# CRITICAL AREAS ASSESSMENT REPORT AND MITIGATION PLAN FOR BUCKO ESTATES IN SEDRO-WOOLLEY, WASHINGTON 98284

**PREPARED FOR:** 

SARAH BUCKO SARAHBUCKO12@GMAIL.COM (360) 840-2609

**PREPARED BY:** 

ESSENCY ENVIRONMENTAL, LLC 11104 320<sup>TH</sup> AVENUE NORTHEAST CARNATION, WA 98014 CONTACT: MARY HARENDA (425) 761-5903 MHARENDA@CABLESPEED.COM



February 4, 2021 Revised July 8, 2021

This report should be cited as:

Essency Environmental, LLC. 2021. Critical Areas Assessment Report and Mitigation Plan for Bucko Estates in Sedro-Woolley, Washington. Prepared for Sarah Bucko. February 4, Revised July 8.

#### **Table of Contents**

<b>Critical Areas Ass</b>	sessment Report and Mitigation Plan for Bucko Estates in Sedro-Woolley, WA	
Introduc	tion	. 1
E	Background	. 1
(	Qualifications	. 1
Methods	5	. 3
Results .		. 4
(	General Site and Proposed Project Description	. 4
S	Shoreline Jurisdiction	. 4
S	Streams	. 5
F	Priority Habitats and Species	. 5
١	Netlands	. 5
ŀ	Aquifer Recharge Areas	. 6
F	Fish and Wildlife Habitat Conservation Areas	. 6
F	Frequently Flooded Areas	. 6
(	Geologically Hazardous Areas	. 6
(	Other	. 6
Critical A	reas Impacts and Mitigation	. 7

Table 1.	Project Contacts
Table 2.	Summary of Riparian Buffer Function

#### Appendices

Appendix A.	<u>Figures</u>
	Figure 1 – Vicinity Map
	Figure 2 – Critical Areas
	Figure 3 – National Wetlands Inventory Map
	Sheet 1 – Topographic Survey
Appendix B.	Site Photographs
Appendix C.	Soils Report
	Watland Datamaination Forma

- Appendix D. Wetland Determination Forms
- Appendix E. Critical Areas Impacts and Mitigation Sheets M1-M4.

Critical Areas Assessment Report and Mitigation Plan Bucko Estates

#### Background

Essency Environmental, LLC prepared this Critical Areas Assessment and Mitigation Plan in support of a proposed residential plat, Bucko Estates, located in Section 23, Township 35N, Range 4E within the city limits of Sedro-Woolley, Washington, 98284 (Figure 1 in Appendix A). The Critical Areas Assessment included parcels P37253, P37250, P37251, P37256, and P37151 (Figure 2 in Appendix A). Parcel P37151 and all of parcel P37256, except the area of a new roadway along the western parcel boundary, are excluded from the proposed plat boundaries (see plat drawings prepared by Ravnik and Associates).

Organization	Role	Representative	Title	Email\Phone
Essency Environmental, LLC	Critical Areas Assessment and Mitigation Plan	Mary Harenda	Professional Wetland Scientist, Fisheries Biologist	mharenda@cablespeed.com (425) 761-5903
Ravnik and Associates, Inc.	Civil Engineering/Planning	John Ravnik	Professional Engineer	jravnik@ravnik.net (360) 707-2048
Metron and Associates, Inc.	Survey	Chuck Troost	Survey Technician	<u>cjt@metrongis.com</u> (360) 435-3777
Sarah Bucko Laura Bucko	Owner/Applicant	Sarah Bucko	Owner	sarahbucko@gmail.com (360) 201-4775

Project contacts are shown in Table 1.

Table 1. Project Contacts

This report revision addresses review comments from the City of Sedro-Woolley (City) and provides a revised plat design and mitigation plan based on those comments.

### Qualifications

This critical areas assessment and mitigation plan was completed by Andrew Wones and Mary Harenda of Essency Environmental, LLC. Essency Environmental, LLC provides environmental consulting services and has conducted many critical areas studies in Washington State.

Andrew Wones has over 30 years of experience in marine and freshwater ecology research and environmental consulting. He has extensive experience with aquatic resources permitting, natural resource inventories, impact assessment, endangered species, mitigation planning and monitoring, and construction monitoring for environmental compliance. Mr. Wones has contributed to numerous environmental impact statements, natural resource studies, provided compliance monitoring services, and written biological assessments for several ports, marinas, and utility agencies. He has authored natural resources technical reports and chapters for NEPA/SEPA documents evaluating a variety of projects including transportation, mining, residential, and recreational developments. Andrew is also a Certified Erosion and Sedimentation Control Lead (CESCL).

Mary Harenda is a Professional Wetland Scientist with over 30 years of diverse experience in biological sciences, project planning and design. She possesses a thorough working knowledge of local, state, and federal permitting and plan requirements, including the Washington SEPA and federal NEPA processes (BAs/BEs/EISs). Mary's extensive technical experience includes wetland inventories, delineations and functional assessments, stream assessments and evaluations, and assessments for wildlife and threatened and endangered species. Her expertise also includes construction oversight on wetland and stream mitigation projects and follow-up monitoring to meet permit requirements. She has completed long-term, multiparameter monitoring on numerous mitigation banks in Washington State. She has worked in both the public and private sectors and has experience across a broad client base including small and large development firms, private home and property owners, small and large businesses, local, state and federal governments and agencies, and public and private utilities.

This Critical Areas Assessment and Mitigation Plan was completed following guidelines in Sedro-Woolley Municipal Code (SWMC 17.65 Regulations for Critical Areas). Background research included review of the following sources:

- Skagit County iMap (Skagit County 2020)
- Skagit County Flood Map (Skagit County 2020)
- City of Sedro-Woolley online documents and maps (available at: <u>https://www.ci.sedro-woolley.wa.us/</u>)
- Washington State Department of Ecology 303d list, interactive map (Ecology 2020)
- Washington State Department of Fish and Wildlife (WDFW) Priority Habitats and Species database (WDFW 2020a)
- Washington State Department of Fish and Wildlife Salmonscape (WDFW 2020b)
- USFWS National Wetlands Inventory Mapper (USFWS 2020)
- USDA NRCS Web Soil Survey (NRCS 2020)
- Aerial photography of the site from Google Earth and Skagit County iMap.

Essency Environmental staff completed critical areas delineation field work on May 15, 22, 26, and 27, 2020. We walked the project parcels to assess the presence of streams or wetlands and sampled locations that appeared most likely to support wetland conditions. In addition, we evaluated areas within 200 feet of the parcel boundaries for the potential presence of critical areas using published information sources including maps and aerial images, and from what could be seen from the project parcel, public roads, and other publicly accessible areas. Wetland determinations followed US Army Corps of Engineers wetland delineation guidelines (USACE 2010). Stream ordinary high water mark delineations were completed using Washington State Department of Ecology approved methods (Ecology 2016). Wetland determination sample plots and stream ordinary high water mark locations were located using a mapping grade Juniper Systems Geode GPS and Effigis data collection and post-processing software. Sample plot and flag locations were subsequently surveyed by Metron and Associates.

Sedro-Woolley Municipal Code 17.65.020 states the following shall constitute critical areas regulated by code: Wetland and Riparian Corridors, Areas with a Critical Recharging Effect on Aquifers Used for Potable Water, Fish and Wildlife Habitat Conservation Areas, Frequently Flooded Areas, and Geologically Hazardous Areas. Critical area buffers are also regulated as described in SWMC 17.65. This report describes whether any critical areas or buffers regulated by the SWMC are present on or near the subject property. Other regulatory and resource categories of interest are also discussed.

### **General Site and Proposed Project Description**

The Critical Areas Assessment included parcels P37253, P37250, P37251, P37256, and P37151 (Figure 2 in Appendix A). Parcels P37253, P37250, and P37251 are currently zoned Residential 7, and parcels P37256 and P37151 are zoned mixed use commercial (City of Sedro-Woolley 2019). A public school bus barn facility and residential properties border the project area.

Two residences are present in the northeast portion of the proposed plat. One house is in the northeast portion of Parcel P32750 and one is in the northeast portion of P37251. Three accessory buildings are also present on the site. The northeast corner of the site is landscaped in the vicinity of the residence. The remainder of the site is primarily mown hayfields and thickets of Himalayan blackberry (*Rubus armeniacus*). One fish-bearing stream, Brickyard Creek, crosses the site, flowing from northeast to southwest. Brickyard Creek occupies the topographically lowest area on the site and is surrounded by a narrow floodplain (see Sheet 1 – Topographic Survey in Appendix A). Site topography steepens abruptly immediately adjacent to the creek, then flattens. The steepest slopes adjacent to the creek are about 20%. Over 80% of site has slopes between 1-2%. Photos of the project site are in Appendix B.

The proposed project is development of a residential plat and associated infrastructure and amenities. All of existing parcels P37253, P37250, and P37251 are included in the proposed plat boundaries. All of parcel P37151 and all of parcel P37256, except the area of a new roadway along the western parcel boundary, are excluded from the proposed plat boundaries (see plat drawings prepared by Ravnik and Associates). As allowed under City of Sedro-Woolley code, the standard riparian buffer of Brickyard Creek will be reduced on both sides of the creek from 110 feet to a minimum of 55 feet in places, and the remaining buffer outside of already developed areas will be enhanced by planting native trees and shrubs. The City is requiring a new road to be constructed along the western boundary of the plat connecting to Cook Road. A new culvert will be installed in Brickyard Creek for the new road crossing and approximately 731 sf of stream channel will be impacted. The culvert is required to meet WDFW standards. A pedestrian trail that was initially proposed through the reduced buffer area has been eliminated due to concerns about reduced buffer function and weed management in the buffer.

### **Shoreline Jurisdiction**

The project parcels are not within Shoreline jurisdiction (City of Sedro-Woolley 2016).

#### Streams

Brickyard Creek flows east to west across the site (Figure 2 and Sheet 1 in Appendix A). Brickyard Creek is classified as a Type 3 stream by the City of Sedro-Wooley, and as Type F under the Washington State stream typing system (WAC 222-16-031). Under Sedro-Wooley Code, Brickyard Creek has a 110-foot standard riparian buffer (SWMC 17.65.530.B). The existing buffer is dominated by reed canarygrass (*Phalaris arundinacea*), pasture grasses and non-native blackberries. There are no trees or shrubs present within the stream buffer adjacent to the creek. There are several mature Douglas fir (*Pseudotsuga menziesii*) trees present within the buffer associated with the existing residences. Brickyard Creek has been dredged in the past to maintain flow capacity. According to information provided by Lisser and Associates, Skagit County Drainage District 14 has rights to conduct drainage maintenance in Brickyard Creek, and drainage right-of-way under Skagit County Auditor File # 267764. Channel banks are also currently mowed in concert with hay cropping on the site.

On the project site, Brickyard Creek provides salmonid migration habitat and poor quality rearing habitat. Stream substrate is dominated by sand. There is virtually no large wood or other complex habitat features, and most of the channel is of uniform depth. The lack of shading trees and shrubs on streambanks has allowed reed canarygrass to dominate the vegetation of the banks and to encroach into the channel itself. Reportedly, the section of Brickyard Creek through the project site goes dry at times.

### **Priority Habitats and Species (PHS)**

Brickyard Creek is the only PHS feature mapped on the site (WDFW 2020a). PHS species in Brickyard Creek include rainbow trout (*Oncorhynchus mykiss*), resident cutthroat trout (*Oncorhynchus clarkii*), and coho salmon (*Oncorhynchus kisutch*). The WDFW Salmonscape interactive map shows documented occurrence of coho salmon and accessible gradient for fall Chinook salmon (*Oncorhynchus tshawytscha*), fall chum salmon (*Oncorhynchus keta*), and oddyear pink salmon (*Oncorhynchus gorbuscha*) (WDFW 2020b). Fall Chinook salmon are federally listed as threatened (64 FR 14308, 79 FR 20802) and a Candidate species for State listing (WDFW 2020a). Coho salmon area a federal "species of concern"(WDFW 2020a).

#### Wetlands

The National Wetland Inventory (NWI) maps Brickyard Creek as a freshwater emergent wetland, and the ditch along the south side of F&S Grade Road that discharges to Brickyard Creek as riverine wetland (USFWS 2020) (Figure 3). This ditch is also shown as an intermittent stream on Salmonscape (WDFW 2020b). Neither WDNR (2020) or USGS (2020) show this ditch as a stream. Our visual observations indicate a stream channel is not present on the south side of F&S Grade Road between Jones Road and Brickyard Creek; existing conditions are either vegetated roadside ditches or culverted sections of ditch.

The Natural Resource Conservation Service (2020) maps most of the project area Minkler silt loam. A small area along the southern edge of the site in the vicinity of sample plot P18 is shown as Field Silt Loam soil (Figure 2 and Appendix C). Neither soil series is classified as hydric. We sampled 22 locations on the parcels that appeared most likely to support wetland conditions (Figure 2 and Appendix D). There were no indicators of wetland hydrology in any of the sample plots. Several plots exhibited relict hydric soil indicators. None of the locations sampled met criteria to be considered wetland. In addition, we evaluated areas within 200 feet of the project parcel and determined that no wetland buffers are present on the project parcels.

# Areas with a Critical Recharging Effect on Aquifers Used for Potable Water

The Skagit County Aquifer Recharge Area Category 1 Areas Map (Skagit County 2010) does not show any aquifer recharge areas on or within 200 feet of the project parcels.

### Fish and Wildlife Habitat Conservation Areas

Brickyard Creek and its associated riparian buffer (i.e., within 110 feet of the stream ordinary high water mark) are defined as a Fish and Wildlife Conservation Areas (HCAs) in SWMC 17.65.500. There are no other Fish and Wildlife Conservation Areas or habitats for species of local importance as defined in SWMC 17.65.500 on the project parcels.

### **Frequently Flooded Areas**

The project is mapped as outside the 500-year floodplain (Zone X) by the Federal Emergency Management Agency (Skagit County 2017). Zone X is not regulated.

### **Geologically Hazardous Areas**

There are no potential landslide or erosion hazard areas or steep slopes mapped by Skagit County on the project parcels (2016). A geotechnical study may be required to assess the presence of Geologically Hazardous Areas (SWMC 17.65.420) as part of the development review process. Essency Environmental is not qualified to assess Geologically Hazardous Areas.

### Other

Section 17.65.070.A.4 of the SWMC states that a survey showing locations, descriptions, and species of all trees over 6 inches in diameter, as measured five feet above the base of the trunk, and shrubs over eight feet tall or six feet wide, may be required to be submitted with any development application. There are several trees present on the site that meet these minimum size criteria.

Brickyard Creek and its associated buffer are present on the project site. Impacts to critical areas from the project and associated mitigation are described below and shown on Sheets M1-M4 in Appendix E. Proposed mitigation follows provisions outlined in SWMC 17.165.160 – *Critical area and buffer mitigation requirements – General Provisions*, including mitigation sequencing guidelines, designation of Protected Critical Areas (PCAs), and proposed mitigation maintenance and monitoring. Project components related to critical areas impacts and mitigation are described below.

• The standard riparian buffer of Brickyard Creek will be reduced on both sides of the creek from 110 feet to a minimum of 55 feet in places, and the remaining buffer will be enhanced by planting native trees and shrubs. The total riparian buffer to be decreased is 3.44 acres. The remaining total riparian buffer to be enhanced is 3.43 acres (See Appendix E).

SWMC 17.65.530.B.2 allows for reduction of the 110-foot standard stream buffer to a maximum of 50 percent or 55 feet if all listed code provisions are met, including adequate enhancement of all remaining buffer area:

2. Decreasing Buffer Widths. Decreasing standard buffers will be allowed pursuant to Section 17.65.150 only if the applicant demonstrates that all of the following criteria are met:

a. A decrease is necessary to accomplish the purposes of the proposal and no reasonable alternative is available;

b. Decreasing width will not adversely affect the fish and wildlife habitat functions and values;

c. If a portion of a buffer is to be reduced, the remaining buffer area will be enhanced, using native vegetation, artificial habitat features, vegetative screening and/or barrier fencing as appropriate to improve the functional attributes of the buffer and to provide equivalent or better protection for fish and wildlife habitat functions and values;

d. The buffer width shall not be reduced below fifty percent of the standard buffer width unless the director determines that no other reasonable alternative exists and that no net loss of HCA riparian functional values will result, based on a functional assessment provided by the applicant utilizing a methodology approved by the director.

The entirety of the 110-foot riparian buffer is currently dominated by pasture grasses and thickets of non-native blackberry. Consequently, the overall degree of buffer function is expected to increase post-enhancement plantings despite the reduction in buffer width. No net loss to stream and buffer resource function is anticipated from the proposed project. Table 2 summarizes the anticipated changes to buffer function from the proposed mitigation.

#### Function Existing Proposed **Functional Change** Buffers Buffers **Vegetation Structure** Current buffer is dominated by Low High mown grass or blackberry. Native trees and shrubs will be planted and invasive shrubs will be controlled. Vegetation Species Diversity Moderate Proposed plantings will substantially Low increase species diversity. Habitat Interspersion Low Moderate Proposed plantings include trees and shrubs and an interspersed planting design. Presence of Native Vegetation Non-native species dominate the Low High current buffer. Fish Habitat Moderate Native plantings will provide source Low Protection/Sustainability of woody debris, increase stream shading, create instream habitat structure along the stream banks, and improve bank integrity. Amphibian Utilization Moderate Native trees and shrubs provide Low habitat for native tree frogs and salamanders. Bird Utilization Low Moderate Current buffer is dominated by mown grass or blackberry. Native trees and shrubs will increase bird habitat. Mammalian Utilization Native plantings will provide a Moderate Low vegetated corridor connecting with PCA tract along Brickyard Creek to the west. Habitat Connectivity Low Moderate Native plantings will provide a vegetated corridor connecting with PCA tract along Brickyard Creek to the west. Water Quality Potential Low Moderate Native plantings will enhance runoff filtration, provide shade to creek, and reduce streambank erosion. Visual and Noise Buffering Low Moderate Mitigation areas will provide localized visual and noise buffering.

#### Table 2. Summary of Riparian Buffer Function

- New water and sewer lines will be installed under Brickyard Creek either by trenching if the creek bed is dry at the time of construction or by boring/pushing under the creek. WDFW has indicated trenching is allowed as long as the creek bed is dry at the time of construction. Any disturbed areas will be restored to existing grade with a minimum of 3 feet of cover. Surface soils will be stabilized as needed and disturbed areas will be seeded with an erosion control mix.
- The City is requiring a new road to be constructed along the western boundary of the plat connecting to Cook Road. A new arch culvert, 11.25 ft wide x 65 ft long, will be installed in Brickyard Creek and approximately 731 sf of stream will be impacted. The culvert is required to meet WDFW standards. Any disturbed areas in the riparian buffer will be stabilized, seeded with an erosion control mix, and planted as shown on the mitigation plan sheets.

An existing culvert in Brickyard Creek and gravel drive in the eastern portion of the site will remain to provide vehicle access to the south side of the creek for utility maintenance. In 2016, a culvert was removed from the creek that had washed out and was causing stream bank erosion. This culvert was located approximately 350 feet downstream of the existing culvert. Skagit County Drainage District 14 has rights to conduct drainage maintenance in Brickyard Creek, and drainage right-of-way under Skagit County Auditor File # 267764. The City also conducts routine drainage maintenance in this reach of the creek, and vegetation maintenance in the creek and along the banks and manages this section of creek to convey storm water from developed up stream portions of the watershed (Technical Memorandum dated April 14, 2021,from Lyndon Lee to John Coleman, Sedro-Woolley Planning Director). The City has indicated they would not support addition of any instream features, such as large wood, in this reach of the creek due to concerns regarding flow conveyance and drainage capacity (Personal Communication with Heike Nelson, Ravnik and Associates, per David Lee, Sedro-Wooley City Engineer).

• Section 17.65.070.A.4 of the SWMC states that a survey showing locations, descriptions, and species of all trees over 6 inches in diameter, as measured five feet above the base of the trunk, and shrubs over eight feet tall or six feet wide, may be required to be submitted with any development application. There are several trees present on the site that meet these minimum size criteria. If required, a vegetation survey will be submitted with the development application which shows surveyed locations, descriptions, and species of all trees over 6 inches in diameter and shrubs over eight feet tall or six feet wide per SWMC 17.65.070.A.4.

#### **Mitigation Goals and Objectives**

The goal of the proposed mitigation is to compensate for decreased riparian buffer width by enhancing riparian buffer function.

**Objectives:** Compensate for decreasing the standard riparian buffer of Brickyard Creek, a Type 3/Type F Water, by 3.43 acres, through enhancing the remaining 3.44 acres with plantings of native trees and shrubs. The mitigation plan sheets M1-M4 in Appendix E show planting areas,

and planting schedules and notes for enhancement areas. Table 2, above, summarizes the anticipated changes to buffer function from the proposed mitigation.

**Protected Critical Areas Tracts, Fencing and Signage:** Enhanced riparian buffer areas will be identified on the recorded plat as Protected Critical Areas (PCAs) and fenced and signed as required by SWMC 17.165.160.

#### Performance Standards

Mitigation Performance Standards are as follows:

- 1. PCA tracts were recorded on the approved plat.
- 2. Enhancement mitigation areas were planted as approved.
- 3. There will be 90% survival of installed plantings at the end of the first growing season (Year 1). Any replacement plantings shall be installed before the beginning of the second growing season (February 23rd per the Sedro-Woolley WETS tables).
- 4. There will be a minimum of 80% cover of native woody species (shrub and tree canopy layers considered together) at the end of the fifth growing season (Year 5) in enhancement areas. Volunteer native woody species can be included in the Year 5 cover value. At least three native tree species and three native shrub species shall each comprise at least 10% of the total year five cover value.
- 5. Invasive/Non-Native Species:
  - a. In enhancement areas, there will be less than 10% cover of blackberry, Scotch broom, thistle, bindweed/morning glory, all invasive knotweed species, tansy ragwort, English ivy, purple loosestrife, yellow iris and other non-native, invasive, aggressive tree, shrub, viny or herbaceous species combined at the end of the first through fifth growing seasons. Reed canary grass cover shall not counted towards the 10% threshold but reed canary grass cover in monitoring plots and general observations about reed canary grass coverage on the site should be noted.
  - b. In enhancement areas, any patches of Invasive/Non-Native Species as noted shall be removed using removal means appropriate for the species. A "patch" is defined as an area greater than 200 ft<sup>2</sup> that has more than 50% areal cover of Invasive/Non-Native Species. Reed canary grass shall not be counted towards the 50% areal cover threshold in identifying patches.

#### Monitoring

A field inspection will be completed soon after plantings are installed, and an as-built report will be submitted to applicable permitting agencies. Thereafter, monitoring will be conducted annually for 5 years near the end of the plant growing season.

Year 1 vegetation monitoring will include a complete plant survival count. Year 2-5 vegetation cover monitoring shall be done either via a cover estimation for discrete areas separately or by sampling a minimum of 10% of the mitigation enhancement area using sampling plots, at the discretion of the biologist doing the monitoring. Percent cover of Invasive/Non-Native Species described under Performance Standard 5a should be also be made either via visual estimation

or by plot sampling, or both. The enhancement plantings areas should be surveyed for patches of Invasive/Non-Native Species as described under Performance Standard 5b. Locations of any patches should be mapped and located for control by maintenance crews.

Monitoring will also include recommendations for management of the site to meet performance standards, and site photographs to document vegetation development.

Annual monitoring reports documenting progress of the mitigation in meeting performance standards will be submitted per the schedule provided by permitting agencies. At minimum, annual reports will include the following:

- Number of each species originally planted.
- Number of plants of each species surviving at the end of the first growing season.
- Number and species of replacement plantings (if any).
- Photos from pre-determined photopoints.
- Estimated cover of native woody species.
- Estimated cover of invasive species.
- Description of measures taken to control invasive species.
- General observations on plant survival and health and any patterns/trends noted in species survival or health.
- General observations on Invasive/Non-Native Species on the site and recommendations for management.

#### **Maintenance and Contingency**

Plant maintenance activities should include irrigation, weed and invasive/non-native species control, mulch replacement, and replanting as necessary on a schedule sufficient to achieve Performance Standards.

**Contingency Actions:** 

- If more than 20% of plants are dead or severely stressed during any of the maintenance or monitoring inspections, additional plantings of the same or alternative native species may be added to the planting areas. Appropriate maintenance actions should be implemented to improve plant growing conditions.
- Performance Standard 4: If yearly monitoring indicates that native woody species areal cover and species composition performance standards are not on track to be met by Year 5, contingency measures such as additional plantings and improved maintenance actions shall be implemented by the permittee as recommended by the project biologist, project landscape architect, project landscape contractor and other parties knowledgeable in such areas.
- Performance Standard 5: If yearly monitoring indicates that Invasive/Non-native Species performance standards are not on track to be met by Year 5, contingency measures such as additional plantings and improved maintenance actions shall be implemented by the permittee as recommended by the project biologist, project landscape architect, project landscape contractor and other parties knowledgeable in such areas.

• If one or more performance standards have not been met at the end of the 5-year monitoring period, the permittee and/or their designee shall confer with the City on acceptable adaptive management or contingency actions which may include additional replanting and extension of the maintenance and monitoring period beyond 5 years.

#### **Performance Bond**

A mitigation performance and/or maintenance bond will be provided by the project applicant as required by the City of Sedro-Woolley Municipal Code.

City of Sedro-Wooley. 2016. City of Sedro-Woolley Shoreline Management Program Update. Effective June 14, 2016. Available at: <u>https://www.ci.sedro-</u> woolley.wa.us/departments/planning/shoreline\_master\_plan.php

- City of Sedro-Wooley. 2019. City of Sedro-Wooley Zoning Map. Available at: <u>https://www.ci.sedro-</u> <u>woolley.wa.us/Departments/Planning/Comprehensive%20Plan/Comp\_Plan\_Land\_Use\_Map.pdf</u>
- Skagit County. 2010. Aquifer Recharge Area Map. Category 1 Areas. (Skagit County Code 14.24.310). Available at:

https://www.skagitcounty.net/GIS/Documents/Critical Areas/Category%201%20Areas% 20Aquifer%20Recharge%20Map.pdf

- Skagit County. 2016. Potential Landslide and Erosion Hazard Areas. Available at: <u>https://www.skagitcounty.net/GIS/Documents/GeoHazard/cw103-53.pdf</u>
- Skagit County. 2020. iMap. Skagit County interactive maps. Available at: <u>https://www.skagitcounty.net/Maps/iMap/</u>
- Skagit County 2017. FEMA Q3 100 Year Floodplain. Map. Available at: <u>https://www.skagitcounty.net/GIS/Documents/Flood/FEMA%20Q3%20100%20Year%20</u> <u>Floodplain%20Map.pdf</u>
- U.S. Army Corps of Engineers. May 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region, Version 2.0.
- U.S. Department of Agriculture (USDA). Natural Resources Conservation Service (NRCS). 2020. Custom Soil Report for Skagit County Area, WA. Downloaded from: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm
- U.S. Fish and Wildlife Service. National Wetlands Inventory Mapper. 2020. Available at: http://www.fws.gov/wetlands/data/mapper.HTML
- U.S. Geological Survey (USGS). 2020. The National Map. National Hydrography Layer. Available at: <u>https://viewer.nationalmap.gov/advanced-viewer/</u>
- Washington State Department of Ecology. 2016. Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State. October 2016. Publication Number 16-06-029. Available at: https://fortress.wa.gov/ecy/publications/SummaryPages/1606029.html
- Washington State Department of Ecology. 2020. Water Quality Assessment for Washington. Online interactive map. Available at: https://fortress.wa.gov/ecy/wqamapviewer/map.aspx.

Washington Department of Natural Resources (WDNR). 2020. Forest Practices Application Mapping Tool. Available at: <u>https://fpamt.dnr.wa.gov/default.aspxb</u> Washington State Department of Fish and Wildlife (WDFW). 2020a. PHS on the Web. Priority Habitats and Species database. Available at: <u>http://apps.wdfw.wa.gov/phsontheweb/</u>

WDFW. 2020b. Salmonscape online fish distribution maps. Available at: http://apps.wdfw.wa.gov/salmonscape/map.html





EGEND	Hawthorne S		
Parcel Boundaries Type 3/Type F Stream Standard Stream Buffe Sample Plot	ard R. Murrow St		
онwм r -110'			
Figure 2. Critical Areas Existing Conditions		Essency Environmental LLC 11104 320th Ave NE Carnation, WA 98014	
Bucko Estates Parcels P37253, P37250, P37251, P37256, and P37151 Sedro-Woolley, WA	ENVIRONMENTAL	425 269-3119 425 761-5903 www.essencyenvironmental.com	Date: 1/29/2021



#### U.S. Fish and Wildlife Service National Wetlands Inventory



#### May 3, 2020

#### Wetlands



Estuarine and Marine Deepwater

Estuarine and Marine Wetland

- Freshwater Forested/Shrub Wetland
  - **Freshwater Pond**

Freshwater Emergent Wetland

Lake Other 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.

Figure 3- NWI Map

National Wetlands Inventory (NWI) This page was produced by the NWI mapper



#### All photos were taken during field work in May 2020

#### Appendix B





Photo 3. Brickyard Creek from the center of the site, facing eastnortheast.



Photo 4. Brickyard Creek from the center of the site, facing west.

#### Appendix B





Photo 7. From sample plot P12, facing west.



Photo 8. Existing building on parcel P37251 from sample plot P12, facing south.

#### Appendix B





Photo 12. From southwest corner of Parcel P37251, facing south.

Critical Areas Assessment Report and Mitigation Plan Bucko Estates



United States Department of Agriculture

Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Skagit County Area, Washington



## Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/? cid=nrcs142p2 053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

# Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map	9
Legend	10
Map Unit Legend	11
Map Unit Descriptions	11
Skagit County Area, Washington	13
57—Field silt loam, protected	13
92—Minkler silt loam	14
136—Sumas silt loam	15
152—Urban land-Mt. Vernon-Field complex	16
References	19

# **How Soil Surveys Are Made**

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


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: Skagit County Area, Washington Survey Area: Varsion 10, Sep 46, 2010	Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.	Date(s) aerial images were photographed: Jul 9, 2010—Aug 28, 2011	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 LEGEND	Area of Interest (AOI)     Resident and a second seco	Soils     Soil Map Unit Polygons     An Very Stony Spot <ul> <li>Soil Map Unit Lines</li> <li>Soil Map Unit Points</li> <li>Soil Map Unit Points</li> <li>Soil Map Unit Points</li> <li>Solecial Point Features</li> <li>Blowout</li> <li>Water Features</li> </ul>	<ul> <li>Borrow Pit</li> <li>Earns and Canals</li> <li>Clay Spot</li> <li>Transportation</li> <li>Transportation</li> </ul>	<ul> <li>Closed Depression</li> <li>Cravel Pit</li> <li>US Routes</li> <li>Gravelly Spot</li> <li>Major Roads</li> </ul>	<ul> <li>Landfill</li> <li>Lava Flow</li> <li>Background</li> <li>Marsh or swamp</li> <li>Aerial Photography</li> <li>Mine or Quarry</li> </ul>	<ul> <li>Miscellaneous Water</li> <li>Perennial Water</li> <li>Rock Outcrop</li> </ul>	<ul> <li>Saline Spot</li> <li>Sandy Spot</li> <li>Severely Eroded Spot</li> </ul>	<ul> <li>Sinkhole</li> <li>Slide or Slip</li> </ul>	Ø Sodic Spot

## **Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
57	Field silt loam, protected	61.2	17.7%
92	Minkler silt loam	198.7	57.4%
136	Sumas silt loam	14.3	4.1%
152	Urban land-Mt. Vernon-Field complex	72.2	20.8%
Totals for Area of Interest		346.4	100.0%

## **Map Unit Descriptions**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Skagit County Area, Washington

### 57—Field silt loam, protected

#### **Map Unit Setting**

National map unit symbol: 2hwb Elevation: 10 to 50 feet Mean annual precipitation: 32 inches Mean annual air temperature: 50 degrees F Frost-free period: 160 to 210 days Farmland classification: Prime farmland if protected from flooding or not frequently flooded during the growing season

#### **Map Unit Composition**

*Field and similar soils:* 90 percent *Minor components:* 10 percent *Estimates are based on observations, descriptions, and transects of the mapunit.* 

#### **Description of Field**

#### Setting

*Landform:* Flood plains *Parent material:* Alluvium and volcanic ash

#### **Typical profile**

H1 - 0 to 13 inches: silt loam
H2 - 13 to 21 inches: silt loam
H3 - 21 to 40 inches: stratified sand to loamy fine sand
H4 - 40 to 60 inches: stratified sand to very fine sandy loam

#### **Properties and qualities**

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 36 to 48 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 10.2 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 2w Hydrologic Soil Group: B Forage suitability group: Seasonally Wet Soils (G002XN202WA) Hydric soil rating: No

#### **Minor Components**

#### Skagit, undrained Percent of map unit: 5 percent Landform: Flood plains Hydric soil rating: Yes

#### Sumas, undrained

Percent of map unit: 5 percent Landform: Flood plains Hydric soil rating: Yes

## 92—Minkler silt loam

#### **Map Unit Setting**

National map unit symbol: 2hxl Elevation: 50 to 80 feet Mean annual precipitation: 50 inches Mean annual air temperature: 50 degrees F Frost-free period: 190 days Farmland classification: Prime farmland if drained

#### Map Unit Composition

*Minkler and similar soils:* 100 percent *Estimates are based on observations, descriptions, and transects of the mapunit.* 

#### **Description of Minkler**

#### Setting

Landform: Terraces Parent material: Alluvium andglaciolacustrine deposits

#### **Typical profile**

H1 - 0 to 12 inches: medial silt loam
H2 - 12 to 15 inches: medial silt loam
H3 - 15 to 60 inches: stratified fine sand to very fine sandy loam

#### Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 6 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 10.6 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 5w Hydrologic Soil Group: B/D Forage suitability group: Wet Soils (G002XN102WA) Hydric soil rating: No

### 136—Sumas silt loam

#### Map Unit Setting

National map unit symbol: 2hsv Elevation: 0 to 50 feet Mean annual precipitation: 35 to 60 inches Mean annual air temperature: 48 to 52 degrees F Frost-free period: 150 to 210 days Farmland classification: Prime farmland if drained

#### Map Unit Composition

*Sumas, drained, and similar soils:* 80 percent *Minor components:* 20 percent *Estimates are based on observations, descriptions, and transects of the mapunit.* 

#### **Description of Sumas, Drained**

#### Setting

Landform: Deltas, flood plains Parent material: Alluvium

#### **Typical profile**

H1 - 0 to 6 inches: silt loam H2 - 6 to 16 inches: silty clay loam H3 - 16 to 60 inches: coarse sand

#### **Properties and qualities**

Slope: 0 to 2 percent
Depth to restrictive feature: 12 to 20 inches to strongly contrasting textural stratification
Natural drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 12 to 35 inches
Frequency of flooding: Rare
Frequency of ponding: None
Available water storage in profile: Low (about 3.1 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 3w Hydrologic Soil Group: C Forage suitability group: Soils with Few Limitations (G002XN502WA) Hydric soil rating: Yes

#### **Minor Components**

#### Sumas, undrained

Percent of map unit: 5 percent Landform: Tidal flats Hydric soil rating: Yes

#### Mt. vernon

Percent of map unit: 5 percent Hydric soil rating: No

#### Field

Percent of map unit: 5 percent Hydric soil rating: No

#### Skagit, undrained

Percent of map unit: 5 percent Landform: Flood plains Hydric soil rating: Yes

### 152—Urban land-Mt. Vernon-Field complex

#### Map Unit Setting

National map unit symbol: 2htf Elevation: 10 to 50 feet Mean annual precipitation: 32 to 40 inches Mean annual air temperature: 50 degrees F Frost-free period: 160 to 210 days Farmland classification: Not prime farmland

#### Map Unit Composition

Urban land: 40 percent Mt. vernon and similar soils: 30 percent Field and similar soils: 20 percent Minor components: 10 percent Estimates are based on observations, descriptions, and transects of the mapunit.

