

**OREGON CITY SCHOOL DISTRICT**

**SITE PLAN AND DESIGN REVIEW**

**PROPOSED TRANSPORTATION MAINTENANCE FACILITY**

**Exhibit G - Wetlands Delineation Report**

*Refer to attached Wetlands Delineation Report prepared by Pacific Habitat.*

**Wetland Delineation  
for the  
Oregon City High School Property  
in Oregon City, Oregon**

(Township 3 South, Range 2 East, Section 9D, tax lot 1400)

**Prepared for**

**BBL Architects**

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PHS Project Number: 5481

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# TABLE OF CONTENTS

	<u>Page</u>
<b>I. INTRODUCTION.....</b>	<b>1</b>
<b>II. RESULTS AND DISCUSSION .....</b>	<b>1</b>
A. Landscape Setting and Land Use .....	1
B. Site Alterations.....	2
C. Precipitation Data and Analysis.....	3
D. Methods .....	4
E. Description of All Wetlands and Other Non-Wetland Waters.....	4
F. Deviation from LWI or NWI .....	5
G. Mapping Method.....	5
H. Additional Information .....	5
I. Results and Conclusions .....	5
J. Disclaimer.....	5
<b>III. REFERENCES.....</b>	<b>6</b>

## APPENDIX A: Figures

- Figure 1: Vicinity Map (USGS)
- Figure 2: Tax Lot Map
- Figure 3: Local Wetland Inventory
- Figure 4: Soil Survey
- Figure 5: Aerial Photo
- Figure 6: Potentially jurisdictional wetland (Wetland Delineation Map)

## APPENDIX B: Wetland Delineation Data Sheets

## APPENDIX C: Site photos (ground level)

## APPENDIX D: Wetland Definitions and Methodology (Client only)

## I. INTRODUCTION

Pacific Habitat Services, Inc. (PHS) conducted a wetland delineation for the portion of an Oregon City School District property that will be used for a new transportation/maintenance facility. The study area is located in Oregon City, OR (Township 3 South, Range 2 East, Section 9D, tax lot 1400).

This report presents the results of PHS's wetland delineation within the study area. Figures, including a map depicting the location of wetlands within the study area, are located in Appendix A. Data sheets documenting on-site conditions are provided in Appendix B. Ground-level photographs documenting site conditions are provided in Appendix C. A discussion of the wetland delineation methodology is provided for the client in Appendix D.

## II. RESULTS AND DISCUSSION

### A. Landscape Setting and Land Use

The study area is located approximately one-quarter mile northeast of the intersection of Oregon Highway 213 and Glen Oak Road in Oregon City. The study area consists of one tax lot (1400) as shown in the attached figures (Appendix A). The parcel is zoned as "Industrial Campus" (ORWAP Reporter). Surrounding parcels are zoned as residential, industrial, commercial, and public and semi-public.

Site topography slopes down to the northwest. The study area is within the Beaver Creek watershed (HUC 170900070403); Caufield Creek flows west approximately 600 feet south of the study area.

Dominant vegetation in the southern portion of the study area includes primarily weedy forbs and pasture grasses. The northern portion of the study area is forested, with upland Douglas-fir/oak woodland transitioning to an Oregon ash forest in the north. Vegetation observed within the study area includes the species listed in Table 1 below.

**Table 1. Vegetation within the Study Area.**

Common Name	Latin Name	Wetland Indicator Status
Colonial bentgrass	<i>Agrostis capillaris</i>	FAC
Spreading bentgrass	<i>Agrostis stolonifera</i>	FAC
Service-berry	<i>Amelanchier alnifolia</i>	FACU
Sweet vernalgrass	<i>Anthoxanthum odoratum</i>	FACU
Taper-fruit short-scale sedge	<i>Carex leptopoda</i>	FAC
Slough sedge	<i>Carex obnupta</i>	OBL
Chicory	<i>Cichorium intybus</i>	FACU
Hazelnut	<i>Corylus cornuta</i>	FACU
English hawthorn	<i>Crataegus monogyna</i>	FAC
Scotch broom	<i>Cytisus scoparius</i>	UPL
Orchard grass	<i>Dactylus glomerata</i>	FACU



Common Name	Latin Name	Wetland Indicator Status
Queen Anne's lace	<i>Daucus carota</i>	FACU
Tall fescue	<i>Festuca arundinacea</i>	FAC
Cascara	<i>Frangula purshiana</i>	FAC
Oregon ash	<i>Fraxinus latifolia</i>	FACW
Salal	<i>Gaultheria shallon</i>	FACU
Velvetgrass	<i>Holcus lanatus</i>	FAC
St. Johnswort	<i>Hypericum perforatum</i>	FACU
Hairy cat's-ear	<i>Hypochaeris radicata</i>	FACU
English Holly	<i>Ilex aquifolium</i>	FACU
Ox-eye daisy	<i>Leucanthemum vulgare</i>	FACU
English plantain	<i>Plantago lanceolata</i>	FACU
Bluegrass	<i>Poa species</i>	FAC
Sword fern	<i>Polystichum munitum</i>	FACU
Sweet cherry	<i>Prunus avium</i>	FACU
Douglas-fir	<i>Pseudotsuga menziesii</i>	FACU
Bracken fern	<i>Pteridium aquilinum</i>	FACU
Oregon white oak	<i>Quercus garryana</i>	FACU
Oak	<i>Quercus species</i>	FACU or UPL
Clustered rose	<i>Rosa pisocarpa</i>	FAC
Rose	<i>Rosa species</i>	assumed FAC
Himalayan blackberry	<i>Rubus armeniacus</i>	FACU
Trailing blackberry	<i>Rubus ursinus</i>	FACU
Scouler's willow	<i>Salix scouleriana</i>	FAC
Snowberry	<i>Symphoricarpos albus</i>	FACU
Western red cedar	<i>Thuja plicata</i>	FAC
Pacific poison-oak	<i>Toxicodendron diversilobum</i>	FAC
Clover	<i>Trifolium species</i>	FAC or FACU

## B. Site Alterations

The study area itself has been relatively undisturbed since before July of 2000, the earliest year aerial imagery is available through Google Earth. Several features surrounding the site, which may have affected site drainage, have been developed since 2000. To the east, a tree farm was cleared between 2000 and 2001, making way for the construction of High School Road and a stormwater catch basin northeast of the tax lot. These features were constructed by May 2002. In this time period, an unpaved path paralleling the northern boundary of the parcel was graveled.

There is no evidence of recent fill or site alterations beyond those described above.

### C. Precipitation Data and Analysis

The wetland delineation was conducted on September 10, 2014. No rain fell during the field investigation; 1.08 inches was recorded during the two previous weeks (National Weather Service).

Precipitation for the water year (October 1, 2013 through August 31, 2014) was 33.01 inches, which is 75 percent of normal. Most of the fall and winter months of the 2013/14 water year were well below the normal range. However, March 2014 was exceptionally wet, bringing the precipitation for the water year into the normal range, though still below the average.

Table 1 shows the average monthly precipitation in Oregon City for the three months prior to the site visit, as well as the upper and lower values considered within normal ranges for the period of record (NRCS WETS table for Oregon City, 2002).

**Table 2. Average Monthly Precipitation (NRCS WETS Table for Oregon City) and Observed Monthly Precipitation for the 2013/2014 water year.**

Month	Average*	2 Years in 10 Will Have		Observed Precipitation**
		Less than	More than	
October 2013	3.48	1.85	4.25	1.05
November 2013	6.79	4.43	8.16	3.94
December 2013	7.23	4.85	8.65	2.08
January 2014	6.59	4.23	7.94	3.21
February 2014	5.51	3.83	6.56	3.83
March 2014	4.70	3.54	5.49	9.02
April 2014	3.46	2.44	4.10	3.93
May 2014	2.70	1.72	3.26	2.59
June 2014	1.83	1.11	2.22	1.33
July 2014	0.83	0.29	1.00	0.91
August 2014	1.00	0.21	1.16	1.12
<b>TOTALS</b>	<b>44.12</b>	<b>28.5</b>	<b>52.79</b>	<b>33.01</b>

\*Average Monthly Rainfall (NRCS WETS Table for Oregon City, Oregon)

\*\*Recorded monthly rainfall for Oregon City, Oregon (National Weather Service)

The precipitation fluctuations are not expected to have affected the 2014 wetland delineation, as the wetlands were clearly defined by topography, hydrophytic vegetation, and indicators of wetland hydrology. Although upland areas occasionally satisfied the hydric soils criteria, they lacked hydrophytic vegetation and indicators of wetland hydrology, and were topographically higher than the wetland area.

## **D. Methods**

PHS delineated the limits of the wetlands on the site based on the presence of wetland hydrology, hydric soils, and hydrophytic vegetation, in accordance with the Routine On-site Determination, as described in the *Corps of Engineers Wetland Delineation Manual, Wetlands Research Program Technical Report Y-87-1* ("The 1987 Manual") and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region*. The delineation was conducted on September 10, 2014.

The study area was investigated for the presence of wetlands or other waters. The wetland boundary for Wetland A was determined based upon a shift in vegetation from a predominance of FAC or wetter species in the wetland to a predominance of FAC or drier species in the upland, the presence/absence of sediment deposits, and the presence/absence of hydric soils. Vegetation in some portions of the wetland passed the FAC-neutral test, whereas vegetation in upland areas never passed the FAC-neutral test.

In addition to the six paired sample points collected to document wetland boundaries, numerous pits were excavated across the site to determine if soils were hydric. This included areas near wetland boundaries and areas where more than 50 percent of the dominant vegetation was FAC or wetter. Two upland sample points were taken to document non-wetland areas within the study area (sample points 7 and 8).

## **E. Description of all Wetlands and Other Non-Wetland Waters**

PHS identified one wetland within the study area. It was determined that other than the wetland area described below, the site does not contain hydrophytic vegetation or wetland hydrology. Some upland areas near the wetland boundary satisfied the hydric soil criterion. However, this may be due to historic conditions and not reflective of the current hydrological regime.

### **Wetland A**

Wetland A is approximately 44,906 square feet (1.03 acre) within the study area. The Cowardin class is palustrine forested, seasonally flooded (PFOC), the Hydrogeomorphic (HGM) class is Slope. Wetland A continues offsite to the north and west.

