the Marshlands and Pilchuck River and is referred to as the Snohomish River Tributaries Watershed in this document.</p>   |                |              |
| REQUEST A COPY       | <p>The mission of the Department of Ecology is to protect, preserve, and enhance Washington's environment. To help us meet that goal, please consider the environment before you print or request a copy.</p> <p><b>Accessibility Options</b><br/>       Persons with hearing loss can call 711 for Washington Relay Service<br/>       Persons with a speech disability can call 877-833-6341</p> <ul style="list-style-type: none"> <li><a href="#">Water Quality Order Form</a></li> </ul>  |                |              |
| CONTACT              | Ralph Svrjcek at 425-649-7165 or <a href="mailto:ralph.svrjcek@ecy.wa.gov">ralph.svrjcek@ecy.wa.gov</a>  |                |              |
| KEYWORDS             | creek, Snohomish River, report, study, basin, cleanup, river, water cleanup plan, plan, water, watershed, wood, Total Maximum Daily Load, fecal coliform   |                |              |
| RELATED PUBLICATIONS | <p>Title:</p> <p><a href="#">Snohomish County - Controlling Pet Waste in Suburban Areas</a></p> <p><a href="#">Lower Snohomish River Tributaries Fecal Coliform Bacteria Total Maximum Daily Load:Detailed Implementation Plan</a></p> <p><a href="#">Focus on Pet Waste Management</a></p> <p><a href="#">Water Cleanup Plans: Ecology seeks comments on plan to clean up bacteria in Snohomish River tributaries</a></p> <p><a href="#">Water Quality Assessment of Tributaries to the Snohomish River and Nonpoint Source Pollution TMDL</a></p>                                |                |              |



Wetland name or number C

## RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland C Date of site visit: 1/23/20  
 Rated by LBaldwin Trained by Ecology?  Yes  No Date of training 10/20/18  
 HGM Class used for rating sope Wetland has multiple HGM classes?  Y  N

NOTE: Form is not complete without the figures requested (figures can be combined).

Source of base aerial photo/map ESRI

OVERALL WETLAND CATEGORY III (based on functions  or special characteristics )

### 1. Category of wetland based on FUNCTIONS

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

| FUNCTION                              | Improving Water Quality |     |     | Hydrologic |     |     | Habitat |     |   |    |
|---------------------------------------|-------------------------|-----|-----|------------|-----|-----|---------|-----|---|----|
| <i>Circle the appropriate ratings</i> |                         |     |     |            |     |     |         |     |   |    |
| Site Potential                        | H                       | M   | (L) | H          | (M) | L   | H       | (M) | L |    |
| Landscape Potential                   | H                       | (M) | L   | H          | (M) | (L) | H       | (M) | L |    |
| Value                                 | (H)                     | M   | L   | H          | (M) | L   | H       | (M) | L |    |
| Score Based on Ratings                | 6                       |     |     | 5          |     |     | 6       |     |   | 17 |

Score for each function based on three ratings (order of ratings is not important)

- 9 = H,H,H  
 8 = H,H,M  
 7 = H,H,L  
 7 = H,M,M  
 6 = H,M,L  
 6 = M,M,M  
 5 = H,L,L  
 5 = M,M,L  
 4 = M,L,L  
 3 = L,L,L

### 2. Category based on SPECIAL CHARACTERISTICS of wetland

| CHARACTERISTIC                     | CATEGORY    |
|------------------------------------|-------------|
| Estuarine                          | I II        |
| Wetland of High Conservation Value | I           |
| Bog                                | I           |
| Mature Forest                      | I           |
| Old Growth Forest                  | I           |
| Coastal Lagoon                     | I II        |
| Interdunal                         | I II III IV |
| None of the above                  | NA          |



Wetland name or number C

## 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         |          |
| Location of outlet ( <i>can be added to map of hydroperiods</i> )   | D 1.1, D 4.1         |          |
| Boundary of area within 150 ft of the wetland ( <i>can be added to another figure</i> )   | D 2.2, D 5.2         |          |
| Map of the contributing basin   | D 4.3, D 5.3         |          |
| 1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat | H 2.1, H 2.2, H 2.3  |          |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website)   | D 3.1, D 3.2         |          |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web)  | D 3.3                |          |

### Riverine Wetlands

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

### Lake Fringe Wetlands

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

### Slope Wetlands

| Map of:   | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes  | H 1.1, H 1.4         | 1        |
| Hydroperiods  | H 1.2                | 2        |
| Plant cover of <b>dense</b> trees, shrubs, and herbaceous plants  | S 1.3                | 3        |
| Plant cover of <b>dense, rigid</b> trees, shrubs, and herbaceous plants ( <i>can be added to figure above</i> )                   | S 4.1                | 3        |
| Boundary of 150 ft buffer ( <i>can be added to another figure</i> )   | S 2.1, S 5.1         | 1        |
| 1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat | H 2.1, H 2.2, H 2.3  | 4        |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website)   | S 3.1, S 3.2         | 5        |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web)  | S 3.3                | 6        |

Wetland name or number C

## HGM Classification of Wetlands in Western Washington

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

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

1. Are the water levels in the entire unit usually controlled by tides except during floods?

**NO** - go to 2

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

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

**NO - Saltwater Tidal Fringe (Estuarine)**

**YES - Freshwater Tidal Fringe**

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

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

**NO** - go to 3

**YES** - The wetland class is **Flats**

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

3. Does the entire wetland unit **meet all** of the following criteria?

The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;

At least 30% of the open water area is deeper than 6.6 ft (2 m).

**NO** - go to 4

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

4. Does the entire wetland unit **meet all** of the following criteria?

The wetland is on a slope (*slope can be very gradual*),

The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,

The water leaves the wetland **without being impounded**.

**NO** - go to 5

**YES** - The wetland class is **Slope**

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

5. Does the entire wetland unit **meet all** of the following criteria?

The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

The overbank flooding occurs at least once every 2 years.

Wetland name or number C

NO - go to 6

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

**YES** - The wetland class is **Riverine**

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

NO - go to 7

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

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

NO - go to 8

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

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

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

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

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

Wetland name or number C

| <b>SLOPE WETLANDS</b>   |                                   |
|---|-----------------------------------|
| <b>Water Quality Functions - Indicators that the site functions to improve water quality</b>  |                                   |
| S 1.0. Does the site have the potential to improve water quality?   |                                   |
| S 1.1. Characteristics of the average slope of the wetland: <i>(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)</i>   |                                   |
| Slope is 1% or less   | points = 3                        |
| Slope is > 1%-2%  | points = 2                        |
| Slope is > 2%-5%  | points = 1                        |
| Slope is greater than 5%  | points = 0                        |
| 2   |                                   |
| S 1.2. <u>The soil 2 in below the surface (or duff layer)</u> is true clay or true organic (use NRCS definitions): Yes = 3 No = 0   |                                   |
| 0   |                                   |
| S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants:   |                                   |
| Choose the points appropriate for the description that best fits the plants in the wetland. <i>Dense means you have trouble seeing the soil surface (&gt;75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.</i> |                                   |
| Dense, uncut, herbaceous plants > 90% of the wetland area   | points = 6                        |
| Dense, uncut, herbaceous plants > ½ of area   | points = 3                        |
| Dense, woody, plants > ½ of area  | points = 2                        |
| Dense, uncut, herbaceous plants > ¼ of area   | points = 1                        |
| Does not meet any of the criteria above for plants  | points = 0                        |
| 2   |                                   |
| Total for S 1   | Add the points in the boxes above |
| 4   |                                   |

**Rating of Site Potential** If score is: 12 = H 6-11 = M  0-5 = L

Record the rating on the first page

|  |                                   |
|--|-----------------------------------|
| S 2.0. Does the landscape have the potential to support the water quality function of the site?                    |                                   |
| S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? |                                   |
|  | Yes = 1 No = 0                    |
| 1  |                                   |
| S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1?        |                                   |
| Other sources _____  | Yes = 1 No = 0                    |
| 0  |                                   |
| Total for S 2  | Add the points in the boxes above |
| 1  |                                   |

**Rating of Landscape Potential** If score is:  1-2 = M 0 = L

Record the rating on the first page

|   |                                   |
|---|-----------------------------------|
| S 3.0. Is the water quality improvement provided by the site valuable to society?   |                                   |
| S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list?  |                                   |
|   | Yes = 1 No = 0                    |
| 0   |                                   |
| S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? <i>At least one aquatic resource in the basin is on the 303(d) list.</i>                                 |                                   |
|   | 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? <i>Answer YES if there is a TMDL for the basin in which unit is found.</i> |                                   |
|   | Yes = 2 No = 0                    |
| 2   |                                   |
| Total for S 3   | Add the points in the boxes above |
| 3   |                                   |

