#### 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 from 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.

check payable to the Oregon Department of State Lands. To pay the	e fee by credit card, call 503-986-5200.
Applicant Owner Name, Firm and Address:	Business phone # <b>503-351-4747</b>
Rosemont Development	Mobile phone #
10117 SE Sunnyside Road Clackamas, Oregon, 97015	E-mail: rosemontdevelopment@gmail.com
Glackallias, Gregori, 97013	
☐ Authorized Legal Agent, Name and Address:	Business phone # 360-696-4403
Environmental Technology Consultants	Mobile phone # <b>360-984-8767</b>
375 Portland Ave, Gladstone, OR 97027	E-mail: AnnakateM@etcEnvironmental.net
Laithan ayya tha yarananti daaanibad balayyan Lbaya land aythanit t	a allany access to the amount with a sime the Damonton and to access the
property for the purpose of confirming the information in the report,	o allow access to the property. I authorize the Department to access the after prior notification to the primary contact.
Typed/Printed Name: Annakate Martin	Signature: Qnnabate, Martin
Date: August 2020 Special instructions regarding site acc	ess: Contact owner or consultant.
Project and Site Information (using decimal degree for	ormat for lat/long of site or start & end points of linear project)
Project Name: 37090 SE Kelso Road	Latitude: <b>N 45.417907</b> Longitude: <b>W -122.2831</b>
Proposed Use: SUBDIVISION, SINGLE FAMILY HOMES	Tax Map # 24E11 Lot 24E11 02204
	Parcel Number 05034843
Project Street Address (or other descriptive location):	Township <b>T2S</b> Range <b>R4E</b> Section <b>11</b> QQ
No Situs Address	Tax Lot(s) 24E1102204
(Formally known as 37090 SE Kelso Road)	Waterway: <b>No name</b> River Mile:
City: Sandy, OR County: Clackamas	NWI Quad(s): Sandy, Oregon
	neation Information
Wetland Consultant Name, Firm and Address:	Phone # <b>360-696-4403</b>
John McConnaughey, PWS & Annakate Martin NRS	Mobile phone # <b>360-984-8767</b>
Environmental Technology Consultants	E-mail: AnnakateM@etcEnvironmental.net
375 Portland Ave, Gladstone, OR 97027	JohnM@etcEnvironmental.net
The information and conclusions on this form and in the atta	ched report are true and correct to the best of my knowledge.
Consultant Signature: Onnakate Martin	Date: May, 2017 updated April 2020
	onsultant
	size: 2.69 acres Total Wetland Acreage: 1.69 AC
Check Box Below if Applicable:	Fees: \$466 (2020)
R-F permit application	☐ Fee payment submitted \$466
☐ Mitigation bank site	Fee (\$100) for resubmittal of rejected report
	•
Wetland restoration/enhancement project (not mitigation)	<ul> <li>No fee for request for reissuance of an expired report</li> </ul>
☐ Industrial Land Certification Program Site	тероп
Reissuance of a recently expired delineation	
Previous DSL # Expiration date	
Other Information:	<u>Y</u> <u>N</u>
Has previous delineation/application been made on parcel?	☐ If known, previous WD2018-0656
Does LWI, if any, show wetland or waters on parcel?	
	ice Use Only
DSL Reviewer: Fee Paid Date:	_// DSL WD #
Date Delineation Received: / / DSL Pro	oject # DSL Site #
Scanned: □ Final Scan: □ DSL W	N# DSL App. #

## **WETLAND DELINEATION REPORT** Tax Lot 24E11 02204 Formally 37090 SE Kelso Road





Evaluated by: Annakate Martin, NRS John McConnaughey PWS# 2009 May, 2017 and August 2020

annakate Martin

Prepared for: Rosemont Development Rob Venema 10117 SE Sunnyside Road Clackamas, OR 97015



**Environmental Technology Consultants** A Division of Sisul Enterprises, Inc.

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(360) 696-4403 Fax: (503) 657-5779 WA Landscape Contractors License #: ENVIRTCO23RB

Web: www.etcEnvironmental.net Email: etc@etcEnvironmental.net

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## Cover Photo.