Vegetation within Wetland A (Sample Points 1, 3, and 5) is dominated by Oregon ash, English hawthorn, rose, and slough sedge. Oregon white oak, Himalayan blackberry, snowberry, and taper-fruit short-scale sedge were also dominant in some areas very near the wetland boundary. Soils within the wetland met the definition for redox dark surface (F6) and are considered hydric. The wetland area had sediment deposits (a primary indicator of wetland hydrology) and often had vegetation that passed the FAC-neutral test (a secondary indicator of wetland hydrology).

Vegetation in the upland adjacent to Wetland A (Sample Points 2, 4, and 6) is dominated by Douglas-fir, Oregon white oak, Oregon ash, Western red cedar, Scouler's willow, service-berry, English holly, English hawthorn, hazelnut, cascara, salal, Himalayan blackberry, snowberry,

rose, trailing blackberry, sword fern, and taper-fruit short-scale sedge. Vegetation in the open area in the southern portion of the study area is dominated by mixed pasture grasses and forbs, including orchard grass, sweet vernal grass, and tall fescue. Scattered English hawthorn and small bracken fern stands are also present in this portion of the study area. Soils in some upland locations near the wetland boundary met the definition for redox dark surface (F6). There were no indicators of wetland hydrology.

As stated above, Wetland A continues to the north and west outside the study area. It appears that the wetland ultimately drains to Caufield Creek, southwest of the study area.

## **F. Deviation from LWI or NWI**

The City of Oregon City Local Wetland Inventory (LWI) maps a swale-wetland complex that passes through the northern portion of the study area. Wetland A, as delineation by PHS, is consistent with the LWI map.

## **G. Mapping Method**

PHS flagged the boundary of Wetland A with blue flagging tape and sample points with lime-green flagging tape. Westlake Consultants, Inc. then performed a professional land survey of the delineated boundaries and six of the eight sample points. The accuracy of the boundary survey and sample points is sub-centimeter. Two of the sample point flags were not surveyed due to missing flags. These sample points (Sample Points 3 and 7) were hand drawn in CAD based on field notes and measured distances from known points. The estimated accuracy of these sample points is +/- three feet.

## **H. Additional Information**

Caufield Creek drains to Beaver Creek, a tributary to the Willamette River. StreamNet does not map ESA-listed fish in Caufield Creek. Listed salmonids are present downstream at the confluence of Beaver Creek and the Willamette River, approximately 4.5 miles southwest of the study area.

## **I. Results and Conclusions**

PHS delineated Wetland A within the study area. The total area of wetlands within the study area boundary is 44,906 square feet (1.03 acres).

## **J. Required Disclaimer**

This report documents the investigation, best professional judgment and conclusions of the investigators. It is correct and complete to the best of our knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk unless it has been reviewed and approved in writing by the Oregon Department of State Lands in accordance with OAR 141-090-0005 through 141-090-0055.

### III. REFERENCES

- Adamus, P.R. and D. Field. 2001 *Guidebook for Hydrogeomorphic (HGM)-based Assessment of Oregon Wetland and Riparian Sites. Willamette Valley Ecoregion, Riverine Impounding and Slopes/Flats Subclasses*. Oregon Division of State Lands, Salem, OR.
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- Munsell Color, 2009. *Munsell Soil Color Charts*.
- National Weather Service, 2014. Climatological Report (Daily) for Oregon City, Oregon.  
<http://www.nws.noaa.gov/climate/getclimate.php?wfo=pqr>.
- Natural Resources Conservation Service (NRCS), 2014. Web Soil Survey.  
<http://websoilsurvey.nrcs.usda.gov/app/>
- Oregon Department of State Lands, 2009. Oregon Revised Statutes (ORS), *Chapter 196 — Columbia River Gorge; Ocean Resource Planning; Wetlands; Removal and Fill*.  
Section 196.800 Definitions for ORS 196.600 - 196.905.
- Oregon Maps online. 2014. <http://www.ormap.org/>
- Lichvar, R.W., M. Butterwick, N.C. Melvin, and W.N. Kirchner. 2014. *State of Oregon 2014 Plant List. The National Wetland Plant List: 2014 Update of Wetland Ratings*.  
[http://wetland\\_plants.usace.army.mil](http://wetland_plants.usace.army.mil)
- Shapiro and Associates, 1999, City of Oregon City Local Wetlands Inventory
- US Army Corps of Engineers, Environmental Laboratory, 1987. *Corps of Engineers Wetland Delineation Manual. Technical Report Y-87-1*.
- US Army Corps of Engineers, Environmental Laboratory, 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)*.
- US Geologic Survey, The National Map Viewer, 2014 (Oregon City quadrangle).

# Appendix A

## Figures





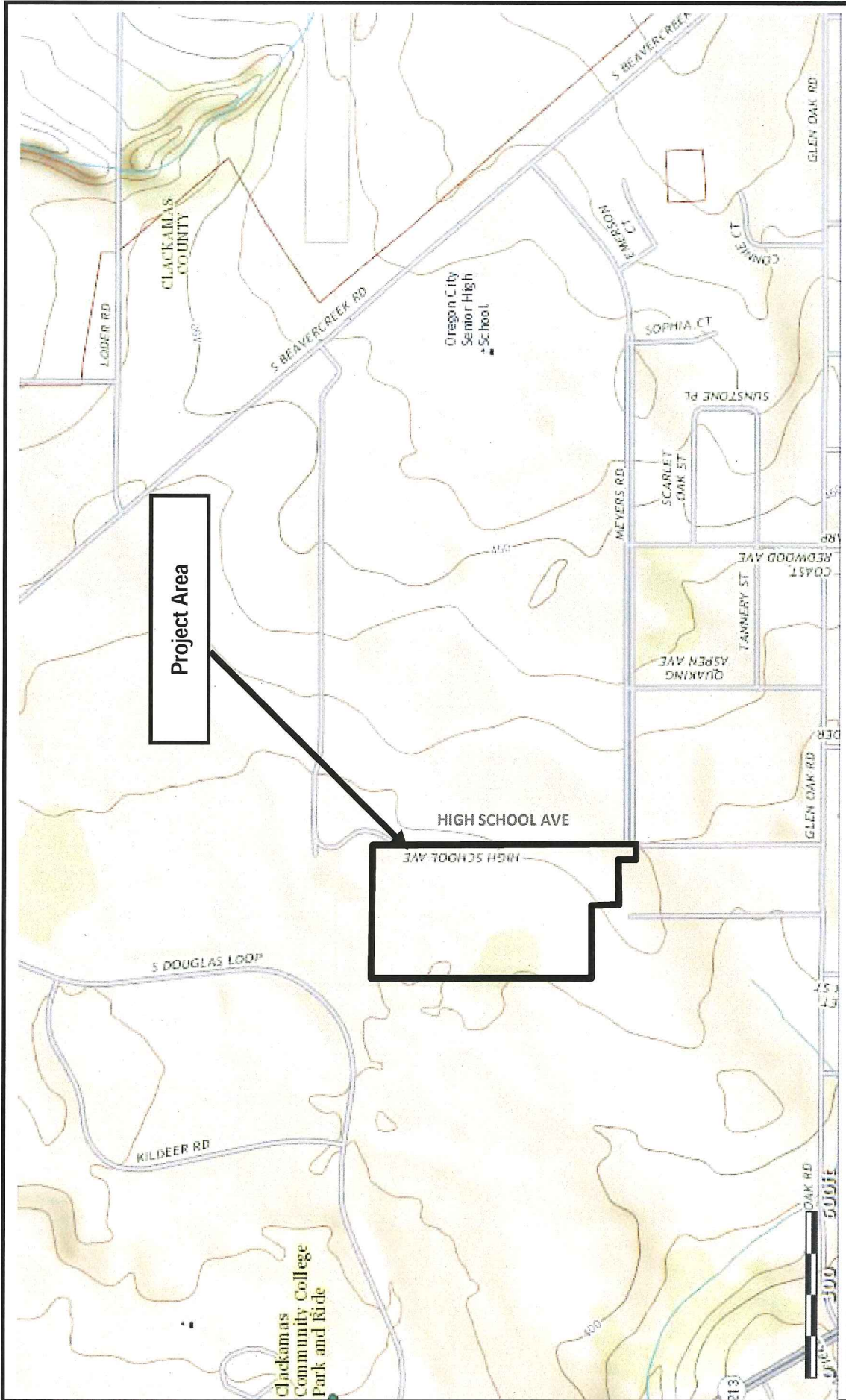



FIGURE  
1

Location and General topography  
Oregon City High School, Oregon City, Oregon  
(USGS The National Map Viewer, Oregon quadrangle, 2014)



5481  
9/26/14



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T 3S R 2E Section 09

# CITY OF OREGON CITY LOCAL WETLAND INVENTORY

## LEGEND

- Urban Growth Boundary
- Wetland
- Wetland label
- Riparian label
- Sample site
- DSL DET wetland
- DSL DET label
- Mitigation wetland
- Site access not granted
- Stream

Wetland acreage



400 500  
FEET  
JUNE 1999

WETLAND INFORMATION IS SUBJECT TO CHANGE  
This map is for planning purposes only. Wetland and riparian boundaries were not fielded or surveyed (but are used as a delineation study). Boundaries for certain wetlands are accurate to within 25'. There may be exceptions for certain wetlands subject to regulation. In all cases, actual field conditions may vary from those shown on this map. The map is not intended to be used as a basis for regulatory decisions. The study was funded by the Oregon Department of Land Conservation and Development pursuant to planning and.