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

Record the rating on the first page



Wetland name or number C

### 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. <i>Stems of plants should be thick enough (usually &gt; 1/8 in), or dense enough, to remain erect during surface flows.</i><br>Dense, uncut, <b>rigid</b> plants cover > 90% of the area of the wetland <span style="float: right;">points = 1</span><br>All other conditions <span style="float: right;">points = 0</span> | 1 |
|---|---|

**Rating of Site Potential** If score is:  1 = M  0 = L

*Record the rating on the first page*

S 5.0. Does the landscape have the potential to support the hydrologic functions of the site?

|   |   |
|---|---|
| S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff? <span style="float: right;">Yes = 1 No = 0</span> | 0 |
|---|---|

**Rating of Landscape Potential** If score is:  1 = M  0 = L

*Record the rating on the first page*

S 6.0. Are the hydrologic functions provided by the site valuable to society?

|  |   |
|--|---|
| S 6.1. Distance to the nearest areas downstream that have flooding problems:<br>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) <span style="float: right;">points = 2</span><br>Surface flooding problems are in a sub-basin farther down-gradient <span style="float: right;">points = 1</span><br>No flooding problems anywhere downstream <span style="float: right;">points = 0</span> | 1 |
|--|---|

|  |   |
|--|---|
| S 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? <span style="float: right;">Yes = 2 No = 0</span> | 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:



Wetland name or number C

**These questions apply to wetlands of all HGM classes.**

**HABITAT FUNCTIONS** - Indicators that site functions to provide important habitat

**H 1.0. Does the site have the potential to provide habitat?**

H 1.1. Structure of plant community: *Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

- Aquatic bed 4 structures or more: points = 4
  - Emergent 3 structures: points = 2
  - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
  - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon 1

**H 1.2. Hydroperiods**

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** 2 points
- Freshwater tidal wetland** 2 points

**H 1.3. Richness of plant species**

Count the number of plant species in the wetland that cover at least 10 ft<sup>2</sup>.

*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*

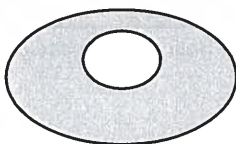
- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

**H 1.4. Interspersion of habitats**

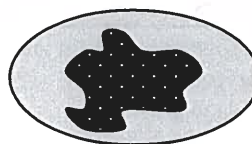
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



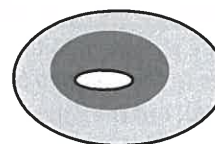
None = 0 points



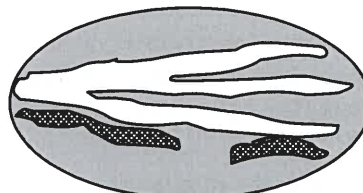
Low = 1 point



Moderate = 2 points



All three diagrams in this row are **HIGH** = 3points



2

Wetland name or number C

|  |                                   |   |
|--|-----------------------------------|---|
| <p>H 1.5. Special habitat features:<br/>         Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (&gt; 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh &gt; 4 in) within the wetland</p> <p><input type="checkbox"/> Undercut banks are present for at least 6.6 ft (2 m) <b>and/or</b> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (&gt; 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>)</p> <p><input type="checkbox"/> 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>)</p> <p><input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p> |                                   | 2 |
| Total for H 1  | Add the points in the boxes above | 9 |

**Rating of Site Potential** If score is: 15-18 = H  7-14 = M  0-6 = L *Record the rating on the first page*

|   |                                   |   |
|---|-----------------------------------|---|
| <p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>   |                                   |   |
| <p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: % undisturbed habitat <u>4</u> + [(% moderate and low intensity land uses)/2] <u>1</u> = <u>5</u> %</p> <p>If total accessible habitat is:</p> <p>&gt; 1/3 (33.3%) of 1 km Polygon <span style="float: right;">points = 3</span></p> <p>20-33% of 1 km Polygon <span style="float: right;">points = 2</span></p> <p>10-19% of 1 km Polygon <span style="float: right;">points = 1</span></p> <p>&lt; 10% of 1 km Polygon <span style="float: right;">points = 0</span></p>           |                                   | 0 |
| <p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: % undisturbed habitat <u>34</u> + [(% moderate and low intensity land uses)/2] <u>11</u> = <u>45</u> %</p> <p>Undisturbed habitat &gt; 50% of Polygon <span style="float: right;">points = 3</span></p> <p>Undisturbed habitat 10-50% and in 1-3 patches <span style="float: right;">points = 2</span></p> <p>Undisturbed habitat 10-50% and &gt; 3 patches <span style="float: right;">points = 1</span></p> <p>Undisturbed habitat &lt; 10% of 1 km Polygon <span style="float: right;">points = 0</span></p> |                                   | 1 |
| <p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>&gt; 50% of 1 km Polygon is high intensity land use <span style="float: right;">points = (- 2)</span></p> <p>≤ 50% of 1 km Polygon is high intensity <span style="float: right;">points = 0</span></p>  |                                   | 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*

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

**Rating of Value** If score is: 2 = H  1 = M  0 = L *Record the rating on the first page*

Wetland name or number C

## WDFW Priority Habitats

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

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

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

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

Wetland name or number C

**CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

| Wetland Type  | Category                            |
|---|-------------------------------------|
| <i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>   |                                     |
| <p><b>SC 1.0. Estuarine wetlands</b></p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <ul style="list-style-type: none"> <li>— The dominant water regime is tidal,</li> <li>— Vegetated, and</li> <li>— With a salinity greater than 0.5 ppt</li> </ul> <p style="text-align: right;">Yes – Go to <b>SC 1.1</b>    No = <b>Not an estuarine wetland</b></p>  |                                     |
| <p>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?</p> <p style="text-align: right;">Yes = <b>Category I</b>    No - Go to <b>SC 1.2</b></p>   | <b>Cat. I</b>                       |
| <p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <ul style="list-style-type: none"> <li>— 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 <i>Spartina</i>, see page 25)</li> <li>— At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.</li> <li>— The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.</li> </ul> <p style="text-align: right;">Yes = <b>Category I</b>    No = <b>Category II</b></p>  | <b>Cat. I</b><br><br><b>Cat. II</b> |
| <p><b>SC 2.0. Wetlands of High Conservation Value (WHCV)</b></p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?</p> <p style="text-align: right;">Yes – Go to <b>SC 2.2</b>    No – Go to <b>SC 2.3</b></p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?</p> <p style="text-align: right;">Yes = <b>Category I</b>    No = <b>Not a WHCV</b></p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland?<br/><a href="http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf">http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</a></p> <p style="text-align: right;">Yes – <b>Contact WNHP/WDNR and go to SC 2.4</b>    No = <b>Not a WHCV</b></p> <p>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?</p> <p style="text-align: right;">Yes = <b>Category I</b>    No = <b>Not a WHCV</b></p>   | <b>Cat. I</b>                       |
| <p><b>SC 3.0. Bogs</b></p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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?</p> <p style="text-align: right;">Yes – Go to <b>SC 3.3</b>    No – Go to <b>SC 3.2</b></p> <p>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?</p> <p style="text-align: right;">Yes – Go to <b>SC 3.3</b>    No = <b>Is not a bog</b></p> <p>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?</p> <p style="text-align: right;">Yes = <b>Is a Category I bog</b>    No – Go to <b>SC 3.4</b></p> <p><b>NOTE:</b> 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.</p> <p>SC 3.4. Is an area with peats or mucks forested (&gt; 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?</p> <p style="text-align: right;">Yes = <b>Is a Category I bog</b>    No = <b>Is not a bog</b></p> | <b>Cat. I</b>                       |