#### Description of Urban Land

**Typical profile** 

H1 - 0 to 6 inches: variable

#### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 8s Hydric soil rating: No

#### **Description of Mt. Vernon**

#### Setting

*Landform:* Natural levees, flood plains *Parent material:* Alluvium and volcanic ash

#### **Typical profile**

*H1 - 0 to 10 inches:* ashy very fine sandy loam *H2 - 10 to 29 inches:* stratified ashy sand to very fine sandy loam

H3 - 29 to 60 inches: stratified fine sand to silt loam

### **Properties and qualities**

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 24 to 48 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water storage in profile: High (about 10.2 inches)

#### Interpretive groups

Land capability classification (irrigated): 3w Land capability classification (nonirrigated): 3w Hydrologic Soil Group: C Forage suitability group: Soils with Few Limitations (G002XN502WA) Hydric soil rating: No

#### **Description of Field**

#### Setting

*Landform:* Flood plains, natural levees *Parent material:* Alluvium and volcanic ash

#### **Typical profile**

H1 - 0 to 13 inches: silt loam
H2 - 13 to 21 inches: silt loam
H3 - 21 to 40 inches: stratified sand to loamy fine sand
H4 - 40 to 60 inches: stratified sand to very fine sandy loam

#### **Properties and qualities**

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 24 to 60 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 10.2 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 3w Hydrologic Soil Group: B Forage suitability group: Seasonally Wet Soils (G002XN202WA) Hydric soil rating: No

#### Minor Components

#### Mt. vernon

Percent of map unit: 10 percent Hydric soil rating: No Custom Soil Resource Report

# References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/ nrcs/detail/national/soils/?cid=nrcs142p2\_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2 053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ home/?cid=nrcs142p2 053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/ detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/ nrcs/detail/soils/scientists/?cid=nrcs142p2\_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/? cid=nrcs142p2\_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs142p2\_052290.pdf

Project/Site:	Bucko		City/County:	Sedro-	Woolley/	Skagit	Samp	ling Date:	5/15/20	)		
Applicant/Own	er: Sarah Bud	ko		State:	WA	Sampling Po	oint:	P1				
Investigator(s)	M. Harenda	a/A. Wones	Section, T	ownship,	Range:	S23, T35N	l, R4E					
Landform (hills	lope, terrace, et	c.): terrace	Lo	cal relief	(concave	, convex, nor	ne):	none		Slope (%):	1%	
Subregion (LR	R): MLRA2		Lat: 48.510	)876°N	Long:	122.25290	9°W	Datum:	WGS 8	34		
Soil Map Unit I	Name: Minkle	er silt loam				NWI	classi	fication:	NA			
Are climatic / h	ydrologic condit	ions on the site ty	pical for this tim	e of year?	? Yes	X No	(If no	, explain in	Remark	s.)		
Are Vegetation	n <u>X</u> , Soil	, or Hydrold	ogy signif	ficantly dis	sturbed?	Are "Norn	nal Ciro	cumstances	" presen	t? Yes X	No	
Are Vegetation	ı, Soil	, or Hydrold	ogy natur	ally probl	ematic?	(If r	needec	l, explain ar	ny answe	ers in Remark	s.)	
SUMMARY	3UMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc											

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>X</u> No _ Yes <u>No _</u> Yes <u>No _</u>	XX	Is the Sampled Area within a Wetland?	Yes _	No <u>X</u>
Remarks: Recently mown.					

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 20 ft dm )	% Cover	Species?	Status	Number of Dominant Species
1. Populus trichocarpa	20	yes	FAC	That Are OBL, FACW, or FAC: 3 (A)
2				Total Number of Dominant
3				Species Across All Strata: 4 (B)
4				That Are OBL, EACW, or EAC 75 (A/B)
50% = <u>10%</u> ; 20% = <u>4%</u>				(··-)
	20	= Total Cov	er	<b>5</b> • • • • • • •
Sapling/Shrub Stratum (Plot size: 10 ft dm	)			Prevalence Index worksheet:
1. Rubus armeniacus	3	yes	FAC	Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
50% =1.5% ; 20% =0.6%	3	= Total Cov	er	UPL species x 5 =
Herb (Plot size: <u>6 ft dm</u> )				Column Totals: (A) (B)
1. Tanacetum vulgare	3	no	FACU	( )
2. Agrostis sp.	20	yes	FAC	Prevalence Index = B/A =
3. Dactylis glomerata	67	yes	FACU	
4. Vicia sativa	5	no	FACU	Hydrophytic Vegetation Indicators:
5. <u>Galium aparine</u>	3	no	FACU	1 - Rapid Test for Hydrophytic Vegetation
6. Cirsium arvense	2	no	FAC	X 2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants
11				Problematic Hydrophytic Vegetation' (Explain)
50% = <u>50%</u> ; 20% = <u>20%</u>	100	<u>= T</u> otal Cov	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:	)			be present, unless disturbed or problematic.
1				
2				Hydrophytic
		= Total Cov	er	Vegetation
% Bare Ground in Herb Stratum 0	-			Present? Yes X No
Remarks: Vegetation recently mown.				

OIL							Sampling Point:	P1
Profile Desc	ription: (Describe	to the depth	n needed to docume	ent the ind	icator or c	onfirm the ab	sence of indicators.)	
Depth	Matrix		<u> </u>	Redox Feat	tures			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0.4	10VP 2/2	100					Fine sandy	
0-4	10TR 3/2	100					Fine sandy	
4-16	10YR 3/3	100					loam	
		·						
<sup>1</sup> Type: C=C	oncentration, D=Dep	letion, RM=F	Reduced Matrix, CS=	Covered or	r Coated Sa	and Grains.	<sup>2</sup> Location: PL=Pore L	ining, M=Matrix.
Hydric Soi	I Indicators: (Appli	cable to all	I RRs unless other	wise noter	4)	Indi	cators for Problematic	Hydric Soils <sup>3</sup>
Injune oor				-\		indi		
Histoso	ol (A1)		Sandy Redox (St	) )			2 cm Muck (A10)	-0)
Histic E	pipedon (A2)		Stripped Matrix (S	56)			Red Parent Material (1)	-2)
Black H	HISTIC (A3)		Loamy Mucky Mi	neral (F1) (	except ML	_KA 1)	very Shallow Dark Surf	ace (TF12)
Hydrog	en Sultide (A4)		Loamy Gleyed M	atrix (F2)		(	Uther (Explain in Rema	rks)
	ea Below Dark Surfa	ce (A11)	Depleted Matrix ( Bodox Dark Surf	F3)				· · · · · · · · · · · · ·
	Mucky Minoral (S1)		Redux Dark Suffa			•	indicators of hydrophyl	ic vegetation and
Sandy	Cloued Metrix (S1)		_ Depleted Dark St				wetland hydrology must	t be present,
Sanuy	Gleyeu Matrix (34)			115 (FO)			uniess disturbed of prof	Jiemalic
estrictive La	ver (if present):							
Type	<b>,</b>				Hydric Se	oil Present?	Yes	No X
Dopth (incl	noc):				Tryunc o	on resent:		
Deptil (illei								
YDROLOG	iΥ							
Wetland Hvdr	ology Indicators:							
Primary Indica	tors (minimum of one	e required; c	heck all that apply)			Secon	dary Indicators (2 or mo	ore required)
-	<b>X</b>		Water-Stained	l Leaves (B	9) (except	t Wa	ter-Stained Leaves (B9	) (MLRA 1, 2,
Surface Wa	ater (A1)		MLRA 1, 2, 4/	A, and 4B)	, ,   •	4A	, and 4B)	
High Water	Table (A2)		Salt Crust (B1	1)		Dra	ainage Patterns (B10)	
Saturation	(A3)		Aquatic Inverte	ebrates (B1	3)	Dry	-Season Water Table (	C2)
Water Mark	(B1)		Hydrogen Sulf	ide Odor (C	C1)	Sa	turation Visible on Aeria	al Imagery (C9)
_			Oxidized Rhiz	ospheres a	long Living	]		
Sediment E	Deposits (B2)		Roots (C3)			Ge	omorphic Position (D2)	
Drift Depos	its (B3)		Presence of R	educed Iro	n (C4)	Sh	allow Aquitard (D3)	
			Recent Iron Re	eduction in	Tilled			
Algal Mat o	or Crust (B4)		Soils (C6)			FA	C-Neutral Test (D5)	
Iron Donco	ite (B5)		Stunted or Str	essed Plan	ts (D1)	D-	icod Ant Mounda (DC) (	
Surface Se	ils (DD)		(LKK A) Other (Evoluin	in Romark	( <b>n</b> )	Ra	ised Ant Mounds (D6) (	
_ Sunace Su	Vicible on Aprial Ima	aony (P7)		I III Kelliaik	.5)		SI-HEAVE HUIMMOCKS (	(10
Sparsely V	enetated Concave Si	urface (B8)						
	Systeme Concave S							
ield Observa	ations:							
urface Water	Present? Yes	No	X Depth (inches):					
ater Table P	resent? Yes	No	X Depth (inches):		w	etland Hydro	oav Present? Yes	No X
aturation Pro	sent?							
ncludes canil	larv fringe) Yes	No	X Depth (inches):					
scribe Record	ded Data (stream day	uge, monitor	ing well, aerial photo	s. previous	inspection	s), if available	•	
	and bala (officially ga	-90, 11011101		-, p				
marke: No h	drology indicators of	served						
mains. NU fly	arology mulcators of	301 VEU.						

Project/Site:	Buck	)		City/Cou	nty: S	Sedro-V	Noolley/	Skagit	Samp	ling Date:	5/15/2	0		
Applicant/Own	er:	Sarah Bucl	KO		State: WA			Sampling I	Point:	P2				
Investigator(s)	: M	. Harenda/	A. Wones	Secti	ion, Town	nship, I	Range:	S23, T35	N, R4E					
Landform (hills	slope, t	errace, etc	.): terrace		Local r	relief (	concave	, convex, no	one):	none		Slope (%):	1%	
Subregion (LR	R):	MLRA2		Lat: 4	8.510714	4°N	Long:	122.2529	21°W	Datum:	WGS 8	34		
Soil Map Unit	Name:	Minkler	silt loam					NV	/I classi	fication:	NA			
Are climatic / h	nydrolo	gic conditio	ons on the site ty	pical for th	is time of	year?	Yes	X No	(If no	o, explain in	Remark	s.)		
Are Vegetation	n X	, Soil	, or Hydrold	ogy	significan	ntly dis	turbed?	Are "No	rmal Cir	cumstances	s" presen	t? Yes X	No	
Are Vegetation	۱	, Soil	, or Hydrold	ogy	naturally	proble	ematic?	(1	needeo	d, explain ar	ny answe	ers in Remark	s.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes N Yes N Yes N	$\begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \\ \hline X \\ \hline \end{array}$	Is the Sampled Area within a Wetland?	Yes	No <u>X</u>
Remarks: Recently mown.					

	Absolute	Dominant	Indicator	Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species	
l				Total Number of Dominant	
3.	·			Species Across All Strata: <u>2</u> (B)	
4.				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)	
	-	= Total Cove	ər		
Sapling/Shrub Stratum (Plot size: 10 ft dm	)			Prevalence Index worksheet:	
1				Total % Cover of: Multiply by:	
2				OBL species x 1 =	
3				FACW species x 2 =	
4				FAC species x 3 =	
5				FACU species x 4 =	
		= Total Cove	er	UPL species x 5 =	
Herb (Plot size: <u>6 ft dm</u> )				Column Totals: (A) (B)	
1. Dactylis glomerata	35	Yes	FACU		
2. Agrostis capillaris	50	Yes	FAC	Prevalence Index = B/A =	
3. Anthoxanthum odoratum	15	No	FACU		
4				Hydrophytic Vegetation Indicators:	
5				1 - Rapid Test for Hydrophytic Vegetation	
6				2 - Dominance Test is >50%	
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>	
8				4 - Morphological Adaptations <sup>1</sup> (Provide supportin	ng
9				data in Remarks or on a separate sheet)	
10				5 - Wetland Non-Vascular Plants	
11				Problematic Hydrophytic Vegetation' (Explain)	
Weady Vina Stratum (Distaira)	100	<u>= T</u> otal Cove	ər	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	t
	)		-		
2					
L		- Total Cove	ər	Hydrophytic	
% Bare Ground in Herb Stratum		= 10101 0000	51	Vegetation Present? Yes No X	
	-				
Pemarks: Vegetation recently mown					
Nomano. Vegetation recently mown.					

OIL							Sampling Point:	P2
Profile Desc	cription: (Describe	to the dept	h needed to docume	ent the indi	cator or con	firm the ab	sence of indicators.)	
Depth	Matrix			Redox Feat	ures		,	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-8	10YR 3/2	100					Silt loam	
	10111 0/2						Fine sandy	
8-16	10YR 3/3	100					loam	
16+	2.5 Y 4/2	97	7.5YR 5/6	3	С	М	Sand	
<u> </u>		·						
Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, CS=	Covered or	Coated Sand	d Grains.	<sup>2</sup> Location: PL=Pore L	ining, M=Matrix.
Hydric Soi	il Indicators: (Appli	cable to all	LRRs, unless other	wise noted	.)	Indi	cators for Problemation	c Hydric Soils <sup>3</sup> :
Histoso	ol (A1)		Sandy Redox (St	5)		:	2 cm Muck (A10)	-
Histic E	Epipedon (A2)	-	Stripped Matrix (S	56)			Red Parent Material (TI	=2)
Black I	Histic (A3)	_	Loamy Mucky Mi	neral (F1) (e	except MLRA	A 1) 🔡 '	Very Shallow Dark Surf	ace (TF12)
Hydrog	gen Sulfide (A4)		Loamy Gleyed M	atrix (F2)		(	Other (Explain in Rema	rks)
Deplet	ed Below Dark Surfa	ce (A11)	Depleted Matrix (	F3)				
	Jark Surface (A12)	-	Redox Dark Surfa	ace (F6)			Indicators of hydrophyl	tic vegetation and
Sandy Sandy	Gleved Matrix (S4)	_	Depleted Dark St Redox Depressio	inace (F7)			inless disturbed or prol	t be present,
strictive La	ayer (if present):						_	
Type:					Hydric Soil	Present?	Yes	No X
Depth (inc	hes):							
DROLOG	θY							
etland Hydi	rology Indicators:	o roquirodu				Casar	dan ( Indiantara (2) ar ma	
inary muica		e required, d	Water-Stained	LL eaves (B	) (except	Wa	iter-Stained Leaves (B	) ( <b>MI RA 1</b> , <b>2</b> ,
Surface W	ater (A1)		MLRA 1, 2, 4	A, and 4B)	(oxcopt	4A	, and 4B)	,) (III <u></u> _IOT I, <u>_</u> ,
High Wate	r Table (A2)		Salt Crust (B1	1)		Dra	ainage Patterns (B10)	
Saturation	(A3)		Aquatic Inverte	ebrates (B13	3)	Dry	-Season Water Table (	(C2)
Water Mar	ks (B1)		Hydrogen Sulf	ide Odor (C	1)	Sat	turation Visible on Aeria	al Imagery (C9)
0 11 11			Oxidized Rhiz	ospheres al	ong Living	•		
Sediment I	Deposits (B2)		Roots (C3)	advaad Iran		Ge	omorphic Position (D2)	
Drift Depos	Sils (D3)		Presence of R	eduction in	Tilled		allow Aquitard (D3)	
Algal Mat o	or Crust (B4)		Soils (C6)		rilleu	FA	C-Neutral Test (D5)	
	( /		Stunted or Str	essed Plant	s (D1)			
Iron Depos	sits (B5)		(LRR A)			Ra	ised Ant Mounds (D6) (	LRR A)
Surface Sc	oil Cracks (B6)		Other (Explain	in Remarks	3)	Fro	st-Heave Hummocks (	D7)
Inundation	Visible on Aerial Ima	igery (B7)						
Sparsely V	regetated Concave S	urtace (B8)						
eld Observa	ations:							
urface Water	r Present? Yes	No	Depth (inches):		_			
ater Table F	Present? Yes	No	Depth (inches):		Wetla	and Hydrol	ogy Present? Yes	No X
turation Pre	esent?					-		
cludes capi	llary fringe) Yes	No	Depth (inches):					
cribe Recor	ded Data (stream ga	uge, monito	ring well, aerial photo	s, previous	inspections),	if available	:	
arke:								

Project/Site:	et/Site: Bucko			City/Cou	ity/County: Sedro-Woolley/Skagit					Sampling Date:		20		
Applicant/Owr	ier:	Sarah Bucko				State:	WA	Sampling P	oint:	P3				
Investigator(s)	: N	I. Harenda/A.	Wones	Secti	ion, To	ownship,	Range:	S23, T35N	N, R4E					
Landform (hills	slope, t	terrace, etc.):	terrace		Loc	cal relief	(concave	, convex, no	ne):	none		Slope (%)	: 1%	, D
Subregion (LR	(R):	MLRA2		Lat: 4	18.510	537°N	Long:	122.25247	76° W	Datum:	WGS 8	84		
Soil Map Unit	Name:	Minkler sil	t loam					NW	l classi	fication:	NA			
Are climatic / h	vdrolo	gic conditions	on the site typ	oical for th	is time	e of year	? Yes	X No	(If no	o, explain in	Remark	(s.)		
Are Vegetation	1 <u>X</u>	, Soil	, or Hydrolo	gy	signifi	icantly di	sturbed?	Are "Nor	mal Cir	cumstances	s" presen	nt? Yes	Х	No
Are Vegetation	า	, Soil	, or Hydrolo	ду	natura	ally probl	ematic?	(If	needeo	d, explain ar	ny answe	ers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         No           Yes         No           Yes         No           Yes         No	X X X	Is the Sampled Area within a Wetland?	Yes	No <u>X</u>
Remarks: Recently mown. Near Ge	otest TP8.				

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1				Total Number of Dominant
3.				Species Across All Strata: 1 (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
		= Total Cove	er	
Sapling/Shrub Stratum (Plot size: 10 ft dm	)			Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
		= Total Cove	er	LIPL species x 5 =
Herb (Plot size: <u>6 ft dm</u> )				Column Totals: (A) (B)
1. Rumex acetosella	15	No	FAC	
2. Agrostis capillaris	10	No	FAC	Prevalence Index = B/A =
3. Anthoxanthum odoratum	60	Yes	FACU	
4. Vicia sativa	10	No	FACU	Hydrophytic Vegetation Indicators:
5. Plantago lanceolata	5	No	FACU	1 - Rapid Test for Hydrophytic Vegetation
6				2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants
11				Problematic Hydrophytic Vegetation' (Explain)
50% = 50 20% = 20	100	= Total Cove	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:	)			be present, unless disturbed or problematic.
1				
2				Hydrophytic
		= Total Cove	er	Vegetation
% Bare Ground in Herb Stratum	_			Present? Yes No X
Remarks: Vegetation recently mown.				

SOIL							Sampling Point:	P3
Profile Desc	cription: (Describe te	o the depth	n needed to document the	e indicator	or confirm	the absence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Redox Color (moist) %	Features	pe <sup>1</sup> L	OC <sup>2</sup>	Texture	Remarks
0-3	10YR 3/3	100				Ve 	ry fine ndy loam	
3-9	2.5Y 4/2	100				Ve 	ry fine ndy loam	
9-16	2.5Y 5/2	100				sa	nd	
			· ·			<u> </u>		
<sup>1</sup> Type: C=C	oncentration, D=Deple	etion, RM=F	Reduced Matrix, CS=Cover	ed or Coate	ed Sand Gra	ins. <sup>2</sup> Locat	ion: PL=Pore Li	ning, M=Matrix.
Hydric Soi	il Indicators: (Applic	able to all	LRRs, unless otherwise I	noted.)		Indicators	for Problematic	Hydric Soils <sup>3</sup> :
Histoso	ol (A1)		Sandy Redox (S5)			2 cm M	uck (A10)	
Histic E	Epipedon (A2)		_ Stripped Matrix (S6)			Red Pa	rent Material (TF	2)
Black F	HISTIC (A3)		Loamy Mucky Mineral (	( <b>excep</b> =2)	t MLRA 1)	Very Sr	allow Dark Suffa	ace (TF12)
	ed Below Dark Surfac	e (A11)	Loarny Gleyed Matrix (r Depleted Matrix (F3)	-2)			Explain in Remai	KS)
Thick F	Dark Surface (A12)		Redox Dark Surface (F	6)		<sup>3</sup> Indicat	ors of hydrophyti	ic vegetation and
Sandy	Mucky Mineral (S1)		Depleted Dark Surface	(F7)		wetland	hvdroloav must	be present.
Sandy	Gleyed Matrix (S4)		Redox Depressions (F8	3)		unless	disturbed or prob	lematic
Destriction 1	(16							
Restrictive La	ayer (if present):			Lbeala				Na V
Type:	haa);			Hyar	ic Soli Pres	ent? te	5 I	
	nes).							
Remarks:								
	2V							
Wotland Hydr	ology Indicators:							
Primary Indica	itors (minimum of one	required; c	heck all that apply)		5	Secondary Inc	licators (2 or mo	re required)
			Water-Stained Leave	es (B9) ( <b>ex</b>	cept	Water-Sta	ined Leaves (B9	) ( <b>MLRA 1, 2,</b>
Surface Wa	ater (A1)		MLRA 1, 2, 4A, and	<b>4B</b> )		_ 4A, and 4	B)	
High Water	r Table (A2)		Salt Crust (B11)	o (D12)		_ Drainage I	Patterns (B10)	(2)
Saturation	(A3) ka (B1)		Aqualic Invertebrate	S(DI3)		_ Dry-Seaso	Visible on Aoria	Umagany (C0)
	K3 (D1)		Oxidized Rhizosphe	res along Li	iving		VISIBLE OIT ACTIA	i iiiagery (C9)
Sediment [	Deposits (B2)		Roots (C3)		_	Geomorph	ic Position (D2)	
Drift Depos	sits (B3)		Presence of Reduce	ed Iron (C4)		_ Shallow A	quitard (D3)	
Algal Mat c	or Crust (B4)		Soils (C6)	Dianta (D1)	. –	FAC-Neut	ral Test (D5)	
Iron Depos	sits (B5)		(LRR A)	Plants (D1)	)	Raised An	t Mounds (D6) (I	
Surface So	oil Cracks (B6)		Other (Explain in Re	marks)		Frost-Hear	ve Hummocks (E	07)
Inundation	Visible on Aerial Imag	gery (B7)		,			,	,
Sparsely V	egetated Concave Su	rface (B8)						
Field Observa	ations:	Nia	Death (inches)					
Surface Water	Present? Yes		Depth (Inches):		Wotland L		acont? Vac	No Y
Saturation Pre	sent?				wettantur	iyulology Fi	esent: Tes	
(includes capil	llary fringe) Yes	No	Depth (inches):					
Describe Record	ded Data (stream dau	ge, monitor	ing well, aerial photos, prev	vious inspe	ctions), if ava	ailable:		
		J.,	<b>0</b> • , • • • • • • • • • • • • • • • • •		,, 240			
Remarks:								

Project/Site:	Buck	0			City/Co	ounty:	Sedro-	Woolley/	Skagit	Samp	ling Date:	5/15/2	0		
Applicant/Owr	er:	Sarah Buc	K0				State:	WA	Sampling P	oint:	P4				
Investigator(s)	: N	1. Harenda	A. Won	es	Se	ction, T	ownship,	Range:	S23, T35N	N, R4E					
Landform (hills	slope,	errace, etc	.): tei	rrace		Lo	cal relief	(concave	, convex, no	ne):	none		Slope (%):	1%	
Subregion (LR	R):	MLRA2			Lat:	48.510	)194°N	Long:	122.25189	94° W	Datum:	WGS 8	34		
Soil Map Unit	Name:	Minkler	silt loar	m					NW	I classi	fication:	NA			
Are climatic / h	nydrolo	gic conditio	ons on tl	he site typ	ical for	this time	e of year	? Yes	X No	(If no	o, explain in	Remark	s.)		
Are Vegetation	ו <u>א</u>	, Soil	, c	or Hydrolog	ау	signif	ficantly di	sturbed?	Are "Nor	mal Cir	cumstances	" preser	it? Yes X	Nc	
Are Vegetation	า	, Soil	, c	or Hydrolog	ду	natur	ally probl	ematic?	(If	needeo	d, explain ar	ny answe	ers in Remarl	(s.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         X         No           Yes         No         X           Yes         No         X	Is the Sampled Area within a Wetland?	Yes NoX
Remarks: Recently mown.			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
l				Total Number of Dominant
3.				Species Across All Strata: <u>2</u> (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
		= Total Cove	er	
Sapling/Shrub Stratum (Plot size: 10 ft dm	)			Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
		= Total Cove	er	UPL species x 5 =
Herb (Plot size: <u>6 ft dm</u> )				Column Totals: (A) (B)
1. Phalaris arundinacea	45	Yes	FACW	
2. Agrostis capillaris	55	Yes	FAC	Prevalence Index = B/A =
3				
4				Hydrophytic Vegetation Indicators:
5				<ol> <li>Rapid Test for Hydrophytic Vegetation</li> </ol>
6				X 2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants
11				Problematic Hydrophytic Vegetation (Explain)
	100	= Total Cove	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:	)			be present, unless disturbed or problematic.
1				
2				Hydrophytic
		= Total Cov	er	Vegetation
% Bare Ground in Herb Stratum	_			Present? Yes X No
Remarks: Vegetation recently mown.				

SOIL							Sampling Point:	P4		
Profile Desc	ription: (Describe to	the depth	needed to docume	ent the indi	cator or cor	nfirm the al	osence of indicators.)			
(inches)	Color (moist)	%	Color (moist)	Kedox real %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-8	10YR 3/2	100					Silt loam			
<u> </u>	10VP 3/2	100	·				Sandy loam			
0-10	101R 3/2	100		<u> </u>	. <u> </u>		Sandy Idam			
<sup>1</sup> Type: C=Co	oncentration, D=Deple	tion, RM=F	Reduced Matrix, CS=	Covered or	Coated San	d Grains.	<sup>2</sup> Location: PL=Pore Li	ning, M=Matrix.		
Hydric Soil	Indicators: (Applic	able to all	LRRs, unless other	wise noted	i.)	Indi	cators for Problematic	Hydric Soils <sup>3</sup> :		
Histoso	l (A1)		Sandy Redox (St	5)			2 cm Muck (A10)	-		
Histic E	pipedon (A2)	_	Stripped Matrix (	Ś6)		—	Red Parent Material (TF	2)		
Black H	listic (A3)		Loamy Mucky Mi Loamy Gloved M	neral (F1) (	except MLR	A 1)	Very Shallow Dark Surfa	ace (TF12)		
Deplete	ed Below Dark Surface	e (A11)	Depleted Matrix (	(F3)				K3)		
Thick D	ark Surface (A12)		Redox Dark Surf	ace (F6)			<sup>3</sup> Indicators of hydrophyti	c vegetation and		
Sandy I	Mucky Mineral (S1)	_	Depleted Dark Si Rodox Doprossion	urface (F7)			wetland hydrology must	be present,		
	Sleyeu Matrix (34)		Redux Depressio	JIIS (FO)						
Restrictive La	yer (if present):									
Туре:					Hydric Soil	Present?	Yes	No X		
Depth (inches):										
Remarks:										
HYDROLOG	Y ology Indicators:									
Primary Indicat	tors (minimum of one	required; cl	neck all that apply)			Secon	dary Indicators (2 or mo	re required)		
			Water-Stained	Leaves (B	9) (except	Wa	ater-Stained Leaves (B9	) (MLRA 1, 2,		
Surface Wa	iter (A1) Table (A2)		MLRA 1, 2, 4/ Salt Crust (B1	<b>A, and 4B</b> )		4A	, and 4B)			
Saturation (	(A3)		Aquatic Invert	ebrates (B1	3)	Dr	-Season Water Table (	C2)		
Water Mark	s (B1)		Hydrogen Sul	fide Odor (C	21)	Sa	turation Visible on Aeria	I Imagery (C9)		
Sediment D	enosits (B2)		Oxidized Rhiz Roots (C3)	ospheres a	long Living	Ge	omorphic Position (D2)			
Drift Deposi	its (B3)		Presence of R	Reduced Iron	n (C4)	Sh	allow Aquitard (D3)			
			Recent Iron R	eduction in	Tilled					
Algal Mat o	r Crust (B4)		Solis (C6) Stunted or Str	essed Plan	ts (D1)	FA	C-Neutral Test (D5)			
Iron Deposi	ts (B5)		(LRR A)	0000011011	(D I)	Ra	ised Ant Mounds (D6) (I	LRR A)		
Surface Soi	il Cracks (B6)		Other (Explain	n in Remark	s)	Fro	ost-Heave Hummocks ([	07)		
Sparselv Ve	egetated Concave Su	face (B8)								
	<b>.</b>									
Field Observa	tions:	NI.	Death (is 1 )							
Surface Water	Present? Yes	No No	Depth (inches):		Wet	and Hydro	ogy Present? Ves	No Y		
Saturation Pres	sent?					ana nyuru				
(includes capill	ary fringe) Yes	No	Depth (inches):							
Describe Record	led Data (stream gau	ge, monitori	ing well, aerial photo	os, previous	inspections)	, if available	:			
Remarks <sup>.</sup>										
Romando.										