Photo of Wetland A shortly after blackberries were mowed, looking west at the first wetland investigation. ETC Photo 3/13/2017

#### INTRODUCTION

This report delineates the wetlands and waterways of lot 24E11 02204. There used to be a house on this lot with the address of 37090 SE Kelso Road, Sandy Oregon. The house and address no longer exist. Lot 2204 is the northern portion of a larger piece of property known as lot 2200 that was subdivided in the process of building the Sandy Woods subdivision.

Originally ETC prepared a delineation report covering the entire lot 2200 (37090 SE Kelso Road). The applicant then decided only to develop the southern portion of the property and requested that ETC remove the North portion of the property from the study area. Accordingly, ETC authored and submitted a report for areas South of the BPA powerline ROW which bisected lot 2200. That delineation was numbered WD2017-0410 and was concurred with by DSL for Joe Spaziani.

In the process of permitting the Sandy Woods subdivision, the City of Sandy required the applicant to widen Olson Road, and this necessitated fills to a wetland area known as Track "A" and Track "E". DSL also required the applicant to delineate the remainder of the property due to the usage of an access road coming in from Kelso Road. Accordingly, ETC authored and submitted a report numbered WD2018-0656 that included the remainder of lot 2200 and Tracks "A" and "E". In the course of reviewing WD2018-0656, DSL determined that there may be errors in the wetland boundary plots that defined what we are calling Wetland "A" of lot 2200, (not to be confused the wetland in Track "A" next to Olson Road). Because the project at that time did not impact Wetland "A", we elected to remove the area from the study boundary of WD2018-0656. The report was subsequently concurred with by DSL.

The applicant sold the property to Rosemont development and now is planning a subdivision development for the areas North of the BPA Powerline on lots 2204 and 2202. Lot 2203 is a conservation track for a stream and small wetland. Lots 2202 and 2203 were included in WD2018-0656.

The study area of WD2018-0656 included the upland portions of lot 2204, which included the former house and some farmed areas.

In conversations with DSL, ETC requested guidance on defining the study boundary for this report. We requested that it include the entire lot 2204 in order to make a clean report with a study boundary defined by lot lines. DSL disagreed and instructed ETC to include only those portions of lot 2204 that were not previously delineated by WD2018-0656. This is the reason the study boundary in this report bisects lot 2204 close to the Wetland "A" boundary.

Lot 2205 is a sliver of land between the old western boundary of the original lot 2200, and a fence separating lot 2200 and lot 2300. Rather than move the fence or argue with the owner of lot 2300 over this land, the applicant has deeded lot 2205 to the owner of lot 2300. For this reason, lot 2205 is not included in any of the delineation studies mentioned in this report.

The ditches of Kelso Road that are in the Kelso Road ROW are not included in this report. Water from these ditches is the primary source of water that creates wetland "A".

<u>Study Area</u>: This report includes only those portions of lot 2204 not previously delineated by WD2018-0656, basically an area containing a sloped wetland area we are calling Wetland "A". Some of the field work was done in 2017 and revisited in 2020 for this report.

The relevant previously submitted delineations and reports for the original lot 2200 and Tracks "A" and "E" are:

 WD2017-0410 - The south portions of the parent parcel Tax Lot 2200 (37090 SE Kelso Road), which has since been subdivided. The wetland study included the entire tax lot 2200, however in the process of developing the subdivision submittals the applicant decided to remove the North half of lot 2200 from the study boundary. • WD2018-0656- This report included northern portions of tax lot 2200 (except Wetland "A"). The reason for removing Wetland "A" from the study boundary is discussed above.

The timing of site visits and writing of this report was affected by shutdowns in response to the COVID-19 pandemic. The shutdowns delayed the production of this report.

This report is intended to assist the permittee, the City of Sandy, and the State of Oregon to evaluate the application and determine what environmental conditions or mitigations may be required to move this project forward.