Wetland name or number C

|  |  |
|--|--|
| <p><b>SC 4.0. Forested Wetlands</b></p> <p>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 answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> <li>— <b>Old-growth forests</b> (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.</li> <li>— <b>Mature forests</b> (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)</li> </ul> <p>Yes = <b>Category I</b>    No = <b>Not a forested wetland for this section</b></p>  | <p><b>Cat. I</b></p>   |
| <p><b>SC 5.0. Wetlands in Coastal Lagoons</b></p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> <li>— 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</li> <li>— The lagoon in which the wetland is located contains ponded water that is saline or brackish (&gt; 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>)</li> </ul> <p>Yes – Go to <b>SC 5.1</b>    No = <b>Not a wetland in a coastal lagoon</b></p> <p><b>SC 5.1. Does the wetland meet all of the following three conditions?</b></p> <ul style="list-style-type: none"> <li>— 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).</li> <li>— At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.</li> <li>— The wetland is larger than 1/10 ac (4350 ft<sup>2</sup>)</li> </ul> <p>Yes = <b>Category I</b>    No = <b>Category II</b></p> | <p><b>Cat. I</b></p> <p><b>Cat. II</b></p>   |
| <p><b>SC 6.0. Interdunal Wetlands</b></p> <p>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 based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> <li>— Long Beach Peninsula: Lands west of SR 103</li> <li>— Grayland-Westport: Lands west of SR 105</li> <li>— Ocean Shores-Copalis: Lands west of SR 115 and SR 109</li> </ul> <p>Yes – Go to <b>SC 6.1</b>    No = <b>not an interdunal wetland for rating</b></p> <p><b>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)?</b><br/>Yes = <b>Category I</b>    No – Go to <b>SC 6.2</b></p> <p><b>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?</b><br/>Yes = <b>Category II</b>    No – Go to <b>SC 6.3</b></p> <p><b>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?</b><br/>Yes = <b>Category III</b>    No = <b>Category IV</b></p>  | <p><b>Cat I</b></p> <p><b>Cat. II</b></p> <p><b>Cat. III</b></p> <p><b>Cat. IV</b></p> |
| <p><b>Category of wetland based on Special Characteristics</b><br/>If you answered No for all types, enter "Not Applicable" on Summary Form</p>  | <p><b>NA</b></p>   |



Wetland name or number \_\_\_\_\_

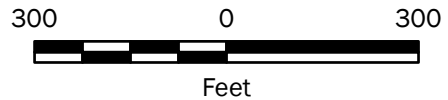
*This page left blank intentionally*



\\geoengineers.com\WANN\Projects\_24\24145001\GIS\MXD\24145001\_WetlandC\_F01\_cowardin.mxd Date Exported: 01/24/20 by lbaldrin

**Legend**

- Forested
- Scrub/Shrub
- 150-ft Boundary



**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet

|   |                 |
|---|-----------------|
| <b>Wetland C Cowardin</b>                                     |                 |
| Sunnyside Village - Cottage Housing<br>Marysville, Washington |                 |
|   | <b>Figure 1</b> |

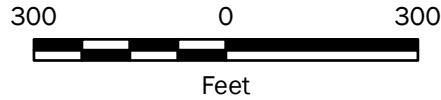




\\geoengineers.com\WANN\Projects\_24\24145001\GIS\MXD\24145001\_WetlandC\_F02\_hydro.mxd Date Exported: 01/24/20 by lbaldwin

**Legend**

- Saturated
- Seasonally Flooded



**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet

|   |                 |
|---|-----------------|
| <b>Wetland D Hydroperiods</b>                                 |                 |
| Sunnyside Village - Cottage Housing<br>Marysville, Washington |                 |
|   | <b>Figure 2</b> |

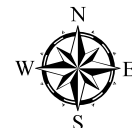




\\geoengineers.com\WANN\Projects\_24\24145001\GIS\MXD\24145001\_WetlandC\_F03\_plantcover.mxd Date Exported: 01/24/20 by lbaldwin

**Legend**

 Dense, Rigid Shrubs and Trees



300 0 300



Feet

**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet

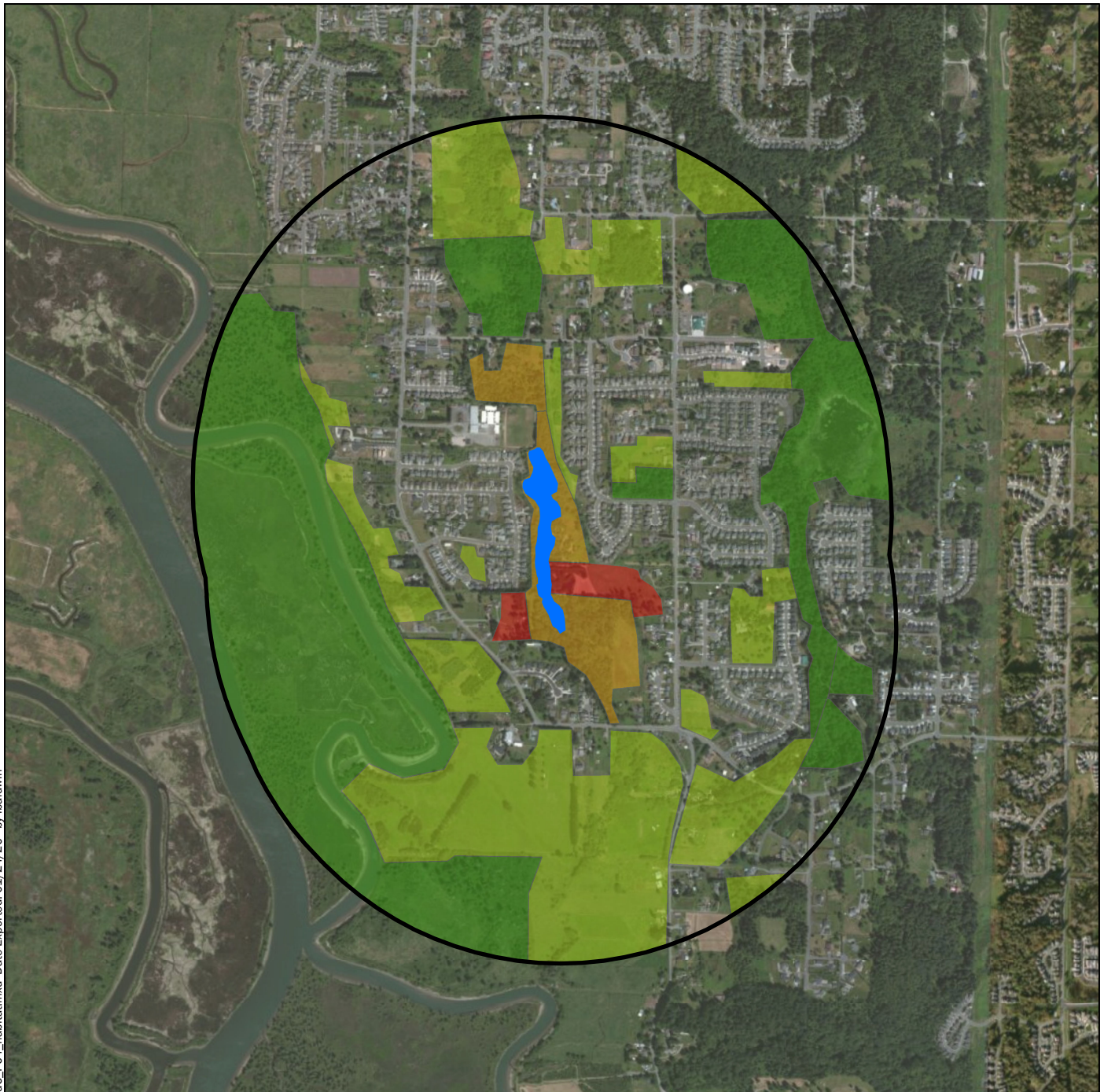
**Wetland C Plant Cover**

Sunnyside Village - Cottage Housing  
Marysville, Washington



**Figure 3**





\\geoengineers.com\WANN\Projects\24\24145001\GIS\MXD\24145001\_WetlandC\_F04\_habitat.mxd Date Exported: 01/24/20 by lbalwin

**Legend**

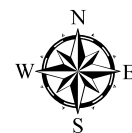
- Wetland
- Accessible low/moderate intensity use
- Accessible undisturbed
- Low/moderate intensity use
- Undisturbed

**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet



1,500                      0                      1,500



Feet

|   |                 |
|---|-----------------|
| <b>Wetland C Habitat</b>                                      |                 |
| Sunnyside Village - Cottage Housing<br>Marysville, Washington |                 |
|   | <b>Figure 4</b> |