City of Oregon City  
320 Warner Mills Road  
Oregon City, Oregon 97045  
SHAPIRO

Project Area

FIGURE  
3

Local Wetlands Inventory map  
Oregon City High School, Oregon City, Oregon  
(Shapiro and Associates, Inc., 9/1/1999)

5481  
9/26/14



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Wilsonville, OR 97070

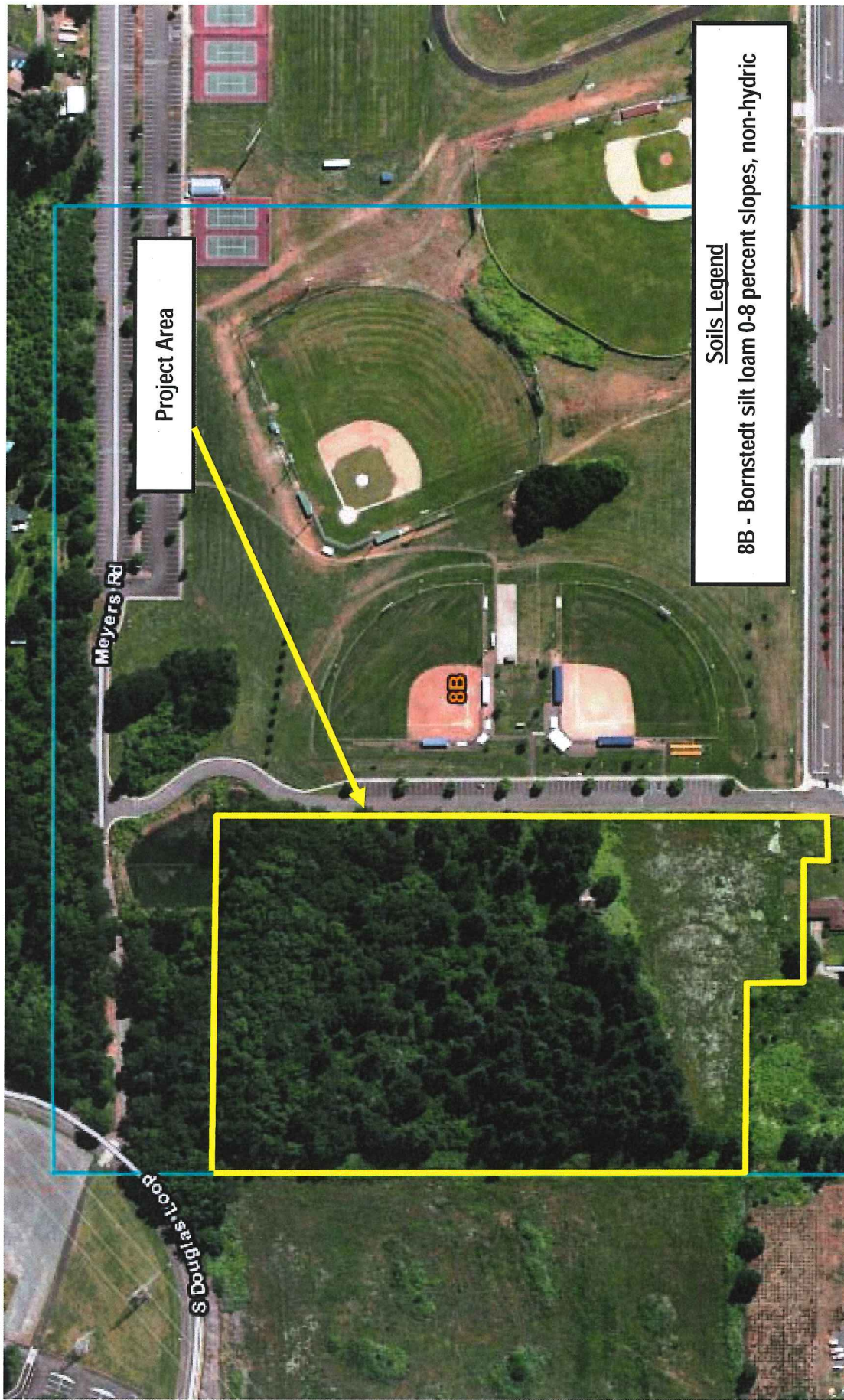


FIGURE  
4

Soils map  
Oregon City High School, Oregon City, Oregon  
(NRCS Web Soil Survey, 2014)





FIGURE  
5

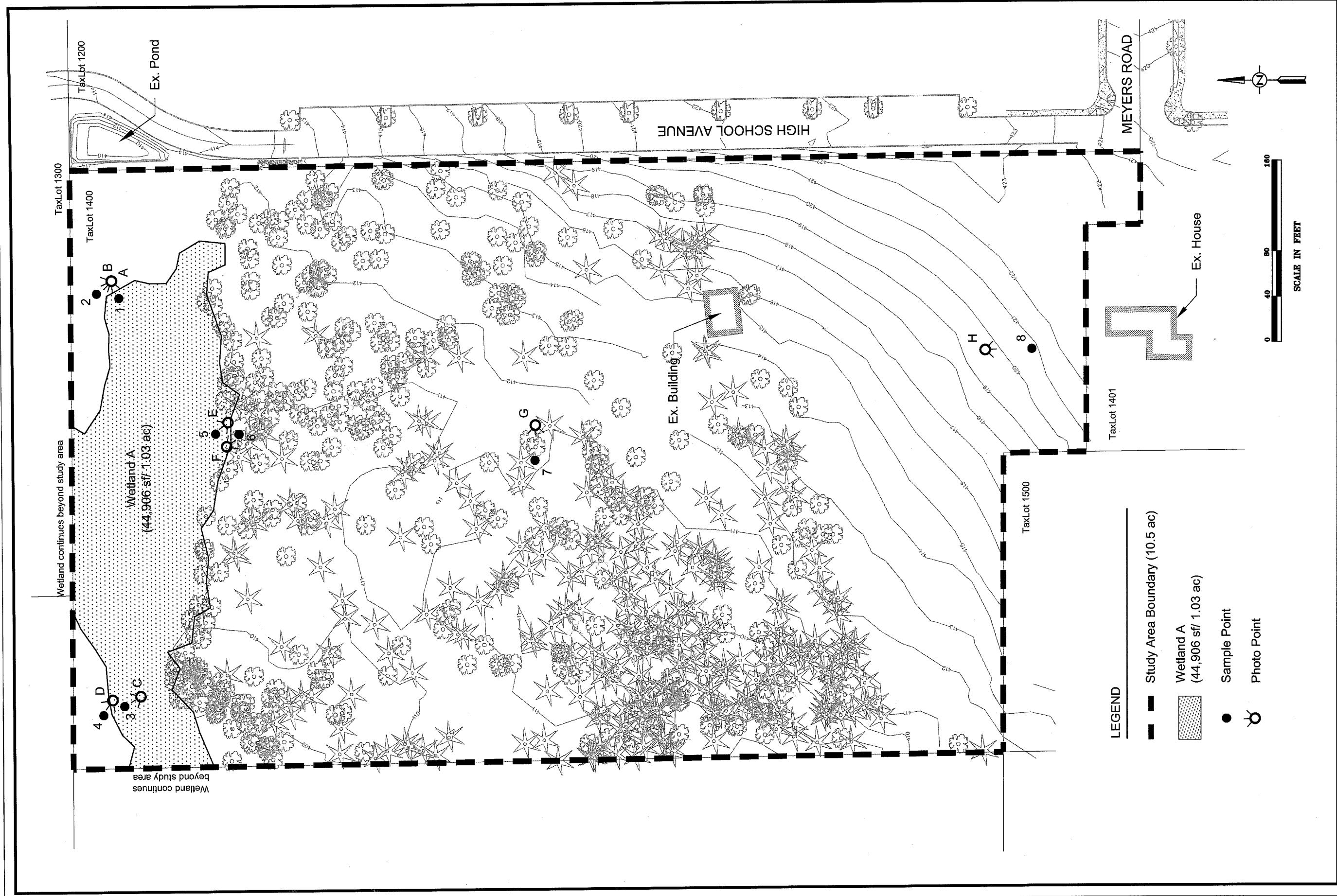
Aerial photo  
Oregon City High School, Oregon City, Oregon  
(Google Earth, 2014)

5481  
9/26/14



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# Appendix B

## Wetland Determination Data Sheets



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

Project/Site: Oregon City High School City/County: Oregon City/Clackamas Sampling Date: 9/10/2014  
 Applicant/Owner: Oregon City School District State: OR Sampling Point: 1  
 Investigator(s): TF/CET Section, Township, Range: S9D T3S R2E  
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): none Slope (%): <1  
 Subregion (LRR): LRR A Lat: 45.321304 Long: -122.568066 Datum: \_\_\_\_\_  
 Soil Map Unit Name: Bornstedt silt loam, 0 to 8 percent slopes NWI Classification: PFO  
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (if no, explain in Remarks)  
 Are vegetation \_\_\_\_\_ Soil \_\_\_\_\_ or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y  
 Are vegetation \_\_\_\_\_ Soil \_\_\_\_\_ or Hydrology \_\_\_\_\_ naturally problematic? If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			
Remarks:					

## VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status
<b>Tree Stratum</b> (plot size: <u>30</u> )			
1 <u>Fraxinus latifolia</u>	<u>70</u>	<u>X</u>	<u>FACW</u>
2 <u>Quercus sp.</u>	<u>20</u>	<u>X</u>	<u>(FACU)</u>
3 _____	_____	_____	_____
4 _____	_____	_____	_____
	<u>90</u>	= Total Cover	
<b>Sapling/Shrub Stratum</b> (plot size: <u>5</u> )			
1 <u>Crataegus monogyna</u>	<u>30</u>	<u>X</u>	<u>FAC</u>
2 <u>Rubus armeniacus</u>	<u>20</u>	<u>X</u>	<u>FACU</u>
3 <u>Rosa sp.</u>	<u>20</u>	<u>X</u>	<u>(FAC)</u>
4 <u>Symphoricarpos albus</u>	<u>5</u>	_____	<u>FACU</u>
5 _____	_____	_____	_____
	<u>75</u>	= Total Cover	
<b>Herb Stratum</b> (plot size: <u>5</u> )			
1 <u>Carex obnupta</u>	<u>80</u>	<u>X</u>	<u>OBL</u>
2 <u>Rubus ursinus</u>	<u>15</u>	_____	<u>FACU</u>
3 <u>Polystichum munitum</u>	<u>5</u>	_____	<u>FACU</u>
4 _____	_____	_____	_____
5 _____	_____	_____	_____
6 _____	_____	_____	_____
7 _____	_____	_____	_____
8 _____	_____	_____	_____
	<u>100</u>	= Total Cover	
<b>Woody Vine Stratum</b> (plot size: _____)			
1 _____	_____	_____	_____
2 _____	_____	_____	_____
	<u>0</u>	= Total Cover	
% Bare Ground in Herb Stratum <u>0</u>			
Remarks:			

**Dominance Test worksheet:**

Number of Dominant Species  
That are OBL, FACW, or FAC: 4 (A)

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

Percent of Dominant Species  
That are OBL, FACW, or FAC: 67% (A/B)

**Prevalence Index Worksheet:**

Total % Cover of	Multiply by:	
OBL Species _____	x 1 =	<u>0</u>
FACW species _____	x 2 =	<u>0</u>
FAC Species _____	x 3 =	<u>0</u>
FACU Species _____	x 4 =	<u>0</u>
UPL Species _____	x 5 =	<u>0</u>
Column Totals <u>0</u> (A)		<u>0</u> (B)

Prevalence Index = B/A = #DIV/0!