Project/Site:	Buck	0		City/Coun	ty: Sec	ro-Woolley	/Skagit	Samp	ling Date:	5/15/20	)		
Applicant/Owr	ner:	Sarah Buc	KO		State	: WA	Sampling P	oint:	P5				
Investigator(s)	: 1	1. Harenda	A. Wones	Sectio	n, Townsh	ip, Range:	S23, T35N	I, R4E					
Landform (hills	slope,	terrace, etc	.): terrace		Local reli	ef (concave	e, convex, no	ne):	none		Slope (%):	1%	
Subregion (LF	R):	MLRA2		Lat: 48	.509524°N	Long:	122.25217	78° W	Datum:	WGS 8	34		
Soil Map Unit	Name	Minkler	silt loam				NW	l classi	fication:	NA			
Are climatic / I	nydrole	ogic condition	ons on the site typ	pical for this	s time of ye	ar? Yes	X No	(If no	o, explain in	Remark	s.)		
Are Vegetation	n )	(, Soil	, or Hydrold	ogys	ignificantly	disturbed?	Are "Norr	mal Cir	cumstances	s" presen	t? Yes X	No	
Are Vegetation	n	, Soil	, or Hydrold	ogy n	aturally pr	oblematic?	(If	needeo	d, explain ar	ny answe	ers in Remark	(s.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes N Yes N Yes N	No <u>X</u> No <u>X</u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes	No <u>X</u>
Remarks: Recently mown. Along str	eam edge.				

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>2</u> (B)
4.				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
		= Total Cove	er	
Sapling/Shrub Stratum (Plot size: 10 ft dm)				Prevalence Index worksheet:
<u> </u>				Total % Cover of: Multiply by:
2.				OBL species x 1 =
3.				FACW species x 2 =
4.				FAC species x 3 =
5				FACU species x 4 =
		= Total Cove	er	UPL species x 5 =
Herb (Plot size: <u>6 ft dm</u> )				Column Totals: (A) (B)
1. Phalaris arundinacea	15	No	FACW	
2. Schedonorus pratensis	50	Yes	FACU	Prevalence Index = B/A =
3. Anthoxanthum odoratum	20	Yes	FACU	
4. Poa sp.	10	No	FAC	Hydrophytic Vegetation Indicators:
5. Vicia sativa	4	No	FACU	1 - Rapid Test for Hydrophytic Vegetation
6. Galium aparine	1	No	FACU	2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				Gata In Remarks of on a separate sheet)
10				5 - Wetland Non-Vascular Plants
11				Problematic Hydrophytic Vegetation (Explain)
	100	<u> </u>	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: )				be present, unless disturbed of problematic.
1				
2		<b>T</b> ( 10	-	Hydrophytic
N/ Dave Oracia d'a black Olivetaria		= Total Cove	er	Vegetation
% Bare Ground in Herb Stratum				Present? Yes No X
Remarks: Vegetation recently mown.				

SOIL							Sampling Point	: P5
Profile Desc	ription: (Describe	to the depth	n needed to docum	ent the inc	dicator or co	onfirm the at	osence of indicators.	
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-10	10YR 3/2	100					loam	2" ribbon
10-16	10YR 3/2	100					Sandy clay loam	
16-18	2.5Y 3/2	100					Clayey sand	
18-20	2.5Y 3/2	100					loam	
		<u> </u>		<u> </u>		. <u> </u>		<u> </u>
						·		. <u></u> .
<sup>1</sup> Type: C=C	oncentration, D=Dep	letion, RM=F	Reduced Matrix, CS=	=Covered c	or Coated Sa	and Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.
Hydric Soi	l Indicators: (Appli	cable to all	LRRs, unless other	rwise note	ed.)	Indi	cators for Problemat	ic Hydric Soils <sup>3</sup> :
Histoso	ol (A1)	_	_ Sandy Redox (S	5) SC)			2 cm Muck (A10)	
Black H	listic (A3)	—	_ Simpped Matrix (	oo) ineral (F1)	(except ML)	RA 1)	Verv Shallow Dark Su	FZ) face (TF12)
Hydrog	en Sulfide (A4)	_	Loamy Gleyed M	latrix (F2)			Other (Explain in Rem	arks)
Deplete	ed Below Dark Surfac	ce (A11)	Depleted Matrix (	(F3)				
Thick D	Dark Surface (A12)	_	Redox Dark Surf	ace (F6)			<sup>3</sup> Indicators of hydrophy	tic vegetation and
Sandy	Mucky Mineral (S1)	_	_ Depleted Dark S	urface (F7)	)		wetland hydrology mu	st be present,
Sanuy	Gleyed Matrix (34)			лі (го)			unless disturbed of pro	Diematic
Restrictive La	yer (if present):				Ubudaia Ca	il Des sent?	Vaa	Na Y
Type:	poc):				Hydric So	Dil Present?	tes	
	les).							
HYDROLOG	Υ							
Wetland Hydr	ology Indicators:							
Primary Indica	tors (minimum of one	e required; c	heck all that apply)		20) (avecant	Secon	dary Indicators (2 or m	ore required)
Surface Wa	ator (A1)		Water-Stained	Leaves (E	39) ( <b>except</b>	۷۷a م م	ater-Stained Leaves (E	9) ( <b>MLRA 1, 2</b> ,
High Water	Table (A2)		Salt Crust (B1	<b>n, and 40</b> , 1)	)	<b>T</b>	ainage Patterns (B10)	
Saturation	(A3)		Aquatic Invert	ebrates (B	13)	Dr	y-Season Water Table	(C2)
Water Marl	(B1)		Hydrogen Sul	fide Odor (	C1)	Sa	, turation Visible on Aer	ial Imagery (C9)
			Oxidized Rhiz	ospheres a	along Living	0.	omometic Desition (DC	
Drift Depos	Jeposits (B2) itts (B3)		Presence of R	Reduced Irr	on (C.4)	Ge Sh	eomorphic Position (D2 allow Aquitard (D3)	2)
			Recent Iron R	eduction ir	n Tilled			
Algal Mat c	r Crust (B4)		Soils (C6)			FA	C-Neutral Test (D5)	
Iron Denos	its (B5)		Stunted or Str	essed Plai	nts (D1)	Ra	uised Ant Mounds (D6)	
Surface So	il Cracks (B6)		Other (Explain	n in Remar	ks)	Fro	ost-Heave Hummocks	(D7)
Inundation	Visible on Aerial Ima	igery (B7)	、 .		,			<b>、</b> ,
Sparsely V	egetated Concave S	urface (B8)						
Field Observa	ations:							
Surface Water	Present? Yes	No	X Depth (inches)	:				
Water Table P	resent? Yes	No	X Depth (inches)	:	W	etland Hydro	ology Present? Yes	s No X
Saturation Pre	sent?	V No	Death (inches)	10.10				
(Includes capil	lary fringe) Yes	X NO	Deptn (Inches)	: 16-18		-) '('l		
Describe Record	ded Data (stream ga	uge, monitor	ing well, aerial photo	os, previou	s inspections	s), if available	):	
Remarks: Satur	ated in sand lens from	m 16-18" onl	у.					

Project/Site:	Buck	0		City/Cou	unty:	Sedro-	Woolley/	Skagit	Samp	ling Date:	5/15/2	0		
Applicant/Own	er:	Sarah Bucl	KO			State:	WA	Sampling P	oint:	P6				
Investigator(s)	: 1	/I. Harenda/	A. Wones	Sec	tion, To	wnship,	Range:	S23, T35N	I, R4E					
Landform (hills	slope,	terrace, etc	.): terrace		Loca	al relief	(concave	, convex, no	ne):	none		Slope (%)	: 1%	
Subregion (LR	R):	MLRA2		Lat:	48.5095	524°N	Long:	122.25217	78° W	Datum:	WGS 8	34		
Soil Map Unit	Name	Minkler	silt loam					NW	l classi	fication:	NA			
Are climatic / h	nydrolo	ogic conditio	ons on the site ty	pical for th	his time	of year?	? Yes	X No	(lf no	o, explain in	Remark	s.)		
Are Vegetation	ר ו <u>א</u>	(, Soil	, or Hydrold	gy	signific	cantly dis	sturbed?	Are "Norr	mal Cir	cumstances	" preser	t? Yes	X	10
Are Vegetation	1	, Soil	, or Hydrold	gy	natural	lly probl	ematic?	(If	needeo	d, explain ar	ny answe	ers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	$\frac{X}{X}$	Is the Sampled Area within a Wetland?	Yes	No <u>X</u>
Remarks: Recently mown.						

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1				Total Number of Dominant
3.				Species Across All Strata: <u>2</u> (B)
4.				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
		= Total Cove	er	
Sapling/Shrub Stratum (Plot size: 10 ft dm	)			Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2.				OBL species x 1 =
3.				FACW species x 2 =
4.				FAC species x 3 =
5				FACU species x 4 =
		= Total Cove	er	LIPL species $x 5 =$
Herb (Plot size: <u>6 ft dm</u> )				
1. Plantago lanceolata	5	No	FACU	
2. Festuca rubra	10	No	FAC	Prevalence Index = B/A =
3. Anthoxanthum odoratum	40	Yes	FACU	
4. Agrostis sp.	15	No	FAC	Hydrophytic Vegetation Indicators:
5. Dactylis glomerata	30	Yes	FACU	1 - Rapid Test for Hydrophytic Vegetation
6				2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks of on a separate sneet)
10				5 - Wetland Non-Vascular Plants
11				Problematic Hydrophytic Vegetation' (Explain)
Woody Vine Stratum (Plot size:	100	<u> </u>	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1				
2				I hadrow had in
		= Total Cove	er	Vegetation
% Bare Ground in Herb Stratum	-			Present? Yes No X
Deverte Menetalise recently recent				
Kemarks: vegetation recently mown.				

Profile Descri Depth (inches) 0-10	ption: (Describe Matrix	4 - 41 - d 41						
Depth (inches) 0-10	Matrix	to the depti	n needed to docume	ent the indic	cator or con	firm the abs	sence of indicators.)	
(inches) 0-10				Redox Featu		. 2	<b>-</b> ,	
0-10	Color (moist)	%	Color (moist)		Type'	Loc <sup>2</sup>	lexture	Remarks
	10YR 3/2	100					Sandy loam	
10.16	10VD 2/2	100					Loamy very	
10-16	101R 3/2	100	·		<u> </u>		fine sand	
			. <u> </u>					
			· · · · · ·					
<u> </u>			·		<u> </u>			
Type: C=Con	centration, D=Dep	letion, RM=F	Reduced Matrix, CS=	Covered or	Coated Sand	d Grains.	<sup>2</sup> Location: PL=Pore L	ining, M=Matrix.
				• • •	,			
Hydric Soil I	ndicators: (Appli	cable to all	LRRs, unless other	wise noted.	.)	Indic	ators for Problemation	c Hydric Soils <sup>a</sup> :
Histosol (	(A1)	_	Sandy Redox (S5	5) 50		2	cm Muck (A10)	
Histic Epi Block Llic	ipedon (A2)	_	Stripped Matrix (S Learny Musley Min	56) narol (E1) (a	weent MI D		led Parent Material (1)	-2) 2000 (TE12)
Hvdronev	n Sulfide (A4)		Loamy Gleved M	аtrix (F2) ( <b>е</b>		יי <u> </u>	ery Shanow Dark Suff )ther (Explain in Rema	$acc(\Gamma \Gamma L)$
Depleted	Below Dark Surfa	ce (A11)	Depleted Matrix (	F3)				
Thick Da	rk Surface (A12)	· / _	Redox Dark Surfa	ace (F6)		3	ndicators of hydrophyl	tic vegetation and
Sandy M	ucky Mineral (S1)	_	Depleted Dark Su	urface (F7)		W	etland hydrology must	t be present,
Sandy Gl	leyed Matrix (S4)		Redox Depressio	ns (F8)		u	nless disturbed or prol	blematic
strictivo I av	or (if present):							
	er (il present).				Undria Cail	Dresent?	Vee	
Type:	·o);				Hydric Soli	Present?	res	NO X
Deptil (illelie				<u> </u>				
DROLOGY	,							
atland Hydrol	ogy Indicators:							
mary Indicato	rs (minimum of one	e required; c	heck all that apply)			Second	ary Indicators (2 or mo	re required)
Surface Wat	$r(\Lambda 1)$		Water-Stained	Leaves (B9			- · · · · · · · · · · · · · · · · · · ·	pre required)
<b>•</b> • • • • • • • • • • • • • • • • • •					) (except	Wat	er-Stained Leaves (BS	) ( <b>MLRA 1, 2,</b>
High Water T	$ahla (\Delta 2)$		Salt Crust (B1	<b>A, and 4B</b> )	9) (except	Wat 4A,	er-Stained Leaves (B9 and 4B) inage Patterns (B10)	9) ( <b>MLRA 1, 2,</b>
High Water T Saturation (A	able (A2) 3)		Salt Crust (B1	<b>A, and 4B</b> ) 1) ∋brates (B13	except	Wat 4A, Drai	er-Stained Leaves (B9 and 4B) inage Patterns (B10) -Season Water Table (	(MLRA 1, 2,
High Water T Saturation (A Water Marks	able (A2) 3) (B1)		Salt Crust (B1 Aquatic Inverte Hydrogen Sulf	<b>A, and 4B</b> ) 1) ebrates (B13 ide Odor (C	<ul> <li>except</li> <li>except</li> <li>except</li> </ul>	Wat 4 <b>A</b> , Drai Dry- Satu	er-Stained Leaves (BS and 4B) inage Patterns (B10) ·Season Water Table ( uration Visible on Aeria	(C2) (C2) (C2) (C2)
High Water T Saturation (A Water Marks	able (A2) 3) (B1)		Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Oxidized Rhize	A, and 4B) 1) ebrates (B13 ide Odor (C ospheres alo	9) ( <b>except</b> 3) 1) ong Living	Wat 4 <b>A</b> , Drai Dry- Sate	er-Stained Leaves (BS and 4B) inage Patterns (B10) ·Season Water Table ( uration Visible on Aeria	(C2) al Imagery (C9)
High Water T Saturation (A Water Marks Sediment De	able (A2) 3) (B1) posits (B2)		Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Oxidized Rhize Roots (C3)	A, and 4B) 1) ebrates (B13 ide Odor (C ospheres ald	<ul> <li>except</li> <li>excep</li></ul>	Wat 4A, Drai Dry- Satu	er-Stained Leaves (BS and 4B) inage Patterns (B10) Season Water Table ( uration Visible on Aeria	(C2) al Imagery (C9)
High Water T Saturation (A Water Marks Sediment De Drift Deposits	able (A2) 3) (B1) posits (B2) s (B3)		Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Oxidized Rhize Roots (C3) Presence of R	A, and 4B) 1) ebrates (B13 ide Odor (C ospheres ald educed Iron aduction in 7	<ul> <li>except</li> <li>excep</li></ul>	Wat 4A, Drai Satu Geo Sha	er-Stained Leaves (BS and 4B) inage Patterns (B10) Season Water Table ( uration Visible on Aeria pmorphic Position (D2) Illow Aquitard (D3)	(C2) al Imagery (C9)
High Water T Saturation (A Water Marks Sediment De Drift Deposits	able (A2) 3) (B1) posits (B2) s (B3) Crust (B4)		Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Oxidized Rhize Roots (C3) Presence of R Recent Iron Re Soils (C6)	A, and 4B) 1) ebrates (B13 ide Odor (C ospheres ald educed Iron eduction in T	<ul> <li>except</li> <li>excep</li></ul>	Wat           4A,           Drai           Dry           Satu           Gec           Sha	er-Stained Leaves (BS and 4B) inage Patterns (B10) Season Water Table ( uration Visible on Aeria pmorphic Position (D2) Illow Aquitard (D3)	(C2) al Imagery (C9)
High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (	able (A2) 3) (B1) posits (B2) s (B3) Crust (B4)		Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Oxidized Rhize Roots (C3) Presence of R Recent Iron Re Soils (C6) Stunted or Stre	A, and 4B) 1) ebrates (B13 ide Odor (C pspheres ak educed Iron eduction in 7 essed Plants	<ul> <li>except</li> <li>excep</li></ul>	Wat 4A, Drai Dry- Satu Geo Sha	er-Stained Leaves (BS and 4B) inage Patterns (B10) -Season Water Table ( uration Visible on Aeria omorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5)	(C2) al Imagery (C9)
High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or 0 Iron Deposits	able (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5)		Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Oxidized Rhize Roots (C3) Presence of R Recent Iron Re Soils (C6) Stunted or Stre (LRR A)	A, and 4B) 1) ebrates (B13 ide Odor (C ospheres ald educed Iron eduction in 1 essed Plants	<ul> <li>except</li> <li>(except</li> <li>)</li> <li>1)</li> <li>(cd)</li> <li>(C4)</li> <li>Tilled</li> <li>s (D1)</li> </ul>	Wat 4A, Drai Dry Satu Gec Sha FAC Rais	er-Stained Leaves (BS and 4B) inage Patterns (B10) Season Water Table ( uration Visible on Aeria omorphic Position (D2) llow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (	(C2) al Imagery (C9)
High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or ( Iron Deposits Surface Soil (	able (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5) Cracks (B6)		Salt Crust (B1 Aquatic Invertu Hydrogen Sulf Oxidized Rhizo Roots (C3) Presence of R Recent Iron Ro Soils (C6) Stunted or Stro (LRR A) Other (Explain	A, and 4B) 1) ebrates (B13 ide Odor (C ospheres ald educed Iron eduction in 7 essed Plants in Remarks	<ul> <li>except</li> <li>excep</li></ul>	Wat 4A, Drai Dry- Satu Geo Sha — FAC — Rais — Fros	er-Stained Leaves (BS and 4B) inage Patterns (B10) Season Water Table ( uration Visible on Aeria omorphic Position (D2) llow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) ( st-Heave Hummocks (	(C2) al Imagery (C9) (LRR A) D7)
High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or ( Iron Deposits Surface Soil ( Inundation Vi	able (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) isible on Aerial Ima	agery (B7)	Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Oxidized Rhize Roots (C3) Presence of R Recent Iron Re Soils (C6) Stunted or Stra (LRR A) Other (Explain	A, and 4B) 1) ebrates (B13 ide Odor (C ospheres ald educed Iron eduction in T essed Plants in Remarks	a) (except 3) 1) bong Living (C4) Tilled s (D1) s)	Wat 4A, Dra Dry- Satu Geo Sha FAC Rais Fros	er-Stained Leaves (BS and 4B) inage Patterns (B10) Season Water Table ( uration Visible on Aeria pmorphic Position (D2) llow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) ( st-Heave Hummocks (	(C2) al Imagery (C9) (LRR A) (D7)
High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or ( Iron Deposits Surface Soil ( Inundation Vi Sparsely Veg	able (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) isible on Aerial Ima getated Concave S	agery (B7) urface (B8)	Salt Crust (B1 Aquatic Inverter Hydrogen Sulf Oxidized Rhize Roots (C3) Presence of R Recent Iron Ro Soils (C6) Stunted or Stre (LRR A) Other (Explain	A, and 4B) 1) ebrates (B13 ide Odor (C ospheres ak educed Iron eduction in ∃ essed Plants in Remarks	a) (except 3) 1) bong Living (C4) Tilled s (D1) s)	Wat 4A, Drai Dry- Satu Geo Sha FAC Rais Fros	er-Stained Leaves (BS and 4B) inage Patterns (B10) Season Water Table ( uration Visible on Aeria omorphic Position (D2) llow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) ( st-Heave Hummocks (	(C2) al Imagery (C9) (LRR A) D7)
High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or ( Iron Deposits Surface Soil ( Inundation Vi Sparsely Veg	able (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) sible on Aerial Ima jetated Concave S ons:	agery (B7) urface (B8)	Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Oxidized Rhize Roots (C3) Presence of R Recent Iron Re Soils (C6) Stunted or Stre (LRR A) Other (Explain	A, and 4B) 1) ebrates (B1: ide Odor (C ospheres ald educed Iron eduction in 7 essed Plants in Remarks	<ul> <li>except</li> <li>(except</li> <li>1)</li> <li>pong Living</li> <li>(C4)</li> <li>Tilled</li> <li>s (D1)</li> <li>s)</li> </ul>	Wat 4A, Drai Dry- Satu Gec Sha FAC Rais Fros	er-Stained Leaves (BS and 4B) inage Patterns (B10) -Season Water Table ( uration Visible on Aeria omorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) ( st-Heave Hummocks (	(C2) al Imagery (C9) (LRR A) D7)
High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or ( Iron Deposits Surface Soil ( Inundation Vi Sparsely Veg	able (A2) (B1) posits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) sible on Aerial Ima getated Concave S ons: Present? Yes	agery (B7) urface (B8)	Salt Crust (B1     Aquatic Inverte     Hydrogen Sulf     Oxidized Rhize     Roots (C3)     Presence of R     Recent Iron Re     Soils (C6)     Stunted or Stre     (LRR A)     Other (Explain     X     Depth (inches):	A, and 4B) 1) ebrates (B1: ide Odor (C ospheres ald educed Iron eduction in ∃ essed Plants in Remarks	<ul> <li>except</li> <li>(except</li> <li>1)</li> <li>ong Living</li> <li>(C4)</li> <li>Tilled</li> <li>s (D1)</li> </ul>	Wat 4A, Drai Dry- Satu Gec Sha FAC Rais Fros	er-Stained Leaves (BS and 4B) inage Patterns (B10) Season Water Table ( uration Visible on Aeria omorphic Position (D2) Ilow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) ( st-Heave Hummocks (	(C2) al Imagery (C9) ( <b>LRR A</b> ) D7)
High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or ( Iron Deposits Surface Soil ( Inundation Vi Sparsely Veg	able (A2) (B1) posits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) sible on Aerial Ima getated Concave S ons: Present? Yes sent? Yes	agery (B7) urface (B8)	Salt Crust (B1     Aquatic Inverte     Hydrogen Sulf     Oxidized Rhize     Roots (C3)     Presence of R     Recent Iron Re     Soils (C6)     Stunted or Stre     (LRR A)     Other (Explain     X     Depth (inches):     X     Depth (inches):     X	A, and 4B) 1) ebrates (B1: ide Odor (C ospheres ald educed Iron eduction in 7 essed Plants in Remarks	a) (except         b) (1)         c) (2)         c)	Wat 4A, Drai Dry- Satu Gec Sha FAC Rais Fros	er-Stained Leaves (BS and 4B) inage Patterns (B10) Season Water Table ( uration Visible on Aeria omorphic Position (D2) Ilow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) ( st-Heave Hummocks ( opp Present? Yes	(C2) al Imagery (C9) (LRR A) D7)
High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or ( Iron Deposits Surface Soil ( Inundation Vi Sparsely Veg Eld Observati rface Water P ater Table Pre turation Prese	able (A2) (B1) posits (B2) s (B3) Crust (B4) (B5) Cracks (B6) isible on Aerial Ima getated Concave S ons: Present? Yes sent? Yes	agery (B7) urface (B8)	X Depth (inches): Xalt Crust (B1 Aquatic Inverti- Hydrogen Sulf Oxidized Rhizi Roots (C3) Presence of R Recent Iron Ri Soils (C6) Stunted or Stru- (LRR A) Other (Explain	A, and 4B) 1) ebrates (B1: ide Odor (C ospheres ald educed Iron eduction in 7 essed Plants in Remarks	a) (except         b) (except         c) (1)         c) (C4)	Wat 4A, Drai Dry- Satu Gec Sha FAC Rais Fros	er-Stained Leaves (BS and 4B) inage Patterns (B10) Season Water Table ( uration Visible on Aeria omorphic Position (D2) Ilow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) ( st-Heave Hummocks ( oppy Present? Yes	(C2) al Imagery (C9) (LRR A) D7)
High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or ( Iron Deposits Surface Soil ( Inundation Vi Sparsely Veg Eld Observati rface Water P ater Table Pre turation Prese cludes capillat	able (A2) (B1) posits (B2) s (B3) Crust (B4) (B5) Cracks (B6) isible on Aerial Ima getated Concave S ons: resent? Yes sent? Yes ent? ry fringe) Yes	agery (B7) urface (B8)	X       Depth (inches):         X       Depth (inches):	A, and 4B) 1) ebrates (B1; ide Odor (C ospheres ak educed Iron eduction in essed Plant: in Remarks	(except ) (except ) ) (C4) (C4) (C4) (C1) (C1) (C1) (C2) (C2) (C2) (C2) (C2) (C2) (C2) (C2	Wat 4A, Drai Dry- Satu Geo Sha FAC Rais Fros	er-Stained Leaves (BS and 4B) inage Patterns (B10) -Season Water Table ( uration Visible on Aeria omorphic Position (D2) Ilow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) ( st-Heave Hummocks ( ogy Present? Yes	(C2) al Imagery (C9) (LRR A) D7)
High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or ( Iron Deposits Surface Soil ( Inundation Vi Sparsely Veg Id Observation frace Water P ater Table Pre turation Prese cludes capillar cribe Recorde	able (A2) (B1) posits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) isible on Aerial Ima getated Concave S ons: resent? Yes sent? Yes ent? Yes ont? Yes ont (Stream ga	agery (B7) urface (B8)	Salt Crust (B1         Aquatic Inverti         Hydrogen Sulf         Oxidized Rhizi         Roots (C3)         Presence of R         Recent Iron Ri         Soils (C6)         Stunted or Struct         (LRR A)         Other (Explain         X         Depth (inches):         X         Depth (inches):         X         Depth (inches):         X         Depth (inches):	A, and 4B) 1) ebrates (B1; ide Odor (C ospheres ak educed Iron eduction in 7 essed Plant: in Remarks	(except ) (except ) ) (C4) (C4) (C4) (C1) (C1) (C4) (C4) (C4) (C4) (C4) (C4) (C4) (C4	Wat 4A, Drai Dry Satu Gec Sha FAC Fros	er-Stained Leaves (BS and 4B) inage Patterns (B10) Season Water Table ( uration Visible on Aeria omorphic Position (D2) llow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) ( st-Heave Hummocks ( ogy Present? Yes	(C2) al Imagery (C9) (LRR A) D7)
High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or ( Iron Deposits Surface Soil ( Inundation Vi Sparsely Veg Id Observati rface Water P ater Table Pre turation Prese cludes capillar cribe Recorde	able (A2) (B1) posits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) isible on Aerial Ima getated Concave S ons: resent? Yes sent? Yes ent? Yes ont? ry fringe) Yes id Data (stream ga	agery (B7) urface (B8)	X Depth (inches): X Depth (inches): X Depth (inches): X Depth (inches):	A, and 4B) 1) ebrates (B1; ide Odor (C ospheres ak educed Iron eduction in 7 essed Plant: in Remarks	a) (except         b) (except         c) (c) (c) (c) (c) (c) (c) (c) (c) (c) (	AA, Dra Dry Satu Satu Sha FAC Rais Fros	er-Stained Leaves (BS and 4B) inage Patterns (B10) Season Water Table ( uration Visible on Aeria omorphic Position (D2) llow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) ( st-Heave Hummocks ( ogy Present? Yes	(C2) al Imagery (C9) (LRR A) D7)
High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or ( Iron Deposits Surface Soil ( Inundation Vi Sparsely Veg Id Observati rface Water P ater Table Pre turation Prese cludes capillar cribe Recorde	able (A2) (B1) posits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) sible on Aerial Ima jetated Concave S ons: Present? Yes sent? Yes ent? ry fringe) Yes d Data (stream ga	agery (B7) urface (B8)	X Depth (inches): X Depth (inches): X Depth (inches): X Depth (inches):	A, and 4B) 1) ebrates (B1: ide Odor (C ospheres ald educed Iron eduction in ⊺ essed Plants in Remarks 	a) (except         b) (except         c) (c) (c) (c) (c) (c) (c) (c) (c) (c) (	Wat 4A, Dra Dry Satu Satu Sha FAC Rais Fros	er-Stained Leaves (BS and 4B) inage Patterns (B10) Season Water Table ( uration Visible on Aeria omorphic Position (D2) llow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) ( st-Heave Hummocks ( ogy Present? Yes	(C2) al Imagery (C9) (LRR A) D7)
High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or ( Iron Deposits Surface Soil ( Inundation Vi Sparsely Veg eld Observatii rface Water P ater Table Prese cludes capillar cribe Recorde	able (A2) (B1) posits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) sible on Aerial Ima getated Concave S ons: Present? Yes sent? Yes ent? Yes ont? ry fringe) Yes d Data (stream ga	agery (B7) urface (B8)	X Depth (inches): X Depth (inches): X Depth (inches): X Depth (inches):	A, and 4B) 1) ebrates (B1: ide Odor (C ospheres ald educed Iron eduction in 1 essed Plant: in Remarks	<pre> (except )) (except )) (except )) ) ) ) ) ) (C4) (C4) (C4) (C4) (C4) (</pre>	AA, Dra Dry Satu Satu Sha FAC Rais Fros	er-Stained Leaves (BS and 4B) inage Patterns (B10) Season Water Table ( uration Visible on Aeria omorphic Position (D2) llow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) ( st-Heave Hummocks ( ogy Present? Yes	(C2) al Imagery (C9) (LRR A) D7)
High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or ( Iron Deposits Surface Soil ( Inundation Vi Sparsely Veg eld Observatii rface Water P ater Table Pre turation Prese cludes capillar cribe Recorde	able (A2) (B1) posits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) sible on Aerial Ima getated Concave S ons: Present? Yes sent? Yes sent? Yes ent? ry fringe) Yes d Data (stream ga	agery (B7) urface (B8)	Xalt Crust (B1 Aquatic Inverter Hydrogen Sulf Oxidized Rhize Roots (C3) Presence of R Recent Iron Re Soils (C6) Stunted or Stre (LRR A) Other (Explain X Depth (inches): X Depth (inches): X Depth (inches): ing well, aerial photo	A, and 4B) 1) ebrates (B1: ide Odor (C ospheres alc educed Iron eduction in 1 essed Plants in Remarks	a) (except         b) (except         c) (1)         c) (C4)         Tilled         s (D1)         c)         weth	Wat 4A, Drai Dry- Satu Satu FAC Rais Fros	er-Stained Leaves (BS and 4B) inage Patterns (B10) Season Water Table ( uration Visible on Aeria omorphic Position (D2) llow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) ( st-Heave Hummocks ( ogy Present? Yes	(C2) al Imagery (C9) (LRR A) D7)

Project/Site:	Buck	C		City/Cour	nty: Sedro	Woolley/	/Skagit	Samp	ling Date:	5/15/20	C	
Applicant/Own	er:	Sarah Bucl	KO		State:	WA	Sampling P	oint:	P7			
Investigator(s)	: N	I. Harenda/	A. Wones	Section	on, Township,	Range:	S23, T35N	I, R4E				
Landform (hills	slope, t	errace, etc	.): terrace		Local relief	(concave	e, convex, no	ne):	none		Slope (%):	1%
Subregion (LR	R):	MLRA2		Lat: 48	8.510344°N	Long:	122.25080	)9°W	Datum:	WGS 8	34	
Soil Map Unit	Name:	Minkler	silt loam				NW	l classi	fication:	NA		
Are climatic / h	nydrolo	gic conditio	ons on the site ty	pical for thi	s time of year	? Yes	X No	(If no	o, explain in	Remark	s.)	
Are Vegetation	ר X	, Soil	, or Hydrold	ogy	significantly di	sturbed?	Are "Norr	mal Cir	cumstances	s" presen	t? Yes X	No
Are Vegetation	า	, Soil	, or Hydrold	bgyi	naturally prob	ematic?	(If	needeo	d, explain ar	ny answe	ers in Remark	s.)

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         X         No           Yes         No         X           Yes         No         X	Is the Sampled Area within a Wetland?	Yes NoX
Remarks: Recently mown.			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 1 (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
		= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 10 ft dm)		<u> </u>		Prevalence Index worksheet:
<u></u>				Total % Cover of: Multiply by:
2.				OBL species x 1 =
3.				FACW species x 2 =
4.				FAC species x 3 =
5.				FACU species x 4 =
		= Total Cove	er	$\frac{1}{1}$
Herb (Plot size: <u>6 ft dm</u> )				
1. Cirsium arvense	10	No	FACU	
2. Agrostis sp.	80	Yes	FAC	Prevalence Index = B/A =
3. Anthoxanthum odoratum	10	No	FACU	
4				Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6				X 2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants
11				Problematic Hydrophytic Vegetation' (Explain)
	100	= Total Cove	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:)				be present; unless disturbed of problematic.
1			-	
2		Total Cav		Hydrophytic
% Poro Cround in Horb Stratum			er	Vegetation
				riesent? Tes A NO
Remarks: vegetation recently mown.				