Add or remove map data

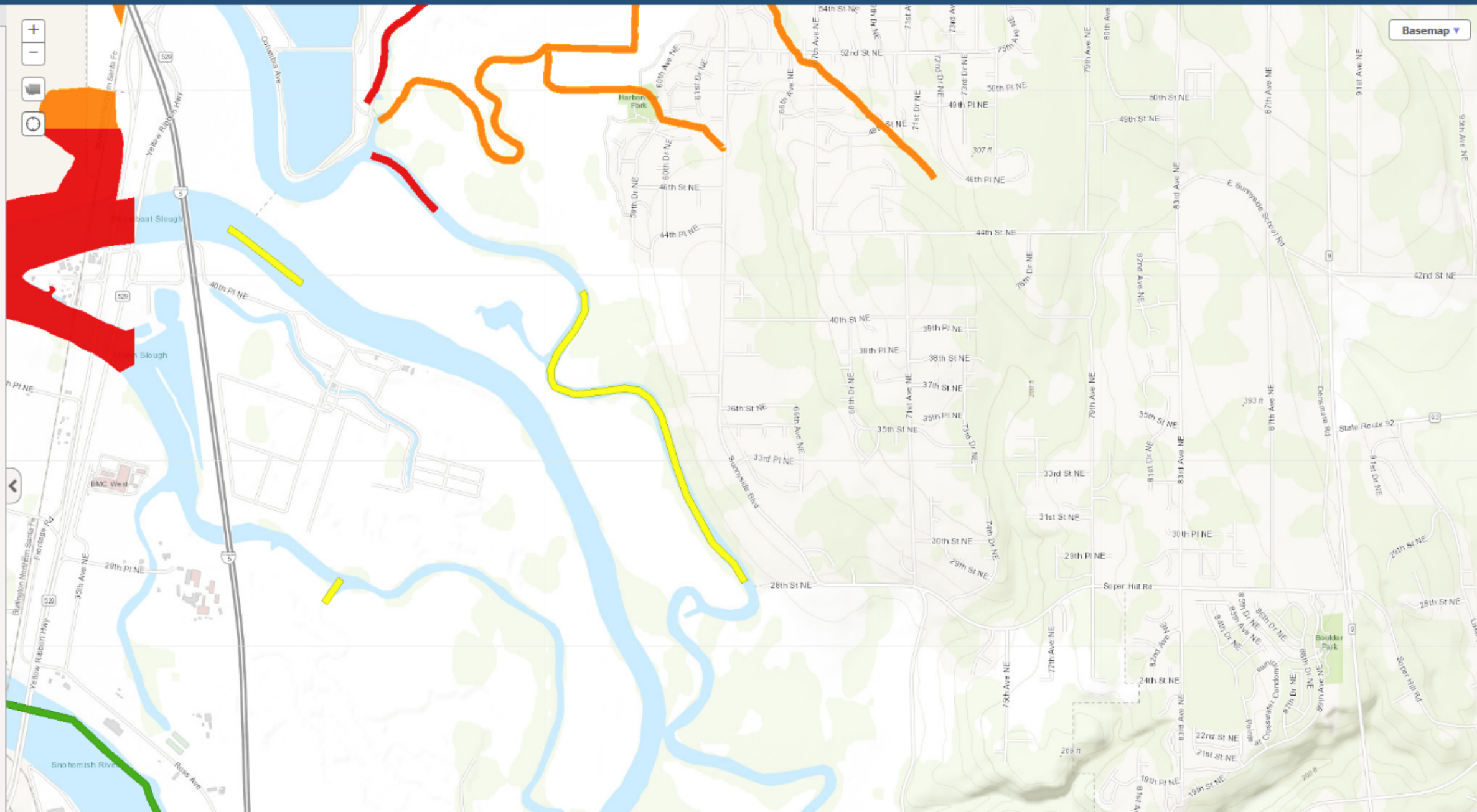
Assessed Waters/Sediment

Water

- Category 5 - 303d
- Category 4C
- Category 4B
- Category 4A
- Category 2
- Category 1

Sediment

- Category 5 - 303d
- Category 4C
- Category 4B
- Category 4A
- Category 2
- Category 1



## Publication Summary

Our Ecology website has changed, which can cause broken links.  
 To report these, please [contact us](#) with the publication and broken link.

|                      |  |                |              |
|----------------------|--|----------------|--------------|
| TITLE                | <b>Snohomish River Tributaries Fecal Coliform Total Maximum Daily Load Submittal Report</b>  |                |              |
|                      | Publication number   | Date Published | Date Revised |
|                      | 00-10-087  | November 2000  | June 2001    |
| VIEW NOW:            | <p><a href="#">Snohomish River Tributaries Fecal Coliform Total Maximum Daily Load Submittal Report</a> (Number of pages: 85) (Publication Size: 720KB)</p> <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>Trouble viewing? Try these free options.</p> <ul style="list-style-type: none"> <li>• Get the latest <a href="#">Adobe Reader</a> for PDFs.</li> <li>• For Excel or Word viewing get <a href="#">Open Office</a>, <a href="#">Microsoft OneDrive</a>, <a href="#">DropBox Basic</a> or a mobile app at your favorite app store.</li> </ul> </div> |                |              |
| AUTHOR(S)            | Robert Wright, Randy Coots, and Robert Cusimano  |                |              |
| DESCRIPTION          | <p>The Snohomish River basin drains 1,978 square miles and discharges to Possession Sound near the City of Everett. The junction of two major rivers, the Skykomish and Snoqualmie, forms the Snohomish River. The TMDL study area is comprised of the main Snohomish River tributaries: Quilceda, Allen, Woods, French Creek, the Marshlands and Pilchuck River and is referred to as the Snohomish River Tributaries Watershed in this document.</p>   |                |              |
| REQUEST A COPY       | <p>The mission of the Department of Ecology is to protect, preserve, and enhance Washington's environment. To help us meet that goal, please consider the environment before you print or request a copy.</p> <p><b>Accessibility Options</b><br/>       Persons with hearing loss can call 711 for Washington Relay Service<br/>       Persons with a speech disability can call 877-833-6341</p> <ul style="list-style-type: none"> <li>• <a href="#">Water Quality Order Form</a></li> </ul>  |                |              |
| CONTACT              | Ralph Svrjcek at 425-649-7165 or <a href="mailto:ralph.svrjcek@ecy.wa.gov">ralph.svrjcek@ecy.wa.gov</a>  |                |              |
| KEYWORDS             | creek, Snohomish River, report, study, basin, cleanup, river, water cleanup plan, plan, water, watershed, wood, Total Maximum Daily Load, fecal coliform   |                |              |
| RELATED PUBLICATIONS | <p>Title:</p> <p><a href="#">Snohomish County - Controlling Pet Waste in Suburban Areas</a></p> <p><a href="#">Lower Snohomish River Tributaries Fecal Coliform Bacteria Total Maximum Daily Load:Detailed Implementation Plan</a></p> <p><a href="#">Focus on Pet Waste Management</a></p> <p><a href="#">Water Cleanup Plans: Ecology seeks comments on plan to clean up bacteria in Snohomish River tributaries</a></p> <p><a href="#">Water Quality Assessment of Tributaries to the Snohomish River and Nonpoint Source Pollution TMDL</a></p>                                    |                |              |



Wetland name or number D

## RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland D Date of site visit: 1/23/20  
 Rated by LBaldwin Trained by Ecology?  Yes \_\_\_ No Date of training 10/20/18  
 HGM Class used for rating Depressional Wetland has multiple HGM classes? \_\_\_ Y \_\_\_ N

NOTE: Form is not complete without the figures requested (figures can be combined).

Source of base aerial photo/map ESRI

OVERALL WETLAND CATEGORY IV (based on functions  or special characteristics \_\_\_)

### 1. Category of wetland based on FUNCTIONS

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

| FUNCTION               | Improving Water Quality               |   |   | Hydrologic |   |   | Habitat |   |   |              |
|------------------------|---------------------------------------|---|---|------------|---|---|---------|---|---|--------------|
|                        | <i>Circle the appropriate ratings</i> |   |   |            |   |   |         |   |   |              |
| Site Potential         | H                                     | M | L | H          | M | L | H       | M | L |              |
| Landscape Potential    | H                                     | M | L | H          | M | L | H       | M | L |              |
| Value                  | H                                     | M | L | H          | M | L | H       | M | L | <b>TOTAL</b> |
| 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                          | I II        |
| Wetland of High Conservation Value | I           |
| Bog                                | I           |
| Mature Forest                      | I           |
| Old Growth Forest                  | I           |
| Coastal Lagoon                     | I II        |
| Interdunal                         | I II III IV |
| None of the above                  | NA          |

Wetland name or number D

## Maps and figures required to answer questions correctly for Western Washington

### Depressional Wetlands

| Map of:   | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes  | D 1.3, H 1.1, H 1.4  | 1        |
| Hydroperiods  | D 1.4, H 1.2         | 2        |
| Location of outlet ( <i>can be added to map of hydroperiods</i> )   | D 1.1, D 4.1         | NA       |
| Boundary of area within 150 ft of the wetland ( <i>can be added to another figure</i> )   | D 2.2, D 5.2         | 1        |
| Map of the contributing basin   | D 4.3, D 5.3         | 3        |
| 1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat | H 2.1, H 2.2, H 2.3  | 4        |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website)   | D 3.1, D 3.2         | 5        |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web)  | D 3.3                | 6        |