**Hydrophytic Vegetation Indicators:**

1- Rapid Test for Hydrophytic Vegetation X

2- Dominance Test is >50% \_\_\_\_\_

3- Prevalence Index is ≤ 3.0<sup>1</sup> \_\_\_\_\_

4- Morphological Adaptations<sup>1</sup> (provide supporting data in Remarks or on a separate sheet) \_\_\_\_\_

5- Wetland Non-Vascular Plants<sup>1</sup> \_\_\_\_\_

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) \_\_\_\_\_

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

**Hydrophytic Vegetation Present?** Yes X No \_\_\_\_\_

## SOIL

PHS # 5481

Sampling Point:

1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-7	10YR 3/2	99	10YR 3/6	1	C	M	Silt Loam	Fine
7-16	10YR 3/2	80	10YR 4/6	15	C	M	Silt Loam	Coarse
			10YR 3/6	4	C	M		Medium
			10YR 3/6	1	C	PL		

<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 Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)(except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if present):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

## HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_Water Table Present? Yes ☐ No ☒ Depth (inches): >16Saturation Present? Yes ☐ No ☒ Depth (inches): >16  
(includes capillary fringe)

Wetland Hydrology Present?

Yes ☒ No ☐

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

Remarks:

Faint sediment deposits on leaf litter

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

Project/Site: Oregon City High School City/County: Oregon City/Clackamas Sampling Date: 9/10/2014  
 Applicant/Owner: Oregon City School District State: OR Sampling Point: 2  
 Investigator(s): TF/CET Section, Township, Range: S9D T3S R2E  
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): none Slope (%): <1  
 Subregion (LRR): LRR A Lat: 45.321304 Long: -122.568066 Datum:   
 Soil Map Unit Name: Bornstedt silt loam, 0 to 8 percent slopes NWI Classification: upland  
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No  (if no, explain in Remarks)  
 Are vegetation  Soil  or Hydrology  significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y  
 Are vegetation  Soil  or Hydrology  naturally problematic? If needed, explain any answers in Remarks.)

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

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

## VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status
<b>Tree Stratum</b> (plot size: <u>30</u> )			
1 <u><i>Pseudotsuga menziesii</i></u>	<u>5</u>		<u>FACU</u>
2 <u><i>Fraxinus latifolia</i></u>	<u>35</u>	<u>X</u>	<u>FACW</u>
3 <u><i>Quercus garryana</i></u>	<u>35</u>	<u>X</u>	<u>FACU</u>
4 <u></u>			
	<u>75</u>	= Total Cover	
<b>Sapling/Shrub Stratum</b> (plot size: <u>5</u> )			
1 <u><i>Ilex aquifolium</i></u>	<u>20</u>	<u>X</u>	<u>FACU</u>
2 <u><i>Crataegus monogyna</i></u>	<u>40</u>	<u>X</u>	<u>FAC</u>
3 <u><i>Thuja plicata</i></u>	<u>5</u>		<u>FAC</u>
4 <u><i>Symphoricarpos albus</i></u>	<u>10</u>		<u>FACU</u>
5 <u><i>Rosa pisocarpa</i></u>	<u>10</u>		<u>FAC</u>
	<u>90</u>	= Total Cover	
<b>Herb Stratum</b> (plot size: <u>5</u> )			
1 <u><i>Polystichum munitum</i></u>	<u>5</u>	<u>X</u>	<u>FACU</u>
2 <u><i>Carex leptopoda</i></u>	<u>5</u>	<u>X</u>	<u>FAC</u>
3 <u></u>			
4 <u></u>			
5 <u></u>			
6 <u></u>			
7 <u></u>			
8 <u></u>			
	<u>10</u>	= Total Cover	
<b>Woody Vine Stratum</b> (plot size: <u>5</u> )			
1 <u><i>Rubus ursinus</i></u>	<u>40</u>	<u>X</u>	<u>FACU</u>
2 <u></u>			
	<u>40</u>	= Total Cover	
% Bare Ground in Herb Stratum <u>50</u>			

**Dominance Test worksheet:**

Number of Dominant Species  
That are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species  
That are OBL, FACW, or FAC: 43% (A/B)

**Prevalence Index Worksheet:**

Total % Cover of	Multiply by:	
OBL Species <u></u>	x 1 =	<u>0</u>
FACW species <u></u>	x 2 =	<u>0</u>
FAC Species <u></u>	x 3 =	<u>0</u>
FACU Species <u></u>	x 4 =	<u>0</u>
UPL Species <u></u>	x 5 =	<u>0</u>
Column Totals <u>0</u> (A)		<u>0</u> (B)

Prevalence Index = B/A = #DIV/0!

**Hydrophytic Vegetation Indicators:**

- 1- Rapid Test for Hydrophytic Vegetation
- 2- Dominance Test is >50%
- 3- Prevalence Index is ≤ 3.0<sup>1</sup>
- 4- Morphological Adaptations<sup>1</sup> (provide supporting data in Remarks or on a separate sheet)
- 5- Wetland Non-Vascular Plants<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

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

**Hydrophytic Vegetation Present?** Yes  No X

Remarks:

Also in Sapling/Shrub Stratum - *Frangula purshiana* (5%) - Total Shrub Stratum = 90%



## SOIL

PHS # 5481

Sampling Point:

2

**Profile Description:** (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

<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 Indicators: (Applicable to all LRRs, unless otherwise noted.)**

### Indicators for Problematic Hydric Soils<sup>3</sup>:

<u>          </u> Histosol (A1)	<u>          </u> Sandy Redox (S5)	<u>          </u> 2 cm Muck (A10)
<u>          </u> Histic Epipedon (A2)	<u>          </u> Stripped Matrix (S6)	<u>          </u> Red Parent Material (TF2)
<u>          </u> Black Histic (A3)	<u>          </u> Loamy Mucky Mineral (F1)( <b>except MLRA 1</b> )	<u>          </u> Very Shallow Dark Surface (TF12)
<u>          </u> Hydrogen Sulfide (A4)	<u>          </u> Loamy Gleyed Matrix (F2)	<u>          </u> Other (explain in Remarks)
<u>          </u> Depleted Below Dark Surface (A11)	<u>          </u> Depleted Matrix (F3)	
<u>          </u> Thick Dark Surface (A12)	<u>          </u> <b>X</b> Redox Dark Surface (F6)	
<u>          </u> Sandy Mucky Mineral (S1)	<u>          </u> Depleted Dark Surface (F7)	
<u>          </u> Sandy Gleyed Matrix (S4)	<u>          </u> Redox Depressions (F8)	

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

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

**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches):

Hydric Soil Present?	Yes	X	No
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Remarks:

## HYDROLOGY

### Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

_____ Surface Water (A1)	_____ Water stained Leaves (B9) <b>(Except MLRA</b>	_____ Water stained Leaves (B9)
_____ High Water Table (A2)	<b>1, 2, 4A, and 4B)</b>	<b>(MLRA1, 2, 4A, and 4B)</b>
_____ Saturation (A3)	_____ Salt Crust (B11)	_____ Drainage Patterns (B10)
_____ Water Marks (B1)	_____ Aquatic Invertebrates (B13)	_____ Dry-Season Water Table (C2)
_____ Sediment Deposits (B2)	_____ Hydrogen Sulfide Odor (C1)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Drift Deposits (B3)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Geomorphic Position (D2)
_____ Algal Mat or Crust (B4)	_____ Presence of Reduced Iron (C4)	_____ Shallow Aquitard (D3)
_____ Iron Deposits (B5)	_____ Recent Iron Reduction in Plowed Soils (C6)	_____ Fac-Neutral Test (D5)
_____ Surface Soil Cracks (B6)	_____ Stunted or Stressed Plants (D1) <b>(LRR A)</b>	_____ Raised Ant Mounds (D6) <b>(LRR A)</b>
_____ Inundation Visible on Aerial Imagery (B7)	_____ Other (Explain in Remarks)	_____ Frost-Heave Hummocks (D7)
_____ Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present?	Yes	_____	No	<u>  X  </u>	Depth (inches):	_____
Water Table Present?	Yes	_____	No	<u>  X  </u>	Depth (inches):	<u>  &gt;18  </u>
Saturation Present? (includes capillary fringe)	Yes	_____	No	<u>  X  </u>	Depth (inches):	<u>  &gt;18  </u>

### Wetland Hydrology Present?

Yes                      No                      X

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

Remarks:

**No hydrology indicators observed**

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

Project/Site: Oregon City High School City/County: Oregon City/Clackamas Sampling Date: 9/10/2014  
 Applicant/Owner: Oregon City School District State: OR Sampling Point: 3  
 Investigator(s): TF/CET Section, Township, Range: S9D T3S R2E  
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): none Slope (%): <1  
 Subregion (LRR): LRR A Lat: 45.32133 Long: -122.569295 Datum:   
 Soil Map Unit Name: Bornstedt silt loam, 0 to 8 percent slopes NWI Classification: PFO  
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No  (if no, explain in Remarks)  
 Are vegetation  Soil  or Hydrology  significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y  
 Are vegetation  Soil  or Hydrology  naturally problematic? If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u></u>	Is Sampled Area within a Wetland?	Yes <u>X</u>	No <u></u>
Hydric Soil Present?	Yes <u>X</u>	No <u></u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u></u>			