### QUALIFICATIONS OF JOHN MCCONNAUGHEY, PWS

I earned a Bachelor of Science degree from the University of Oregon in 1978 and in 1984 I earned a Masters of Fisheries Science degree from the University of Alaska at Juneau, (since renamed as the University of Alaska, Southeast). The Juneau curriculum specializes in the study of Pacific salmon. I held positions with agencies tasked with salmon research and management beginning with summer jobs in 1979 in Rogue River, the Oregon Dept of Fish and Wildlife, and then with the Alaska Department of Fish and Game in Ketchikan Alaska, in 1980. I worked on salmon projects with ADF&G in Anchorage and Juneau for 5 years before moving to American Samoa to serve as a fisheries project's leader for the Department of Marine and Wildlife Resources. Upon returning stateside, I worked for the Yakama/Klickitat Fisheries Project out of Yakima Washington for 5 years leading four research projects studying aspects of salmon supplementation projects in the Yakima River.

I have been employed with Environmental Technology Consultants since 2006. In 2010 I earned certification as a Professional Wetland Scientists, (PWS) from the Society of Wetlands Scientists, (SWS).

No part of my compensation is dependent on the outcome of my investigations or conclusions I may draw from the observed data.

#### QUALIFICATIONS OF ANNAKATE MARTIN

I earned a Bachelor of Science degree in Natural Resources from Washington State University in 2002. In 2002 I worked for the University of Idaho on MAP tracking steelhead and salmon on the Snake River out of Clarkston, Washington.2002-2003 I worked for Idaho Fish and Game as a field technician for identifying fish in remote streams in Idaho. In 2004 I worked for Environmental Technology Consultants conducting wetland delineations and Phase I ESA reports. From 2007-2014 I worked for 3 Kings Environmental conducting Phase I ESA reports, asbestos and lead surveys. In 2011 I started my own company primarily providing erosion control services (CESCL Certified) and Phase I ESA reports. I worked for Clark Public Utilities as a Restoration Specialist Supervisor and decided to return to ETC.

I have been re-employed with Environmental Technology Consultants in 2015 for wetland delineation consulting.

#### A) Landscape Setting and Land Use:

The subject property is a 11.88 Acre parcel in a rural residential area. that is on a hillslope at approximately 787' in elevation. It is in the Clackamas River watershed. The terrain is gently rolling in the general north to south direction on the majority of the property. The property is surrounded primarily by agricultural land, and partially by roads, rural single-family residences, and single-family residences in subdivisions. The property was a sloped area that had a 100% cover of Himalayan Blackberry.

The area is zoned SFR.

#### B) Site Alterations:

The subject site had a single-family residence, that has been demolished, and according to the Assessors information was built in 1915. Portions of the property have been used for agriculture uses such as a plant nursery, and possibly a raspberry farm. In 2017 the applicant used a brush hog to mow the blackberries on most of the site in order that surveyors could gain access. Much of the property that was historically farmed now has a dense cover of blackberries. The property was divided up into different tax lots in 2019, the portion containing Wetland "A" is now tax lot 2204 and 11.88 acres in size. The site was revisited April 15,2020 to re-delineate Wetland "A".

## C) Precipitation Data and Analysis:

This wet season was above average in January 2020, but below average in February and March. The table below shows the precipitation from the WETS table:

Table 1. Wetland	Evaluation	n Technia	ue (WETS	S) compai	rison of 20	18 and 2019 pred	ipitation to WE	TS avera	ge	
precipitation at the						·		,	J	
WETS Station:								Obse	erved	
PORTLAND INTL					Avg			Compa	ared to	
AIRPORT, OR		Observe	d Precip		Precip		30% chance	WETS A	Average	
					1971-	30% chance	precip more			
Month	2017	2018	2019	2020	2000	precip less than	than	2018	2019	2020
Jan		5.36	2.79	9.83	5.07	2.98	6.15	Avg	Below	Above
Feb		1.86	4.10	2.45	4.18	2.84	4.98	Below	Avg	Below
Mar		2.50	1.54	2.75	3.71	2.85	4.31	Below	Below	Below
Apr		3.34	2.98		2.64	1.93	3.10	Above	Avg	
May		0.17	1.51		2.38	1.44	2.88	Below	Avg	
Jun		1.03	0.45		1.59	0.94	1.93	Avg	Below	
Jul		0.02	0.80		0.72	0.33	0.86	Below	Avg	
Aug		0.06	1.23		0.93	0.35	1.09	Below	Above	
Sep		1.59	3.85		1.65	0.72	1.93	Avg	Above	
Oct		3.43	1.51		2.88	1.57	3.52	Avg	Below	
Nov		2.86	1.52		5.61	3.72	6.73	Below	Below	
Dec		5.08	4.39		5.71	3.89	6.82	Avg	Avg	
TOTAL		27.30	26.67		37.07	32.85	40.58	Below	Below	