### 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 ( <i>can be added to another figure</i> )   | R 2.4                |          |
| Plant cover of trees, shrubs, and herbaceous plants   | R 1.2, R 4.2         |          |
| Width of unit vs. width of stream ( <i>can be added to another figure</i> )   | R 4.1                |          |
| Map of the contributing basin   | R 2.2, R 2.3, R 5.2  |          |
| 1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat | H 2.1, H 2.2, H 2.3  |          |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website)   | R 3.1                |          |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web)  | R 3.2, R 3.3         |          |

### Lake Fringe Wetlands

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

### Slope Wetlands

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



Wetland name or number   D  

## HGM Classification of Wetlands in Western Washington

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

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

1. Are the water levels in the entire unit usually controlled by tides except during floods?

NO - go to 2

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

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

NO - **Saltwater Tidal Fringe (Estuarine)**

YES - **Freshwater Tidal Fringe**

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

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

NO - go to 3

YES - The wetland class is **Flats**

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

3. Does the entire wetland unit **meet all** of the following criteria?

The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;

At least 30% of the open water area is deeper than 6.6 ft (2 m).

NO - go to 4

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

4. Does the entire wetland unit **meet all** of the following criteria?

The wetland is on a slope (*slope can be very gradual*),

The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,

The water leaves the wetland **without being impounded**.

NO - go to 5

YES - The wetland class is **Slope**

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

5. Does the entire wetland unit **meet all** of the following criteria?

The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

The overbank flooding occurs at least once every 2 years.



Wetland name or number D

**NO** – go to 6

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

**YES** – The wetland class is **Riverine**

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

**NO** – go to 7

**YES** – The wetland class is **Depressional**

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

**NO** – go to 8

**YES** – The wetland class is **Depressional**

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

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

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

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

Wetland name or number D

**DEPRESSIONAL AND FLATS WETLANDS**

**Water Quality Functions - Indicators that the site functions to improve water quality**

|   |  |          |
|---|--|----------|
| <b>D 1.0. Does the site have the potential to improve water quality?</b>  |  |          |
| <b>D 1.1. Characteristics of surface water outflows from the wetland:</b>   |  |          |
| Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet).<br>points = 3        |  |          |
| Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet.<br>points = 2            |  |          |
| Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing<br>points = 1                   |  | 3        |
| Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch.<br>points = 1                      |  |          |
| <b>D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). Yes = 4 No = 0</b> |  | 0        |
| <b>D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</b>    |  |          |
| Wetland has persistent, ungrazed, plants > 95% of area<br>points = 5  |  |          |
| Wetland has persistent, ungrazed, plants > 1/2 of area<br>points = 3  |  |          |
| Wetland has persistent, ungrazed plants > 1/10 of area<br>points = 1  |  | 0        |
| Wetland has persistent, ungrazed plants < 1/10 of area<br>points = 0  |  |          |
| <b>D 1.4. Characteristics of seasonal ponding or inundation:</b>  |  |          |
| <i>This is the area that is ponded for at least 2 months. See description in manual.</i>  |  |          |
| Area seasonally ponded is > 1/2 total area of wetland<br>points = 4   |  | 2        |
| Area seasonally ponded is > 1/4 total area of wetland<br>points = 2   |  |          |
| Area seasonally ponded is < 1/4 total area of wetland<br>points = 0   |  |          |
| <b>Total for D 1</b>  | <b>Add the points in the boxes above</b> | <b>5</b> |

**Rating of Site Potential** If score is: 12-16 = H 6-11 = M 0-5 = L Record the rating on the first page

|   |  |          |
|---|--|----------|
| <b>D 2.0. Does the landscape have the potential to support the water quality function of the site?</b>                    |  |          |
| <b>D 2.1. Does the wetland unit receive stormwater discharges?</b>  | Yes = 1 No = 0                           | 0        |
| <b>D 2.2. Is &gt; 10% of the area within 150 ft of the wetland in land uses that generate pollutants?</b>                 | Yes = 1 No = 0                           | 0        |
| <b>D 2.3. Are there septic systems within 250 ft of the wetland?</b>  | Yes = 1 No = 0                           | 1        |
| <b>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?</b> |  |          |
| Source _____  | Yes = 1 No = 0                           | 0        |
| <b>Total for D 2</b>  | <b>Add the points in the boxes above</b> | <b>1</b> |

**Rating of Landscape Potential** If score is: 3 or 4 = H 1 or 2 = M 0 = L Record the rating on the first page

|  |  |          |
|--|--|----------|
| <b>D 3.0. Is the water quality improvement provided by the site valuable to society?</b>   |  |          |
| <b>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?</b>  | Yes = 1 No = 0                           | 0        |
| <b>D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?</b>  | Yes = 1 No = 0                           | 1        |
| <b>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)?</b> | Yes = 2 No = 0                           | 2        |
| <b>Total for D 3</b>   | <b>Add the points in the boxes above</b> | <b>3</b> |

**Rating of Value** If score is: 2-4 = H 1 = M 0 = L Record the rating on the first page

Wetland name or number D

**DEPRESSIONAL AND FLATS WETLANDS**

**Hydrologic Functions** - Indicators that the site functions to reduce flooding and stream degradation

|   |                                   |   |
|---|-----------------------------------|---|
| D 4.0. Does the site have the potential to reduce flooding and erosion?   |                                   |   |
| D 4.1. <u>Characteristics of surface water outflows from the wetland:</u>   |                                   |   |
| Wetland is a depression or flat depression with no surface water leaving it (no outlet)   | points = 4                        | 4 |
| Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet   | points = 2                        |   |
| Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch   | points = 1                        |   |
| Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing   | points = 0                        |   |
| D 4.2. <u>Depth of storage during wet periods:</u> 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                        | 0 |
| Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet  | points = 5                        |   |
| Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet  | points = 3                        |   |
| The wetland is a "headwater" wetland  | points = 3                        |   |
| Wetland is flat but has small depressions on the surface that trap water  | points = 1                        |   |
| Marks of ponding less than 0.5 ft (6 in)  | points = 0                        |   |
| D 4.3. <u>Contribution of the wetland to storage in the watershed:</u> 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 | 9 |

**Rating of Site Potential** If score is: 12-16 = H  6-11 = M  0-5 = L Record the rating on the first page

|   |                                   |   |
|---|-----------------------------------|---|
| D 5.0. Does the landscape have the potential to support hydrologic functions of the site?   |                                   |   |
| D 5.1. Does the wetland receive stormwater discharges?  | Yes = 1 No = 0                    | 0 |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff?   | Yes = 1 No = 0                    | 0 |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? | Yes = 1 No = 0                    | 0 |
| Total for D 5   | Add the points in the boxes above | 0 |

**Rating of Landscape Potential** If score is:  3 = H  1 or 2 = M  0 = L Record the rating on the first page

|   |                                   |   |
|---|-----------------------------------|---|
| D 6.0. Are the hydrologic functions provided by the site valuable to society?   |                                   |   |
| D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met. |                                   |   |
| The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds):   |                                   |   |
| • Flooding occurs in a sub-basin that is immediately down-gradient of unit.   | points = 2                        | 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 conveyance in a regional flood control plan?  |                                   |   |
|   | Yes = 2 No = 0                    | 0 |
| 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 the first page



Wetland name or number D

**These questions apply to wetlands of all HGM classes.**

**HABITAT FUNCTIONS** - Indicators that site functions to provide important habitat

H 1.0. Does the site have the potential to provide habitat?

H 1.1. Structure of plant community: *Indicators are Cowardin classes and strata within the Forested class.* Check the Cowardin plant classes in the wetland. *Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

- Aquatic bed 4 structures or more: points = 4
  - Emergent 3 structures: points = 2
  - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
  - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon

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 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

1

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft<sup>2</sup>.

*Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle*

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

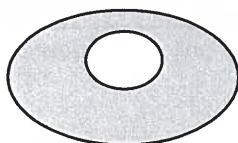
1

H 1.4. Interspersion of habitats

Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



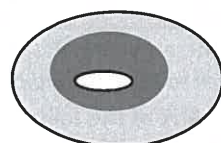
None = 0 points



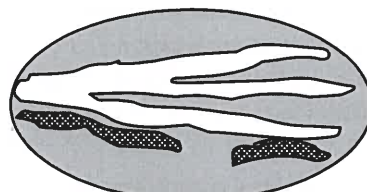
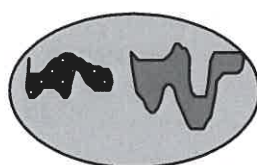
Low = 1 point



Moderate = 2 points



All three diagrams in this row are HIGH = 3points



0

Wetland name or number   D  

|   |                                   |   |
|---|-----------------------------------|---|
| <b>H 1.5. Special habitat features:</b><br>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i><br><input type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).<br><input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland<br><input type="checkbox"/> Undercut banks are present for at least 6.6 ft (2 m) <b>and/or</b> 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)<br><input type="checkbox"/> 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 that have not yet weathered where wood is exposed</i> )<br><input type="checkbox"/> 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> )<br><input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants ( <i>see H 1.1 for list of strata</i> ) |                                   | 0 |
| <b>Total for H 1</b>  | Add the points in the boxes above | 2 |

**Rating of Site Potential** If score is:   15-18   = H   7-14   = M    0-6   = L *Record the rating on the first page*

|   |                                   |
|---|-----------------------------------|
| <b>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</b>   |                                   |
| <b>H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit).</b><br><i>Calculate:</i> % undisturbed habitat <u>      </u> + [(% moderate and low intensity land uses)/2] <u>      </u> = <u>      </u> %<br>If total accessible habitat is:<br>> 1/3 (33.3%) of 1 km Polygon <span style="float: right;">points = 3</span><br>20-33% of 1 km Polygon <span style="float: right;">points = 2</span><br>10-19% of 1 km Polygon <span style="float: right;">points = 1</span><br>< 10% of 1 km Polygon <span style="float: right;">points = 0</span>                |                                   |
| <b>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</b><br><i>Calculate:</i> % undisturbed habitat <u>      </u> + [(% moderate and low intensity land uses)/2] <u>      </u> = <u>      </u> %<br>Undisturbed habitat > 50% of Polygon <span style="float: right;">points = 3</span><br>Undisturbed habitat 10-50% and in 1-3 patches <span style="float: right;">points = 2</span><br>Undisturbed habitat 10-50% and > 3 patches <span style="float: right;">points = 1</span><br>Undisturbed habitat < 10% of 1 km Polygon <span style="float: right;">points = 0</span> |                                   |
| <b>H 2.3. Land use intensity in 1 km Polygon: If</b><br>> 50% of 1 km Polygon is high intensity land use <span style="float: right;">points = (- 2)</span><br>≤ 50% of 1 km Polygon is high intensity <span style="float: right;">points = 0</span>   |                                   |
| <b>Total for H 2</b>  | Add the points in the boxes above |

**Rating of Landscape Potential** If score is:   4-6   = H    1-3   = M   < 1   = L *Record the rating on the first page*

|  |  |
|--|--|
| <b>H 3.0. Is the habitat provided by the site valuable to society?</b>   |  |
| <b>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.</b><br>Site meets ANY of the following criteria: <span style="float: right;">points = 2</span><br><input type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)<br><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)<br><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species<br><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources<br><input type="checkbox"/> 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<br>Site has 1 or 2 priority habitats (listed on next page) within 100 m <span style="float: right;">points = 1</span><br>Site does not meet any of the criteria above <span style="float: right;">points = 0</span> |  |

**Rating of Value** If score is:   2   = H    1   = M    0   = L *Record the rating on the first page*



Wetland name or number D

## WDFW Priority Habitats

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

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

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

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

Wetland name or number D

**CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

| Wetland Type  | Category                            |
|---|-------------------------------------|
| <i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>   |                                     |
| <p><b>SC 1.0. Estuarine wetlands</b><br/>           Does the wetland meet the following criteria for Estuarine wetlands?<br/>           — The dominant water regime is tidal,<br/>           — Vegetated, and<br/>           — With a salinity greater than 0.5 ppt</p> <p style="text-align: right;">Yes – Go to <b>SC 1.1</b>    <b>No = Not an estuarine wetland</b></p>   |                                     |
| <p>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?<br/>           Yes = <b>Category I</b>    No - Go to <b>SC 1.2</b></p>  | <b>Cat. I</b>                       |
| <p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?<br/>           — 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 <i>Spartina</i>, see page 25)<br/>           — At least ⅓ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.<br/>           — The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.</p> <p style="text-align: right;">Yes = <b>Category I</b>    No = <b>Category II</b></p>   | <b>Cat. I</b><br><br><b>Cat. II</b> |
| <p><b>SC 2.0. Wetlands of High Conservation Value (WHCV)</b><br/>           SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?<br/>           Yes – Go to <b>SC 2.2</b>    No – Go to <b>SC 2.3</b><br/>           SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?<br/>           Yes = <b>Category I</b>    <b>No = Not a WHCV</b><br/>           SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland?<br/> <a href="http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf">http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</a><br/>           Yes – <b>Contact WNHP/WDNR and go to SC 2.4</b>    No = <b>Not a WHCV</b><br/>           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?<br/>           Yes = <b>Category I</b>    No = <b>Not a WHCV</b></p>  | <b>Cat. I</b>                       |
| <p><b>SC 3.0. Bogs</b><br/>           Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i><br/>           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?<br/>           Yes – Go to <b>SC 3.3</b>    No – Go to <b>SC 3.2</b><br/>           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?<br/>           Yes – Go to <b>SC 3.3</b>    <b>No = Is not a bog</b><br/>           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?<br/>           Yes = <b>Is a Category I bog</b>    No – Go to <b>SC 3.4</b><br/> <b>NOTE:</b> 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.<br/>           SC 3.4. Is an area with peats or mucks forested (&gt; 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?<br/>           Yes = <b>Is a Category I bog</b>    No = <b>Is not a bog</b></p> | <b>Cat. I</b>                       |