Remarks:

## VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
<b>Tree Stratum</b> (plot size: <u>30</u> )				Number of Dominant Species	
1 <u>Fraxinus latifolia</u>	<u>60</u>	<u>X</u>	<u>FACW</u>	That are OBL, FACW, or FAC: <u>4</u> (A)	
2 <u>Quercus garryana</u>	<u>10</u>		<u>FACU</u>	Total Number of Dominant	
3 <u></u>				Species Across All Strata: <u>5</u> (B)	
4 <u></u>				Percent of Dominant Species	
	<u>70</u>	= Total Cover		That are OBL, FACW, or FAC: <u>80%</u> (A/B)	
<b>Sapling/Shrub Stratum</b> (plot size: <u>5</u> )				<b>Prevalence Index Worksheet:</b>	
1 <u>Rosa sp.</u>	<u>10</u>	<u>X</u>	<u>(FAC)</u>	Total % Cover of	Multiply by:
2 <u></u>				OBL Species	x 1 = <u>0</u>
3 <u></u>				FACW species	x 2 = <u>0</u>
4 <u></u>				FAC Species	x 3 = <u>0</u>
5 <u></u>				FACU Species	x 4 = <u>0</u>
	<u>10</u>	= Total Cover		UPL Species	x 5 = <u>0</u>
				Column Totals	<u>0</u> (A) <u>0</u> (B)
<b>Herb Stratum</b> (plot size: <u>5</u> )				Prevalence Index = B/A = <u>#DIV/0!</u>	
1 <u>Carex obnupta</u>	<u>40</u>	<u>X</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b>	
2 <u>Carex leptopoda</u>	<u>10</u>	<u>X</u>	<u>FAC</u>	1- Rapid Test for Hydrophytic Vegetation	
3 <u></u>				<u>X</u> 2- Dominance Test is >50%	
4 <u></u>				3-Prevalence Index is ≤ 3.0 <sup>1</sup>	
5 <u></u>				4-Morphological Adaptations <sup>1</sup> (provide supporting	
6 <u></u>				data in Remarks or on a separate sheet)	
7 <u></u>				5- Wetland Non-Vascular Plants <sup>1</sup>	
8 <u></u>				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
	<u>50</u>	= Total Cover		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless	
<b>Woody Vine Stratum</b> (plot size: <u>5</u> )				disturbed or problematic.	
1 <u>Rubus ursinus</u>	<u>60</u>	<u>X</u>	<u>FACU</u>	<b>Hydrophytic</b>	
2 <u></u>				<b>Vegetation</b>	
	<u>60</u>	= Total Cover		Present? Yes <u>X</u> No <u></u>	
% Bare Ground in Herb Stratum <u>0</u>					

Remarks:

## SOIL

PHS # 5481

Sampling Point:

3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 2/2	98	10YR 4/6	2	C	M	Silt Loam	Fine
4-16	10YR 3/2	80	10YR 4/6	20	C	M	Silty Clay Loam	Medium

<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 Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if present):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

## HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input checked="" type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_

Water Table Present? Yes ☐ No ☒ Depth (inches): >16

Saturation Present? Yes ☐ No ☒ Depth (inches): >16  
(includes capillary fringe)

Wetland Hydrology Present?

Yes ☒ No ☐

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

Remarks:

Sediment deposits on leaves suggest water sits on surface

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

Project/Site: Oregon City High School City/County: Oregon City/Clackamas Sampling Date: 9/10/2014  
 Applicant/Owner: Oregon City School District State: OR Sampling Point: 4  
 Investigator(s): TF/CET Section, Township, Range: S9D T3S R2E  
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): none Slope (%): <1  
 Subregion (LRR): LRR A Lat: 45.32133 Long: -122.569295 Datum:   
 Soil Map Unit Name: Bornstedt silt loam, 0 to 8 percent slopes NWI Classification: upland  
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No  (if no, explain in Remarks)  
 Are vegetation  Soil  or Hydrology  significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y  
 Are vegetation  Soil  or Hydrology  naturally problematic? If needed, explain any answers in Remarks.)

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

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

## VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status
<b>Tree Stratum</b> (plot size: <u>30</u> )			
1 <u>Quercus sp.</u>	<u>30</u>	<u>X</u>	<u>(FACU)</u>
2 <u>Fraxinus latifolia</u>	<u>15</u>	<u>X</u>	<u>FACW</u>
3 <u>Pseudotsuga menziesii</u>	<u>15</u>	<u>X</u>	<u>FACU</u>
4 <u>Crataegus monogyna</u>	<u>15</u>	<u>X</u>	<u>FAC</u>
	<u>90</u>	= Total Cover	
<b>Sapling/Shrub Stratum</b> (plot size: <u>5</u> )			
1 <u>Corylus cornuta</u>	<u>15</u>	<u>X</u>	<u>FACU</u>
2 <u>Frangula purshiana</u>	<u>15</u>	<u>X</u>	<u>FAC</u>
3 <u>Gaultheria shallon</u>	<u>10</u>	<u>X</u>	<u>FACU</u>
4 <u>Symphoricarpos albus</u>	<u>10</u>	<u>X</u>	<u>FACU</u>
5 <u>Rubus armeniacus</u>	<u>10</u>	<u>X</u>	<u>FACU</u>
	<u>60</u>	= Total Cover	
<b>Herb Stratum</b> (plot size: <u>5</u> )			
1 <u>Polystichum munitum</u>	<u>30</u>	<u>X</u>	<u>FACU</u>
2 <u>Carex leptopoda</u>	<u>5</u>		<u>FAC</u>
3 <u>Rubus ursinus</u>	<u>20</u>	<u>X</u>	<u>FACU</u>
4 <u></u>			
5 <u></u>			
6 <u></u>			
7 <u></u>			
8 <u></u>			
	<u>55</u>	= Total Cover	
<b>Woody Vine Stratum</b> (plot size: <u></u> )			
1 <u></u>			
2 <u></u>			
	<u>0</u>	= Total Cover	
% Bare Ground in Herb Stratum <u>45</u>			

**Dominance Test worksheet:**

Number of Dominant Species  
That are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 11 (B)

Percent of Dominant Species  
That are OBL, FACW, or FAC: 27% (A/B)

**Prevalence Index Worksheet:**

Total % Cover of	Multiply by:	
OBL Species	x 1 =	<u>0</u>
FACW species	x 2 =	<u>0</u>
FAC Species	x 3 =	<u>0</u>
FACU Species	x 4 =	<u>0</u>
UPL Species	x 5 =	<u>0</u>
Column Totals	<u>0</u> (A)	<u>0</u> (B)

Prevalence Index = B/A = #DIV/0!

**Hydrophytic Vegetation Indicators:**

- 1- Rapid Test for Hydrophytic Vegetation
- 2- Dominance Test is >50%
- 3- Prevalence Index is ≤ 3.0<sup>1</sup>
- 4- Morphological Adaptations<sup>1</sup> (provide supporting data in Remarks or on a separate sheet)
- 5- Wetland Non-Vascular Plants<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

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

**Hydrophytic Vegetation Present?** Yes  No X

Remarks:

Also in Tree Stratum - Amelanchier alnifolia 5%, Prunus avium 10%; Total Tree Stratum = 90%

## SOIL

PHS # 5481

Sampling Point:

4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 3/2	98	10YR 3/3	2	C	M	Silt Loam	Fine
4-9	10YR 3/2	95	10YR 3/3	2	C	M	Silt Loam	Fine
			7.5YR 2.5/3	3	C	M	Silt Loam	Medium
9-16	10YR 3/2	88	10YR 3/6	10	C	M	Silt Loam	Coarse
			10YR 3/3	2				Fine

<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 Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if present):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒ X

Remarks:

Mottles are faint in the upper 9 inches, so soils do not meet definition for Redox Dark Surface

## HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X	Depth (inches): _____
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X	Depth (inches): <u>&gt;16</u>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X	Depth (inches): <u>&gt;16</u>

(includes capillary fringe)

Wetland Hydrology Present?

Yes \_\_\_\_\_ No ☒ X

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

Remarks:

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

Project/Site: Oregon City High School City/County: Oregon City/Clackamas Sampling Date: 9/10/2014  
 Applicant/Owner: Oregon City School District State: OR Sampling Point: 5  
 Investigator(s): TF/CET Section, Township, Range: S9D T3S R2E  
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): none Slope (%): <1  
 Subregion (LRR): LRR A Lat: 45.321112 Long: -122.568728 Datum: \_\_\_\_\_  
 Soil Map Unit Name: Bornstedt silt loam, 0 to 8 percent slopes NWI Classification: PFO  
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (if no, explain in Remarks)  
 Are vegetation \_\_\_\_\_ Soil \_\_\_\_\_ or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y  
 Are vegetation \_\_\_\_\_ Soil \_\_\_\_\_ or Hydrology \_\_\_\_\_ naturally problematic? If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u>	No _____	
Wetland Hydrology Present?	Yes <u>X</u>	No _____	
Remarks:			

## VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status
<b>Tree Stratum</b> (plot size: <u>30</u> )			
1 <u>Fraxinus latifolia</u>	<u>75</u>	<u>X</u>	<u>FACW</u>
2 <u>Quer sp.</u>	<u>10</u>		<u>(FACU)</u>
3 _____			
4 _____			
	<u>85</u>	= Total Cover	
<b>Sapling/Shrub Stratum</b> (plot size: <u>5</u> )			
1 <u>Frangula purshiana</u>	<u>5</u>		<u>FAC</u>
2 <u>Fraxinus latifolia</u>	<u>15</u>	<u>X</u>	<u>FACW</u>
3 <u>Symphoricarpos albus</u>	<u>30</u>	<u>X</u>	<u>FACU</u>
4 <u>Crataegus monogyna</u>	<u>15</u>	<u>X</u>	<u>FAC</u>
5 <u>Rosa sp.</u>	<u>15</u>	<u>X</u>	<u>(FAC)</u>
	<u>80</u>	= Total Cover	
<b>Herb Stratum</b> (plot size: <u>5</u> )			
1 <u>Rubus ursinus</u>	<u>10</u>		<u>FACU</u>
2 <u>Carex obnupta</u>	<u>80</u>	<u>X</u>	<u>OBL</u>
3 _____			
4 _____			
5 _____			
6 _____			
7 _____			
8 _____			
	<u>90</u>	= Total Cover	
<b>Woody Vine Stratum</b> (plot size: _____)			
1 _____			
2 _____			
	<u>0</u>	= Total Cover	
% Bare Ground in Herb Stratum <u>10</u>			
Remarks:			

**Dominance Test worksheet:**

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

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

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

**Prevalence Index Worksheet:**

Total % Cover of	Multiply by:	
OBL Species _____	x 1 =	<u>0</u>
FACW species _____	x 2 =	<u>0</u>
FAC Species _____	x 3 =	<u>0</u>
FACU Species _____	x 4 =	<u>0</u>
UPL Species _____	x 5 =	<u>0</u>
Column Totals <u>0</u> (A)		<u>0</u> (B)

Prevalence Index = B/A = #DIV/0!