<u>Deductions of Recent Weather Data</u>: The precipitation in 2017 was above average for the site when the delineation was first conducted, there were saturated soils and shallow water tables at or above levels where hydric soils were observed. In Spring 2020 we made two visits, January 10 when conditions were wet, and April 15 when conditions were fairly dry. On the April 15 visit the precipitation was below average and the area was dry, no water in the stream and no water in the soil pits. On all other visits Kelso Road ditches were flooded and water was seen flowing through Wetland "A".

### D) Methods: (site-specific methods for field investigation)

Wetland determinations and delineations discussed in this report were conducted in accordance with the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual ("the manual"), including regional supplements and applicable guidance, and supporting technical or guidance documents issued by the Department of State Lands.

In 2017 our investigations followed the mowing of the blackberries, and we were able to observe and traverse the site with ease. In 2020 the blackberries were again removed and the vegetation more or less the same as 2017 - recently mowed blackberries in the Wetland "A" area.

We dug soil test pits to a general depth of 16"-18" bgs. The soils in the area of Wetland "A" are often very reddish in color, particularly in the Northern end. However, we were able to discern hydric features in the soil.

We set wetland flags around the Wetland "A".

## E) Description of All Wetlands and Other Non-Wetland Waters:

<u>Wetland "A", 75,839 SQFT, 1.741 Acres</u>. Wetland "A" starts at the Kelso Road Ditch and extends downslope and widens in a South West direction until crossing the West property boundary. As it is fed mainly by ditch flows, and is high up in its drainage, it probably dries out early in the summer.

The middle of the wetland has some shallow ponding created by the shallow ditch that runs through the center of the wetland becoming clogged with blackberry rubble and tire ruts from the mowing of the blackberries. In these puddles we observed bright green bubbly algae, the vigorous growth of which suggested fertilizer enrichment, probably fertilizer runoff from the nursery on the North side of SE Kelso Road.

West of the subject property, the wetland broadens out considerably, and flows onto lot 2300, where it is utilized as a horse pasture. About 1,000 feet to the south in Lot 2300, it connects with the stream that flows through lot 2203. The dominant vegetation in the upper portion is blackberries, and this transitions to pasture grasses in the lower section.

The Cowardin classification is Palustrine, Scrub Shrub, broad-leaved deciduous, Saturated, to Palustrine, Emergent, Persistent, Saturated, PSS1B to PEM1B. The HGM classification is sloped wetland.

#### F) Deviation from LWI or NWI:

The NWI map does not show any wetlands or waterways on lot 2204.

#### G) Mapping Method:

A property boundary survey and topographic survey was conducted by Toby Bolden, PLS 60377LS of Centerline Concepts. Centerline Concepts also located many of our wetland data plots and wetland boundary flags.

We used the TopCon GRS-1 GPS with a Topcon BR-1 beacon receiver for DGPS corrections for mapping some flags and plots either missed by the surveyors or added after their survey. These and other information shown in the figures were mapped as described in Section G.

#### H) Additional Information: (i.e., if needed to establish state jurisdiction)

None. All wetlands and waters described in this report are presumed to be jurisdictional.

#### I) Results and Conclusions:

**<u>Hydrology.</u>** The Hydrology on this site has been altered substantially from the historical conditions a long history of land use on this and neighboring properties, and by changes caused by roadways and

their associated ditches and culverts. Wetland "A" is thought to be created, or at least greatly enlarged by stormwater from higher in the drainage collected and concentrated into roadside ditches that discharge onto the Northern end of the property from the Kelso Road ditch.

<u>Plants.</u> Wetland "A" had Blackberries with some herbaceous plants, mostly grasses, in the wettest areas. There is also some mixed aged cottonwood and alder trees in the North part of the wetland.