Wetland name or number D

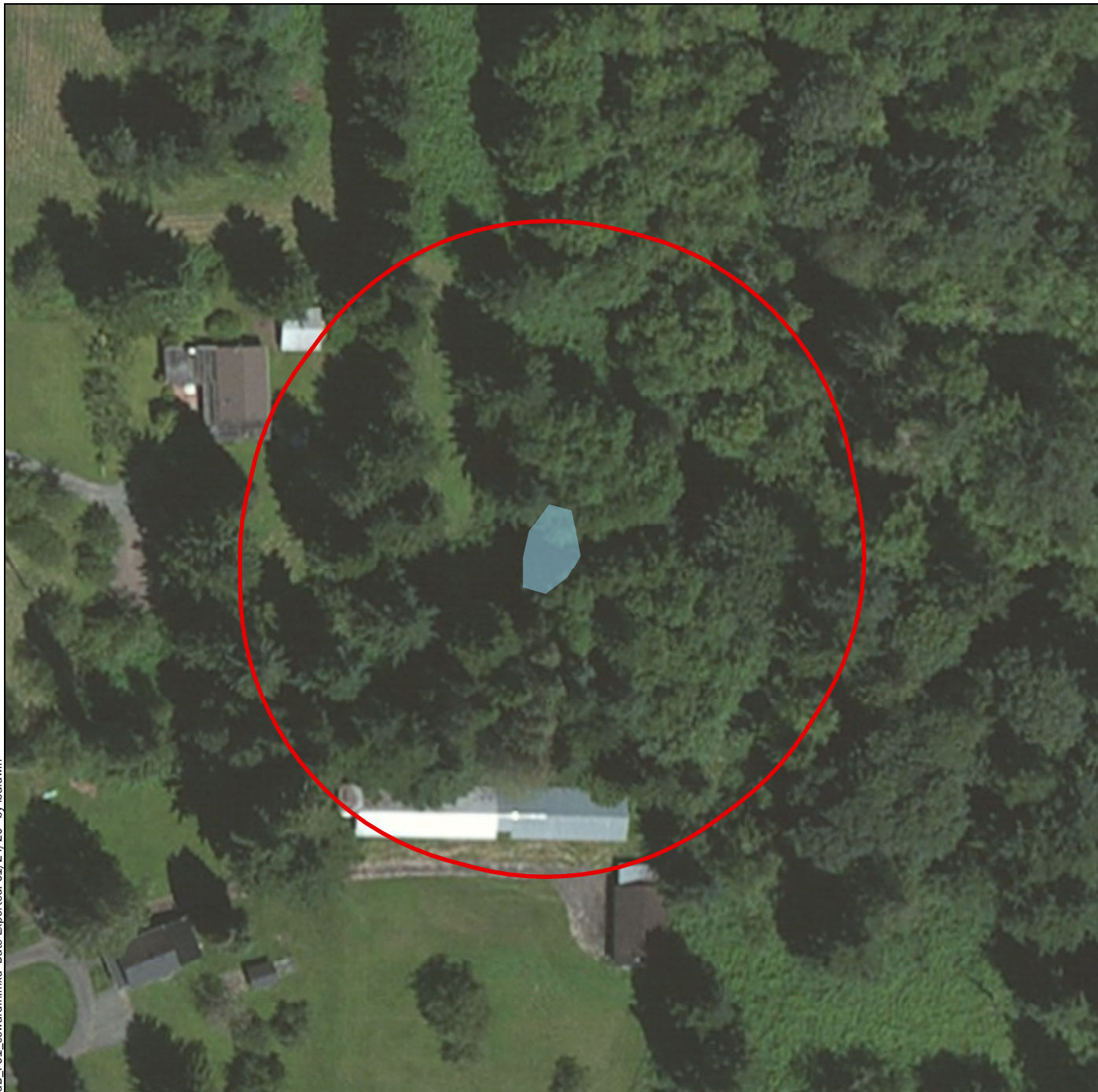
|   |  |
|---|--|
| <p><b>SC 4.0. Forested Wetlands</b></p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> <li>— <b>Old-growth forests</b> (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.</li> <li>— <b>Mature forests</b> (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).</li> </ul> <p style="text-align: right;">Yes = <b>Category I</b>    No = <b>Not a forested wetland for this section</b></p>   | <p>Cat. I</p>  |
| <p><b>SC 5.0. Wetlands in Coastal Lagoons</b></p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> <li>— 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</li> <li>— The lagoon in which the wetland is located contains ponded water that is saline or brackish (&gt; 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>)</li> </ul> <p style="text-align: right;">Yes – Go to <b>SC 5.1</b>    No = <b>Not a wetland in a coastal lagoon</b></p> <p><b>SC 5.1. Does the wetland meet all of the following three conditions?</b></p> <ul style="list-style-type: none"> <li>— 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).</li> <li>— 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.</li> <li>— The wetland is larger than 1/10 ac (4350 ft<sup>2</sup>)</li> </ul> <p style="text-align: right;">Yes = <b>Category I</b>    No = <b>Category II</b></p> | <p>Cat. I</p> <p>Cat. II</p>                               |
| <p><b>SC 6.0. Interdunal Wetlands</b></p> <p>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 based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> <li>— Long Beach Peninsula: Lands west of SR 103</li> <li>— Grayland-Westport: Lands west of SR 105</li> <li>— Ocean Shores-Copalis: Lands west of SR 115 and SR 109</li> </ul> <p style="text-align: right;">Yes – Go to <b>SC 6.1</b>    No = <b>not an interdunal wetland for rating</b></p> <p><b>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)?</b><br/> <span style="float: right;">Yes = <b>Category I</b>    No – Go to <b>SC 6.2</b></span></p> <p><b>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?</b><br/> <span style="float: right;">Yes = <b>Category II</b>    No – Go to <b>SC 6.3</b></span></p> <p><b>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?</b><br/> <span style="float: right;">Yes = <b>Category III</b>    No = <b>Category IV</b></span></p>              | <p>Cat I</p> <p>Cat. II</p> <p>Cat. III</p> <p>Cat. IV</p> |
| <p><b>Category of wetland based on Special Characteristics</b><br/>         If you answered No for all types, enter "Not Applicable" on Summary Form</p>  | <p>NA</p>  |

Wetland name or number \_\_\_\_\_



*This page left blank intentionally*

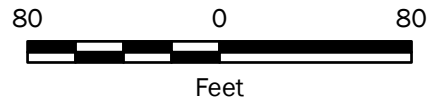
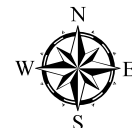


\\geoengineers.com\WANN\Projects\_24\24145001\GIS\MXD\24145001\_WetlandD\_F01\_cowardin.mxd Date Exported: 01/24/20 by lbatlwin



**Legend**

-  Emergent
-  150-ft Boundary



**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet

**Wetland D Cowardin**

Sunnyside Village - Cottage Housing  
Marysville, Washington




**Figure 1**





\\geoengineers.com\WANN\Projects\24\24145001\GIS\MXD\24145001\_WetlandD\_F02\_hydro.mxd Date Exported: 01/24/20 by lbaldwin

**Legend**

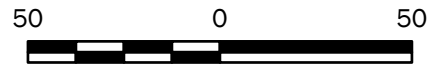
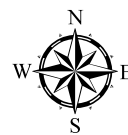
 Seasonally flooded

**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet



Feet

**Wetland D Hydroperiods**

Sunnyside Village - Cottage Housing  
Marysville, Washington



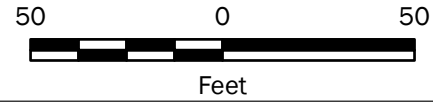
**Figure 2**



\\geoengineers.com\WANN\Projects\24\24145001\GIS\MXD\24145001\_WetlandD\_F03\_basin.mxd Date Exported: 01/30/20 by lbaldwin

**Legend**

- Wetland
- Basin



**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet

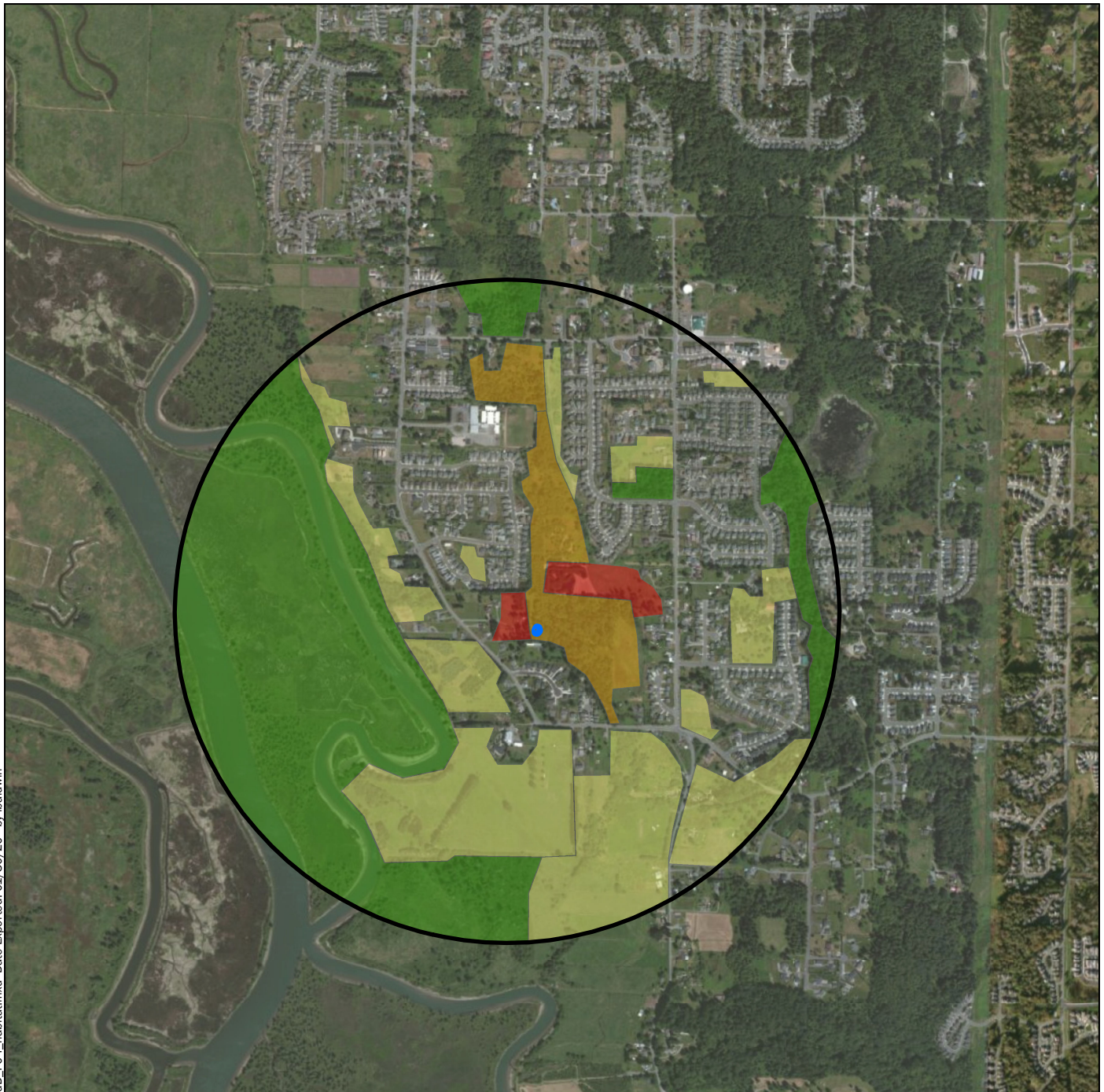
**Wetland D Contributing Basin**

Sunnyside Village - Cottage Housing  
Marysville, Washington



**Figure 3**





\\geoengineers.com\WANN\Projects\24\24145001\GIS\MXD\24145001\_WetlandD\_F04\_habitat.mxd Date Exported: 01/30/20 by lbadwin