**Hydrophytic Vegetation Indicators:**

\_\_\_\_\_ 1- Rapid Test for Hydrophytic Vegetation

X 2- Dominance Test is >50%

\_\_\_\_\_ 3-Prevalence Index is ≤ 3.0<sup>1</sup>

\_\_\_\_\_ 4-Morphological Adaptations<sup>1</sup> (provide supporting data in Remarks or on a separate sheet)

\_\_\_\_\_ 5- Wetland Non-Vascular Plants<sup>1</sup>

\_\_\_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

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

**Hydrophytic Vegetation Present?** Yes X No \_\_\_\_\_

## SOIL

PHS # 5481

Sampling Point:

5

## Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 3/2	99	10YR 3/4	1	C	M	Silt Loam	Fine
4-6	10YR 3/2	96	10YR 3/4	4	C	M	Silt Loam	Fine
6-12	10YR 3/2	90	10YR 3/6	5	C	M	Silt Loam	Fine
			10YR 3/4	3	C	M		Fine
			7.5YR 2.5/3	2	C	M		Medium
12-16	10YR 3/2	85	10YR 3/6	10	C	M	Silt Loam	Medium
			7.5YR 2.5/3	5	C	M		Medium

<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 Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)(except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

## Restrictive Layer (if present):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

## HYDROLOGY

## Wetland Hydrology Indicators:

## Primary Indicators (minimum of one required; check all that apply)

## Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input checked="" type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

## Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_

Water Table Present? Yes ☐ No ☒ Depth (inches): >16

Saturation Present? Yes ☐ No ☒ Depth (inches): >16  
(includes capillary fringe)

## Wetland Hydrology Present?

Yes ☒ No ☐

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

Remarks:

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

Project/Site: Oregon City High School City/County: Oregon City/Clackamas Sampling Date: 9/10/2014  
 Applicant/Owner: Oregon City School District State: OR Sampling Point: 6  
 Investigator(s): TF/CET Section, Township, Range: S9D T3S R2E  
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): none Slope (%): <1  
 Subregion (LRR): LRR A Lat: 45.321112 Long: -122.568728 Datum:   
 Soil Map Unit Name: Bornstedt silt loam, 0 to 8 percent slopes NWI Classification: upland  
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No  (if no, explain in Remarks)  
 Are vegetation  Soil  or Hydrology  significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y  
 Are vegetation  Soil  or Hydrology  naturally problematic? If needed, explain any answers in Remarks.)

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

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

## VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status
<b>Tree Stratum</b> (plot size: <u>30</u> )			
1 <u>Quercus garryana</u>	<u>25</u>	<u>X</u>	<u>FACU</u>
2 <u>Thuja plicata</u>	<u>25</u>	<u>X</u>	<u>FAC</u>
3 <u>Pseudotsuga menziesii</u>	<u>25</u>	<u>X</u>	<u>FACU</u>
4 <u>Salix scouleriana</u>	<u>5</u>		<u>FAC</u>
	<u>80</u>	= Total Cover	
<b>Sapling/Shrub Stratum</b> (plot size: <u>5</u> )			
1 <u>Gaultheria shallon</u>	<u>50</u>	<u>X</u>	<u>FACU</u>
2 <u>Corylus cornuta</u>	<u>20</u>	<u>X</u>	<u>FACU</u>
3 <u>Symphoricarpos albus</u>	<u>5</u>		<u>FACU</u>
4 <u></u>			
5 <u></u>			
	<u>75</u>	= Total Cover	
<b>Herb Stratum</b> (plot size: <u>5</u> )			
1 <u>Polystichum munitum</u>	<u>20</u>	<u>X</u>	<u>FACU</u>
2 <u></u>			
3 <u></u>			
4 <u></u>			
5 <u></u>			
6 <u></u>			
7 <u></u>			
8 <u></u>			
	<u>20</u>	= Total Cover	
<b>Woody Vine Stratum</b> (plot size: <u></u> )			
1 <u></u>			
2 <u></u>			
	<u>0</u>	= Total Cover	
% Bare Ground in Herb Stratum <u>80</u>			
Remarks:			

**Dominance Test worksheet:**

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

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

Percent of Dominant Species  
That are OBL, FACW, or FAC: 17% (A/B)

**Prevalence Index Worksheet:**

Total % Cover of	Multiply by:	
OBL Species <u></u>	x 1 =	<u>0</u>
FACW species <u></u>	x 2 =	<u>0</u>
FAC Species <u></u>	x 3 =	<u>0</u>
FACU Species <u></u>	x 4 =	<u>0</u>
UPL Species <u></u>	x 5 =	<u>0</u>
Column Totals <u>0</u> (A)		<u>0</u> (B)

Prevalence Index = B/A = #DIV/0!

**Hydrophytic Vegetation Indicators:**

1- Rapid Test for Hydrophytic Vegetation

2- Dominance Test is >50%

3-Prevalence Index is ≤ 3.0<sup>1</sup>

4-Morphological Adaptations<sup>1</sup> (provide supporting data in Remarks or on a separate sheet)

5- Wetland Non-Vascular Plants<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

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

**Hydrophytic Vegetation Present?** Yes  No X



## SOIL

PHS # 5481

Sampling Point:

6

**Profile Description:** (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]<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 Indicators:** (Applicable to all LRRs, unless otherwise noted.)

### Indicators for Problematic Hydric Soils<sup>3</sup>:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(except MLRA 1)</b>	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

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

## Restrictive Layer (if present):

Type:

Depth (inches): \_\_\_\_\_

Hydric Soil Present?	Yes	X	No
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Remarks:

## HYDROLOGY

### Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

Surface Water (A1)	Water stained Leaves (B9) <b>(Except MLRA 1, 2, 4A, and 4B)</b>	Water stained Leaves (B9) <b>(MLRA1, 2, 4A, and 4B)</b>
High Water Table (A2)		
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhizospheres along Living Roots (C3)	Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Plowed Soils (C6)	Fac-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) <b>(LRR A)</b>	Raised Ant Mounds (D6) <b>(LRR A)</b>
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present?    Yes                      No    **X**                      Depth (inches):

Water Table Present?    Yes                      No    **X**                      Depth (inches):                      **>16**

Saturation Present? Yes            No **X** Depth (inches): **>16**  
(includes capillary fringe)

### Wetland Hydrology Present?

Yes                      No                      X

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

Remarks:

**No hydrology indicators observed**

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

Project/Site: Oregon City High School City/County: Oregon City/Clackamas Sampling Date: 9/10/2014  
 Applicant/Owner: Oregon City School District State: OR Sampling Point: 7  
 Investigator(s): TF/CET Section, Township, Range: S9D T3S R2E  
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): LRR A Lat: 45.32012 Long: -122.568792 Datum:   
 Soil Map Unit Name: Bornstedt silt loam, 0 to 8 percent slopes NWI Classification: upland  
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No  (if no, explain in Remarks)  
 Are vegetation  Soil  or Hydrology  significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y  
 Are vegetation  Soil  or Hydrology  naturally problematic? If needed, explain any answers in Remarks.)

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

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

## VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: <u>30</u> )				Number of Dominant Species	
1 <u>Pseudotsuga menziesii</u>	<u>50</u>	<u>X</u>	<u>FACU</u>	That are OBL, FACW, or FAC: <u>2</u> (A)	
2 <u>Salix scouleriana</u>	<u>20</u>	<u>X</u>	<u>FAC</u>	Total Number of Dominant	
3 <u></u>	<u></u>	<u></u>	<u></u>	Species Across All Strata: <u>7</u> (B)	
4 <u></u>	<u></u>	<u></u>	<u></u>	Percent of Dominant Species	
	<u>70</u>	= Total Cover		That are OBL, FACW, or FAC: <u>29%</u> (A/B)	
Sapling/Shrub Stratum (plot size: <u>5</u> )				Prevalence Index Worksheet:	
1 <u>Amelanchier alnifolia</u>	<u>30</u>	<u>X</u>	<u>FACU</u>	Total % Cover of	
2 <u>Corylus cornuta</u>	<u>30</u>	<u>X</u>	<u>FACU</u>	Multiply by:	
3 <u>Gaultheria shallon</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	OBL Species	<u>x 1 = 0</u>
4 <u>Rosa sp.</u>	<u>2</u>	<u></u>	<u>(FAC)</u>	FACW species	<u>x 2 = 0</u>
5 <u>Symphoricarpos albus</u>	<u>5</u>	<u></u>	<u>FACU</u>	FAC Species	<u>x 3 = 0</u>
	<u>87</u>	= Total Cover		FACU Species	<u>x 4 = 0</u>
				UPL Species	<u>x 5 = 0</u>
Herb Stratum (plot size: <u>5</u> )				Column Totals	<u>0</u> (A) <u>0</u> (B)
1 <u>Carex leptopoda</u>	<u>5</u>	<u>X</u>	<u>FAC</u>	Prevalence Index = B/A = <u>#DIV/0!</u>	
2 <u></u>	<u></u>	<u></u>	<u></u>	Hydrophytic Vegetation Indicators:	
3 <u></u>	<u></u>	<u></u>	<u></u>	1- Rapid Test for Hydrophytic Vegetation	
4 <u></u>	<u></u>	<u></u>	<u></u>	2- Dominance Test is >50%	
5 <u></u>	<u></u>	<u></u>	<u></u>	3-Prevalence Index is ≤ 3.0 <sup>1</sup>	
6 <u></u>	<u></u>	<u></u>	<u></u>	4-Morphological Adaptations <sup>1</sup> (provide supporting	
7 <u></u>	<u></u>	<u></u>	<u></u>	data in Remarks or on a separate sheet)	
8 <u></u>	<u></u>	<u></u>	<u></u>	5- Wetland Non-Vascular Plants <sup>1</sup>	
	<u>5</u>	= Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
Woody Vine Stratum (plot size: <u>5</u> )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless	
1 <u>Rubus ursinus</u>	<u>15</u>	<u>X</u>	<u>FACU</u>	disturbed or problematic.	
2 <u></u>	<u></u>	<u></u>	<u></u>	Hydrophytic	
	<u>15</u>	= Total Cover		Vegetation	
% Bare Ground in Herb Stratum <u>0</u>				Yes <u></u> No <u>X</u>	
Remarks:				Present?	