IL							Sampling Point:	P7
Profile Desc	ription: (Describe	to the depth	needed to docum	ent the ind	icator or cor	nfirm the a	bsence of indicators.)	
Depth	Matrix			Redox Fea	tures			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
							Very fine	
0-16	10YR 3/2	100					sandy loam	
		·			·			
							·	
					<u> </u>			
					<u> </u>			
Type: C=Co	oncentration, D=Dep	letion, RM=F	Reduced Matrix, CS=	Covered o	r Coated San	nd Grains.	<sup>2</sup> Location: PL=Pore L	ining, M=Matrix.
Hydric Soil	Indicators: (Appli	cable to all	I PPs unless other	wise note	ч)	Ind	icators for Problemati	c Hydric Soils <sup>3</sup> :
Hyunc Son	i indicators. (Appli		LKKS, unless other	wise note	u.)	inu		c nyunc sons .
Histoso	ol (A1)	_	Sandy Redox (S	5)			2 cm Muck (A10)	
Histic E	pipedon (A2)		Stripped Matrix (	S6)			Red Parent Material (T	F2)
Black H	listic (A3)		Loamy Mucky Mi	ineral (F1) (	except MLR	A 1)	Very Shallow Dark Sur	face (TF12)
Hydrog	en Sulfide (A4)	_	Loamy Gleyed M	latrix (F2)			Other (Explain in Rema	arks)
Deplete	ed Below Dark Surfa	ce (A11)	Depleted Matrix	(F3)				
Thick D	ark Surface (A12)		Redox Dark Surf	ace (F6)			<sup>3</sup> Indicators of hydrophy	tic vegetation and
Sandy I	Mucky Mineral (S1)		Depleted Dark S	urface (F7)			wetland hydrology mus	t be present,
Sandy	Gleyed Matrix (S4)		Redox Depressio	ons (F8)			unless disturbed or pro	blematic
strictive La	yer (if present):							
Type:					Hydric Soi	I Present?	Yes	No X
Depth (incl	nes):				-			
-1 - ( -								
	v							
etland Hvdr	ology Indicators:							
rimary Indicat	tors (minimum of one	e required; cl	heck all that apply)			Secor	dary Indicators (2 or mo	ore required)
	•		Water-Stained	d Leaves (B	(except	W	ater-Stained Leaves (B	9) ( <b>MLRA 1. 2.</b>
Surface Wa	ater (A1)		MLRA 1. 2. 4	A. and 4B)	-) (	4/	A. and 4B)	-, (, -, -, -,
High Water	Table (A2)		Salt Crust (B1	1)			ainage Patterns (B10)	
Saturation (	(A3)		Aquatic Invert	ebrates (B1	13)	Di	v-Season Water Table	(C2)
Water Mark	(A3) (R1)		Hydrogen Sul	fide Odor ((	~1)		y occasion Watch Table	(02)
	(DT)		Nyurogen Sur		Jong Living	3		ai illiagely (C9)
Sodimont D	Doposite (P2)		DXIUIZEU RIIIZ	ospheres a		G	operation (D2)	1
Drift Danag					~ (C1)		control princ Position (D2)	)
Dint Depos	115 (D3)		Fresence of P			Sr	anow Aquitatu (D3)	
Algol Mat -	r Cruct (PA)		Recent Iron R	eduction in	rilleu	<b>F</b> (	C Noutral Tast (DE)	
Aiyai Wat 0	i Giusi (D4)					F#	NO-INEULIAI TEST (D5)	
Iron Denes	ito (PE)		Stunted or Str	essea Plan	iis (D1)		and Ant Mourd- (DO)	
Iron Deposi	its (B5)			. :	· • )	Ra	aised Ant wounds (D6)	
Surface So	II UTACKS (Bb)		Other (Explain	I IN Kemark	(5)	Fr	osi-neave Hummocks (	(זים)
inundation	visible on Aerial Ima	gery (B7)						
Sparsely Ve	egetated Concave S	urtace (B8)						
	tiona							
urfood Weter		NI-	V Donth (instact)					
unace vvater	Present? Yes	ÍNO .	Depth (inches):		—		La ma Den de Ma	
ater I able P	resent? Yes	No	Depth (inches):		Wet	land Hydro	logy Present? Yes	No X
aturation Pres	sent?							
iciudes capill	lary fringe) Yes	No .	X Depth (inches):	-				
scribe Record	ded Data (stream ga	uge, monitor	ing well, aerial photo	os, previous	inspections)	, if available	e:	
narks:								

Project/Site:	Buck	)			City/0	County:	Sedro	Woolley/	Skagit	Samp	ling Date:	5/15/2	0		
Applicant/Own	er:	Sarah Buc	K0				State:	WA	Sampling P	oint:	P8				
Investigator(s)	: M	. Harenda	/A. W	/ones	S	Section,	Township,	Range:	S23, T35N	N, R4E					
Landform (hills	slope, t	errace, etc	.):	terrace		Lo	ocal relief	(concave	, convex, no	ne):	none		Slope (%):	1%	
Subregion (LR	R):	MLRA2			Lat:	48.51	0581°N	Long:	122.24984	44°W	Datum:	WGS 8	34		
Soil Map Unit	Name:	Minkler	silt l	loam					NW	l classi	fication:	NA			
Are climatic / h	nydrolo	gic conditio	ons c	on the site typ	oical fo	or this tin	ne of year	? Yes	X No	(If no	o, explain in	Remark	s.)		
Are Vegetation	n X	, Soil		, or Hydrolo	gy	sign	ificantly di	sturbed?	Are "Nor	mal Cir	cumstances	s" preser	t? Yes X	No	
Are Vegetation	۱	, Soil		, or Hydrolo	gy	natu	rally probl	ematic?	(If	needeo	d, explain ar	ny answe	ers in Remark	s.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         X         No           Yes         No         X           Yes         No         X	Is the Sampled Area within a Wetland?	Yes NoX
Remarks: Recently mown.			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 1 (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
		= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 10 ft dm	)			Prevalence Index worksheet:
1.				Total % Cover of: Multiply by:
2.				OBL species x 1 =
3.				FACW species x 2 =
4.				FAC species x 3 =
5				FACU species x 4 =
		= Total Cov	ər	UPL species $x 5 =$
Herb (Plot size: 6 ft dm )				Column Totals: (A) (B)
1. Dactylis glomerata	10	No	FACU	
2. Agrostis sp.	90	Yes	FAC	Prevalence Index = B/A =
3				
4				Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6				X 2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				Gata In Remarks of on a separate sheet)
10				5 - Weiland Non-Vascular Plants
11				
Weady Vina Stratum (Distaira)	100	<u>= T</u> otal Cove	ər	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	)		-	
2				
L		= Total Cov	er	Hydrophytic
% Bare Ground in Herb Stratum		- 10101 001	51	Vegetation Present? Yes X No
	-			
Remarks: Vegetation recently mown				
Nomence: Vogetation recordly mown.				

SOIL							Sampling Point:	P8
Profile Desc	ription: (Describe t	o the depth	needed to docume	nt the indi	icator or con	firm the a	bsence of indicators.)	
Depth	Matrix		F	Redox Feat	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-16	10YR 3/3	100					Loamy sand	
010	1011( 0/0						Loanty Sand	
	·							. <u></u>
$^{1}$ Type: C-C	oncentration D-Denl	etion RM-E	Peduced Matrix CS-		Costed Sand	Graine	<sup>2</sup> ocation: PL-Pore L	ining M-Matrix
Type. C=CC					Cualeu Sant	d Grains.		ining, w=watrix.
Hvdric Soi	I Indicators: (Applie	able to all	LRRs. unless other	wise noted	d.)	Ind	icators for Problematio	: Hvdric Soils <sup>3</sup> :
			0	、 、	,		0 M	,,
Histoso	) (A1)		_ Sandy Redox (S5	)			2 cm Muck (A10)	-0)
Histic E	pipedon (A2)	_	_ Stripped Matrix (S	66) ( <b>F</b> 4) (			Red Parent Material (Th	-2) (TE40)
	HISTIC (A3)	_	_ Loamy Mucky Mir	neral (F1) (	ехсерт мски	<b>A</b> 1)	Very Shallow Dark Suff	ace (TF12)
Hydrog	en Sulfide (A4)	<u> </u>	_ Loamy Gleyed Ma	atrix (F2)			Other (Explain in Rema	rks)
	ed Below Dark Surfac	e (A11)	_ Depleted Matrix (I	-3)				
	Dark Surface (A12)		_ Redox Dark Surfa	ICE (F6)			<sup>3</sup> Indicators of hydrophyt	ic vegetation and
Sandy I	Mucky Mineral (S1)		_ Depleted Dark Su				wetland hydrology must	be present,
Sandy	Gleyed Matrix (S4)	_	Redox Depression	ns (F8)			unless disturbed or prot	Diematic
Restrictive La	iyer (if present):							
Туре:					Hydric Soil	Present?	Yes	No X
Depth (inch	nes):							
Pomarka:								
Remarks.								
HYDROLOG	iΥ							
Wetland Hydr	ology Indicators:					_		
Primary Indicat	tors (minimum of one	required; cl	heck all that apply)			Secor	idary Indicators (2 or mo	re required)
			Water-Stained	Leaves (B	9) ( <b>except</b>	W	ater-Stained Leaves (B9	) (MLRA 1, 2,
Surface Wa	ater (A1)		MLRA 1, 2, 4A	, and 4B)		4/	A, and 4B)	
High Water	<sup>·</sup> Table (A2)		Salt Crust (B1'	1)		Dr	ainage Patterns (B10)	
Saturation (	(A3)		Aquatic Inverte	ebrates (B1	3)	Dr	y-Season Water Table (	C2)
Water Mark	ks (B1)		Hydrogen Sulf	de Odor (C	21)	Sa	aturation Visible on Aeria	I Imagery (C9)
			Oxidized Rhizo	ospheres a	long Living	_		
Sediment D	Deposits (B2)		Roots (C3)			Ge	eomorphic Position (D2)	
Drift Depos	its (B3)		Presence of R	educed Iro	n (C4)	Sł	nallow Aquitard (D3)	
			Recent Iron Re	eduction in	Tilled			
Algal Mat o	r Crust (B4)		Soils (C6)			F <i>i</i>	AC-Neutral Test (D5)	
			Stunted or Stre	essed Plan	ts (D1)	_		
Iron Deposi	its (B5)		(LRR A)			Ra	aised Ant Mounds (D6) (	LRR A)
Surface So	il Cracks (B6)		Other (Explain	in Remark	s)	Fr	ost-Heave Hummocks (I	07)
Inundation	Visible on Aerial Ima	gery (B7)						
Sparsely Ve	egetated Concave Su	ırface (B8)						
Field Observa	ations:							
Surface Water	Present? Yes	No	X Depth (inches):					
Water Table P	resent? Yes	No	X Depth (inches):		Wetla	and Hydro	logy Present? Yes	No X
	1000111. 100		- · · /		- 1	-		
Saturation Pres	sent?				l l			
Saturation Pres (includes capill	sent? lary fringe) Yes	No	X Depth (inches):					
Saturation Pres (includes capill Describe Record	lary fringe) Yes	No	X Depth (inches):	s. previous	inspections)	if available	2:	
Saturation Pres (includes capill Describe Record	sent? lary fringe) Yes ded Data (stream gau	No Ige, monitor	X Depth (inches): ing well, aerial photo:	s, previous	inspections),	if available	9:	
Saturation Pre (includes capill Describe Record	sent? lary fringe) Yes ded Data (stream gau	No Ige, monitor	<u>X</u> Depth (inches): ing well, aerial photo:	s, previous	inspections),	if available	<del>)</del> :	
Saturation Pres (includes capill Describe Record	lary fringe) Yes ded Data (stream gau	No	X Depth (inches): ing well, aerial photo:	s, previous	inspections),	if available	9:	

Project/Site:	Buck	D			City/Co	ounty:	Sedro-	o-Woolley/Skagit		Samp	ling Date:	5/15/20	C			
Applicant/Owr	er:	Sarah Buc	ko				State:	WA	Sampling F	Point:	P9					
Investigator(s)	: M	. Harenda	'A. W	/ones	Se	ction, To	ownship,	Range:	S23, T35	N, R4E						
Landform (hills	slope, t	errace, etc	.):	terrace		Lo	cal relief	(concave	, convex, no	one):	none		Slope (%)	): 1	%	
Subregion (LR	R):	MLRA2			Lat:	48.510	)934°N	Long:	122.2512	41°W	Datum:	WGS 8	34			
Soil Map Unit	Name:	Minkler	silt l	oam					NV	/I classi	fication:	NA				
Are climatic / h	nydrolo	gic conditio	ons o	n the site typ	oical for	this time	e of year	? Yes	X No	(If no	o, explain in	Remark	s.)			
Are Vegetation	ו <u>X</u>	, Soil		, or Hydrolo	ду	signif	icantly di	sturbed?	Are "Noi	rmal Cir	cumstances	" presen	t? Yes	Х	No	
Are Vegetation	า	, Soil		, or Hydrolo	ду	natur	ally probl	ematic?	(If	needeo	d, explain ar	ny answe	ers in Rem	arks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         X         No            Yes          No            Yes          No	Is the Sampled Area within a Wetland?	Yes NoX
Remarks: Recently mown.			

VEGETATION – Use scientific names of p	lants.			
	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> ) 1.	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2.				Total Number of Dominant Species Across All Strata: 1 (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
-		- Total Cov	or	
Sapling/Shrub Stratum (Plot size: 10 ft dm )			51	Prevalence Index worksheet:
1.				Total % Cover of: Multiply by:
2.				OBL species x 1 =
3.				FACW species x 2 =
4.				FAC species x 3 =
5				FACU species x 4 =
		= Total Cove	ər	UPL species $x = $
Herb (Plot size: <u>6 ft dm</u> )				Column Totals: (A) (B)
1. Cirsium arvense	5	No	FAC	
2. Agrostis sp.	50	Yes	FAC	Prevalence Index = B/A =
3. Ranunculus acris	15	No	FAC	
4. Plantago lanceolata	15	No	FACU	Hydrophytic Vegetation Indicators:
5. Anthoxanthum odoratum	15	No	FACU	1 - Rapid Test for Hydrophytic Vegetation
6				X 2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				Gata In Remarks of on a separate sneet)     S
10				5 - Wetland Non-Vascular Plants
11				
-	100	= Total Cove	ər	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: )				be present, unless disturbed of problematic.
1				
2				Hydrophytic
		= I otal Cove	ər	Vegetation
% Bare Ground in Herb Stratum				Present? Yes X No
Remarks: Vegetation recently mown.				

						<u> </u>	Sampling Point:	P9
Depth	Matrix	o the depth	n needed to docum	ent the indi Redox Feat	ures	nfirm the at	sence of indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-5	10YR 3/3	100					Very fine sandy loam	
5-16	10YR 4/3	100					Very fine sandy loam	
					·			
<sup>1</sup> Type: C=C	oncentration, D=Deple	etion, RM=F	Reduced Matrix, CS=	=Covered or	Coated Sar	nd Grains.	<sup>2</sup> Location: PL=Pore L	ining, M=Matrix.
Hydric Soi	I Indicators: (Applic	able to all	LRRs, unless othe	rwise noted	i.)	Indi	cators for Problemation	: Hydric Soils <sup>3</sup> :
Histoso	ol (A1)		Sandy Redox (S	5)			2 cm Muck (A10)	
Histic E	Epipedon (A2)	_	Stripped Matrix (	S6)			Red Parent Material (Th	F2)
Black H	Histic (A3) Ion Sulfide (A4)		Loamy Mucky M	Ineral (F1) ( Intrix (F2)	except MLR	(A 1)	Very Shallow Dark Surf	ace (TF12) rks)
Deplete	ed Below Dark Surfac	e (A11)	Depleted Matrix	(F3)				110)
Thick E	Dark Surface (A12)		Redox Dark Surf	ace (F6)			<sup>3</sup> Indicators of hydrophyt	ic vegetation and
Sandy	Mucky Mineral (S1)	_	Depleted Dark S	urface (F7)			wetland hydrology must	be present,
Sandy	Gleyed Matrix (S4)		Redox Depression	ons (F8)			unless disturbed or prol	olematic
estrictive La	ayer (if present):							
Туре:					Hydric Soi	I Present?	Yes	No X
Depth (incl	hes):							
YDROLOG Wetland Hydr	Y rology Indicators:					0	landa indiana (Osman	
Primary Indica	tors (minimum of one	required; cl	heck all that apply) Water Stainer	d Loovoc (R	0) (avcant	Secon	dary Indicators (2 or mo	(MIRA 1 2
Surface Wa	ater (A1)		MLRA 1. 2. 4	A. and 4B)	9) (except	4A	. and 4B)	) (WILKA 1, 2,
High Water	r Table (A2)		Salt Crust (B1	1)		Dra	ainage Patterns (B10)	
Saturation	(A3)		Aquatic Invert	tebrates (B1	3)	Dr	y-Season Water Table (	C2)
Water Marl	ks (B1)		Hydrogen Sul	fide Odor (C	21)	Sa	turation Visible on Aeria	al Imagery (C9)
Sediment [	Denosits (B2)		Oxidized Rhiz Roots (C3)	cospneres a	long Living	Ge	omorphic Position (D2)	
Drift Depos	sits (B3)		Presence of F	Reduced Iro	n (C4)	Sh	allow Aquitard (D3)	
			Recent Iron R	eduction in	Tilled		,	
Algal Mat c	or Crust (B4)		Soils (C6)	record Dian		FA	C-Neutral Test (D5)	
Iron Depos	its (B5)		(LRR A)	lesseu Flan	IS (DT)	Ra	ised Ant Mounds (D6) (	
Surface So	il Cracks (B6)		Other (Éxplair	n in Remark	s)	Fro	ost-Heave Hummocks (	(7C)
Inundation Sparsely V	Visible on Aerial Image egetated Concave Su	jery (B7) rface (B8)						
	tions				1			
urface Water	Present? Yes	No	X Depth (inches):					
ater Table P	resent? Yes	No	X Depth (inches):		Wet	land Hydro	logy Present? Yes	No X
aturation Pre	sent?				_	,	J,	
ncludes capil	lary fringe) Yes	No	X Depth (inches):	. <u></u>				
scribe Recor	ded Data (stream gau	ge, monitor	ing well, aerial photo	os, previous	inspections	), if available		
marks:								

Project/Site:	Buc	<b>(</b> 0		City/Co	ounty:	Sedro-	Woolley/	Skagit	Samp	ling Date:	: 5/26/20			
Applicant/Own	er:	Sarah Buck	(0			State:	WA	Sampling I	Point:	P10				
Investigator(s)	: 1	M. Harenda/	A. Wones	Se	ction, To	ownship,	Range:	S23, T35	N, R4E					
Landform (hills	slope,	terrace, etc	.): terrace		Loc	cal relief	(concave	, convex, n	one):	none		Slope (%):	1%	
Subregion (LR	:R):	MLRA2		Lat:	48.510	794°N	Long:	122.2478	88° W	Datum:	WGS 8	34		
Soil Map Unit	Name	: Minkler	silt loam					NV	VI classi	fication:	NA			
Are climatic / h	Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)													
Are Vegetation	n	X , Soil	, or Hydrolo	gy	signifi	icantly di	sturbed?	Are "No	rmal Cir	cumstances	s" presen	t? Yes X	No	
Are Vegetation	ר <u> </u>	, Soil	, or Hydrolo	gy	natura	ally probl	ematic?	(l	f needeo	d, explain a	ny answe	ers in Remark	s.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         No           Yes         No         X           Yes         No         X	Is the Sampled Area within a Wetland?	Yes NoX
Remarks: Recently mown.			

	Absolute	Dominant	Indicator	Dominance Test work	(sheet:
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> ) 1	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant S That Are OBL, FACW,	or FAC: (A)
2				Total Number of Domin	nant
3.				Species Across All Stra	ata: (B)
4.			_	Percent of Dominant S That Are OBL, FACW,	pecies or FAC: (A/B)
		= Total Cov	ver		
Sapling/Shrub Stratum (Plot size: 10 ft dm	)			Prevalence Index wo	rksheet:
1				Total % Cover of:	Multiply by:
2				OBL species	x 1 =
3				FACW species	x 2 =
4				FAC species	x 3 =
5				FACU species	x 4 =
		= Total Cov	ver	UPL species	x 5 =
Herb (Plot size: <u>6 ft dm</u> )				Column Totals:	(A) (B)
1. <u>Lawn grass</u>	98	Yes	54.011	Developed to be the	
2. Hypochaeris radicata	2	NO	FACU	Prevalence Index = B/	A =
3				Hydronhytic Vegetati	on Indicators:
4					
5				1 - Rapid Test for F	hydropnytic vegetation
0				2 - Dominance Tes	t   S > 50%
/				3 - Prevalence Inde	$2X IS \leq 3.0^{\circ}$
o				data in Remarks or	on a separate sheet)
10				5 - Wetland Non-Va	ascular Plants <sup>1</sup>
11.				X Problematic Hydror	ohytic Vegetation <sup>1</sup> (Explain)
	100	= Total Cov	/er	<sup>1</sup> Indicators of hydric so	il and wetland hydrology must
Woody Vine Stratum (Plot size:	)			be present, unless dist	urbed or problematic.
1.					
2.					
		= Total Cov	ver	Hydropnytic Vegetation	
% Bare Ground in Herb Stratum	_			Present? Yes	No
Remarks: Vegetation recently mown lawn.					