**Legend**

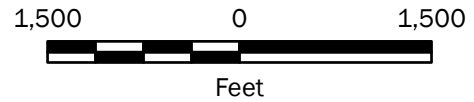
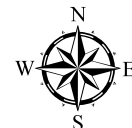
- Wetland
- Accessible low/moderate intensity use
- Accessible undisturbed
- Low/moderate intensity use
- Undisturbed

**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet



|   |                 |
|---|-----------------|
| <b>Wetland D Habitat</b>                                      |                 |
| Sunnyside Village - Cottage Housing<br>Marysville, Washington |                 |
|   | <b>Figure 4</b> |



Add or remove map data

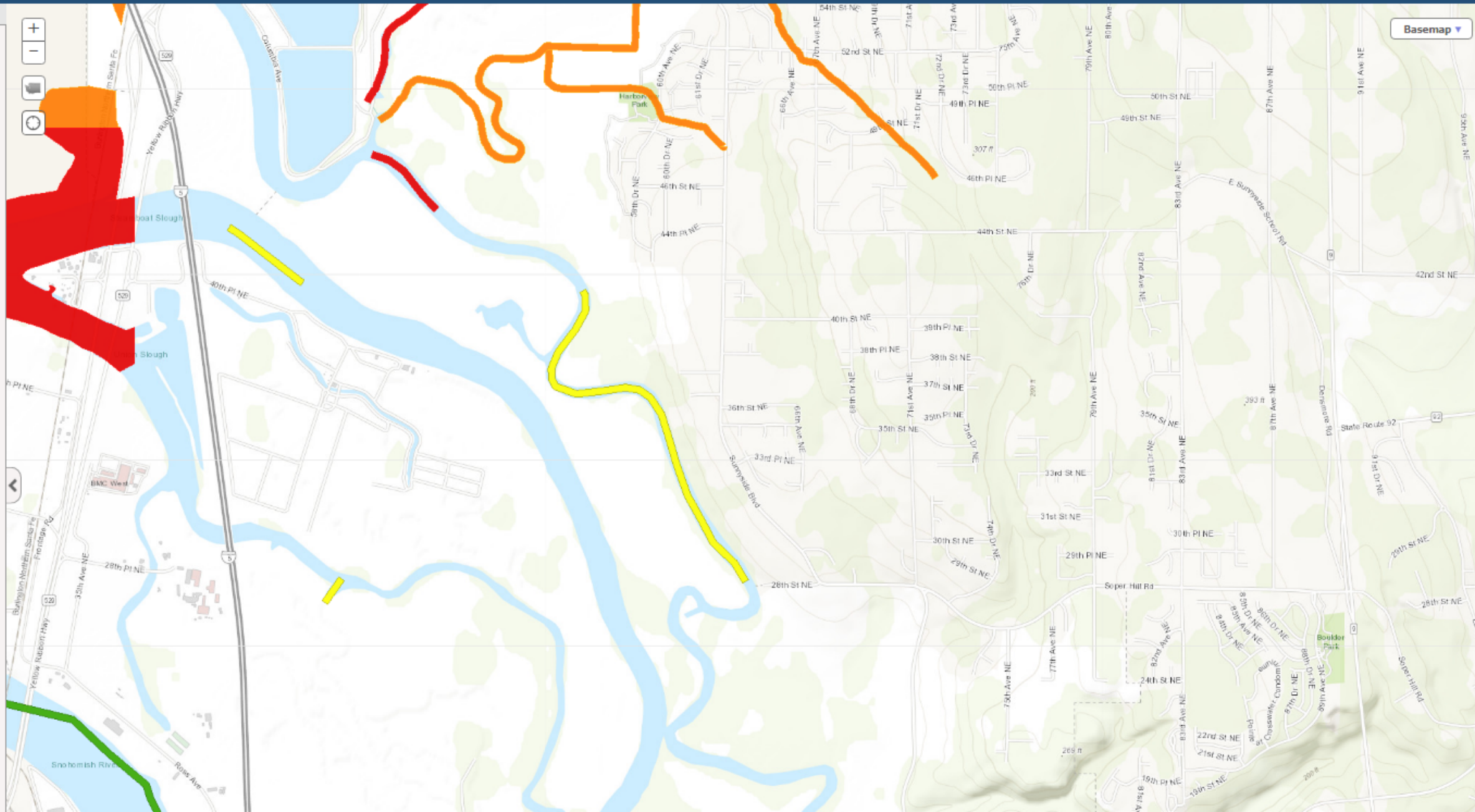
Assessed Waters/Sediment

Water

- Category 5 - 303d
- Category 4C
- Category 4B
- Category 4A
- Category 2
- Category 1

Sediment

- Category 5 - 303d
- Category 4C
- Category 4B
- Category 4A
- Category 2
- Category 1





## Publication Summary

Our Ecology website has changed, which can cause broken links.  
 To report these, please [contact us](#) with the publication and broken link.

|                      |  |                |              |
|----------------------|--|----------------|--------------|
| TITLE                | <b>Snohomish River Tributaries Fecal Coliform Total Maximum Daily Load Submittal Report</b>  |                |              |
|                      | Publication number   | Date Published | Date Revised |
|                      | 00-10-087  | November 2000  | June 2001    |
| VIEW NOW:            | <p><a href="#">Snohomish River Tributaries Fecal Coliform Total Maximum Daily Load Submittal Report</a> (Number of pages: 85) (Publication Size: 720KB)</p> <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>Trouble viewing? Try these free options.</p> <ul style="list-style-type: none"> <li>• Get the latest <a href="#">Adobe Reader</a> for PDFs.</li> <li>• For Excel or Word viewing get <a href="#">Open Office</a>, <a href="#">Microsoft OneDrive</a>, <a href="#">DropBox Basic</a> or a mobile app at your favorite app store.</li> </ul> </div> |                |              |
| AUTHOR(S)            | Robert Wright, Randy Coots, and Robert Cusimano  |                |              |
| DESCRIPTION          | <p>The Snohomish River basin drains 1,978 square miles and discharges to Possession Sound near the City of Everett. The junction of two major rivers, the Skykomish and Snoqualmie, forms the Snohomish River. The TMDL study area is comprised of the main Snohomish River tributaries: Quilceda, Allen, Woods, French Creek, the Marshlands and Pilchuck River and is referred to as the Snohomish River Tributaries Watershed in this document.</p>   |                |              |
| REQUEST A COPY       | <p>The mission of the Department of Ecology is to protect, preserve, and enhance Washington's environment. To help us meet that goal, please consider the environment before you print or request a copy.</p> <p><b>Accessibility Options</b><br/>       Persons with hearing loss can call 711 for Washington Relay Service<br/>       Persons with a speech disability can call 877-833-6341</p> <ul style="list-style-type: none"> <li>• <a href="#">Water Quality Order Form</a></li> </ul>  |                |              |
| CONTACT              | Ralph Svrjcek at 425-649-7165 or <a href="mailto:ralph.svrjcek@ecy.wa.gov">ralph.svrjcek@ecy.wa.gov</a>  |                |              |
| KEYWORDS             | creek, Snohomish River, report, study, basin, cleanup, river, water cleanup plan, plan, water, watershed, wood, Total Maximum Daily Load, fecal coliform   |                |              |
| RELATED PUBLICATIONS | <p>Title:</p> <p><a href="#">Snohomish County - Controlling Pet Waste in Suburban Areas</a></p> <p><a href="#">Lower Snohomish River Tributaries Fecal Coliform Bacteria Total Maximum Daily Load:Detailed Implementation Plan</a></p> <p><a href="#">Focus on Pet Waste Management</a></p> <p><a href="#">Water Cleanup Plans: Ecology seeks comments on plan to clean up bacteria in Snohomish River tributaries</a></p> <p><a href="#">Water Quality Assessment of Tributaries to the Snohomish River and Nonpoint Source Pollution TMDL</a></p>                                    |                |              |