## SOIL

PHS # 5481

Sampling Point:

7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	7.5YR 3/2	100					Silt Loam	
4-18	7.5YR 3/3	100					Silt 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 Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if present):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒ X

Remarks:

## HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes \_\_\_\_\_ No ☒ X Depth (inches): \_\_\_\_\_Water Table Present? Yes \_\_\_\_\_ No ☒ X Depth (inches): >18Saturation Present? Yes \_\_\_\_\_ No ☒ X Depth (inches): >18  
(includes capillary fringe)

Wetland Hydrology Present?

Yes \_\_\_\_\_ No ☒ X

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

Remarks:

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

Project/Site: Oregon City High School City/County: Oregon City/Clackamas Sampling Date: 9/10/2014  
 Applicant/Owner: Oregon City School District State: OR Sampling Point: 8  
 Investigator(s): TF/CET Section, Township, Range: S9D T3S R2E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): None Slope (%): 1  
 Subregion (LRR): LRR A Lat: 45.319085 Long: -122.568236 Datum:   
 Soil Map Unit Name: Bornstedt silt loam, 0 to 8 percent slopes NWI Classification: upland  
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No  (if no, explain in Remarks)  
 Are vegetation  Soil  or Hydrology  significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y  
 Are vegetation  Soil  or Hydrology  naturally problematic? If needed, explain any answers in Remarks.)

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

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

## VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
<b>Tree Stratum</b> (plot size: <u></u> )				Number of Dominant Species	
1				That are OBL, FACW, or FAC: <u>1</u> (A)	
2				Total Number of Dominant	
3				Species Across All Strata: <u>4</u> (B)	
4				Percent of Dominant Species	
	<u>0</u>	= Total Cover		That are OBL, FACW, or FAC: <u>25%</u> (A/B)	
<b>Sapling/Shrub Stratum</b> (plot size: <u>5</u> )				<b>Prevalence Index Worksheet:</b>	
1	<u>5</u>	<u>X</u>	<u>FAC</u>	Total % Cover of <u></u> Multiply by:	
2				OBL Species <u></u> x 1 = <u>0</u>	
3				FACW species <u></u> x 2 = <u>0</u>	
4				FAC Species <u></u> x 3 = <u>0</u>	
5				FACU Species <u></u> x 4 = <u>0</u>	
	<u>5</u>	= Total Cover		UPL Species <u></u> x 5 = <u>0</u>	
				Column Totals <u>0</u> (A) <u>0</u> (B)	
<b>Herb Stratum</b> (plot size: <u>5</u> )				Prevalence Index = B/A = <u>#DIV/0!</u>	
1	<u>35</u>	<u>X</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b>	
2	<u>20</u>	<u>X</u>	<u>FACU</u>	<u></u> 1- Rapid Test for Hydrophytic Vegetation	
3	<u>20</u>	<u>X</u>	<u>FACU</u>	<u></u> 2- Dominance Test is >50%	
4	<u>5</u>		<u>FACU</u>	<u></u> 3-Prevalence Index is ≤ 3.0 <sup>1</sup>	
5	<u>10</u>		<u>FACU</u>	<u></u> 4-Morphological Adaptations <sup>1</sup> (provide supporting	
6	<u>10</u>		<u>FAC</u>	data in Remarks or on a separate sheet)	
7				<u></u> 5- Wetland Non-Vascular Plants <sup>1</sup>	
8				<u></u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
	<u>100</u>	= Total Cover		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless	
<b>Woody Vine Stratum</b> (plot size: <u></u> )				disturbed or problematic.	
1				<b>Hydrophytic</b>	
2				<b>Vegetation</b>	
	<u>0</u>	= Total Cover		Yes <u></u> No <u>X</u>	
% Bare Ground in Herb Stratum <u>0</u>				<b>Present?</b>	
Remarks:					

## SOIL

PHS # 5481

Sampling Point: 8

**Profile Description:** (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

<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 Indicators:** (Applicable to all LRRs, unless otherwise noted.)

### Indicators for Problematic Hydric Soils<sup>3</sup>:

<u>          </u> Histosol (A1)	<u>          </u> Sandy Redox (S5)	<u>          </u> 2 cm Muck (A10)
<u>          </u> Histic Epipedon (A2)	<u>          </u> Stripped Matrix (S6)	<u>          </u> Red Parent Material (TF2)
<u>          </u> Black Histic (A3)	<u>          </u> Loamy Mucky Mineral (F1)( <b>except MLRA 1</b> )	<u>          </u> Very Shallow Dark Surface (TF12)
<u>          </u> Hydrogen Sulfide (A4)	<u>          </u> Loamy Gleyed Matrix (F2)	<u>          </u> Other (explain in Remarks)
<u>          </u> Depleted Below Dark Surface (A11)	<u>          </u> Depleted Matrix (F3)	
<u>          </u> Thick Dark Surface (A12)	<u>          </u> Redox Dark Surface (F6)	
<u>          </u> Sandy Mucky Mineral (S1)	<u>          </u> Depleted Dark Surface (F7)	
<u>          </u> Sandy Gleyed Matrix (S4)	<u>          </u> Redox Depressions (F8)	

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

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

## Restrictive Layer (if present):

Type: \_\_\_\_\_

Depth (inches):

Hydric Soil Present? Yes No **X**

Remarks:

## HYDROLOGY

### Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

_____ Surface Water (A1)	_____ Water stained Leaves (B9) <b>(Except MLRA</b>	_____ Water stained Leaves (B9)
_____ High Water Table (A2)	_____ <b>1, 2, 4A, and 4B)</b>	_____ <b>(MLRA1, 2, 4A, and 4B)</b>
_____ Saturation (A3)	_____ Salt Crust (B11)	_____ Drainage Patterns (B10)
_____ Water Marks (B1)	_____ Aquatic Invertebrates (B13)	_____ Dry-Season Water Table (C2)
_____ Sediment Deposits (B2)	_____ Hydrogen Sulfide Odor (C1)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Drift Deposits (B3)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Geomorphic Position (D2)
_____ Algal Mat or Crust (B4)	_____ Presence of Reduced Iron (C4)	_____ Shallow Aquitard (D3)
_____ Iron Deposits (B5)	_____ Recent Iron Reduction in Plowed Soils (C6)	_____ Fac-Neutral Test (D5)
_____ Surface Soil Cracks (B6)	_____ Stunted or Stressed Plants (D1) <b>(LRR A)</b>	_____ Raised Ant Mounds (D6) <b>(LRR A)</b>
_____ Inundation Visible on Aerial Imagery (B7)	_____ Other (Explain in Remarks)	_____ Frost-Heave Hummocks (D7)
_____ Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present?    Yes                      No    **X**                      Depth (inches):

Water Table Present?      Yes                      No      **X**                      Depth (inches):                      **>16**

Saturation Present? Yes            No   **X**   Depth (inches):   **>16**    
(includes capillary fringe)

### Wetland Hydrology Present?

Yes No X

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

Remarks:

# Appendix C

## Site Photos







**Photo A:**

Looking southwest at  
Wetland A and Data Point 1.

**Photo B:**

Looking northwest at Data  
Point 2.



Project # 5481

10/2/14



Pacific Habitat Services, Inc.  
9450 SW Commerce Circle, Suite 180  
Wilsonville, OR 97070

Photo documentation Oregon City School District Property, Oregon City, Oregon  
Both photo points taken on September 10, 2014.





**Photo C:**

Looking northwest at the  
Wetland A boundary and Data  
Point 3.

**Photo D:**

Looking northwest at Data Point 4.



Project # 5481

10/214



Pacific Habitat Services, Inc.  
9450 SW Commerce Circle, Suite 180  
Wilsonville, OR 97070

Photo documentation Oregon City School District Property, Oregon City, Oregon  
Both photo points taken on September 10, 2014.





**Photo E:**

Looking north at Wetland A and  
Data Point 5.

**Photo F:**

Looking south at Data Point 6.



Project # 5481

10/2/14



Pacific Habitat Services, Inc.  
9450 SW Commerce Circle, Suite 180  
Wilsonville, OR 97070

Photo documentation Oregon City School District Property, Oregon City, Oregon  
Both photo points taken on September 10, 2014.





**Photo G:**

Looking west at Data Point 7.

**Photo H:**

Looking south at Data Point 8.



Project # 5481

10/2/14



Pacific Habitat Services, Inc.  
9450 SW Commerce Circle, Suite 180  
Wilsonville, OR 97070

Photo documentation Oregon City School District Property, Oregon City, Oregon  
Both photo points taken on September 10, 2014.

# Appendix D

## Wetland Definitions and Methodology and References



# **WATERS OF THE STATE AND WETLAND DEFINITION AND CRITERIA**

## **Regulatory Jurisdiction**

Wetlands and water resources in Oregon are regulated by the Oregon Department of State Lands (DSL) under the Removal-Fill Law (ORS 196.800-196.990) and by the U.S. Army Corps of Engineers (COE) through Section 404 of the Clean Water Act.

The primary source documents for wetland delineations within Oregon is the *Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (U.S. Army Corps of Engineers, 2010), which are required by both DSL and COE.