rofile Description: (Describe to the depth need Depth Matrix         Inches)       Color (moist)       %       Color         0-8       10YR 3/3       100	ed to document the in Redox Fe lor (moist) % 2 4/6 1 (R4/6 15 (R4/6 15	Type <sup>1</sup> Type <sup>1</sup> C C C C C C C C C C C C C C C C C C C	And Grains. <sup>2</sup> Locati M Sar M Ver M Sar M Ver and Grains. <sup>2</sup> Locati Indicators f 2 cm Mu Red Par RA 1) Very Sha Other (E <sup>3</sup> Indicator wetland unless d M Ver Secondary Indi	of indicators.)          Texture       Rer         ndy loam       Relict         ry fine       Relict         ndy loam       Relict         ry fine sand       Relict         ion:       PL=Pore Lining, M=I         for Problematic Hydric Suck (A10)       Renarks)         rent Material (TF2)       allow Dark Surface (TF12)         allow Dark Surface (TF12)       sors of hydrophytic vegetathydrology must be preselisturbed or problematic         s       No	=Matrix. Soils <sup>3</sup> : 2) Ition and ent, X
Depth       Matrix         inches)       Color (moist)       %       Col         0-8       10YR 3/3       100	Redox Fe         lor (moist)       %         2       4/6       1         (R4/6       15       1         (R4/6       1 <td< th=""><th>eatures Type1 C C  or Coated Sar ted.) ) (except MLF 7)  7) Hydric Soi re hard thick m</th><th>Loc<sup>2</sup> Sar Ver M sar M Ver M ver M ver and Grains. <sup>2</sup>Locati Indicators f 2 cm Mu Red Par RA 1) 2 cm Mu Red Par Nery Sha Other (E <sup>3</sup>Indicator wetland unless d M Secondary Indi</th><th>Texture       Rer         ndy loam       Relict         ndy loam       Relict         ndy loam       Relict         ndy loam       Relict         ny fine sand       Relict         y fine sand       Relict         ion: PL=Pore Lining, M=I         for Problematic Hydric \$         uck (A10)         rent Material (TF2)         allow Dark Surface (TF12         xplain in Remarks)         ors of hydrophytic vegetat         hydrology must be prese         listurbed or problematic         \$       No</th><th><pre>amarks a redox a</pre></th></td<>	eatures Type1 C C  or Coated Sar ted.) ) (except MLF 7)  7) Hydric Soi re hard thick m	Loc <sup>2</sup> Sar Ver M sar M Ver M ver M ver and Grains. <sup>2</sup> Locati Indicators f 2 cm Mu Red Par RA 1) 2 cm Mu Red Par Nery Sha Other (E <sup>3</sup> Indicator wetland unless d M Secondary Indi	Texture       Rer         ndy loam       Relict         ndy loam       Relict         ndy loam       Relict         ndy loam       Relict         ny fine sand       Relict         y fine sand       Relict         ion: PL=Pore Lining, M=I         for Problematic Hydric \$         uck (A10)         rent Material (TF2)         allow Dark Surface (TF12         xplain in Remarks)         ors of hydrophytic vegetat         hydrology must be prese         listurbed or problematic         \$       No	<pre>amarks a redox a</pre>
inches)       Color (moist)       %       Col         0-8       10YR 3/3       100	lor (moist)       %         2 4/6       1         (R4/6       15         (R4/6)       15         (R4/6)       15         (R4/6)       (R5)         (R4/6)       (R5)         (R4/6)       (R4/6)	Type1	Loc <sup>2</sup> Sau Vei M Sar Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M Vei M N N N N N N N N N N N N N	Texture       Rer         ndy loam       Relict         ry fine       Relict         ndy loam       Relict         ry fine sand       Relict         ry fine sand       Relict         ion:       PL=Pore Lining, M=I         for Problematic Hydric Suck (A10)       Relict         rent Material (TF2)       allow Dark Surface (TF12)         allow Dark Surface (TF12)       sors of hydrophytic vegetat         hydrology must be prese       listurbed or problematic         s       No	<pre>marks a redox a r</pre>
0-8       10YR 3/3       100         8-12       10YR 3/3       99       5YR         12-16       2.5Y 4/2       85       2.5Y	2 4/6       1         (R4/6       15         (R4/6)       15         (R4/6)       15         (R4/6)       15         (R4/6)       15         (R4/6)       16         (R4/6)       16         (R4/6)       16         (R4/6)       16         (R4/6)       16         (R4/6)       17         (R4/6)       16         (R4/6)       17         (R4/6)       17         (R4/6)       16         (R4/6)       17         (R4/6)       17         (R4/6)       16         (R4/6)       17         (R4/6)       16         (R4/6)       17         (R4/6)       16         (R4/6)       17         (R4/6)	C C 	M Sar M Sar M Ver M Ver and Grains. <sup>2</sup> Locati Indicators f 2 cm Mu Red Par RA 1) Very Sha Other (E <sup>3</sup> Indicator wetland unless d M Very Sha Secondary Indi	ndy loam       Relict         ry fine       Relict         ndy loam       Relict         ry fine sand       Relict         ry fine sand       Relict         ion:       PL=Pore Lining, M=I         for Problematic Hydric Suck (A10)       Relict         rent Material (TF2)       allow Dark Surface (TF12)         allow Dark Surface (TF12)       sors of hydrophytic vegetath         hydrology must be preselisturbed or problematic       No         s       No	a redox a r
8-12       10YR 3/3       99       5YR         12-16       2.5Y 4/2       85       2.5Y	2 4/6       1         ('R4/6       15         ('R4/6       16         ('R4/6       15         ('R4/6       16         ('R4/6       16         ('R4/6       16         ('R4/6       16         ('R4/6       17         ('R4/6       16         ('R4/6       17         ('R4/6       17         ('R4/6       17         ('R4/6       16         ('R4/6       17         ('R4/6       17         ('R4/6	C C 	M Sar Vei M Vei M Notators f M Notator Weiland unless d M Notator M Notato	ion: PL=Pore Lining, M=I for Problematic Hydric S uck (A10) rent Material (TF2) allow Dark Surface (TF12 :xplain in Remarks) ors of hydrophytic vegetat hydrology must be prese listurbed or problematic	a redox a
8-12       10YR 3/3       99       5YR         12-16       2.5Y 4/2       85       2.5Y	24/6       1         ('R4/6       15         ('R4/6       16         ('R4/6       15         ('R4/6       15         ('R4/6       16         ('R4/6       16         ('R4/6       16         ('R4/6       17         ('R4/6       16         ('R4/6       17         ('R4/6       17         ('R4/6       17         ('R4/6       17         ('R4/6       17         ('R4/6       17         ('R4/6	C C  or Coated Sau ted.) ) (except MLF 7) Thydric Soi re hard thick m	M sar M Ver M Ver M Ver and Grains. <sup>2</sup> Locati Indicators f 2 cm Mu Red Par 2 cm Mu Red Par 2 cm Mu Red Par 3 Indicator wetland unless d M Ver M Ver Secondary Indi	ion: PL=Pore Lining, M= for Problematic Hydric S Juck (A10) rent Material (TF2) allow Dark Surface (TF12 Explain in Remarks) prs of hydrophytic vegetat hydrology must be prese listurbed or problematic No	=Matrix. Soils <sup>3</sup> : 2) Ition and ent, X
12-16       2.5Y 4/2       85       2.5Y         12-16       2.5Y       1       1         12-16       2.5Y       1       1         12-16       2.5Y       1       1         12-16       2.5Y       1       1       1         12-17       1       1       1       1       1       1         12-17       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       <	(R4/6       15         (R4/6)       15         (R4/6)       15         (R4/6)       15         (R4/6)       15         (R4/6)       16         (R4/6)       16         (R4/6)       16         (R4/6)       16         (R4/6)       17         (R4/6)       16         (R4/6)       17         (R4/6)       16         (R4/6)       17         (R4/6)       17         (R4/6)       16         (R4/6)       17	C	M Ver M Ver and Grains. <sup>2</sup> Locati Indicators f 2 cm Mu Red Par 2 cm Mu Red Par 2 cm Mu Red Par 0 ther (E <sup>3</sup> Indicator wetland unless d M Very Sha Other (E <sup>3</sup> Indicator wetland unless d M Very Sha Secondary Indi	ry fine sand Relict ry fine sand Relict Reli	=Matrix. Soils <sup>3</sup> : 2) Ition and ent, X
12-16       2.5Y 4/2       85       2.5Y	rK4/6       15         rK4/6       15         rK4/6       15         and strix, CS=Covered       15         unless otherwise note       16         andy Redox (S5)       16         ipped Matrix (S6)       16         amy Gleyed Matrix (F3)       16         dox Dark Surface (F6)       16         pleted Dark Surface (F7)       16         dox Depressions (F8)       17         ffuse boundaries and ar       16         uthat apply)       11         Water-Stained Leaves (MLRA 1, 2, 4A, and 4B       15	C	M Ver	ion: PL=Pore Lining, M= for Problematic Hydric \$ uck (A10) rent Material (TF2) allow Dark Surface (TF12 Explain in Remarks) ors of hydrophytic vegetat hydrology must be prese listurbed or problematic No	=Matrix. Soils <sup>3</sup> : 2) Ition and ent, X
Type:       C=Concentration, D=Depletion, RM=Reduce         Hydric Soil Indicators:       (Applicable to all LRRs,         Histosol (A1)       Sar         Histic Epipedon (A2)       Stri         Black Histic (A3)       Loa         Hydrogen Sulfide (A4)       Loa         Depleted Below Dark Surface (A11)       Dep         Thick Dark Surface (A12)       Rec         Sandy Mucky Mineral (S1)       Dep         Sandy Gleyed Matrix (S4)       Rec         strictive Layer (if present):       Type:         Depth (inches):       arks: *Most redox have sharp edges rather than dif         DROLOGY       Saturation (A3)       Z         water Marks (B1)       Kater Marks (B1)       Saturation (A3)         Sediment Deposits (B2)       F         Drift Deposits (B3)       F	ed Matrix, CS=Covered unless otherwise note ndy Redox (S5) ipped Matrix (S6) amy Mucky Mineral (F1) amy Gleyed Matrix (F2) pleted Matrix (F3) dox Dark Surface (F6) pleted Dark Surface (F7) dox Depressions (F8) ffuse boundaries and ar It that apply) Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B	or Coated Sau ted.) ) (except MLF 7) Hydric Soi re hard thick m	Ind Grains. <sup>2</sup> Locati Indicators f 2 cm Mu Red Par RA 1) 2 cm Mu Red Par Other (E <sup>3</sup> Indicato wetland unless d MI Present? Yes nasses.	ion: PL=Pore Lining, M= for Problematic Hydric \$ Jck (A10) rent Material (TF2) allow Dark Surface (TF12 Explain in Remarks) ors of hydrophytic vegetat hydrology must be prese listurbed or problematic	=Matrix. Soils <sup>3</sup> : 2) Ition and ent, X
Type:       C=Concentration, D=Depletion, RM=Reduce         Hydric Soil Indicators:       (Applicable to all LRRs,         Histosol (A1)       Sar         Histic Epipedon (A2)       Stri         Black Histic (A3)       Loa         Depleted Below Dark Surface (A11)       Deplet         Thick Dark Surface (A12)       Rec         Sandy Mucky Mineral (S1)       Deplet         Sandy Gleyed Matrix (S4)       Rec         strictive Layer (if present):       Type:         Depth (inches):       arks: *Most redox have sharp edges rather than dif         DROLOGY       Saturation (A3)       J         water Marks (B1)       Kater Marks (B1)       Kater Marks (B2)         Sediment Deposits (B2)       F       Sediment Deposits (B2)         Drift Deposits (B3)       Histor Cruet (B4)       F	ed Matrix, CS=Covered unless otherwise note ndy Redox (S5) ipped Matrix (S6) amy Mucky Mineral (F1) amy Gleyed Matrix (F2) pleted Matrix (F3) dox Dark Surface (F6) pleted Dark Surface (F7) dox Depressions (F8) fluse boundaries and ar It that apply) Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B	or Coated Sau or Coated Sau ted.) ) (except MLF 7) Hydric Soi re hard thick m	and Grains. <sup>2</sup> Locati Indicators f 2 cm Mu Red Par RA 1) 2 cm Mu Red Par Other (E <sup>3</sup> Indicator wetland unless d MI Present? Yes nasses.	ion: PL=Pore Lining, M= for Problematic Hydric \$ Jck (A10) rent Material (TF2) allow Dark Surface (TF12 Explain in Remarks) ors of hydrophytic vegetat hydrology must be prese listurbed or problematic	=Matrix. Soils <sup>3</sup> : 2) Ition and ent, X
Type:       C=Concentration, D=Depletion, RM=Reduce         Hydric Soil Indicators:       (Applicable to all LRRs,         Histosol (A1)       Sar         Histic Epipedon (A2)       Stri         Black Histic (A3)       Loa         Hydrogen Sulfide (A4)       Loa         Depleted Below Dark Surface (A11)       Deg         Thick Dark Surface (A12)       Rec         Sandy Mucky Mineral (S1)       Deg         Sandy Gleyed Matrix (S4)       Rec         strictive Layer (if present):       Type:         Depth (inches):	ed Matrix, CS=Covered unless otherwise note ndy Redox (S5) ipped Matrix (S6) amy Mucky Mineral (F1) amy Gleyed Matrix (F2) pleted Matrix (F3) dox Dark Surface (F6) pleted Dark Surface (F7) dox Depressions (F8) fluse boundaries and ar It that apply) Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B	or Coated Sar ted.) ) (except MLF 7) Hydric Soi re hard thick m	and Grains. <sup>2</sup> Locati Indicators f 2 cm Mu Red Par RA 1) 2 cm Mu Red Par Other (E <sup>3</sup> Indicator wetland unless d MI Present? Yes nasses.	ion: PL=Pore Lining, M= for Problematic Hydric \$ Jck (A10) rent Material (TF2) allow Dark Surface (TF12 Explain in Remarks) ors of hydrophytic vegetat hydrology must be prese listurbed or problematic	=Matrix. Soils <sup>3</sup> : 2) Ition and ent, X
Type:       C=Concentration, D=Depletion, RM=Reduce         Hydric Soil Indicators:       (Applicable to all LRRs,         Histosol (A1)       Sar         Histic Epipedon (A2)       Stri         Black Histic (A3)       Loa         Hydrogen Sulfide (A4)       Loa         Depleted Below Dark Surface (A11)       Depleted         Thick Dark Surface (A12)       Rec         Sandy Mucky Mineral (S1)       Depleted         Sandy Gleyed Matrix (S4)       Rec         strictive Layer (if present):       Type:         Depth (inches):       arks: *Most redox have sharp edges rather than dif         DROLOGY       Striace Water (A1)       Image: Saturation (A3)         Surface Water (A1)       Saturation (A3)       X         Water Marks (B1)       Saturation (A3)       X         Water Marks (B1)       Image: Saturation (A3)       X         Mater Marks (B2)       Image: Saturation (A3)       Image: Saturation (A3)         Mater Marks (B3)       Image: Saturation (A3)       Image: Saturation (A3)         Mater Marks (B1)       Image: Saturation (A3)       Image: Saturation (A3)         Mater Marks (B1)       Image: Saturation (A3)       Image: Saturation (A3)         Mater Marks (B3)       Image: Saturation (A3)       Imag	ed Matrix, CS=Covered unless otherwise note ndy Redox (S5) ipped Matrix (S6) amy Mucky Mineral (F1) amy Gleyed Matrix (F2) pleted Matrix (F3) dox Dark Surface (F6) pleted Dark Surface (F7) dox Depressions (F8) 	or Coated Sar ted.) ) (except MLF 7) Hydric Soi re hard thick m	Ind Grains. <sup>2</sup> Locati Indicators f 2 cm Mu Red Par Red Par Other (E <sup>3</sup> Indicator wetland unless d MI Present? Yes nasses.	ion: PL=Pore Lining, M= for Problematic Hydric \$ Jck (A10) rent Material (TF2) allow Dark Surface (TF12 Explain in Remarks) ors of hydrophytic vegetat hydrology must be prese listurbed or problematic	=Matrix. Soils <sup>3</sup> : 2) ntion and ent, X
Type:       C=Concentration, D=Depletion, RM=Reduce         Hydric Soil Indicators:       (Applicable to all LRRs,         Histosol (A1)       Sar         Histic Epipedon (A2)       Stri         Black Histic (A3)       Loa         Hydrogen Sulfide (A4)       Loa         Depleted Below Dark Surface (A11)       Depleted         Thick Dark Surface (A12)       Rec         Sandy Mucky Mineral (S1)       Depleted         Sandy Gleyed Matrix (S4)       Rec         strictive Layer (if present):       Type:         Depth (inches):       arks: *Most redox have sharp edges rather than dif         OROLOGY       Saturation (A3)       Y         water Marks (B1)       Kater Marks (B1)       Kater Marks (B2)         Sediment Deposits (B2)       F         Drift Deposits (B3)       F	ed Matrix, CS=Covered unless otherwise note ndy Redox (S5) ipped Matrix (S6) amy Mucky Mineral (F1) amy Gleyed Matrix (F2) pleted Matrix (F3) dox Dark Surface (F6) pleted Dark Surface (F7) dox Depressions (F8) ffuse boundaries and ar It that apply) Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B	or Coated Sar ted.) ) (except MLF 7) Hydric Soi re hard thick m	and Grains. <sup>2</sup> Locati Indicators f 2 cm Mu Red Par RA 1) 2 cm Mu Red Par Other (E <sup>3</sup> Indicator wetland unless d MI Present? Yes masses.	ion: PL=Pore Lining, M= for Problematic Hydric \$ Jck (A10) rent Material (TF2) allow Dark Surface (TF12 Explain in Remarks) ors of hydrophytic vegetat hydrology must be prese listurbed or problematic	=Matrix. Soils <sup>3</sup> : 2) ation and ent, X
Type:       C=Concentration, D=Depletion, RM=Reduce         Hydric Soil Indicators:       (Applicable to all LRRs,         Histosol (A1)       Sar         Histic Epipedon (A2)       Stri         Black Histic (A3)       Loa         Depleted Below Dark Surface (A11)       Depleted Below Dark Surface (A11)         Depleted Below Dark Surface (A12)       Rec         Sandy Mucky Mineral (S1)       Depleted Selow Dark Surface (A12)         Sandy Gleyed Matrix (S4)       Rec         strictive Layer (if present):       Type:         Depth (inches):       arks: *Most redox have sharp edges rather than dif         DROLOGY       Striace Water (A1)       I         High Water Table (A2)       Saturation (A3)       Z         Water Marks (B1)       G       Sediment Deposits (B2)       F         Drift Deposits (B3)       F       G       G	d Matrix, CS=Covered     unless otherwise note     ndy Redox (S5)     ipped Matrix (S6)     amy Mucky Mineral (F1)     amy Gleyed Matrix (F2)     pleted Matrix (F3)     dox Dark Surface (F6)     pleted Dark Surface (F7     dox Depressions (F8)     fluse boundaries and ar     ll that apply)     Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B	<pre>or Coated Sai ted.) ) (except MLF 7) Hydric Soi re hard thick m </pre>	and Grains. <sup>2</sup> Locati Indicators f 2 cm Mu Red Par Red Par Other (E <sup>3</sup> Indicator wetland unless d Mil Present? Yes masses.	ion: PL=Pore Lining, M= for Problematic Hydric \$ uck (A10) rent Material (TF2) allow Dark Surface (TF12 Explain in Remarks) ors of hydrophytic vegetat hydrology must be prese listurbed or problematic	=Matrix. Soils <sup>3</sup> : 2) ation and ent, X
Type:       C=Concentration, D=Depletion, RM=Reduce         Hydric Soil Indicators:       (Applicable to all LRRs,         Histosol (A1)	ad Matrix, CS=Covered unless otherwise note ndy Redox (S5) ipped Matrix (S6) amy Mucky Mineral (F1) amy Gleyed Matrix (F2) pleted Matrix (F3) dox Dark Surface (F6) pleted Dark Surface (F7) dox Depressions (F8) ffuse boundaries and ar It that apply) Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B	re hard thick m	and Grains. <sup>2</sup> Locati Indicators f 2 cm Mu Red Par RA 1) Very Shi Other (E <sup>3</sup> Indicator wetland unless d Mil Present? Yes masses.	ion: PL=Pore Lining, M=I for Problematic Hydric \$ uck (A10) rent Material (TF2) allow Dark Surface (TF12 Explain in Remarks) ors of hydrophytic vegetat hydrology must be prese disturbed or problematic	=Matrix. Soils <sup>3</sup> : 2) ation and ent, X
Type: C=Concentration, D=Depletion, RM=Reduce         Hydric Soil Indicators: (Applicable to all LRRs,         Histosol (A1)       Sar         Histic Epipedon (A2)       Stri         Black Histic (A3)       Loa         Hydrogen Sulfide (A4)       Loa         Depleted Below Dark Surface (A11)       Depleted Below Dark Surface (A11)         Thick Dark Surface (A12)       Rec         Sandy Mucky Mineral (S1)       Depleted Selow Dark Surface (A12)         Sandy Gleyed Matrix (S4)       Rec         strictive Layer (if present):       Type:         Depth (inches):       arks: *Most redox have sharp edges rather than dif         OROLOGY       Saturation (A3)       Z         water Marks (B1)       K       Sediment Deposits (B2)         Drift Deposits (B3)       F         Algal Mat or Cruct (B4)       F	Ad Matrix, CS=Covered unless otherwise note ndy Redox (S5) ipped Matrix (S6) amy Mucky Mineral (F1) amy Gleyed Matrix (F2) pleted Matrix (F3) dox Dark Surface (F6) pleted Dark Surface (F7) dox Depressions (F8) ffuse boundaries and ar It that apply) Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B	<pre>(or Coated Sai ted.) ) (except MLF 7) Hydric Soi re hard thick m</pre>	And Grains. <sup>2</sup> Locati Indicators f 2 cm Mu Red Par Red Par Other (E <sup>3</sup> Indicator wetland unless d Mil Present? Yes masses.	ion: PL=Pore Lining, M= for Problematic Hydric \$ uck (A10) rent Material (TF2) allow Dark Surface (TF12 Explain in Remarks) prs of hydrophytic vegetat hydrology must be prese listurbed or problematic S No	=Matrix. Soils <sup>3</sup> : 2) ation and ent, X
Hydric Soil Indicators: (Applicable to all LRRs,         Histosol (A1)       Sar         Histic Epipedon (A2)       Stri         Black Histic (A3)       Loa         Hydrogen Sulfide (A4)       Loa         Depleted Below Dark Surface (A11)       Deg         Thick Dark Surface (A12)       Rec         Sandy Mucky Mineral (S1)       Deg         Sandy Gleyed Matrix (S4)       Rec         strictive Layer (if present):       Type:         Depth (inches):	unless otherwise note hdy Redox (S5) ipped Matrix (S6) amy Mucky Mineral (F1) amy Gleyed Matrix (F2) pleted Matrix (F3) dox Dark Surface (F6) pleted Dark Surface (F7 dox Depressions (F8) ffuse boundaries and ar It that apply) Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B	ted.) ) (except MLF ) Hydric Soi re hard thick m	Indicators f 2 cm Mu Red Par Red Par Other (E <sup>3</sup> Indicato wetland unless d  II Present? Yes  Nasses.	for Problematic Hydric \$ uck (A10) rent Material (TF2) allow Dark Surface (TF12 Explain in Remarks) ors of hydrophytic vegetat hydrology must be prese listurbed or problematic	Soils <sup>3</sup> : 2) ation and ent, X
Hydric Soil Indicators: (Applicable to all LRRs,         Histosol (A1)       Sar         Histic Epipedon (A2)       Stri         Black Histic (A3)       Loa         Hydrogen Sulfide (A4)       Loa         Depleted Below Dark Surface (A11)       Deg         Thick Dark Surface (A12)       Rec         Sandy Mucky Mineral (S1)       Deg         Sandy Gleyed Matrix (S4)       Rec         strictive Layer (if present):       Type:         Depth (inches):	unless otherwise note ndy Redox (S5) ipped Matrix (S6) amy Mucky Mineral (F1) amy Gleyed Matrix (F2) pleted Matrix (F3) dox Dark Surface (F6) pleted Dark Surface (F7 dox Depressions (F8) ffuse boundaries and ar It that apply) Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B	ted.) ) (except MLF ) Hydric Soi re hard thick m	Indicators f 2 cm Mu Red Par Red Par Very Sha Other (E 3Indicato wetland unless d nil Present? Yes nasses.	for Problematic Hydric \$ uck (A10) rent Material (TF2) allow Dark Surface (TF12 Explain in Remarks) ors of hydrophytic vegetat hydrology must be prese disturbed or problematic	Soils <sup>3</sup> : 2) ation and ent, X
Histosol (A1)       Sar         Histic Epipedon (A2)       Stri         Black Histic (A3)       Loa         Hydrogen Sulfide (A4)       Loa         Depleted Below Dark Surface (A11)       Deg         Thick Dark Surface (A12)       Rec         Sandy Mucky Mineral (S1)       Deg         Sandy Gleyed Matrix (S4)       Rec         strictive Layer (if present):       Type:         Depth (inches):	ndy Redox (S5) ipped Matrix (S6) amy Mucky Mineral (F1) amy Gleyed Matrix (F2) pleted Matrix (F3) dox Dark Surface (F6) pleted Dark Surface (F7 dox Depressions (F8) 	) (except MLF 7) Hydric Soi re hard thick m	AA 1) 2 cm Mu Red Par Very Sh Other (E <sup>3</sup> Indicato wetland unless d hil Present? Yes nasses.	uck (A10) rent Material (TF2) allow Dark Surface (TF12 Explain in Remarks) ors of hydrophytic vegetat hydrology must be prese disturbed or problematic	2) ation and ent, X
Histic Epipedon (A2)       Stri         Black Histic (A3)       Loa         Hydrogen Sulfide (A4)       Loa         Depleted Below Dark Surface (A11)       Deg         Thick Dark Surface (A12)       Red         Sandy Mucky Mineral (S1)       Deg         Sandy Gleyed Matrix (S4)       Red         strictive Layer (if present):       Type:         Depth (inches):	ipped Matrix (S6) amy Mucky Mineral (F1) amy Gleyed Matrix (F2) pleted Matrix (F3) dox Dark Surface (F6) pleted Dark Surface (F7 dox Depressions (F8) 	) (except MLF 7) Hydric Soi re hard thick m	Red Par Red Par Very Sh. Other (E <sup>3</sup> Indicato wetland unless d Mil Present? Yes masses.	rent Material (TF2) aallow Dark Surface (TF12 Explain in Remarks) ors of hydrophytic vegetat hydrology must be prese disturbed or problematic	2) ation and ent, X
Black Histic (A3) Loa Hydrogen Sulfide (A4) Loa Depleted Below Dark Surface (A11) Dep Thick Dark Surface (A12) Rec Sandy Mucky Mineral (S1) Dep Sandy Gleyed Matrix (S4) Rec strictive Layer (if present): Type:	In that apply) Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B	) (except MLF 7) Hydric Soi re hard thick m	RA 1) Very Sh. Other (E <sup>3</sup> Indicato wetland unless d bil Present? Yes masses.	allow Dark Surface (TF12 Explain in Remarks) ors of hydrophytic vegetaf hydrology must be prese disturbed or problematic	2) ation and ent, X
Hydrogen Sulfide (A4)       Loa         Depleted Below Dark Surface (A11)       Depleted Below Dark Surface (A11)       Depleted Below Dark Surface (A11)         Thick Dark Surface (A12)       Rec         Sandy Mucky Mineral (S1)       Depleted Below Dark Surface (A12)       Rec         Sandy Mucky Mineral (S1)       Depleted Below Dark Surface (A12)       Rec         Sandy Mucky Mineral (S1)       Depleted Below Dark Surface (A12)       Rec         strictive Layer (if present):       Type:	amy Gleyed Matrix (F2) pleted Matrix (F3) dox Dark Surface (F6) pleted Dark Surface (F7 dox Depressions (F8) ffuse boundaries and ar <u>ll that apply)</u> Water-Stained Leaves ( <b>MLRA 1, 2, 4A, and 4B</b>	7) Hydric Soi	Other (E <sup>3</sup> Indicate         wetland         unless d <b>iil Present? Yes</b> nasses.         Secondary Indi	Explain in Remarks) ors of hydrophytic vegetaf hydrology must be prese disturbed or problematic s No	x ition and ent,
Depleted Below Dark Surface (A11) Dep Thick Dark Surface (A12) Rec Sandy Mucky Mineral (S1) Dep Sandy Gleyed Matrix (S4) Rec strictive Layer (if present): Type: Depth (inches): arks: *Most redox have sharp edges rather than dif DROLOGY tland Hydrology Indicators: mary Indicators (minimum of one required; check al Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	pleted Matrix (F3) dox Dark Surface (F6) pleted Dark Surface (F7 dox Depressions (F8) ffuse boundaries and ar ll that apply) Water-Stained Leaves ( <b>MLRA 1, 2, 4A, and 4B</b>	7) Hydric Sol	<sup>3</sup> Indicato wetland unless d bil Present? Yes nasses.	ors of hydrophytic vegetaf hydrology must be prese listurbed or problematic	x
Thick Dark Surface (A12) Rec Sandy Mucky Mineral (S1) Dep Sandy Gleyed Matrix (S4) Rec strictive Layer (if present): Type: Depth (inches): arks: *Most redox have sharp edges rather than dif DROLOGY etland Hydrology Indicators: mary Indicators (minimum of one required; check al Surface Water (A1) I High Water Table (A2) Saturation (A3) Z Saturation (A3) Z Sediment Deposits (B2) F Drift Deposits (B3) F	dox Dark Surface (F6) pleted Dark Surface (F7 dox Depressions (F8) ffuse boundaries and ar ll that apply) Water-Stained Leaves ( <b>MLRA 1, 2, 4A, and 4B</b>	7) Hydric Sol	<sup>3</sup> Indicato wetland unless d oil Present? Yes nasses.	ors of hydrophytic vegetaf hydrology must be prese disturbed or problematic	x
Sandy Mucky Mineral (S1) Der Sandy Gleyed Matrix (S4) Rec strictive Layer (if present): Type: Depth (inches): arks: *Most redox have sharp edges rather than dif DROLOGY tland Hydrology Indicators: mary Indicators (minimum of one required; check al Surface Water (A1) I High Water Table (A2) S Saturation (A3) Y Water Marks (B1) I Sediment Deposits (B2) I Drift Deposits (B3) I	pleted Dark Surface (F7 dox Depressions (F8) ffuse boundaries and ar ll that apply) Water-Stained Leaves ( <b>MLRA 1, 2, 4A, and 4B</b>	7) Hydric Soi re hard thick m	vetland unless d vil Present? Yes masses.	hydrology must be prese listurbed or problematic	X
Sandý Gleyed Matrix (S4) Rec strictive Layer (if present): Type: Depth (inches): arks: *Most redox have sharp edges rather than dif DROLOGY stand Hydrology Indicators: mary Indicators (minimum of one required; check al Surface Water (A1) Surface Water (B1) Surface Water (B2) Surface Water Deposits (B2) Function (A3) Surface Water Cruct (B4)	dox Depressions (F8) ffuse boundaries and ar ll that apply) Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B	Hydric Soi	unless d ill Present? Yes masses. Secondary Indi	disturbed or problematic	X
strictive Layer (if present):         Type:         Depth (inches):         Darks: *Most redox have sharp edges rather than dif         DROLOGY         strand Hydrology Indicators:         mary Indicators (minimum of one required; check al         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)	ffuse boundaries and ar If that apply) Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B	Hydric Sol	nil Present? Yes masses.	š No	X
strictive Layer (if present):         Type:         Depth (inches):         Darks: *Most redox have sharp edges rather than dif         DROLOGY         stand Hydrology Indicators:         mary Indicators (minimum of one required; check al         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)	ffuse boundaries and ar fluse boundaries and ar ll that apply) Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B	Hydric Sol	nil Present? Yes masses.	s No	X
Type: Depth (inches): arks: *Most redox have sharp edges rather than dif <b>DROLOGY</b> etland Hydrology Indicators: mary Indicators (minimum of one required; check al Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Cruct (B4)	ffuse boundaries and ar ffuse boundaries and ar Il that apply) Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B	Hydric So	nasses.	s No	X
Depth (inches):	ffuse boundaries and ar ffuse boundaries and ar Il that apply) Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B	re hard thick m	nasses.		
DROLOGY         arks: *Most redox have sharp edges rather than dif         DROLOGY         atland Hydrology Indicators:         mary Indicators (minimum of one required; check al         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Cruct (B4)	ffuse boundaries and ar ffuse boundaries and ar ll that apply) Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B	re hard thick n	Secondary Indi		
DROLOGY         etland Hydrology Indicators:         mary Indicators (minimum of one required; check al         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)	Il that apply) Water-Stained Leaves (	re hard thick n	Secondary Indi		
etland Hydrology Indicators:         mary Indicators (minimum of one required; check al         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)	ll that apply) Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B		Secondary Indi		
mary Indicators (minimum of one required; check al         Surface Water (A1)       I         High Water Table (A2)       S         Saturation (A3)       I         Water Marks (B1)       I         Sediment Deposits (B2)       I         Drift Deposits (B3)       I         Algol Mater Cruct (B4)       I	<u>ll that apply)</u> Water-Stained Leaves ( <b>MLRA 1, 2, 4A, and 4B</b>		Secondary Indi		
Surface Water (A1)   High Water Table (A2) Saturation (A3) Water Marks (B1) I Sediment Deposits (B2) F Drift Deposits (B3) F	Water-Stained Leaves ( MLRA 1, 2, 4A, and 4B			icators (2 or more require	ed)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algel Mat or Cruct (B4)	MLRA 1, 2, 4A, and 4B	(B9) ( <b>except</b>	Water-Stair	ned Leaves (B9) (MLRA	. 1, 2,
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	· · ·	3)	4A, and 4E	3)	
Saturation (A3) I Water Marks (B1) I Sediment Deposits (B2) I Drift Deposits (B3) I Algol Mat or Cruct (B4)	Salt Crust (B11)		Drainage P	<sup>v</sup> atterns (B10)	
Water Marks (B1)          Sediment Deposits (B2)          Drift Deposits (B3)          Algo! Mat or Cruct (B4)	Aquatic Invertebrates (E	B13)	Dry-Seaso	n Water Table (C2)	
Sediment Deposits (B2)	Hydrogen Sulfide Odor	(C1)	Saturation	Visible on Aerial Imagery	y (C9)
Sediment Deposits (B2)	Oxidized Rhizospheres	along Living		/	
Algel Mot or Cruct (P4)	Roots (C3)		Geomorphi	ic Position (D2)	
Algol Mat or Cruct (P4)	Presence of Reduced Ir	ron (C4)	Shallow Ad	juitard (D3)	
A REAL MARTER FOR THE	Recent Iron Reduction i	in Tilled		rol Toot (DC)	
	Solis (C6)		FAC-Neutra	ai rest (D5)	
Iron Doposite (BE)	Signated or Stressed Pla	ants (D1)	Dairond And	t Mounde (DE) (I DD A)	
Surface Seil Creake (P6)	(LKK A) Other (Evolein in Dema	orko)	Kaised Ant		
Joundation Visible on April Imagent (DZ)	ouler (⊏xplain in Rema	11KS)	Frost-Heav	re multimocks (D7)	
Sparsoly Vegetated Cancey Surface (B2)					
Sparsely vegetated Concave Sullace (DO)					
Id Observations:		<u> </u>			
rface Water Present? Voc No V D	enth (inches):				
ter Table Breent? Vee No X De	eptin (incides).	\_			
turation Present?	eptit (inches):	I WE	Hand Hudrolemy D	scont? Voc	
luides capillary fringe) Ves No V Dr	enth (inches).		tland Hydrology Pre	esent? Yes N	No X
ribe Reported Date (stream route manifesting)	opan (1101103).		atland Hydrology Pre	esent? Yes N	No X
mbe Recorded Data (stream gauge, monitoring wel	Il opriol photos		etland Hydrology Pre	esent? Yes <u>N</u> N	No <u>X</u>
	II, aerial photos, previou	us inspections	etland Hydrology Pre	esent? Yes <u> </u>	No X
	II, aerial photos, previou	us inspections	etland Hydrology Pre s), if available:	esent? Yes <u> </u>	No <u>X</u>
	II, aerial photos, previou	us inspections	etland Hydrology Pre	esent? Yes <u> </u>	No X
arks:	II, aerial photos, previou	us inspections	etland Hydrology Pre s), if available:	esent? Yes <u> </u>	No <u>X</u>
arks:	II, aerial photos, previou	us inspections	etland Hydrology Pre	esent? Yes <u>N</u>	No <u>X</u>
arks:	II, aerial photos, previou	us inspections	etland Hydrology Pre	esent? Yes N	No <u>X</u>

Project/Site: Bucko	City/County:	Sedro-Woolley	//Skagit	Sampling Date:	5/26/20		
Applicant/Owner: Sarah Bucko		State: WA	Sampling	Point: P11			
Investigator(s): M. Harenda/A. Wones	Section, T	ownship, Range:	S23, T35	5N, R4E			
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concav	re, convex, n	one): none	Slop	e (%): 1	%
Subregion (LRR): MLRA2	Lat: 48.510	695°N Long:	122.2482	276° W Datum:	WGS 84		
Soil Map Unit Name: Minkler silt loam			NV	VI classification:	NA		
Are climatic / hydrologic conditions on the site typ	ical for this tim	e of year? Yes	X No	(If no, explain in	Remarks.)	_	_
Are Vegetation X , Soil , or Hydrolog	gy <u>sig</u> nif	icantly disturbed	? Are "No	ormal Circumstances	" present? Yo	es X	No
Are Vegetation, Soil, or Hydrolog	gy natur	ally problematic?	) (I	lf needed, explain an	y answers in l	Remarks.)	
SUMMARY OF EINDINGS Attach sit	o man cha	ving compli	na naint l	postions trans	ote impo	tant for	turos oto
Hydrophytic Vegetation Present? Yes		wing sampin	ig point id	ocations, transe	ets, impor	lant lea	itures, etc.
Hydric Soil Present? Yes	No X	Is the Sample	d Area with	in a Wetland?	Yes	No	X
Wetland Hydrology Present? Yes	No <u>X</u>						
Remarks: Recently mown.							
VEGETATION – Use scientific names	of plants.						
	Absolut	e Dominant	Indicator	Dominance Test	worksheet:		
Tree Stratum (Plot size: 20 ft dm )	<u>% Cove</u>	r Species?	<u>Status</u>	Number of Domin	ant Species		
1. Pseudotsuga menziesii	25	Yes	FACU	That Are OBL, FA	CW, or FAC:	0	(A)
2				Total Number of [	Dominant	0	
3				Boroont of Domin	ant Species	0	(D)
4				That Are OBL, FA	CW, or FAC:	0	(A/B)
							· · ·
50% cover= <u>12.5%;</u> 20% cover= <u>5%</u>	25	<u> </u>	er	Brovolonoo Indo	v workshoot		
Sapling/Shrub Stratum (Plot size: <u>10 ft dr</u>	<u>ı</u> )	_			A WUINSHEEL.	- h - h	
1				Total % Cover of:	Multi	bly by:	
2				OBL species	x 1 =		
3.				FACW species	x 2 =		
4				FAC species	x 3 =		
5				FACU species	x 4 =	_	
Herb		= I otal Cove	er	UPL species	x 5 =		
(Plot size: 6 ft dm )							
1 Dootulio alemerate	00	Vee		Column Totals:	(A)		(B)

1. Dactylis glomerata	90	Yes	FACU	
2. Vicia sativa	5	No	FACU	Prevalence Index = B/A =
3. Anthoxanthum odoratum	5	No	FACU	
4.				Hydrophytic Vegetation Indicators:
5.				1 - Rapid Test for Hydrophytic Vegetation
6.				2 - Dominance Test is >50%
7.				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants <sup>1</sup>
11				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:	100	<u>= T</u> otal Cov	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1				
2 % Bare Ground in Herb Stratum		_ = Total Cov	er	Hydrophytic Vegetation Present? Yes No X
Remarks: Vegetation recently mown.				

SOIL							Sampling Point:	P11
Profile Deso Depth	cription: (Describe t Matrix	o the depth	n needed to documer R	<b>nt the ind</b> edox Fea	l <b>icator or con</b> tures	firm the a	bsence of indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-5	10YR 2/2	100					Loam	
5-15	10YR 3/2	100					Sandy loam	
				<u> </u>				
1Turnet C-C		otion DM_E		<u> </u>	r Cootod Son		<sup>2</sup> operation: DI – Dara I	ining M-Motrix
Type: C=C	oncentration, D=Depi	elion, Rivi=r	Reduced Matrix, CS=C	overed o	r Coaled San	u Grains.	-Location: PL=Pore L	ining, m=matrix.
Hydric Soi	il Indicators: (Applie	cable to all	LRRs, unless otherw	ise note	d.)	Ind	icators for Problemation	: Hydric Soils <sup>3</sup> :
Histoso	ol (A1) Eninodon (A2)	_	Sandy Redox (S5) Stripped Matrix (S6)	2)			2 cm Muck (A10) Red Parent Material (TE	50)
Black H	Histic (A3)		Loamy Mucky Mine	o) eral (F1) (	except MLR	A 1)	Very Shallow Dark Surf	ace (TF12)
Hydrog	gen Sulfide (A4)		Loamy Gleyed Ma	trix (F2)			Other (Explain in Rema	rks)
Deplete Thick I	ed Below Dark Surfac Dark Surface (A12)	e (A11)	Depleted Matrix (F Redox Dark Surface	3) ce (F6)			<sup>3</sup> Indicators of hydrophyt	ic vegetation and
Sandy	Mucky Mineral (S1)	_	Depleted Dark Sur	face (F7)			wetland hydrology must	be present,
Sandy	Gleyed Matrix (S4)		Redox Depression	s (F8)			unless disturbed or prot	olematic
Restrictive La	aver (if present):							
Type:					Hydric Soil	Present?	Yes	No X
Depth (inc	hes):				-			
Remarks:								
Wetland Hydr	ology Indicators:							
Primary Indica	tors (minimum of one	required; c	heck all that apply)			Secor	dary Indicators (2 or mo	re required)
Surface Wa	ater (A1)		Water-Stained I	Leaves (E and 4B)	(except	VV 44	ater-Stained Leaves (B9	) (MLRA 1, 2,
High Water	r Table (A2)		Salt Crust (B11)	)		Dr	ainage Patterns (B10)	
Saturation	(A3)		Aquatic Invertel	brates (B	13)	Dr	y-Season Water Table (	C2)
	KS (DT)		Oxidized Rhizo	spheres a	along Living	3		a magery (C9)
Sediment [	Deposits (B2)		Roots (C3)			Ge	eomorphic Position (D2)	
Drift Depos	sits (B3)		Presence of Re Recent Iron Re	duced Iro	n (C4) Tilled	Sł	allow Aquitard (D3)	
Algal Mat c	or Crust (B4)		Soils (C6)		Thica	F <i>i</i>	C-Neutral Test (D5)	
Iron Donos	te (B5)		Stunted or Stree	ssed Plan	nts (D1)	D	nicod Ant Mounda (D6) (	
Surface Sc	oil Cracks (B6)		Other (Explain i	n Remark	(S)	Ka	ost-Heave Hummocks (I	D7)
Inundation	Visible on Aerial Imag	gery (B7)			,		· · · · · ·	,
Sparsely V	egetated Concave Su	urface (B8)						
Field Observa	ations:							
Surface Water	Present? Yes	No	X Depth (inches):					
Water Table P	Present? Yes	No	X Depth (inches):		Wetl	and Hydro	logy Present? Yes	No X
(includes capil	llary fringe) Yes	No	X Depth (inches):					
Describe Recor	ded Data (stream gau	ige, monitor	ing well, aerial photos	, previous	s inspections),	if available	e:	
Remarks: Very	dny							
Remarks. Very	ary.							

Project/Site: Bucko	City/County:	Sedro-Woolley/	Skagit Sam	oling Date:	5/26/2	0		
Applicant/Owner: Sarah Bucko		State: WA	Sampling Point:	P12				
Investigator(s): M. Harenda/A. Wones	Section, T	ownship, Range:	S23, T35N, R4E					
Landform (hillslope, terrace, etc.): terrace	Lo	ocal relief (concave	e, convex, none):	none		Slope (%):	1%	
Subregion (LRR): MLRA2	Lat: 48.51	0369°N Long:	122.247660°W	Datum:	WGS 8	34		
Soil Map Unit Name: Minkler silt loam			NWI class	ification:	NA			
Are climatic / hydrologic conditions on the site	typical for this tim	ne of year? Yes	X No (If n	o, explain in	Remark	s.)		
Are Vegetation, Soil, or Hyd	ology <u>sig</u> ni	ficantly disturbed?	Are "Normal Cir	rcumstances	" preser	t? Yes X	No	
Are Vegetation, Soil, or Hyd	ology natu	rally problematic?	(If neede	d, explain ar	ny answe	ers in Remark	s.)	
SUMMARY OF FINDINGS – Attach	site map sho	wing sampling	g point locatio	ns, transe	ects, ir	nportant f	eatures,	etc
Hydrophytic Vegetation Present? Yes	<u>No X</u>							
Hydric Soil Present? Yes	NoX	Is the Sampled	Area within a We	tland?	Yes	No	<u> </u>	
wetiand Hydrology Present? Yes								

Remarks:

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3.				Species Across All Strata: 1 (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
		= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 10 ft dm	)			Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2.				OBL species x 1 =
3				FACW species x 2 =
4.				FAC species x 3 =
5				FACU species x 4 =
		= Total Cov	er	LIPL species $x 5 =$
Herb (Plot size: <u>6 ft dm</u> )				
1. Dactylis glomerata	80	Yes	FACU	
2. Trifolium pratense	6	No	FACU	Prevalence Index = B/A =
3. Rumex obtusifolius	2	No	FAC	
4. Schedonorus pratensis	2	No	FACU	Hydrophytic Vegetation Indicators:
5. Agrostis capillaris	6	No	FAC	1 - Rapid Test for Hydrophytic Vegetation
6. Holcus lanatus	2	No	FAC	2 - Dominance Test is >50%
7. Phalaris arundinacea	2	No	FACW	3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants
11				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	100	= Total Cov	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:	)			be present, unless disturbed or problematic.
1				
2				Hydronbytic
		= Total Cov	er	Vegetation
% Bare Ground in Herb Stratum	_			Present? Yes No X
Remarks:				

SOIL							Sampling Point:	P12
Profile Desc	ription: (Describe te	o the depth	needed to docume	nt the ind	icator or co	nfirm the al	osence of indicators.)	
Depth	Matrix		F	Redox Feat	tures	. 2	<b>-</b> .	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	I ype'	LOC <sup>2</sup>	lexture	Remarks
0-7	10YR 3/2	100					Sandy loam	
7-15	2.5Y 5/2	85	7.5 YR 4/6	15	С	М	Sand	Relict redox
					. <u> </u>			
<sup>1</sup> Type: C=Co	oncentration, D=Deple	etion, RM=R	Reduced Matrix, CS=0	Covered or	r Coated Sar	nd Grains.	<sup>2</sup> Location: PL=Pore L	ining, M=Matrix.
Hydria Sail	Indicatora, (Applic		BBs unloss other	vice notes	1)	Ind	iontoro for Problemati	Uvdria Saila <sup>3</sup>
Hydric Sol			LKKS, unless other		ı. <i>)</i>	ma		C Hyune Solis".
HISTOSO Histic F	ninedon (A2)	_	_ Sandy Redox (S5 Stripped Matrix (S	) (6)		—	2 cm Muck (A10) Red Parent Material (Tl	=2)
Black H	listic (A3)		Loamy Mucky Min	neral (F1) (	except MLR	(A 1)	Very Shallow Dark Surf	ace (TF12)
Hydrog	en Sulfide (A4)		Loamy Gleyed Ma	atrix (F2)	-		Other (Explain in Rema	rks)
Deplete	ed Below Dark Surfac	e (A11)	Depleted Matrix (F Depleted Matrix (F	=3)			31 11 7 7 1 1 1	
Sandy I	Mucky Mineral (S1)		Redox Dark Suna Depleted Dark Su	rface (F0)			"Indicators of hydrophy wetland hydrology mus	tic vegetation and
Sandy	Gleyed Matrix (S4)		Redox Depression	ns (F8)			unless disturbed or prol	plematic
	<i>11</i>							
Restrictive La	iyer (if present):							
Type:	200):				Hydric Soi	I Present?	Yes	NO <u>X</u>
	les).							
Remarks.								
HYDROLOG	Y							
Primary Indicat	tors (minimum of one	required: cl	neck all that apply)			Secon	darv Indicators (2 or mo	ore required)
			Water-Stained	Leaves (B	9) (except	W	ater-Stained Leaves (B	9) (MLRA 1, 2,
Surface Wa	ater (A1)		MLRA 1, 2, 4A	, and 4B)		4A	, and 4B)	
High Water	Table (A2)		Salt Crust (B11	l) brotoc (B1	2)	Dr	ainage Patterns (B10) v Season Water Table /	(C2)
Water Mark	(A3) (s (B1)		Hvdrogen Sulfi	de Odor (C	3) C1)	Di	turation Visible on Aeria	al Imagery (C9)
			Oxidized Rhizo	spheres a	long Living			
Sediment D	Deposits (B2)		Roots (C3)			Ge	eomorphic Position (D2)	
Drift Depos	its (B3)		Presence of Re	educed Iro	n (C4) Tillod	Sh	allow Aquitard (D3)	
Algal Mat o	r Crust (B4)		Soils (C6)	eduction in	Tillea	FA	C-Neutral Test (D5)	
• • • gen • • • • •	()		Stunted or Stre	essed Plan	ts (D1)			
Iron Deposi	its (B5)		(LRR A)		,	Ra	ised Ant Mounds (D6) (	
Surface So	Il Cracks (B6)	non( (P7)	Other (Explain	in Remark	S)	Fr	ost-Heave Hummocks (	D7)
Sparsely Ve	egetated Concave Su	rface (B8)						
Field Observa	tions:							
Surface Water	Present? Yes	No 2	X Depth (inches):		_			
Water Table P	resent? Yes	No	Depth (inches):		Wet	land Hydro	logy Present? Yes	<u>No X</u>
(includes capill	lary fringe) Yes	No	X Depth (inches):					
Describe Record	ded Data (stream gau	ge, monitori	ing well, aerial photos	s, previous	inspections)	), if available	):	
		-	- •	•	. ,			
Remarks: Very of	dry.							

US Army Corps of Engineers
Project/Site:	Buck	D		City/Cou	unty:	Sedro-	Woolley/	Skagit	Samp	ling Date:	5/26/2	0		
Applicant/Own	er:	Sarah Bucko				State:	WA	Sampling	Point:	P13				
Investigator(s)	: N	. Harenda/A	Wones	Sect	tion, To	ownship,	Range:	S23, T3	5N, R4E					
Landform (hills	slope, t	errace, etc.):	terrace		Loc	cal relief	(concave	, convex, i	none):	none		Slope (%):	1%	
Subregion (LR	R):	MLRA2		Lat:	48.509	994°N	Long:	122.250	613°W	Datum:	WGS 8	34		
Soil Map Unit	Name:	Minkler s	ilt Ioam					N	WI classi	fication:	NA			
Are climatic / h	nydrolo	gic condition	s on the site typ	oical for th	nis time	e of year	? Yes	X No	(If no	o, explain ir	Remark	s.)		
Are Vegetation	n X	, Soil	, or Hydrolo	ду	signifi	icantly di	sturbed?	Are "N	ormal Cir	cumstances	s" preser	t? Yes X	No	
Are Vegetation	1	, Soil	, or Hydrolo	ду	natura	ally probl	ematic?		(If needeo	d, explain a	ny answe	ers in Remark	s.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         X         No            Yes          No            Yes          No	Is the Sampled Area within a Wetland?	Yes NoX
Remarks: Recently mown.			

	Absolute	Dominant	Indicator	Dominance Test works	sheet:	
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> ) 1	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Sp That Are OBL, FACW, o	ecies or FAC: 1	(A)
2				Total Number of Domina	ant	( )
3				Species Across All Strat	a: <u>1</u>	(B)
4.				Percent of Dominant Sp That Are OBL, FACW, o	ecies r FAC: 100	(A/B)
		= Total Cov	er			
Sapling/Shrub Stratum (Plot size: 10 ft dm	)			Prevalence Index work	sheet:	
1. <u> </u>	,			Total % Cover of:	Multiply by:	
2.				OBL species	x 1 =	
3				FACW species	x 2 =	
4				FAC species	x 3 =	
5				FACU species	x 4 =	
		= Total Cov	er	UPL species	x 5 =	
Herb (Plot size: 6 ft dm )				Column Totals:	(A)	(B)
1. Phalaris arundinacea	100	Yes	FACW		_ (*)	(=)
2				Prevalence Index = B/A	. =	
3						
4				Hydrophytic Vegetatio	n Indicators:	
5				1 - Rapid Test for Hy	drophytic Vegetat	tion
6				X 2 - Dominance Test i	ıs >50%	
7				3 - Prevalence Index	is ≤3.0¹	
8				4 - Morphological Ad	aptations <sup>1</sup> (Provid	le supporting
9						el)
10				5 - Weiland Non-Vas		
11					iyuc vegetation (	Explain)
	100	<u> </u>	er	<sup>1</sup> Indicators of hydric soil	and wetland hydr	ology must
Woody Vine Stratum (Plot size:	)			be present, unless distu		IC.
1			_			
2				Hydrophytic		
W Dave Oracia d'a Ulark Olastara		= 10tal Cov	er	Vegetation	v	
% Bare Ground in Herb Stratum	_			Present? Yes	<u>X</u> NO	
Demonto						
Kemarks:						

SOIL	Sampling Point: P13
Profile Description: (Describe to the depth needed to document the in Depth Matrix Redox Fe	dicator or confirm the absence of indicators.)
(inches) Color (moist) % Color (moist) %	Type <sup>1</sup> Loc <sup>2</sup> Texture Remarks
0-16 10YR 3/2 100	Loam
<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.
Hydric Soil Indicatore: (Applicable to all LPBs, unless otherwise net	d) Indicators for Problematic Hydric Soile <sup>3</sup>
	2 om Muck (A40)
Histic Epipedon (A2) Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3) Loamy Mucky Mineral (F1)	(except MLRA 1) Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Depleted Matrix (F3)	3Indiastars of hudronhutic vegetation and
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)	) wetland hydrology must be present.
Sandy Gleyed Matrix (S4) Redox Depressions (F8)	unless disturbed or problematic
Destriction Learner (If an a sector	
Restrictive Layer (if present):	Hudria Cail Dragont 2 Vac
Type	Hydric Soll Present? Tes No X
Pomarka:	
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Water-Stained Leaves (	B9) (except Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2) Salt Crust (B11)	) 4A, and 4B) Drainage Patterns (B10)
Saturation (A3) Aquatic Invertebrates (E	13) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor	(C1) Saturation Visible on Aerial Imagery (C9)
Oxidized Rhizospheres	along Living
Sediment Deposits (B2) Roots (C3) Drift Deposits (B3) Presence of Reduced Ir	on (C4) Geomorphic Position (D2)
Recent Iron Reduction i	n Tilled
Algal Mat or Crust (B4) Soils (C6)	FAC-Neutral Test (D5)
Iron Deposits (B5) Stunted or Stressed Pla	nts (D1) Raised Ant Mounds (D6) (LPP A)
Surface Soil Cracks (B6) Cther (Exclain in Rema	(LKK A) Frost-Heave Hummocks (D7)
Inundation Visible on Aerial Imagery (B7)	
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
FIEID ODSETVATIONS: Surface Water Present? Ves No Y Depth (inches):	
Water Table Present? Yes No X Depth (inches):	Wetland Hydrology Present? Yes No X
Saturation Present?	
(includes capillary fringe) Yes No X Depth (inches):	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previou	s inspections), if available:

Remarks: Very dry.

Project/Site:	Buck	)		City/Count	y: Sedro-	Woolley/	Skagit	Samp	ling Date:	5/26/2	0		
Applicant/Own	er:	Sarah Buck	KO		State:	WA	Sampling P	oint:	P14				
Investigator(s)	: M	. Harenda/	A. Wones	Section	n, Township,	Range:	S23, T35N	N, R4E					
Landform (hills	slope, t	errace, etc	.): terrace		Local relief	(concave	, convex, no	ne):	none		Slope (%):	1%	
Subregion (LR	R):	MLRA2		Lat: 48.	.509994°N	Long:	122.25061	13°W	Datum:	WGS 8	34		
Soil Map Unit	Name:	Minkler	silt loam				NW	l classi	fication:	NA			
Are climatic / h	nydrolo	gic conditio	ons on the site ty	pical for this	time of year	? Yes	X No	(If no	o, explain in	Remark	s.)		
Are Vegetation	n X	, Soil	, or Hydrold	ogy si	gnificantly di	sturbed?	Are "Nori	mal Cir	cumstances	s" presen	t? Yes X	No	
Are Vegetation	۱	, Soil	, or Hydrold	ogy na	aturally probl	ematic?	(If	needeo	d, explain ar	ny answe	ers in Remark	s.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         X         No            Yes          No            Yes          No	Is the Sampled Area within a Wetland?	Yes NoX
Remarks: Recently mown.			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> ) 1.	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2.				Total Number of Dominant
3.				Species Across All Strata: 1 (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
		<u>= T</u> otal Cov	/er	
Sapling/Shrub Stratum (Plot size: 10 ft dm	)			Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
Uset		= Total Cov	ver	UPL species x 5 =
Hero (Plot size: 6 ft dm )				Column Totals: (A) (B)
1. <u>Phalaris arundinacea</u>	100	Yes	FACW	Development to days D/A
2				Prevalence Index = B/A =
3				Hydrophytic Vegetation Indicators:
4				4. Denid Test for Lludrankutia Vanstation
5				1 - Rapid Test for Hydrophytic Vegetation
0				$\frac{1}{2}$ - Dominance Test is >50%
8				S - Prevalence index is ≤5.0
o				data in Remarks or on a separate sheet)
3				5 - Wetland Non-Vascular Plants <sup>1</sup>
10				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	100	= Total Cov	/er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:	)			be present, unless disturbed or problematic.
<u> </u>				
2.				
		= Total Cov	/er	Hydrophytic Vegetation
% Bare Ground in Herb Stratum	_	-		Present? Yes X No
Remarks:				

SOIL							Sampling P	oint: P14
Profile Description: (De	scribe to t	the depth	needed to docu	ment the ind	licator or col	nfirm the a	bsence of indicate	ors.)
Depth (inches) Color (m	Matrix	0/_	Color (moist)	Redox Fea	tures	$1 \text{ oc}^2$	Texture	Remarks
	<u></u>	70		/0	Туре			Remarks
<u> </u>		100					Loam	
		·		- <u></u>				
		·						
<sup>1</sup> Type: C=Concentration,	D=Depletion	on, RM=R	educed Matrix, C	S=Covered o	r Coated Sar	nd Grains.	<sup>2</sup> Location: PL=P	ore Lining, M=Matrix.
Hydric Soil Indicators:	(Applical	ble to all L	RRs, unless oth	erwise note	d.)	Ind	icators for Proble	matic Hydric Soils <sup>3</sup> :
Histosol (A1)			Sandy Redox (	S5)			2 cm Muck (A10)	·
Histic Epipedon (A2	)		Stripped Matrix	(S6)			Red Parent Materia	al (TF2)
Black Histic (A3)			Loamy Mucky	Mineral (F1)	except MLR	A 1)	Very Shallow Dark	Surface (TF12)
Hydrogen Sulfide (A	.4)		Loamy Gleyed	Matrix (F2)			Other (Explain in R	lemarks)
Depleted Below Dar	k Surface (	(A11)	_ Depleted Matri	x (F3) urfoco (E6)			3 - d'antenna a Chaudan	when the community the theory and
Sandy Mucky Miner	(A12) al (S1)		_ Redux Dark St Depleted Dark	Surface (F0)			vetland bydrology	phytic vegetation and
Sandy Gleyed Matri	x (S4)		Redox Depress	sions (F8)			unless disturbed of	r problematic
Restrictive Layer (if prese	ent):							
Туре:					Hydric Soi	Present?	Yes	No X
Depth (inches):								
Remarks:								
HYDROLOGY								
Wetland Hydrology Indica Brimany Indicators (minimu	itors:	auirod: ch	ock all that apply			Socor	dany Indicators (2)	or more required)
Frinary indicators (minimu		equireu, cri	Water-Stain	, ed Leaves (F	39) (except	W	ater-Stained Leave	s (B9) ( <b>MLRA 1, 2</b> ,
Surface Water (A1)			MLRA 1, 2,	4A, and 4B)		4/	A, and 4B)	o (20) ( <b>m2</b> (0 ( ), <b>2</b> )
High Water Table (A2)			Salt Crust (E	311)		D	rainage Patterns (B	10)
Saturation (A3)			Aquatic Inve	ertebrates (B	13)	Di	ry-Season Water Ta	able (C2)
Water Marks (B1)			Hydrogen S	ulfide Odor (	C1)	Sa	aturation Visible on	Aerial Imagery (C9)
Sediment Deposits (B2)			Roots (C3)	lizospheres a	along Living	G	eomorphic Position	(D2)
Drift Deposits (B3)			Presence of	Reduced Iro	on (C4)	SI	nallow Aquitard (D3	)
			Recent Iron	Reduction in	Tilled			,
Algal Mat or Crust (B4)			Soils (C6)		(= .)	F/	AC-Neutral Test (D5	5)
Iron Denosite (B5)			Stunted or S	stressed Plar	nts (D1)	D	aised Ant Mounds (	
Surface Soil Cracks (B6	)		Other (Expl	ain in Remark	(S)	Fr	ost-Heave Hummo	Cks (D7)
Inundation Visible on Ae	, erial Imager	ry (B7)						()
Sparsely Vegetated Cor	ncave Surfa	ace (B8)						
Field Observations:								
Surface Water Present?	Yes		Depth (inches	):	\	land Under	logy Propert?	
Saturation Present?	res			).	vvet	ianu Hydro	nogy Fresent?	
(includes capillary fringe)	Yes	No X	C Depth (inches	):				
Describe Recorded Data (str	eam gauge	e, monitorir	ng well, aerial pho	otos, previous	s inspections)	, if available	e:	
, , , , , , , , , , , , , , , , , , ,	- 5		•		- /			

Remarks: Very dry.

Project/Site:	Buc	<0		City/Co	unty:	Sedro-	Woolley/	Skagit	Samp	ling Date:	5/26/20	0		
Applicant/Owr	er:	Sarah Buc	ко			State:	WA	Sampling	Point:	P15				
Investigator(s)	:	M. Harenda	A. Wones	Sec	ction, To	ownship,	Range:	S23, T35	N, R4E					
Landform (hills	slope,	terrace, etc	.): terrace		Loc	cal relief	(concave	, convex, n	one):	none		Slope (%):	1%	
Subregion (LR	:R):	MLRA2		Lat:	48.508	558°N	Long:	122.2484	434°W	Datum:	WGS 8	34		
Soil Map Unit	Name	: Minkler	silt loam					NV	VI classi	fication:	NA			
Are climatic / h	nydrol	ogic conditio	ons on the site typ	oical for t	his time	e of year	? Yes	X No	(If no	o, explain in	Remark	s.)	_	
Are Vegetation	n	X, Soil	, or Hydrolo	gy	signifi	icantly di	sturbed?	Are "No	rmal Cir	cumstances	s" presen	t? Yes X	No	
Are Vegetation	ר <u> </u>	, Soil	, or Hydrolo	gy	natura	ally probl	ematic?	(1	f needeo	d, explain a	ny answe	ers in Remark	(s.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         X         No            Yes          No            Yes          No	Is the Sampled Area within a Wetland?	Yes NoX
Remarks: Recently mown.			

\_\_\_\_

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1			-	Total Number of Dominant
3.				Species Across All Strata: <u>4</u> (B)
4.				Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)
		= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 10 ft dm			-	Prevalence Index worksheet:
1. Rubus armeniacus	3	Yes	FAC	Total % Cover of: Multiply by:
2.				OBL species x 1 =
3.				FACW species x 2 =
4.				FAC species x 3 =
5.				FACU species x 4 =
		= Total Cov	er	UPL species x 5 =
Herb (Plot size: 6 ft dm )				Column Totals: (A) (B)
1. Anthoxanthum odoratum	39	Yes	FACU	
2. Ranunculus acris	20	Yes	FAC	Prevalence Index = B/A =
3. Agrostis capillaris	60	Yes	FAC	
4. Cirsium arvense	1	No	FAC	Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6				X 2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks of on a separate sneet)
10				5 - Wetland Non-Vascular Plants
11				Problematic Hydrophytic Vegetation (Explain)
	100	= Total Cov	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: )				be present, unless disturbed of problematic.
1				
2				Hydrophytic
		= Total Cov	er	Vegetation
% Bare Ground in Herb Stratum	-			Present? Yes X No
Remarks:				

Profile Desc								
	cription: (Describe	to the dept	h needed to docume	nt the indi	cator or co	nfirm the al	sence of indicators.)	
Depth	Matrix		R	edox Feat	ures			
(inches)	Color (moist)	%	Color (moist)	%		Loc <sup>2</sup>	Texture	Remarks
(								
0-10.5	10YR 3/2	100		<u> </u>			Ashy loam	
10.5-16	2.5Y 4/3	95	10YR 5/6	5	С	М	Fine sand	
						-		
<sup>1</sup> Type: C=C	oncentration D=Den	letion RM=	Reduced Matrix CS=0	Covered or	Coated Sa	nd Grains	<sup>2</sup> l ocation: Pl =Pore Li	ning M=Matrix
1)po. 0=0					eculou eu			inig, m=matrix.
Hydric Soi	il Indicators: (Appli	cable to all	LRRs, unless otherv	vise noted	l.)	Ind	cators for Problematic	Hydric Soils <sup>3</sup> :
Histor	ol (A1)		Sandy Redox (S5)	)			2 cm Muck (A10)	
Histor	Eninedon ( $\Delta$ 2)	_	Stripped Matrix (S	, 6)			Red Parent Material (TF	.2)
Black H	Histic (A3)	_	Loamy Mucky Min	o) eral (F1) ((	excent MI R	24 1)	Very Shallow Dark Surfa	-/ ace (TF12)
Hvdroc	instic (A3) ien Sulfide (A4)	—	Loamy Gleved Ma	trix (F2)	except men	(A I)	Other (Explain in Remar	ks)
Deplet	ed Below Dark Surfa	се (A11) —	Depleted Matrix (F					K3)
Depict	Jark Surface (A12)	<u> </u>	Bedox Dark Surfa	ce (F6)			<sup>3</sup> Indicators of hydrophyti	a vagatation and
Sandy	Mucky Mineral (S1)	-	Depleted Dark Su	rface (F7)			wetland hydrology must	he present
Sandy	Gleved Matrix (S4)	_	Redox Depression	nace (F8)			unless disturbed or prob	lematic
				10 (1 0)				lomato
estrictive I a	aver (if present):							
Turner	iyer (ii present).					Duese with	Vee	No. Y
Type:					Hydric Sol	Present?	res	
Depth (inc	hes):							
marks:								
YDROLOG	SY							
Vetland Hydi	ology Indicators:							
rimary Indica	itors (minimum of one							
		e requirea; c	heck all that apply)			Secon	dary Indicators (2 or mo	re required)
Surface W/		e requirea; c	heck all that apply) Water-Stained	Leaves (B	9) ( <b>except</b>	Secon	dary Indicators (2 or mor ater-Stained Leaves (B9)	re required) ) ( <b>MLRA 1, 2,</b>
_ Sunace W	ater (A1)	<u>e requirea; c</u>	heck all that apply) Water-Stained MLRA 1, 2, 4A	Leaves (B , and 4B)	9) ( <b>except</b>	Secon Wi	dary Indicators (2 or mor ater-Stained Leaves (B9) , and 4B)	re required) ) (MLRA 1, 2,
High Water	ater (A1) r Table (A2)	<u>e requirea; c</u>	heck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11	Leaves (B , and 4B) )	9) ( <b>except</b>	<u>Secon</u> Wa 4A	dary Indicators (2 or mor ater-Stained Leaves (B9) a, and 4B) ainage Patterns (B10)	re required) ) (MLRA 1, 2,
High Water Saturation	ater (A1) r Table (A2) (A3)	<u>e requirea, c</u>	heck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte	Leaves (B , <b>and 4B</b> ) ) brates (B1	9) ( <b>except</b> 3)	<u>Secon</u> Wi 4A Dr Dr	dary Indicators (2 or mor ater-Stained Leaves (B9) an <b>and 4B</b> ) ainage Patterns (B10) y-Season Water Table (0	re required) ) ( <b>MLRA 1, 2,</b> C2)
High Water Saturation Water Mark	ater (A1) r Table (A2) (A3) ks (B1)	<u>e requirea, c</u>	heck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfid	Leaves (B , <b>and 4B</b> ) ) brates (B1 de Odor (C	9) ( <b>except</b> 3) 21)	<u>Secon</u> 44 Dr Dr Sa	dary Indicators (2 or mor ater-Stained Leaves (B9) an and 4B) ainage Patterns (B10) y-Season Water Table (0 turation Visible on Aerial	re required) ) ( <b>MLRA 1, 2,</b> C2) I Imagery (C9)
High Water Saturation Water Marl	ater (A1) r Table (A2) (A3) ks (B1)	<u>e requirea; c</u>	heck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfic Oxidized Rhizo	Leaves (B , <b>and 4B</b> ) ) brates (B1 de Odor (C spheres al	9) ( <b>except</b> 3) 21) long Living	Secon 44 Dr Dr Sa	dary Indicators (2 or mor ater-Stained Leaves (B9) an and 4B) ainage Patterns (B10) y-Season Water Table (0 turation Visible on Aerial	re required) ) ( <b>MLRA 1, 2,</b> C2) I Imagery (C9)
High Water Saturation Water Marl	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2)	<u>e requirea; c</u>	heck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfic Oxidized Rhizo Roots (C3)	Leaves (B , <b>and 4B</b> ) ) brates (B1 de Odor (C spheres al	9) ( <b>except</b> 3) 21) long Living	Secon 44 Dr Sa Ge	dary Indicators (2 or mol ater-Stained Leaves (B9) a, and 4B) ainage Patterns (B10) y-Season Water Table (( turation Visible on Aerial comorphic Position (D2)	re required) ) ( <b>MLRA 1, 2,</b> C2) I Imagery (C9)
High Water Saturation Water Marl Sediment I Drift Depos	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3)	<u>e requirea, c</u>	heck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfic Oxidized Rhizo Roots (C3) Presence of Re	Leaves (B , <b>and 4B</b> ) ) brates (B1 de Odor (C spheres al educed Iror	9) ( <b>except</b> 3) 21) ong Living n (C4)	Secon Wi 44 Dr Sa Sa St	dary Indicators (2 or mol ater-Stained Leaves (B9) ainage Patterns (B10) y-Season Water Table (0 turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3)	re required) ) ( <b>MLRA 1, 2,</b> C2) I Imagery (C9)
High Water Saturation Water Marl Sediment I Drift Depos	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3)	<u>e requirea, c</u>	heck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfic Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re	Leaves (B , <b>and 4B</b> ) ) brates (B1 de Odor (C spheres al educed Iror duction in	9) ( <b>except</b> 3) 21) ong Living n (C4) Tilled	Secon 44 Dr Sa Sa St	dary Indicators (2 or mol ater-Stained Leaves (B9) ainage Patterns (B10) y-Season Water Table (0 turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3)	re required) ) ( <b>MLRA 1, 2,</b> C2) I Imagery (C9)
High Water Saturation Water Marl Sediment I Drift Depos	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4)	<u>e requirea, c</u>	heck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfic Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6)	Leaves (B , <b>and 4B</b> ) ) brates (B1 de Odor (C spheres al educed Iror duction in	9) ( <b>except</b> 3) 3) 3) 3) 3) 3) 3) 4) 3) 4) 4) 4) 4) 4) 4) 4) 4) 4) 4) 4) 4) 4)	Secon Wi 4A Dr Sa Sa Sf FA	dary Indicators (2 or mol ater-Stained Leaves (B9) ainage Patterns (B10) y-Season Water Table (0 turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)	re required) ) ( <b>MLRA 1, 2,</b> C2) I Imagery (C9)
High Water Saturation Water Marl Sediment I Drift Depos	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4)	<u>e requirea, c</u>	heck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfic Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre	Leaves (B , <b>and 4B</b> ) ) brates (B1 de Odor (C spheres al educed Iron duction in ssed Plant	9) (except 3) 21) long Living n (C4) Tilled ts (D1)	<u>Secon</u>  Dr Sr Sr FA	dary Indicators (2 or mol ater-Stained Leaves (B9) a, and 4B) ainage Patterns (B10) y-Season Water Table (0 turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)	re required) ) ( <b>MLRA 1, 2,</b> C2) I Imagery (C9)
High Water Saturation Water Marl Sediment I Drift Depos Algal Mat c	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5)	<u>e requirea, c</u>	heck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfic Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre (LRR A)	Leaves (B , <b>and 4B</b> ) ) brates (B1 de Odor (C spheres al educed Iror duction in	9) (except 3) 21) long Living n (C4) Tilled ts (D1)	<u>Secon</u> Wi Dr Sa Sa St FA Ra	dary Indicators (2 or mon ater-Stained Leaves (B9) a, and 4B) ainage Patterns (B10) y-Season Water Table (0 turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) ac-Neutral Test (D5) hised Ant Mounds (D6) (L	re required) ) ( <b>MLRA 1, 2,</b> C2) I Imagery (C9)
High Water Saturation Water Marl Sediment I Drift Depos Algal Mat c Iron Depos Surface Sc	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) ill Cracks (B6)	<u>e requirea, c</u>	heck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfic Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre (LRR A) Other (Explain	Leaves (B , <b>and 4B</b> ) ) brates (B1 de Odor (C spheres al educed Iror duction in ssed Plant in Remark	9) (except 3) 21) long Living n (C4) Tilled ts (D1) s)	<u>Secon</u> Wi Dr Sa St FA Ra Fr	dary Indicators (2 or mon ater-Stained Leaves (B9) a, and 4B) ainage Patterns (B10) y-Season Water Table (0 turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) ac-Neutral Test (D5) hised Ant Mounds (D6) (L post-Heave Hummocks (D6)	re required) ) ( <b>MLRA 1, 2,</b> C2) I Imagery (C9) <b>LRR A</b> ) D7)
High Water Saturation Water Marl Sediment I Drift Depos Algal Mat c Iron Depos Surface Sc Inundation	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) sil Cracks (B6) Visible on Aerial Ima	gery (B7)	heck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfic Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre (LRR A) Other (Explain	Leaves (B , <b>and 4B</b> ) ) brates (B1 de Odor (C spheres al educed Iror duction in essed Plant in Remark	9) ( <b>except</b> 3) 21) long Living n (C4) Tilled ts (D1) s)	<u>Secon</u> Wi Dr Sa Sa St FA FA Fr	dary Indicators (2 or mon ater-Stained Leaves (B9) a, and 4B) ainage Patterns (B10) y-Season Water Table (0 turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) hised Ant Mounds (D6) (L pst-Heave Hummocks (D6)	re required) ) ( <b>MLRA 1, 2,</b> C2) I Imagery (C9) <b>LRR A</b> ) D7)
High Water Saturation Water Marl Drift Depos Algal Mat c Iron Depos Surface Sc Inundation Sparsely V	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) Visible on Aerial Ima egetated Concave S	gery (B7) urface (B8)	heck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfic Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre (LRR A) Other (Explain	Leaves (B , <b>and 4B</b> ) ) brates (B1 de Odor (C spheres al educed Iron duction in essed Plant in Remark	9) ( <b>except</b> 3) 21) long Living n (C4) Tilled ts (D1) s)	<u>Secon</u> Wi Dr Sa Sa Sf FA FA	dary Indicators (2 or mon ater-Stained Leaves (B9) a, and 4B) ainage Patterns (B10) y-Season Water Table (0 turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) nised Ant Mounds (D6) (L pst-Heave Hummocks (D	re required) ) ( <b>MLRA 1, 2,</b> C2) I Imagery (C9) LRR <b>A</b> ) D7)
High Water Saturation Water Marl Sediment I Drift Depos Algal Mat c Iron Depos Surface So Inundation Sparsely V	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) bil Cracks (B6) Visible on Aerial Ima egetated Concave Si	.gery (B7) urface (B8)	heck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfid Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre (LRR A) Other (Explain	Leaves (B , <b>and 4B</b> ) ) brates (B1 de Odor (C spheres al educed Iron duction in ssed Plant in Remark	9) (except 3) 21) long Living n (C4) Tilled ts (D1) s)	<u>Secon</u>  Dr Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa	dary Indicators (2 or mon ater-Stained Leaves (B9) a, and 4B) ainage Patterns (B10) y-Season Water Table (0 turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) a.C-Neutral Test (D5) hised Ant Mounds (D6) (I post-Heave Hummocks (D	re required) ) ( <b>MLRA 1, 2,</b> C2) I Imagery (C9) L <b>RR A</b> )
High Water Saturation Water Marl Sediment I Drift Depos Algal Mat c Iron Depos Surface Sc Inundation Sparsely V	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) Visible on Aerial Ima egetated Concave Si ations:	igery (B7) urface (B8)	heck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfid Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre (LRR A) Other (Explain	Leaves (B , and 4B) ) brates (B1 de Odor (C spheres al educed Iron duction in essed Plant in Remark	9) (except 3) 21) long Living n (C4) Tilled ts (D1) s)	<u>Secon</u>  Dr Sa Sa Sa Sa Sa Sa FA Fr	dary Indicators (2 or mon ater-Stained Leaves (B9) a, and 4B) ainage Patterns (B10) y-Season Water Table (0 turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) nised Ant Mounds (D6) (I post-Heave Hummocks (D	re required) ) ( <b>MLRA 1, 2,</b> C2) I Imagery (C9) L <b>RR A</b> ) D7)
High Water Saturation Water Marl Sediment I Drift Depos Algal Mat o Iron Depos Surface So Inundation Sparsely V	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) Visible on Aerial Ima egetated Concave S ations: Present? Yes	igery (B7) urface (B8)	Heck all that apply)         Water-Stained         MLRA 1, 2, 4A         Salt Crust (B11         Aquatic Inverte         Hydrogen Sulfid         Oxidized Rhizo         Roots (C3)         Presence of Re         Soils (C6)         Stunted or Stree         (LRR A)         Other (Explain	Leaves (B , and 4B) ) brates (B1 de Odor (C spheres al educed Iron duction in ssed Plant in Remark	9) (except 3) C1) long Living n (C4) Tilled ts (D1) s)	<u>Secon</u>  Dr Sa Sa Sa Sa Sa FA Fr	dary Indicators (2 or mon ater-Stained Leaves (B9) a, and 4B) ainage Patterns (B10) y-Season Water Table (0 turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) hised Ant Mounds (D6) (I post-Heave Hummocks (D	re required) ) ( <b>MLRA 1, 2,</b> C2) I Imagery (C9) L <b>RR A</b> ) D7)
High Water Saturation Water Marl Sediment I Drift Depos Algal Mat o Iron Depos Surface So Inundation Sparsely V	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Ima 'egetated Concave S <b>ations:</b> Present? Yes	igery (B7) urface (B8)	Ample State         Water-Stained         MLRA 1, 2, 4A         Salt Crust (B11         Aquatic Inverte         Hydrogen Sulfid         Oxidized Rhizo         Roots (C3)         Presence of Re         Recent Iron Re         Soils (C6)         Stunted or Stre         (LRR A)         Other (Explain	Leaves (B , and 4B) ) brates (B1 de Odor (C spheres al educed Iron duction in ssed Plant in Remark	9) ( <b>except</b> 3) C1) long Living n (C4) Tilled ts (D1) s) Wet	<u>Secon</u> Wi Dr Sa Sa Sa Sa FA FA Fr Fr	dary Indicators (2 or mol ater-Stained Leaves (B9) a, and 4B) ainage Patterns (B10) y-Season Water Table (( turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (L ost-Heave Hummocks (D bost-Heave Hummocks (D	re required) ) (MLRA 1, 2, C2) I Imagery (C9) LRR A) D7)
High Water Saturation Water Marl Sediment I Drift Depos Algal Mat o Iron Depos Surface So Inundation Sparsely V ield Observa urface Water /ater Table P aturation Pre	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Ima 'egetated Concave S <b>ations:</b> · Present? Yes 'resent? Yes	ugery (B7) urface (B8)	America Stained         Water-Stained         MLRA 1, 2, 4A         Salt Crust (B11         Aquatic Inverte         Hydrogen Sulfid         Oxidized Rhizo         Roots (C3)         Presence of Re         Recent Iron Re         Soils (C6)         Stunted or Stre         (LRR A)         Other (Explain	Leaves (B , and 4B) ) brates (B1 de Odor (C spheres al educed Iron duction in ssed Plant in Remark	9) ( <b>except</b> 3) C1) long Living n (C4) Tilled ts (D1) s) Wet	<u>Secon</u> Wi Dr Sa Sa Sa Sa FA FA Fr Fr	dary Indicators (2 or mol ater-Stained Leaves (B9) a, and 4B) ainage Patterns (B10) y-Season Water Table (( turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) AC-Neutral Test (D5) hised Ant Mounds (D6) (L ost-Heave Hummocks (D6) (Dost-Heave Hummocks (D6))	re required) ) (MLRA 1, 2, C2) I Imagery (C9) LRR A) D7)
High Water Saturation Water Marl Sediment I Drift Depos Algal Mat o Iron Depos Surface So Inundation Sparsely V Field Observa Surface Water Vater Table P Saturation Pre ncludes capil	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) bil Cracks (B6) Visible on Aerial Ima 'egetated Concave S <b>ations:</b> • Present? Yes 'resent? Yes sent? lary fringe) Yes	ugery (B7) urface (B8)	America Stained         Water-Stained         MLRA 1, 2, 4A         Salt Crust (B11         Aquatic Inverte         Hydrogen Sulfid         Oxidized Rhizo         Roots (C3)         Presence of Re         Recent Iron Re         Soils (C6)         Stunted or Stre         (LRR A)         Other (Explain	Leaves (B , and 4B) ) brates (B1 de Odor (C spheres al educed Iron duction in ssed Plant in Remark	9) (except 3) C1) long Living n (C4) Tilled ts (D1) s) Wet	<u>Secon</u> Wi Dr Sa Sa Sa Sa FA FA Fr Fr	dary Indicators (2 or mol ater-Stained Leaves (B9) a, and 4B) ainage Patterns (B10) y-Season Water Table (( turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) AC-Neutral Test (D5) hised Ant Mounds (D6) (I post-Heave Hummocks (D6) bost-Heave Hummocks (D6)	re required) ) (MLRA 1, 2, C2) I Imagery (C9) LRR A) D7)
High Water Saturation Water Marl Sediment I Drift Depos Algal Mat of Iron Depos Surface So Inundation Sparsely V Field Observa Surface Water Vater Table P Saturation Pre ncludes capil	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) bil Cracks (B6) Visible on Aerial Ima regetated Concave Si <b>ations:</b> r Present? Yes resent? Yes sent? lary fringe) Yes ded Data (stream car	igery (B7) urface (B8)	America and the second seco	Leaves (B , and 4B) ) brates (B1 de Odor (C spheres al educed Iror duction in essed Plant in Remark	9) (except 3) 1) long Living n (C4) Tilled ts (D1) s) Wether inspections	<u>Secon</u> Wi Dr Sa Sa Sa Sa FA FA Fa Fr tland Hydro	dary Indicators (2 or mol ater-Stained Leaves (B9) ainage Patterns (B10) y-Season Water Table (( turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) hised Ant Mounds (D6) (I post-Heave Hummocks (D6) Iogy Present? Yes	re required) ) (MLRA 1, 2, C2) I Imagery (C9) LRR A) D7)
High Water Saturation Water Marl Sediment I Drift Depos Algal Mat of Iron Depos Surface So Inundation Sparsely V ield Observa urface Water /ater Table P aturation Pre ncludes capil scribe Recor	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) Visible on Aerial Ima 'egetated Concave So <b>ations:</b> r Present? Yes isent? Yes isent? Yes ded Data (stream gat	igery (B7) urface (B8)	America State         Water-Stained         MLRA 1, 2, 4A         Salt Crust (B11         Aquatic Inverte         Hydrogen Sulfid         Oxidized Rhizo         Roots (C3)         Presence of Re         Recent Iron Re         Soils (C6)         Stunted or Stre         (LRR A)         Other (Explain	Leaves (B , and 4B) ) brates (B1 de Odor (C spheres al educed Iror duction in essed Plant in Remark	9) (except 3) 21) ong Living n (C4) Tilled ts (D1) s) Wet  inspections	<u>Secon</u>     	dary Indicators (2 or mol ater-Stained Leaves (B9) ainage Patterns (B10) y-Season Water Table (0 turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) tised Ant Mounds (D6) (I post-Heave Hummocks (D6) bost-Heave Hummocks (D6) logy Present? Yes	re required) ) (MLRA 1, 2, C2) I Imagery (C9) LRR A) D7)
High Water Saturation Water Marl Sediment I Drift Depos Algal Mat of Iron Depos Surface So Inundation Sparsely V Field Observator Vater Table P aturation Pre Includes capil Scribe Recor	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) Visible on Aerial Ima 'egetated Concave So <b>ations:</b> r Present? Yes isent? Yes isent? Yes ded Data (stream gat	igery (B7) urface (B8)	America and the second seco	Leaves (B , and 4B) ) brates (B1 de Odor (C spheres al educed Iror duction in essed Plant in Remark	9) (except 3) 1) ong Living n (C4) Tilled ts (D1) s) Wet inspections		dary Indicators (2 or mol ater-Stained Leaves (B9) ainage Patterns (B10) y-Season Water Table (0 turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) hised Ant Mounds (D6) (I post-Heave Hummocks (D6) bost-Heave Hummocks (D6) logy Present? Yes	re required) ) ( <b>MLRA 1, 2,</b> C2) I Imagery (C9) LRR A) D7)
High Water Saturation Water Marl Sediment I Drift Depos Algal Mat of Iron Depos Surface So Inundation Sparsely V Feld Observa fater Table P aturation Pre accudes capil Scribe Recor	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) Visible on Aerial Ima 'egetated Concave Si ations: r Present? Yes isent? llary fringe) Yes ded Data (stream gat	igery (B7) urface (B8)	X       Depth (inches):         X       Depth (inches):	Leaves (Bi , and 4B) ) brates (B1 de Odor (C spheres al educed Iror duction in essed Plant in Remark	9) (except 3) 21) long Living n (C4) Tilled ts (D1) s) Wet inspections		dary Indicators (2 or mol ater-Stained Leaves (B9) ainage Patterns (B10) y-Season Water Table (0 turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) bised Ant Mounds (D6) (I post-Heave Hummocks (D6) bost-Heave Hummocks (D6) bost-Heave Hummocks (D6)	re required) ) ( <b>MLRA 1, 2,</b> C2) I Imagery (C9) LRR A) D7)
High Water Saturation Water Marl Sediment I Drift Depos Algal Mat o Iron Depos Surface So Inundation Sparsely V eld Observa urface Water ater Table P aturation Pre icludes capil	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) Visible on Aerial Ima 'egetated Concave Si <b>ations:</b> r Present? Yes 'resent? Yes sent? llary fringe) Yes ded Data (stream gat	igery (B7) urface (B8)	America and the second seco	Leaves (Bi , and 4B) ) brates (B1 de Odor (C spheres al educed Iror duction in essed Plant in Remark	9) (except 3) 21) long Living n (C4) Tilled ts (D1) s) Wet inspections	<u>Secon</u> Wi Dr Sa 	dary Indicators (2 or mon ater-Stained Leaves (B9) a, and 4B) ainage Patterns (B10) y-Season Water Table (( turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) a.C-Neutral Test (D5) hised Ant Mounds (D6) (L ost-Heave Hummocks (D6) bost-Heave Hummocks (D6) host-Heave Hummocks (D6) bost-Heave Hummocks (D6)	re required) ) (MLRA 1, 2, C2) I Imagery (C9) LRR A) D7) No X
High Water Saturation Water Marl Sediment I Drift Depos Algal Mat o Iron Depos Surface So Inundation Sparsely V eld Observa urface Water ater Table P aturation Pre focludes capil scribe Recorr marks:	ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) Visible on Aerial Ima 'egetated Concave Si <b>ations:</b> r Present? Yes 'resent? Yes sent? llary fringe) Yes ded Data (stream gat	igery (B7) urface (B8)	All that apply)         Water-Stained         MLRA 1, 2, 4A         Salt Crust (B11         Aquatic Inverte         Hydrogen Sulfid         Oxidized Rhizo         Roots (C3)         Presence of Re         Recent Iron Re         Soils (C6)         Stunted or Stree         (LRR A)         Other (Explain	Leaves (B , and 4B) ) brates (B1 de Odor (C spheres al educed Iror duction in essed Plant in Remark	9) (except 3) 21) long Living n (C4) Tilled ts (D1) s) Wet inspections	<u>Secon</u> Wi  Dr Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa 	dary Indicators (2 or mon ater-Stained Leaves (B9) a, and 4B) ainage Patterns (B10) y-Season Water Table (( turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) hised Ant Mounds (D6) (L ost-Heave Hummocks (D6) bost-Heave Hummocks (D6) host-Heave Hummocks (D6) bost-Heave Hummocks (D6) host-Heave Hummocks (D	<u>re required)</u> ) ( <b>MLRA 1, 2,</b> C2) I Imagery (C9) <b>LRR A</b> ) D7) No <u>X</u>