## **Waters of This State and Wetland Definition**

Waters of This State are defined as “all natural waterways, tidal and non-tidal bays, intermittent streams, constantly flowing streams, lakes, wetlands, that portion of the Pacific Ocean that is in the boundaries of this state, all other navigable and nonnavigable bodies of water in this state and those portions of the ocean shore ...” (DSL, 2009).

Wetlands are defined as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (DSL 2009).

## **Wetland Criteria**

Based on the above definition, three major factors characterize a wetland: hydrology, substrate, and biota.

### **Wetland Hydrology**

Wetland hydrology is related to duration of saturation, frequency of saturation, and critical depth of saturation. The 1987 manual defines wetland hydrology as inundation or saturation within a major portion of the root zone (usually above 12 inches), typically for at least 12.5% of the growing season. The wetland hydrology criterion can be met, however, if saturation within the major portion of the root zone is present for only 5% of the growing season, depending on other evidence.

The growing season is defined as the portion of the year when soil temperatures at 12.0 inches below the soil surface are higher than biological zero (41 degrees Fahrenheit, 5 degrees Celsius), but also allows approximation from frost free days, based on air temperature. The growing season for any given site or location is determined from US Natural Resources Conservation Service, (formerly Soil Conservation Service) data and information.

Wetland hydrologic indicators include the following: visual observation of inundation or saturation, watermarks, drift lines, sediment deposits, and/or oxidized rhizospheres with living roots. Oxidized rhizospheres are defined as yellowish-red zones around the roots and rhizomes of some plants that grow in frequently saturated soils. Other indicators of hydrology, including algal mats or crust, iron deposits, surface soil cracks, sparsely vegetated concave surface, salt crust, aquatic invertebrates, hydrogen sulfide odor, reduced iron, iron reduction in tilled soils, and stunted or stressed plants can also be used to determine the presence of wetland hydrology.

### **Wetland Substrate (Soils)**

Most wetlands are characterized by hydric soils. Hydric soils are those that are ponded, flooded, or saturated for long enough during the growing season to develop anaerobic conditions. Periodic saturation of soils causes alternation of reduced and oxidized conditions, which leads to the formation of redoximorphic features (gleying and mottling). Mineral hydric soils will be either gleyed or will have bright mottles and/or low matrix chroma. The redoximorphic feature known as gley is a result of greatly reduced soil conditions, which result in a characteristic grayish, bluish or greenish soil color. The term mottling is used to describe areas of contrasting color within a soil matrix. The soil matrix is the portion of the soil layer that has the predominant color. Soils that have brightly colored mottles and a low matrix chroma are indicative of a fluctuating water table.

Hydric soil indicators include: organic content of greater than 50% by volume, and/or presence of redoximorphic features and dark soil matrix, as determined by the use of a Munsell Soil Color Chart. This chart establishes the chroma, value and hue of soils based on comparison with color chips. Mineral hydric soil must meet one of the 16 definitions for hydric soil indicators, or be classified as a "problem soil" in the Interim Regional Supplement.

### **Wetland Biota (Vegetation)**

Wetland biota is defined as hydrophytic vegetation. A hydrophyte is a plant species that is capable of growing in substrates that are periodically deficient in oxygen as a result of saturated soil conditions. The U.S. Fish and Wildlife Service, in the *National List of Plant Species that Occur in Wetlands*, has established five basic groups of vegetation based on their frequency of occurrence in wetlands. These categories, referred to as the "wetland indicator status", are as follows: obligate wetland plants (OBL), facultative wetland (FACW), facultative (FAC), facultative upland (FACU), and obligate upland (UPL). Table 1 gives a definition of the plant indicator codes.

**Table 1. Description of Wetland Plant Indicator Status Codes**

<b>Indicator Code</b>	<b>Status</b>
<b>OBL</b>	Obligate wetland. Estimated to occur almost exclusively in wetlands (>99%)
<b>FACW</b>	Facultative wetland. Estimated to occur 67-99% of the time in wetlands.
<b>FAC</b>	Facultative. Occur equally in wetlands and non-wetlands (34-66%).
<b>FACU</b>	Facultative upland. Usually occur in non-wetlands (67-99%).
<b>UPL</b>	Obligate upland. Estimated to occur almost exclusively in non-wetlands (>99%). If a species is not assigned to one of the four groups described above it is assumed to be obligate upland.
<b>NI</b>	Has not yet received a wetland indicator status, but is probably not obligate upland.

Observations of hydrology, soils, and vegetation, were made using the "Routine On-site" delineation method as defined in the 1987 manual and the Interim Regional Supplement for areas that were not currently in agricultural production. One-foot diameter soil pits were excavated to 20 inches and soil profiles were examined for hydric soil and wetland hydrology field indicators. In addition, a visual absolute-cover estimate of the dominant species of the plant community was performed using soil pit locations as a center of reference. Dominant plant species are based on estimates of absolute cover for herbaceous, and shrub species within a 5 foot radius of the sample point, and basal area cover for tree and woody vine species within a 30 foot radius of the sample point. Plant species in each vegetative layer, which are estimated at less than 20% of the total cover, are not considered to be dominant. The wetland indicator status is then used to determine if there is an overall dominance (greater than 50%) of wetland or upland plant species. If less than 50% of the dominant species are hydrophytic, then the prevalence index may be used to determine if the subdominant species are hydrophytic. If the prevalence index is less than or equal to 3, hydrophytic vegetation criterion is met.

During data collection, the soil profiles were examined for hydric soil and wetland hydrology field indicators. Plant species and cover were recorded. Data was recorded on standard data sheets which contain the information specified in the 1987 Corps Manual and the Interim Regional Supplement.



**WETLAND DELINEATION / DETERMINATION REPORT COVER FORM**

This form must be included with any wetland delineation report submitted to the Department of State Lands for review and approval. A wetland delineation report submittal is not "complete" unless the fully completed and signed report cover form and the required fee are submitted. Attach this form to the front of an unbound report or include a hard copy of the completed form with a CD/DVD that includes a single PDF file of the report cover form and report (minimum 300 dpi resolution) and submit to: **Oregon Department of State Lands, 775 Summer Street NE, Suite 100, Salem, OR 97301-1279**. A single PDF attachment of the completed cover form and report may be e-mailed to **Wetland\_Delineation@dsl.state.or.us**. For submittal of PDF files larger than 10 MB, e-mail instructions on how to access the file from your ftp or other file sharing website. Fees can be paid by check or credit card. Make the check payable to the Oregon Department of State Lands. To pay the fee by credit card, call 503-986-5200.

<input checked="" type="checkbox"/> Applicant <input type="checkbox"/> Owner Name, Firm and Address: <b>BBL Architects</b> <b>Attn: Ronald R. Lee</b> <b>200 North State Street</b> <b>Lake Oswego, OR 97034</b>	Business phone # <b>503-635-4425</b> Mobile phone # (optional) E-mail: <b>ron@bblarchitects.com</b>
<input type="checkbox"/> Authorized Legal Agent, Name and Address:	Business phone # Mobile phone # E-mail:

I either own the property described below or I have legal authority to allow access to the property. I authorize the Department to access the property for the purpose of confirming the information in the report, after prior notification to the primary contact.  
Typed/Printed Name: \_\_\_\_\_ Signature: \_\_\_\_\_  
Date: \_\_\_\_\_ Special instructions regarding site access: \_\_\_\_\_

**Project and Site Information** (using decimal degree format for lat/long, enter centroid of site or start & end points of linear project)

Project Name: <b>OCHS Transportation Facility</b>	Latitude: <b>45.320357</b>	Longitude: <b>-122.568612</b>
Proposed Use: <b>Oregon City High School transportation maintenance facility.</b>	Tax Map <b>3 South, 2 East, Section 9D, tax lot 1400</b>	
Project Street Address (or other descriptive location): <b>High School Ave, northwest of intersection with Meyers Road</b>	Township <b>3 S</b> Range <b>2 E</b> Section <b>9D</b> QQ Tax Lot(s) <b>1400</b>	
City: <b>Oregon City</b> County: <b>Clackamas</b>	Waterway: <b>N/A</b> River Mile: <b>N/A</b> NWI Quad(s): <b>Oregon City</b>	

**Wetland Delineation Information**

Wetland Consultant Name, Firm and Address: <b>Pacific Habitat Services</b> <b>Attn: Tina Farrelly</b> <b>9450 SW Commerce Circle, Suite 180</b> <b>Wilsonville, OR 97070</b>	Phone # <b>503-570-0800</b> Mobile phone # E-mail: <b>tf@pacifichabitat.com</b>
The information and conclusions on this form and in the attached report are true and correct to the best of my knowledge. Consultant Signature: _____ Date: _____	
Primary Contact for report review and site access is <input checked="" type="checkbox"/> Consultant <input type="checkbox"/> Applicant/Owner <input type="checkbox"/> Authorized Agent	
Wetland/Waters Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Study Area size: <b>11 acres</b> Total Wetland Acreage: <b>1.03 acres</b>	

**Check Box Below if Applicable:****Fees:**

<input type="checkbox"/> R-F permit application submitted <input type="checkbox"/> Mitigation bank site <input type="checkbox"/> Wetland restoration/enhancement project (not mitigation) <input type="checkbox"/> Industrial Land Certification Program Site <input type="checkbox"/> Reissuance of a recently expired delineation Previous DSL # _____ Expiration date _____	<input checked="" type="checkbox"/> Fee payment submitted \$ <b>396</b> <input type="checkbox"/> Fee (\$100) for resubmittal of rejected report <input type="checkbox"/> No fee for request for reissuance of an expired report
<b>Other Information:</b>	
Has previous delineation/application been made on parcel?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N If known, previous DSL # _____
Does LWI, if any, show wetland or waters on parcel?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N

**For Office Use Only**

DSL Reviewer: _____	Fee Paid Date: ____ / ____ / ____	DSL WD # _____
Date Delineation Received: ____ / ____ / ____	DSL Project # _____	DSL Site # _____
Scanned: <input type="checkbox"/> Final Scan: <input type="checkbox"/>	DSL WN # _____	DSL App. # _____