Project/Site:	Buck	cko (		City/Co	ounty:	Sedro-Woolley/Skagit		Samp	Sampling Date:		C				
Applicant/Own	er:	Sarah Bucl	ко				State:	WA	Samplin	g Point:	P16				
Investigator(s)	: N	1. Harenda/	A. Wo	ones	Se	ction, T	ownship,	Range:	S23, T	35N, R4E					
Landform (hills	slope, t	errace, etc	.): t	errace		Lo	cal relief	(concave	, convex,	none):	none		Slope (%)	: 1	1%
Subregion (LR	R):	MLRA2			Lat:	48.508	8822°N	Long:	122.24	8950°W	Datum:	WGS 8	34		
Soil Map Unit	Name:	Minkler	silt loa	am					1	NWI class	ification:	NA			
Are climatic / h	nydrolo	gic conditio	ons on	the site typ	ical for	this time	e of year	? Yes	X No	(lf n	o, explain in	Remark	s.)		
Are Vegetation	ו <u>X</u>	, Soil	,	or Hydrolog	ау	signif	icantly di	sturbed?	Are "N	Normal Cir	cumstances	s" presen	t? Yes	Х	No
Are Vegetation	า	, Soil	,	or Hydrolog	ду	natur	ally probl	ematic?		(If neede	d, explain ar	ny answe	ers in Rema	rks.)	1

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         X         No           Yes         No         X           No         X         X	Is the Sampled Area within a Wetland?	Yes NoX
Remarks: Recently mown.			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1				Total Number of Dominant
3				Species Across All Strata: <u>2</u> (B)
4.				Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)
		= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 10 ft dm				Prevalence Index worksheet:
1.	,			Total % Cover of: Multiply by:
2.				OBL species x 1 =
3.				FACW species x 2 =
4.				FAC species x 3 =
5.				FACU species x 4 =
		= Total Cov	er	
Herb (Plot size: 6 ft dm )				
1. Anthoxanthum odoratum	50	Yes	FACU	
2. Ranunculus acris	3	No	FAC	Prevalence Index = B/A =
3. Ranunculus repens	2	No	FAC	
4. Cirsium arvense	3	No	FAC	Hydrophytic Vegetation Indicators:
5. Plantago lanceolata	2	No	FACU	1 - Rapid Test for Hydrophytic Vegetation
6. Schedonorus arundinaceus	15	No	FAC	X 2 - Dominance Test is >50%
7. Poa pratensis	20	Yes	FAC	3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants <sup>1</sup>
11				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	100	= Total Cov	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:	)			be present, unless disturbed or problematic.
1				
2				Hydrophytic
		= Total Cov	er	Vegetation
% Bare Ground in Herb Stratum	-			Present? Yes X No
Remarks:				

SOIL							Sampling Point:	P16
Profile Desc	cription: (Describe t	o the depth	n needed to docume	nt the indi	cator or con	firm the al	osence of indicators.)	
Depth	Matrix		R	edox Feat	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-11	10YR 4/2	100					Ashy loam	
11-17	2.5Y 4/3	97	10YR5/6	1-3	С	М	Ashy loam	
					·			
						·		
'Type: C=C	oncentration, D=Depl	etion, RM=	Reduced Matrix, CS=C	Covered or	Coated Sand	d Grains.	<sup>2</sup> Location: PL=Pore Li	ning, M=Matrix.
Hydric Soi	il Indicators: (Applie	cable to all	LRRs, unless otherv	vise notec	l.)	Indi	cators for Problematic	Hydric Soils <sup>3</sup> :
Histoso	ol (A1)		Sandy Redox (S5)				2 cm Muck (A10)	
Histic E	Epipedon (A2)	_	Stripped Matrix (S	6) arol (E1) (	weent MLP/	<b>A</b> 1) —	Red Parent Material (TF	2) 200 (TE12)
Hydroo	aen Sulfide (A4)	_	Loamy Gleved Ma	trix (F2)		<b>4</b> I)	Other (Explain in Remai	ice (1712) iks)
Deplete	ed Below Dark Surfac	æ (A11)	Depleted Matrix (F	3)				-/
Thick E	Dark Surface (A12)	_	Redox Dark Surfa	ce (F6)			<sup>3</sup> Indicators of hydrophyti	c vegetation and
Sandy Sandy	Gleved Matrix (S4)	_	Depieted Dark Sul Redox Depression	iace (F7)			unless disturbed or prob	lematic
				- ( -/				
Restrictive La	ayer (if present):							
Type:	L )				Hydric Soil	Present?	Yes	No X
Depth (Inc	nes):							
Remarks:								
HYDROLOG	jY vology Indiastora							
Primary Indica	tors (minimum of one	reauired: c	heck all that apply)			Secon	darv Indicators (2 or mo	re required)
			Water-Stained	Leaves (B	9) (except	Wa	ater-Stained Leaves (B9	) (MLRA 1, 2,
Surface Wa	ater (A1)		MLRA 1, 2, 4A	, and 4B)		4A	, and 4B)	
Saturation	(A3)		Aquatic Inverte	) brates (B1	3)	Dr Dr	ainage Patterns (B10) v-Season Water Table (	C2)
Water Mark	ks (B1)		Hydrogen Sulfi	de Odor (C	;1)	Sa	turation Visible on Aeria	I Imagery (C9)
			Oxidized Rhizo	spheres al	ong Living			
Sediment L	Deposits (B2) sits (B3)		Roots (C3) Presence of Re	duced Iron	(C4)	Ge Sh	eomorphic Position (D2)	
	sits (D0)		Recent Iron Re	duction in	Tilled	0	anow Aquitard (DO)	
Algal Mat c	or Crust (B4)		Soils (C6)			FA	C-Neutral Test (D5)	
Iron Depos	sits (B5)		(LRR A)	ssed Plani	s (D1)	Ra	ised Ant Mounds (D6) (I	RR A)
Surface So	oil Cracks (B6)		Other (Explain	in Remark	s)	Fre	ost-Heave Hummocks ([	D7)
Inundation	Visible on Aerial Ima	gery (B7)						
Sparsely V	egetated Concave Su	urface (B8)						
Field Observa	ations:							
Surface Water	Present? Yes	No	X Depth (inches):					
Water Table P	Present? Yes	No	X Depth (inches):		Wetla	and Hydro	logy Present? Yes	No X
Saturation Pre (includes capil	esent? llarv fringe) Yes	No	X Depth (inches):					
Describe Record	ded Data (stream dau	uge, monitor	ing well, aerial photos	, previous	inspections).	if available	:	
		<u> </u>	0 - , p		-,			
Remarks:								

Project/Site:	Buc	ko		City/Co	unty:	Sedro-Woolley/Skagit		Skagit	Sampling Date:		05/27/2	20		
Applicant/Owr	er:	Sarah Buc	KO			State:	WA	Sampling F	Point:	P18				
Investigator(s)	: 1	1. Harenda	A. Wones	Sec	tion, To	ownship,	Range:	S23, T35	N, R4E					
Landform (hills	slope,	terrace, etc	.): terrace		Loc	cal relief	(concave	, convex, no	one):	none		Slope (%):	1%	
Subregion (LR	(R):	MLRA2		Lat:	48.508	442°N	Long:	122.2499	66°W	Datum:	WGS 8	34		
Soil Map Unit	Soil Map Unit Name: Field silt loam NWI classification: NA													
Are climatic / h	nydrol	ogic condition	ons on the site typ	oical for th	his time	e of year	? Yes	X No	(If no	o, explain ir	Remark	s.)		
Are Vegetation	ר ר <u>ב</u>	< , Soil	, or Hydrolo	ду	signifi	icantly di	sturbed?	Are "Nor	mal Cir	cumstances	s" presen	t? Yes X	No	
Are Vegetation	ר <u> </u>	, Soil	, or Hydrolo	ду	natura	ally probl	ematic?	(If	needeo	d, explain a	ny answe	ers in Remark	(s.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         X         No            Yes          No            Yes          No	Is the Sampled Area within a Wetland?	Yes No _X
Remarks: Recently mown.			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
l			-	Total Number of Dominant
3				Species Across All Strata: 1 (B)
4				Percent of Dominant Species
*·				That Are OBL, FACW, or FAC: 100 (A/B)
		= Total Cov	rer	
Sapling/Shrub Stratum (Plot size: 10 ft dm	)			Prevalence Index worksheet:
1. Rubus armeniacus	20	Yes	FAC	Total % Cover of: Multiply by:
2.				OBL species x 1 =
3.				FACW species x 2 =
4.				FAC species x 3 =
5.				FACU species x 4 =
50% of TC=10%; 20% of TC=4%	20	= Total Cov	er	UPL species x 5 =
Herb (Plot size: 6 ft dm )				Column Totals: (A) (B)
1. Poa pratensis	90	Yes	FAC	
2. Vicia sativa	2	No	FACU	Prevalence Index = B/A =
3. Ranunculus repens	3	No	FAC	
4. Schedonorus pratensis	5	No	FACU	Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6				X 2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				Gata III Remarks of on a separate sheet)
10				Droblematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11				
	100	<u> </u>	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:	)			be present, unless disturbed of problematic.
1			-	
2				Hydrophytic
W Dave Oracia d'a Ulark Otactura		= 10tal Cov	er	Vegetation
% Bare Ground in Herb Stratum	_			Present? Yes <u>X</u> No
Kemarks:				

SOIL	Sampling Point: P18
Profile Description: (Describe to the depth needed to document the	indicator or confirm the absence of indicators.)
(inches) Color (moist) % Color (moist) %	Type <sup>1</sup> Loc <sup>2</sup> Texture Remarks
0-11 10YR 3/2 100	
11-16 10YR 5/3 100	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covere	ed or Coated Sand Grains. <sup>2</sup> Location: PL=Pore Lining. M=Matrix.
	eted ) Indicators for Droblematic Hudris Calls <sup>3</sup> :
Hydric Soli Indicators: (Applicable to all LRRs, unless otherwise h	oted.) Indicators for Problematic Hydric Solis":
Histosol (A1) Sandy Redox (S5)	2 cm Muck (A10) Red Parent Material (TF2)
Black Histic (A3) Loamy Mucky Mineral (F	F1) (except MLRA 1) Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F	2) Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Depleted Matrix (F3)	<sup>3</sup> Indicators of hydrophytic vogstation and
Sandy Mucky Mineral (S1) Depleted Dark Surface (	F7) wetland hydrology must be present,
Sandy Gleyed Matrix (S4) Redox Depressions (F8)	unless disturbed or problematic
Restrictive Laver (if present):	
Type <sup>.</sup>	Hydric Soil Present? Yes No X
Depth (inches):	
Remarks:	l
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (2 or more required)
Water-Stained Leave	s (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2,
Surface Water (A1) MLRA 1, 2, 4A, and	4B) 4A, and 4B)
High Water Table (A2) Salt Crust (B11)	(P12) Drainage Patterns (B10)
Water Marks (B1) Advancement and Advancement A	or (C1) Div-Season Water Table (C2)
Oxidized Rhizosphere	es along Living
Sediment Deposits (B2)Roots (C3)	Geomorphic Position (D2)
Drift Deposits (B3) Presence of Reduced	n in Tilled Shallow Aquitard (D3)
Algal Mat or Crust (B4) Soils (C6)	FAC-Neutral Test (D5)
Stunted or Stressed I	Plants (D1)
Iron Deposits (B5) (LRR A)	Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B7)	
Sparsely Vegetated Concave Surface (B8)	
Field Observations	
Field Upservations: Surface Water Present? Ves No X Depth (inches):	
Water Table Present? Yes No X Depth (inches):	Wetland Hydrology Present? Yes No X
Saturation Present?	
(Includes capillary tringe) Yes No X Depth (inches):	ieus inspections) if queilable:
Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev	
Pomarka:	
nemans.	

Project/Site:	Buck	icko (		City/Co	ounty:	Sedro-Woolley/Skagit			Sampling Date:		5/27/20	C		
Applicant/Own	er:	Sarah Bucl	KO			State:	WA	Sampling P	oint:	P19				
Investigator(s)	: N	1. Harenda/	A. Wones	Se	ction, To	ownship,	Range:	S23, T35N	N, R4E					
Landform (hills	slope, t	errace, etc	.): terrace		Loc	cal relief	(concave	, convex, no	ne):	none		Slope (%	5): 19	6
Subregion (LR	R):	MLRA2		Lat:	48.509	596°N	Long:	122.25106	64°W	Datum:	WGS 8	34		
Soil Map Unit Name: Minkler silt loam NWI classification: NA														
Are climatic / h	nydrolo	gic conditio	ons on the site ty	pical for	this time	e of year	? Yes	X No	(If no	o, explain in	Remark	s.)		
Are Vegetation	ו <u> </u>	, Soil	, or Hydrold	gy	signifi	icantly di	sturbed?	Are "Nor	mal Cir	cumstances	" presen	t? Yes	Х	No
Are Vegetation	ר <u> </u>	, Soil	, or Hydrold	gy	natura	ally probl	ematic?	(If	needeo	d, explain ar	ny answe	ers in Rem	narks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes N Yes N Yes N	o <u>X</u> o <u>X</u> o <u>X</u>	Is the Sampled Area within a Wetland?	Yes	No <u>X</u>
Remarks: Recently mown.					

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1				Total Number of Dominant
3.				Species Across All Strata: 1 (B)
4.				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
		= Total Cove	er	
Sapling/Shrub Stratum (Plot size: <u>10 ft dm</u> )				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
		= Total Cove	er	UPL species x 5 =
Herb (Plot size: 6 ft dm )				Column Totals: (A) (B)
1. Poa pratensis	5	No	FAC	<u> </u>
2. Anthoxanthum odoratum	90	Yes	FACU	Prevalence Index = B/A =
3. Equisetum arvense	5	No	FAC	
4. Plantago lanceolata	trace	No	FACU	Hydrophytic Vegetation Indicators:
5. Lactuca serriola	trace	No	FACU	1 - Rapid Test for Hydrophytic Vegetation
6				2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants
11				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	100	= Total Cove	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: )				be present, unless disturbed or problematic.
1				
2				Hydrophytic
		= Total Cove	er	Vegetation
% Bare Ground in Herb Stratum				Present? Yes No X
Remarks:				

SOIL				Sampling Point:	P19
Profile Description: (Describe to the dep	th needed to document the inc	dicator or con	firm the ab	sence of indicators.)	
Depth Matrix (inches) Color (moist) %	Color (moist) %	atures Type <sup>1</sup>	l oc <sup>2</sup>	Texture	Remarks
0-14 10YR 3/3 100				Sandy loam	
<u>14-16</u> <u>10YR 4/2</u> 98	7.5YR 5/6 2	С	М	Fine sand	Faint redox
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=	=Reduced Matrix, CS=Covered of	or Coated Sand	d Grains.	<sup>2</sup> Location: PL=Pore Li	ning, M=Matrix.
Hydric Soil Indicators: (Applicable to al	II LRRs, unless otherwise note	ed.)	Indie	cators for Problematic	Hydric Soils <sup>3</sup> :
Histosol (A1) Histic Epipedon (A2)	Sandy Redox (S5) Stripped Matrix (S6)		2	2 cm Muck (A10) Red Parent Material (TF	2)
Black Histic (A3)	Loamy Mucky Mineral (F1)	(except MLRA	<b>A</b> 1)	/ery Shallow Dark Surfa	-/ ace (TF12)
Hydrogen Sulfide (A4)     Depleted Below Dark Surface (A11)	Loamy Gleyed Matrix (F2) Depleted Matrix (F3)		(	Other (Explain in Remai	'ks)
Thick Dark Surface (A12)	Redox Dark Surface (F6)		3	Indicators of hydrophyt	c vegetation and
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	)	י נ	vetland hydrology must unless disturbed or prob	be present, Ilematic
Type:		Hvdric Soil	Present?	Yes	No X
Depth (inches):					
Remarks:					
Wetland Hydrology Indicators:					
Primary Indicators (minimum of one required;	check all that apply)	DO(ave ant)	Second	dary Indicators (2 or mo	re required)
Surface Water (A1)	MLRA 1, 2, 4A, and 4B	B9) ( <b>except</b> )	4A.	, and 4B)	) (MILKA 1, 2,
High Water Table (A2)	Salt Crust (B11)	, ,	Dra	ainage Patterns (B10)	
Saturation (A3)	Aquatic Invertebrates (B	13)	Dry	-Season Water Table (	C2)
Water Marks (B1)	Oxidized Rhizospheres	along Living	Sat	uration visible on Aeria	Timagery (C9)
Sediment Deposits (B2)	Roots (C3)		Ge	omorphic Position (D2)	
	Recent Iron Reduction in	n Tilled	Sna	allow Aquitard (D3)	
Algal Mat or Crust (B4)	Soils (C6)	nte (D1)	FA	C-Neutral Test (D5)	
Iron Deposits (B5)	(LRR A)		Rai	sed Ant Mounds (D6) (	LRR A)
Surface Soil Cracks (B6)	Other (Explain in Remar	ˈks)	Fro	st-Heave Hummocks ([	07)
Sparsely Vegetated Concave Surface (B8)	)				
Field Observations:					
Surface Water Present? Yes No	X Depth (inches):				
Water Table Present? Yes No	X Depth (inches):	Wetla	and Hydrol	ogy Present? Yes	No X
Saturation Present?		1			
(includes capillary fringe) Yes No	X Depth (inches):				
(includes capillary fringe) Yes No Describe Recorded Data (stream gauge, monitor	X Depth (inches):	s inspections),	if available	:	
(includes capillary fringe) Yes <u>No</u> Describe Recorded Data (stream gauge, monito	X Depth (inches): pring well, aerial photos, previou	s inspections),	if available		

Project/Site:	Bucko	l.			City/C	ounty:	Sedro-	Woolley/	Skagit	Samp	ling Date:	5/27/20	)		
Applicant/Own	ier: S	Sarah Buc	ко				State:	WA	Sampling	Point:	P20				
Investigator(s)	: M.	Harenda	'A. Wo	ones	Se	ection, To	ownship,	Range:	S23, T35	5N, R4E					
Landform (hills	slope, te	errace, etc	.):	terrace		Lo	cal relief	(concave	, convex, n	ione):	none		Slope (%):	1%	
Subregion (LR	R):	MLRA2			Lat:	48.509	870°N	Long:	122.2496	614°W	Datum:	WGS 8	34		
Soil Map Unit	Name:	Minkler	silt lo	bam					N\	NI classi	fication:	NA			
Are climatic / h	nydrolog	ic conditio	ons or	n the site typ	ical for	this time	e of year	? Yes	X No	(If no	o, explain in	Remark	s.)		
Are Vegetation	า	, Soil		, or Hydrolo	ду	signif	icantly di	sturbed?	Are "No	ormal Cir	cumstances	s" presen	t? Yes X	No	
Are Vegetation	ר <u>ו</u>	, Soil		, or Hydrolo	ду	natur	ally probl	ematic?	(	If needed	d, explain ar	ny answe	ers in Remark	s.)	
			_				_			_		_			

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No <u>X</u> No <u>X</u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes NoX	
Remarks: Recently mown.					

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1				Total Number of Dominant
3.				Species Across All Strata: <u>3</u> (B)
4.				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
		= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 10 ft dm )				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
		= Total Cov	er	LIPL species $x 5 =$
Herb (Plot size: 6 ft dm )				
1. Dactylis glomerata	40	Yes	FACU	
2. Anthoxanthum odoratum	40	Yes	FACU	Prevalence Index = B/A =
3. Ranunculus repens	20	Yes	FAC	
4				Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6				2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants <sup>1</sup>
11				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	100	= Total Cov	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: )				be present, unless disturbed or problematic.
1				
2				I hudron hudio
		= Total Cov	er	Vegetation
% Bare Ground in Herb Stratum				Present? Yes No X
Remarks:				

SOIL							Sampling Poir	t: P20
Profile Desc	cription: (Describe t	o the depth	needed to docume	ent the indi	cator or co	nfirm the a	bsence of indicators	.)
Depth	Matrix		F	Redox Featu	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-16	10YR 3/3	100					Sandy loam	
·		·						
		<u> </u>		·				
		<u> </u>		·				
4							<u> </u>	
'Type: C=C	oncentration, D=Deple	etion, RM=R	educed Matrix, CS=	Covered or	Coated Sa	nd Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.
Hydric Soi	I Indicators: (Annlic	able to all l	RRs unless other	wise noted	)	Ind	icators for Problema	tic Hydric Soils <sup>3</sup>
inguite ooi				wise noted	•)	ina		
Histoso	ol (A1)		_ Sandy Redox (S5	6) )			2 cm Muck (A10)	
Histic E	pipedon (A2)		_ Stripped Matrix (S	56) 		<u> </u>	Red Parent Material (	1F2)
Black H	Histic (A3)		_ Loamy Mucky Mir	neral (F1) (e	except MLF	(A 1)	Very Shallow Dark St	irface (TF12)
Hydrog	en Sulfide (A4)	- ( ) ( )	_ Loamy Gleyed Ma	atrix (F2)			Other (Explain in Ren	harks)
Depiete	ed Below Dark Surrac	e (A11)	_ Depleted Matrix (I	F3)			31 11 7 7 1 1 1	
Thick L	Musky Minoral (S1)		_ Redux Dark Suna				"Indicators of hydropr	lytic vegetation and
Sandy	Cloved Matrix (S4)		_ Depleted Dark Su _ Podox Doprossion	(F7)			welland hydrology mu	ist de present,
				113 (1 0)			uniess disturbed of pr	Oblematic
Restrictive La	over (if present).							
Ture	iyer (ii present).						N	
Type:					Hydric So	Il Present?	Yes	NO X
Depth (Inc	nes):			I				
Remarks:								
HYDROLOG	iΥ							
Wetland Hydr	ology Indicators:							
Primary Indica	tors (minimum of one	required; ch	neck all that apply)			Secor	ndary Indicators (2 or r	nore required)
			Water-Stained	Leaves (B9	9) (except	W	ater-Stained Leaves (I	39) ( <b>MLRA 1, 2,</b>
Surface Wa	ater (A1)		MLRA 1, 2, 4A	A, and 4B)		4/	A, and 4B)	
High Water	Table (A2)		Salt Crust (B1	1)		Di	ainage Patterns (B10)	
Saturation	(A3)		Aquatic Inverte	ebrates (B13	3)	Di	y-Season Water Table	e (C2)
Water Mark	ks (B1)		Hydrogen Sulf	ide Odor (C	1)	Sa	aturation Visible on Ae	rial Imagery (C9)
			Oxidized Rhizo	ospheres all	ong Living	0		
Sediment L	Deposits (B2)		Roots (C3)		(0.1)	G	eomorphic Position (D	2)
Drift Depos	sits (B3)		Presence of R	educed Iron	i (C4) Tille d	Sr	nallow Aquitard (D3)	
Algol Moto	r Cruct (D4)		Recent Iron Re	eduction in	rilled	E/	C Noutral Test (DE)	
	n Clust (D4)		Solis (CO)	and Diant		F/	AC-Meuliai Test (DS)	
Iron Denos	its (B5)				S (DT)	R	aised Ant Mounds (D6	
Surface So	il Cracks (B6)		(EKK A) Other (Explain	in Remarks	2)	Ko	ost-Heave Hummocks	
	Visible on Aerial Imag	nerv (R7)			•)	' '		
Sparsely V	egetated Concave Su	Inface (B8)						
Field Observa	ations:							
Surface Water	Present? Ves	No	(Depth (inches):					
Water Table D	resent? Ves		Depth (inches).		We	tland Hydro	logy Present? Va	s No Y
Saturation Pro	sent?				_ 176			
(includes capil	larv fringe) Yes	No	C Depth (inches):					
Describe Record	hed Data (stream cou		ng well aerial photor	s previous	inspections	) if available	<b>.</b> .	
Describe Recon	ucu Dala (sireani yau	ge, moniton	ng wen, aenai prioto:	s, previous	napections	/, 11 avalla010		
<u> </u>								
Remarks:								

Project/Site:	Buck	0			City/0	County:	Sedro-	Woolley/	Skagit	Samp	ling Date:	5/27/2	0		
Applicant/Own	er:	Sarah Bucl	ю				State:	WA	Sampling F	Point:	P21				
Investigator(s)	: N	1. Harenda/	'A. W	/ones	S	ection, 7	Township,	Range:	S23, T35	N, R4E					
Landform (hills	slope,	terrace, etc	.):	terrace		Lo	ocal relief	(concave	, convex, no	one):	none		Slope (%):	1%	
Subregion (LR	R):	MLRA2			Lat:	48.50	9752°N	Long:	122.2482	65°W	Datum:	WGS 8	84		
Soil Map Unit	Name:	Minkler	silt l	oam					NW	/I classi	fication:	NA			
Are climatic / h	nydrolo	gic conditio	ons o	n the site typ	oical fo	or this tim	ne of year	? Yes	X No	(If no	o, explain in	Remark	s.)		
Are Vegetation	า	, Soil		, or Hydrolo	gy	signi	ificantly di	sturbed?	Are "Nor	mal Cir	cumstances	s" preser	nt? Yes X	No	
Are Vegetation	ר ו	, Soil		, or Hydrolo	gy	natu	rally probl	ematic?	(If	needeo	d, explain ar	ny answe	ers in Remark	s.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         X         No           Yes         No         X           No         X         X	Is the Sampled Area within a Wetland?	Yes NoX
Remarks: Recently mown.			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
l				Total Number of Dominant
3.				Species Across All Strata: <u>2</u> (B)
4.				Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)
		= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 10 ft dm	)			Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
		= Total Cov	er	UPL species x 5 =
Herb (Plot size: 6 ft dm )				Column Totals: (A) (B)
1. Poa pratensis	30	Yes	FAC	
2. Anthoxanthum odoratum	70	Yes	FACU	Prevalence Index = B/A =
3				
4				Hydrophytic Vegetation Indicators:
5				<ol> <li>1 - Rapid Test for Hydrophytic Vegetation</li> </ol>
6				X 2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants
11				Problematic Hydrophytic Vegetation' (Explain)
	100	= Total Cov	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:	)			be present, unless disturbed or problematic.
1				
2				Hydrophytic
		= Total Cov	er	Vegetation
% Bare Ground in Herb Stratum	_			Present? Yes X No
Remarks:				

SOIL		Sampling Point:	P21
Profile Description: (Describe to the depth needed to document the inc	dicator or confirm	the absence of indicators.)	
Uepth Matrix Redox Fea	atures Type <sup>1</sup>	Loc <sup>2</sup> Texture	Remarks
0.14 10VP 2/2 100			
<u>14-16 10YR 4/2 100</u>	<u> </u>	Sand	
	<u> </u>		
	·		·
Trunce C. Concentration D. Depletion DM. Deduced Matrix CS. Covered		aina <sup>2</sup> l agation: DL Dara L	ining M. Motrix
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered 6	or Coated Sand Gr	ains. "Location: PL=Pore L	lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise note	ed.)	Indicators for Problemati	c Hydric Soils <sup>3</sup> :
Histosol (A1) Sandy Redox (S5)		2 cm Muck (A10)	
Histic Epipedon (A2) Stripped Matrix (S6)	(except MI RA 1)	Red Parent Material (T	F2) face (TF12)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)		Other (Explain in Rema	arks)
Depleted Below Dark Surface (A11) Depleted Matrix (F3)			
Thick Dark Surface (A12) Redox Dark Surface (F6)	١	<sup>3</sup> Indicators of hydrophy	tic vegetation and
Sandy Gleyed Matrix (S4) Redox Depressions (F8)	)	unless disturbed or pro	blematic
Restrictive Layer (if present):			
Type:	Hydric Soil Pre	sent? Yes	No X
Depth (inches):			
Remarks:			
HYDROLOGY Wetland Hydrology Indicators:			
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or mo	pre required)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Water-Stained Leaves ( Surface Water (A1)	B9) ( <b>except</b>	Secondary Indicators (2 or mo Water-Stained Leaves (B	ore required) 9) ( <b>MLRA 1, 2,</b>
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Water-Stained Leaves (        Surface Water (A1)      MLRA 1, 2, 4A, and 4B         High Water Table (A2)       Salt Crust (B11)	B9) ( <b>except</b>	Secondary Indicators (2 or mo Water-Stained Leaves (B <b>4A, and 4B</b> ) Drainage Patterns (B10)	ore required) 9) ( <b>MLRA 1, 2,</b>
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Water-Stained Leaves (         Surface Water (A1)       MLRA 1, 2, 4A, and 4B         High Water Table (A2)       Salt Crust (B11)         Saturation (A3)       Aquatic Invertebrates (E	B9) ( <b>except</b> ) 313)	Secondary Indicators (2 or mo Water-Stained Leaves (8 <b>4A, and 4B</b> ) Drainage Patterns (B10) Dry-Season Water Table	ore required) 9) ( <b>MLRA 1, 2,</b> (C2)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Water-Stained Leaves (         Surface Water (A1)       MLRA 1, 2, 4A, and 4B         High Water Table (A2)       Salt Crust (B11)         Saturation (A3)       Aquatic Invertebrates (B         Water Marks (B1)       Dividinged Delinesetates	B9) ( <b>except</b> ) ) B13)	Secondary Indicators (2 or mo Water-Stained Leaves (B <b>4A, and 4B</b> ) Drainage Patterns (B10) Dry-Season Water Table Saturation Visible on Aeria	pre required) 9) ( <b>MLRA 1, 2,</b> (C2) al Imagery (C9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Surface Water (A1)       Water-Stained Leaves (         High Water Table (A2)       Salt Crust (B11)         Saturation (A3)       Aquatic Invertebrates (B         Water Marks (B1)       Hydrogen Sulfide Odor         Sediment Deposits (B2)       Roots (C3)	B9) ( <b>except</b> )	Secondary Indicators (2 or mo Water-Stained Leaves (Bs <b>4A, and 4B</b> ) Drainage Patterns (B10) Dry-Season Water Table Saturation Visible on Aeria Geomorphic Position (D2)	pre required) 9) ( <b>MLRA 1, 2,</b> (C2) al Imagery (C9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Water-Stained Leaves (	B9) ( <b>except</b> ) ) B13) (C1) along Living on (C4)	Secondary Indicators (2 or mo Water-Stained Leaves (B <b>4A, and 4B</b> ) Drainage Patterns (B10) Dry-Season Water Table Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3)	ore required) 9) ( <b>MLRA 1, 2,</b> (C2) al Imagery (C9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Water-Stained Leaves (	B9) ( <b>except</b> ) ) (C1) along Living on (C4) n Tilled	Secondary Indicators (2 or mo Water-Stained Leaves (B <b>4A, and 4B</b> ) Drainage Patterns (B10) Dry-Season Water Table Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3)	ore required) 9) ( <b>MLRA 1, 2,</b> (C2) al Imagery (C9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Water-Stained Leaves (         Surface Water (A1)       MLRA 1, 2, 4A, and 4B         High Water Table (A2)       Salt Crust (B11)         Saturation (A3)       Aquatic Invertebrates (E         Water Marks (B1)       Hydrogen Sulfide Odor         Sediment Deposits (B2)       Roots (C3)         Drift Deposits (B3)       Presence of Reduced Ir         Algal Mat or Crust (B4)       Soils (C6)	B9) ( <b>except</b> ) 313) (C1) along Living on (C4) n Tilled rts (D1)	Secondary Indicators (2 or mo Water-Stained Leaves (B <b>4A, and 4B</b> ) Drainage Patterns (B10) Dry-Season Water Table Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)	ore required) 9) ( <b>MLRA 1, 2,</b> (C2) al Imagery (C9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Water-Stained Leaves (         MLRA 1, 2, 4A, and 4B         High Water Table (A2)       Salt Crust (B11)         Saturation (A3)       Aquatic Invertebrates (B         Water Marks (B1)       Hydrogen Sulfide Odor         Oxidized Rhizospheres       Roots (C3)         Drift Deposits (B2)       Roots (C3)         Drift Deposits (B3)       Presence of Reduced Ir         Algal Mat or Crust (B4)       Soils (C6)         Iron Deposits (B5)       (LRR A)	B9) ( <b>except</b> ) 13) (C1) along Living on (C4) n Tilled nts (D1)	Secondary Indicators (2 or mo Water-Stained Leaves (B 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6)	pre required) 9) ( <b>MLRA 1, 2,</b> (C2) al Imagery (C9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Water-Stained Leaves (         MLRA 1, 2, 4A, and 4B         High Water Table (A2)       Salt Crust (B11)         Saturation (A3)       Aquatic Invertebrates (B         Water Marks (B1)       Hydrogen Sulfide Odor         Oxidized Rhizospheres       Solit CC3)         Drift Deposits (B2)       Presence of Reduced Ir         Algal Mat or Crust (B4)       Soils (C6)         Iron Deposits (B5)       (LRR A)         Surface Soil Cracks (B6)       Other (Explain in Remark	B9) ( <b>except</b> ) 313) (C1) along Living on (C4) n Tilled nts (D1) rks)	Secondary Indicators (2 or mo Water-Stained Leaves (B 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) Frost-Heave Hummocks (	Dre required) 9) ( <b>MLRA 1, 2,</b> (C2) al Imagery (C9) ) ( <b>LRR A</b> ) [D7)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Water-Stained Leaves (	B9) ( <b>except</b> ) 313) (C1) along Living on (C4) n Tilled nts (D1) rks)	Secondary Indicators (2 or mo Water-Stained Leaves (B <b>4A, and 4B</b> ) Drainage Patterns (B10) Dry-Season Water Table Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) Frost-Heave Hummocks (	ore required) 9) ( <b>MLRA 1, 2,</b> (C2) al Imagery (C9) ) ( <b>LRR A</b> ) [D7)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)       Water-Stained Leaves (         Surface Water (A1)       Water-Stained Leaves (         High Water Table (A2)       Salt Crust (B11)         Saturation (A3)       Aquatic Invertebrates (E         Water Marks (B1)       Hydrogen Sulfide Odor         Sediment Deposits (B2)       Roots (C3)         Drift Deposits (B3)       Presence of Reduced In         Algal Mat or Crust (B4)       Soils (C6)         Sturface Soil Cracks (B6)       Other (Explain in Remark         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remark	B9) ( <b>except</b> ) 313) (C1) along Living on (C4) n Tilled nts (D1) rks)	Secondary Indicators (2 or mo Water-Stained Leaves (B <b>4A, and 4B</b> ) Drainage Patterns (B10) Dry-Season Water Table Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) Frost-Heave Hummocks (	Dre required) 9) ( <b>MLRA 1, 2,</b> (C2) al Imagery (C9) ) ( <b>LRR A</b> ) [D7)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)       Water-Stained Leaves (         Surface Water (A1)       Water-Stained Leaves (         High Water Table (A2)       Salt Crust (B11)         Saturation (A3)       Aquatic Invertebrates (E         Water Marks (B1)       Hydrogen Sulfide Odor         Oxidized Rhizospheres       Roots (C3)         Drift Deposits (B2)       Roots (C3)         Drift Deposits (B3)       Presence of Reduced In         Algal Mat or Crust (B4)       Soils (C6)         Surface Soil Cracks (B6)       Other (Explain in Remain Inundation Visible on Aerial Imagery (B7)         Sparsely Vegetated Concave Surface (B8)       Field Observations:	B9) ( <b>except</b> ) 13) (C1) along Living on (C4) n Tilled nts (D1) rks) 	Secondary Indicators (2 or mo Water-Stained Leaves (B 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) Frost-Heave Hummocks (	pre required) 9) ( <b>MLRA 1, 2,</b> (C2) al Imagery (C9) ) ( <b>LRR A</b> ) (D7)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)       Water-Stained Leaves (	B9) (except ) 313) (C1) along Living on (C4) n Tilled nts (D1) rks)	Secondary Indicators (2 or mo Water-Stained Leaves (B 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) Frost-Heave Hummocks (	pre required) 9) ( <b>MLRA 1, 2,</b> (C2) al Imagery (C9) ( <b>LRR A</b> ) (D7)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Surface Water (A1)	B9) ( <b>except</b> ) (C1) (C1) along Living on (C4) n Tilled nts (D1) rks) Wetland	Secondary Indicators (2 or mo Water-Stained Leaves (B 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) Frost-Heave Hummocks ( Hydrology Present? Yes	ore required) 9) ( <b>MLRA 1, 2,</b> (C2) al Imagery (C9) ) ( <b>LRR A</b> ) (D7)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Water Stained Leaves (         MLRA 1, 2, 4A, and 4B         Salt Crust (B1)         Saturation (A3)         Water Marks (B1)         Water Marks (B1)         Drift Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Surface Soil Cracks (B6)         Inundation Visible on Aerial Imagery (B7)         Sparsely Vegetated Concave Surface (B8)         Field Observations:         Surface Water Present?         Yes       No         X       Depth (inches):         Water Table Present?       Yes         No       X       Depth (inches):	B9) (except ) B13) - (C1) - along Living on (C4) - n Tilled nts (D1) - rks) -	Secondary Indicators (2 or mo Water-Stained Leaves (B9 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) Frost-Heave Hummocks ( Hydrology Present? Yes	Dre required) 9) ( <b>MLRA 1, 2,</b> (C2) al Imagery (C9) ( <b>LRR A</b> ) (D7) No X
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)       Water-Stained Leaves (	B9) ( <b>except</b> )	Secondary Indicators (2 or mo Water-Stained Leaves (B 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) Frost-Heave Hummocks ( Hydrology Present? Yes vailable:	Dre required)         9) (MLRA 1, 2,         (C2)         al Imagery (C9)         (LRR A)         (D7)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Water-Stained Leaves (         MLRA 1, 2, 4A, and 4B         Surface Water (A1)       MLRA 1, 2, 4A, and 4B         High Water Table (A2)       Salt Crust (B11)         Saturation (A3)       Aquatic Invertebrates (E         Water Marks (B1)       Hydrogen Sulfide Odor of Oxidized Rhizospheres         Sediment Deposits (B2)       Roots (C3)         Drift Deposits (B3)       Presence of Reduced In Recent Iron Reduction in Soils (C6)         Stunded or Crust (B4)       Soils (C6)         Surface Soil Cracks (B6)       (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remark         Surface Water Present?       Yes       No       X         Sutrace Water Present?       Yes       No       X       Depth (inches):	B9) (except         )         313)         (C1)         along Living         on (C4)         n Tilled         nts (D1)         rks)	Secondary Indicators (2 or mo Water-Stained Leaves (B 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) Frost-Heave Hummocks ( Hydrology Present? Yes vailable:	Dre required) 9) ( <b>MLRA 1, 2,</b> (C2) al Imagery (C9) ( <b>LRR A</b> ) D7) No X
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)       Water-Stained Leaves (         Surface Water (A1)       MLRA 1, 2, 4A, and 4B         High Water Table (A2)       Satt Crust (B11)         Saturation (A3)       Aquatic Invertebrates (E         Water Marks (B1)       Hydrogen Sulfide Odor         Oxidized Rhizospheres       Sodi (C3)         Drift Deposits (B2)       Roots (C3)         Drift Deposits (B3)       Presence of Reduced Ir         Algal Mat or Crust (B4)       Soils (C6)         Surface Soil Cracks (B6)       (LRR A)         Inundation Visible on Aerial Imagery (B7)       Sparsely Vegetated Concave Surface (B8)         Field Observations:         Surface Water Present?       Yes       No       X       Depth (inches):	B9) (except ) (C1) along Living on (C4) n Tilled nts (D1) rks) Wetland	Secondary Indicators (2 or mo Water-Stained Leaves (B 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) ( Frost-Heave Hummocks ( Hydrology Present? Yes	Dre required) 9) ( <b>MLRA 1, 2,</b> (C2) al Imagery (C9) ) (LRR A) D7) No X
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Water-Stained Leaves (         High Water Table (A2)       MLRA 1, 2, 4A, and 4B         High Water Table (A2)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B         Water Marks (B1)       Hydrogen Sulfide Odor         Oxidized Rhizospheres       Roots (C3)         Drift Deposits (B2)       Presence of Reduced Ir         Algal Mat or Crust (B4)       Soils (C6)         Surface Soil Cracks (B6)       URR A)         Surface Soil Cracks (B6)       Other (Explain in Remark)         Inundation Visible on Aerial Imagery (B7)       Sparsely Vegetated Concave Surface (B8)         Field Observations:       No       X       Depth (inches):         Sutrace Water Present?       Yes       No       X       Depth (inches):         Saturation Present?       Yes       No       X       Depth (inches):       Depth (inches):         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previou       Remarks:       Remarks:	B9) ( <b>except</b> )  B13)  (C1) along Living on (C4) n Tilled nts (D1) rks)  Wetland us inspections), if an	Secondary Indicators (2 or mo Water-Stained Leaves (B9 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) Frost-Heave Hummocks ( Hydrology Present? Yes vailable:	Dre required) 9) ( <b>MLRA 1, 2,</b> (C2) al Imagery (C9) ( <b>LRR A</b> ) (D7) No X

Project/Site:	Buck	0		City/County	: Sedro-	Woolley/	Skagit	Samp	ling Date:	5/27/20	)		
Applicant/Own	er:	Sarah Buc	ко		State:	WA	Sampling P	oint:	P22				
Investigator(s)	: N	1. Harenda	A. Wones	Section	, Township,	Range:	S23, T35N	I, R4E					
Landform (hills	slope,	errace, etc	.): terrace		Local relief	(concave	, convex, no	ne):	none		Slope (%):	1%	
Subregion (LR	R):	MLRA2		Lat: 48.5	509015°N	Long:	122.24781	I7°W	Datum:	WGS 8	34		
Soil Map Unit	Name:	Minkle	silt loam				NW	l classi	fication:	NA			
Are climatic / h	nydrolc	gic condition	ons on the site ty	pical for this t	ime of year	? Yes	X No	(If no	o, explain in	Remark	s.)		
Are Vegetation	ו <u> </u>	, Soil	, or Hydrold	ogysig	nificantly di	sturbed?	Are "Norr	mal Cir	cumstances	s" presen	t?Yes )	K No	o c
Are Vegetation	า	, Soil	, or Hydrold	ogy na	turally probl	ematic?	(If	needeo	d, explain ar	ny answe	ers in Remar	ˈks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No <u>X</u> No <u>X</u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes NoX	
Remarks: Recently mown.					

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20 ft dm</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>3</u> (B)
4.				Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)
		- Total Cav	or	
Copling/Chruh Strotum (Distoizer 10 ft dm )		= 1 otal Cove	er	Prevalence Index worksheet:
<u>Saping/Shiub Stratum</u> (Flot size. <u>10 it um</u> )				Total % Cover of: Multiply by:
2				OBL species x1 =
3				
4				FAC  opening $x =$
				FAC species $x_3 = $
J		– Total Cov	ar	
Herb (Plot size: 6 ft dm )		10tal 000		UPL species x 5 =
	5	No	FACW	Column Totals: (A) (B)
2. Anthoxanthum odoratum	30	Yes	FACU	Prevalence Index = $B/A =$
3. Festuca rubra	25	Yes	FAC	
4 Ranunculus repens	15	No	FAC	Hydrophytic Vegetation Indicators:
5 Taraxacum officinale	5	No	FACU	1 - Rapid Test for Hydrophytic Vegetation
6. Dactylis glomerata	20	Yes	FACU	2 - Dominance Test is >50%
7.				$3 - Prevalence Index is \leq 3.0^1$
8.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9.				data in Remarks or on a separate sheet)
10.				5 - Wetland Non-Vascular Plants <sup>1</sup>
11.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	100	= Total Cove	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:				be present, unless disturbed or problematic.
1.			ŀ	
2.				
		= Total Cove	er	Hydrophytic Vegetation
% Bare Ground in Herb Stratum		-		Present? Yes No X
Remarks:				

OIL							Sampling Point:	P22
Profile Desc	cription: (Describe	to the dept	h needed to docume	ent the indi	cator or con	firm the ab	sence of indicators.)	
Depth	Matrix			Redox Feat	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-9.5	10YR 2/2	100					Sandy loam	
0 0.0	1011(2/2				·		Ashy sandy	
9.5-14	2.5Y 4/3	97	10YR 5/6	3	С	М	loam	
	·						·	
<sup>1</sup> Tvpe: C=C	oncentration. D=Dep	letion. RM=	Reduced Matrix. CS=	Covered or	Coated San	d Grains.	<sup>2</sup> Location: PL=Pore L	ining, M=Matrix,
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
Hydric Soi	il Indicators: (Appli	cable to all	LRRs, unless other	wise noted	.)	Indi	cators for Problemati	c Hydric Soils <sup>3</sup> :
Histoso	ol (A1)		Sandy Redox (S5	5)			2 cm Muck (A10)	
Histic E	Epipedon (A2)	_	Stripped Matrix (S	S6)		I	Red Parent Material (T	F2)
Black H	Histic (A3)	_	Loamy Mucky Mi	neral (F1) (	except MLR	A 1) \	Very Shallow Dark Surf	ace (TF12)
Hydrog	gen Sulfide (A4)	_	Loamy Gleved M	atrix (F2)	•	, <u> </u>	Other (Explain in Rema	arks)
Deplete	ed Below Dark Surfa	ce (A11)	Depleted Matrix (	F3) ´´			、 <b>.</b>	,
Thick D	Dark Surface (A12)	· / _	Redox Dark Surfa	ace (F6)		3	Indicators of hvdrophv	tic vegetation and
Sandv	Mucky Mineral (S1)	—	Depleted Dark Su	urface (F7)		\	wetland hydrology mus	t be present.
Sandy	Gleved Matrix (S4)	—	Redox Depressio	ons (F8)		l	unless disturbed or pro	blematic
				- ( - /				
estrictive La	ayer (if present):							
Type:					Hydric Soil	Present?	Yes	No X
Depth (incl	hes).				nyane een			
Bopar (ino								
DROLOG	ΥΥ							
etland Hydr	rology Indicators:							
rimary Indica	ators (minimum of one	e required; o	check all that apply)			Second	dary Indicators (2 or mo	ore required)
			Water-Stained	Leaves (B	except) (except	Wa	iter-Stained Leaves (BS	9) ( <b>MLRA 1, 2,</b>
Surface Wa	ater (A1)		MLRA 1, 2, 4/	A, and 4B)		4A	, and 4B)	
High Water	r Table (A2)		Salt Crust (B1	1)		Dra	ainage Patterns (B10)	
Saturation	(A3)		Aquatic Inverte	ebrates (B13	3)	Dry	-Season Water Table	(C2)
Water Marl	ks (B1)		Hydrogen Sulf	ide Odor (C	1)	Sat	turation Visible on Aeria	al Imagery (C9)
	. ,		Oxidized Rhiz	ospheres al	ong Living			
Sediment D	Deposits (B2)		Roots (C3)	·	0 0	Ge	omorphic Position (D2)	
Drift Depos	sits (B3)		Presence of R	educed Iron	i (C4)	Sha	allow Aquitard (D3)	
			Recent Iron R	eduction in <sup>-</sup>	Tilled			
Algal Mat c	or Crust (B4)		Soils (C6)			FA	C-Neutral Test (D5)	
			Stunted or Str	essed Plant	s (D1)			
Iron Depos	sits (B5)		(LRR A)		. ,	Ra	ised Ant Mounds (D6)	(LRR A)
Surface So	oil Cracks (B6)		Other (Explain	in Remarks	5)	Fro	st-Heave Hummocks (	D7)
Inundation	Visible on Aerial Ima	igery (B7)	、、				· · · · · · · · · · · · · · · · · · ·	
Sparsely V	egetated Concave S	urface (B8)						
eld Observa	ations:							
urface Water	r Present? Yes	No	X Depth (inches):					
ater Table P	Present? Yes	No	X Depth (inches):		Wetl	and Hydrol	ogy Present? Yes	No X
aturation Pre	esent?				-   1	•		
ncludes capil	llary fringe) Yes	No	X Depth (inches):					
scribe Record	ded Data (stream da	uae. monito	ring well, aerial photo	s. previous	inspections)	, if available		
	gu	J.,	J	,,	.,			
norke								
IIdIKS:								





						PLANT QU	JANTITIES		
					PLANTING	AREAS (See	locations o	on Sheet M2	)
COMMON NAME	SCIENTIFIC NAME	STOCK TYPE	SPACING*	AREA A - 8,743 SF	AREA B - 37,076 SF	AREA C - 34,674 SF	AREA D - 65,840 SF	AREA E - 3,473 SF	TOTALS
TREES/LARGE SHRUBS									
Douglas fir	Pseudotsuga menziesii	2-gal container or min 18" bareroot	Min 10' 0.c	10	70	60	80	5	225
Western red cedar	Thuja plicata	2-gal container or min 18" bareroot	Min 10' 0.c	20	90	80	140	10	340
Sitka spruce	Picea sitchensis	2-gal container or min 18" bareroot	Min 10' 0.c	10	60	50	100	10	230
Oregon ash#	Fraxinus latifolia	1-gal container or min 12" bareroot	Min 10' 0.c	10	60	50	100	10	230
Pacific willow#	Salix lasiandra	Min 18" bareroot or 36" live stake	Min 10' 0.c	25	100	50	250	10	435
Grand fir	Abies grandis	2-gal container or min 18" bareroot	Min 10' 0.c	5	50	40	50	5	150
Vine maple	Acer circinatum	1-gal container or min 12" bareroot	Min 10' 0.c	10	40	30	50	5	135
SHRUBS			·		·	·	·	· · · · ·	
Redtwig dogwood#	Cornus sericea	1-gal container or min 12" bareroot	See Sheet M4	20	80	50	130	10	290
Sitka willow#	Salix sitchensis	Min 18" bareroot or 36" live stake	See Sheet M4	20	80	50	130	10	290
Nootka rose	Rosa nutkana	1-gal container or min 12" bareroot	See Sheet M4	30	110	150	270	10	570
Snowberry	Symphoricarpos albus	1-gal container or min 12" bareroot	See Sheet M4	40	110	150	270	10	580
Red flowering currant	Ribes sanguineum	1-gal container or min 12" bareroot	See Sheet M4	20	120	150	270	10	570
Twinberry	Lonicera involucrata	1-gal container or min 12" bareroot	See Sheet M4	10	120	150	270	10	560
			TOTALS	230	1090	1060	2110	115	4605

NOTES:

TARGET PLANTING SURVIVAL DENSITIES ARE 400 TREES/ACRE AND 600 SHRUBS/ACRE. PLANT QUANTITIES IN EACH PLANTING AREA WERE INFLUENCED BY LOCAL SITE CONDITIONS INCLUDING TOPOGRAPHY, PROXIMITY TO BRICKYARD CREEK, ASPECT, AND SOIL CONDITIONS.

#OREGON ASH, WILLOW, AND DOGWOOD SPECIES SHOULD BE PLANTED WITHIN 0-20' HORIZONTAL DISTANCE FROM EDGE OF BRICKYARD CREEK.

\* SEE PLANT SPACING TYPICAL AND NOTES ON SHEET M4.

	SHEET M3 – PLANT SCHEDULE	•	Essency Environmental LLC	
Sh		1	11104 320th Ave NE	Date
e			Carnation, WA 98014	2:
et:				7/7,
M3	Bucko Estates	Essency	425 269-3119	/202
;	Sedro-Woolley, WA	ENVIRONMENTAL	425 761-5903	1





#### **MITIGATION AND PLANTING NOTES**

- 1. ALL WORK SHALL BE PERFORMED BY PERSONS FAMILIAR WITH THIS KIND OF WORK AND UNDER THE DIRECTION OF A QUALIFIED SUPERVISOR.
- 2. PLANT SIZING AND QUALITY STANDARDS SHALL CONFORM TO THE CURRENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATON.
- 3. ALL PLANT MATERIAL SHALL BE NURSERY STOCK AND LOCALLY GROWN OR REGIONALLY ACCLIMATIZED TO THE PACIFIC NORTHWEST. PLANT MATERIAL SHALL EXHIBIT NORMAL HABITS OF GROWTH FOR THE SPE-CIES, SHALL HAVE BUDS INTACT AND SHALL BE FREE OF DISEASE, INSECTS, SCARS, BRUISES, BREAKS, AND WEED AND SEED ROOTS.
- 4. MITIGATION ENHANCEMENT AREAS SHOULD BE PLANTED AS SHOWN PER SHEET M2 AND THE PLANT SCHEDULE ON SHEET M3. REFER TO CONSTRUCTION PLANS PREPARED BY RAVNIK AND ASSOCIATES FOR LOT AND TRACT DIMENSIONS AND MEASUREMENT REFERENCES. SPECIES SUBSTITUTIONS SUBJECT TO APPROVAL BY THE PROJECT BIOLOGIST.
- 5. GRUB BLACKBERRY AND REED CANARY GRASS THICKETS PRIOR TO PLANTING. MOW REST OF ENHANCEMENT PLANTING AREA PRIOR TO PLANTING. DECOMPACT SURFACE SOILS AS NEEDED PRIOR TO PLANTING.
- 6. FOR CONTAINER PLANTS, SCORE FOUR SIDES OF ROOTBALL PRIOR TO PLANTING. BUTTERFLY ROOTBALL IF ROOT CIRCLING IS EVIDENT.

#### MAINTENANCE, CONTINGENCY AND MONITORING NOTES

- 1. SEE MITIGATION PLAN REPORT PREPARED BY ESSENCY ENVIRONMENTAL FOR INFORMATION ON PERFORMANCE STANDARDS, MONITORING REQUIREMENTS AND DETAILS, AND FINANCIAL
- 2. GUARANTEE REQUIREMENTS FOR MITIGATION.
- 3. PLANT MAINTENANCE ACTIVITIES SHOULD INCLUDE IRRIGATION, WEED AND INVASIVE/NON-NATIVE SPECIES CONTROL, MULCH REPLACEMENT, AND REPLANTING AS NECESSARY ON A SCHEDULE SUFFICIENT TO ACHIEVE PERFORMANCE STANDARDS.
- 4. CONTINGENCY ACTIONS: SEE MITIGATION PLAN REPORT PREPARED BY ESSENCY ENVIRONMENTAL FOR INFORMATION ON CONTINGENCY MEASURES AND ACTIONS.

CONTINUOUS OUTER ROW AT X FEET ON CENTER. 2/3X FEET SETBACK FROM EDGE OF PLANTING BED WITH TRIANGULAR SPACING INSIDE BED (TYP) -EDGE OF PLANTING BED OR PAVEMENT Date: Rev 7/7/21 Essency Environmental LLC Carnation, WA 98014 11104 320th Ave NE X = RECOMMENDED SPACING 269-3119 761-5903 = ACTUAL PLANT LOCATIONS 425 425 - PLANTING AND MITIGATION M Sedro-Woolley, Estates SHEET M4 Bucko NOTES Sheet: M4