<u>Soils.</u> Soils in the many areas are red in color, about 5YR3/3, which tended to mask hydric soil features in the margin of the wetland. There was a presence of what appeared to be manganese. Distinct differences were apparent between the soils south of the stream which tended to be 10YR 3/2 a darker less red soil and in the disturbed pasture grasses area.

## Disclaimer: OAR141-090-0035(12)(j):

"This report documents the investigation, best professional judgment and conclusions of the investigator. It is correct and complete to the best of my 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."

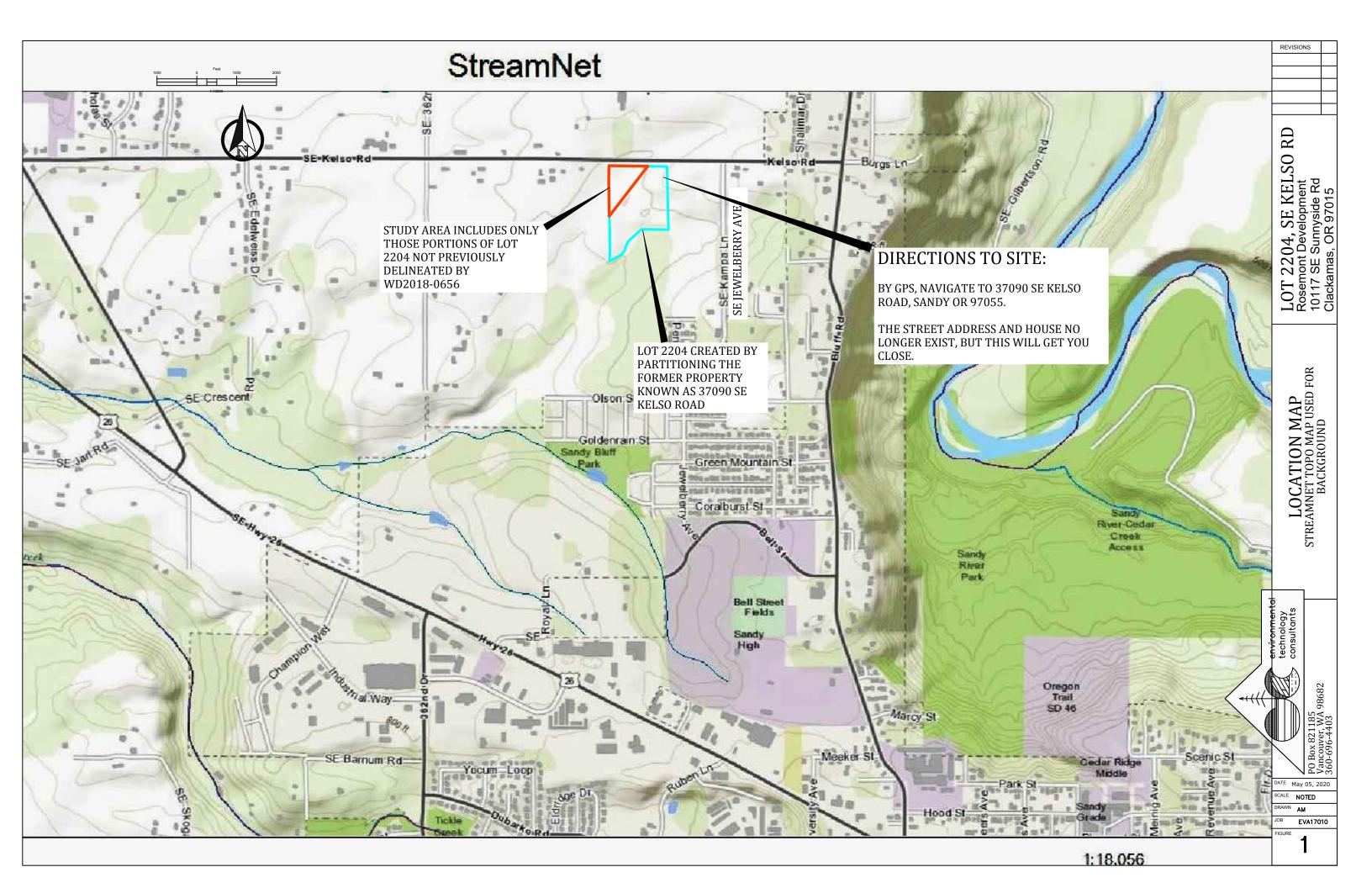
# **APPENDIX A - Maps:**

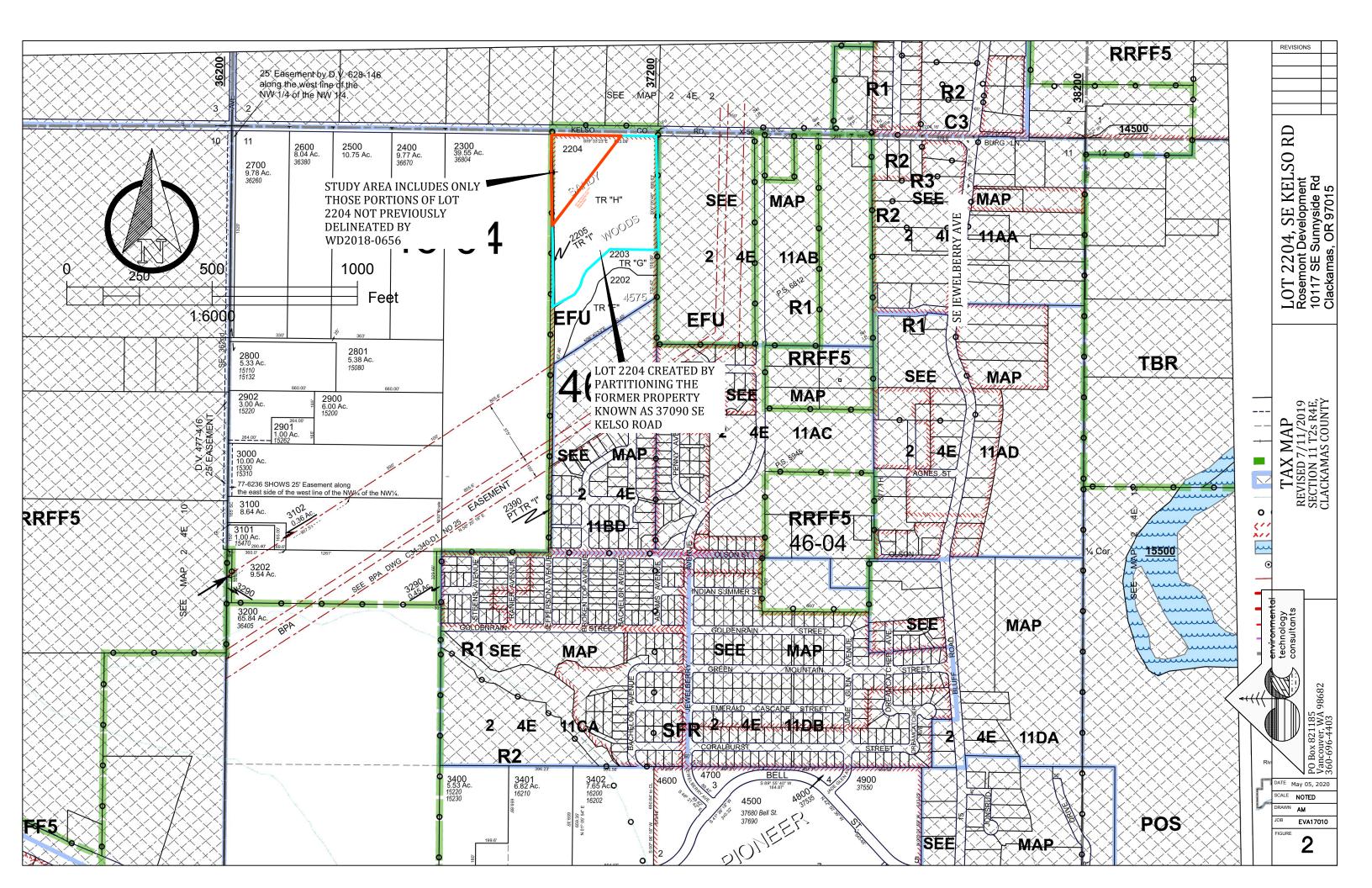
Location Map (Streamnet) Tax Map

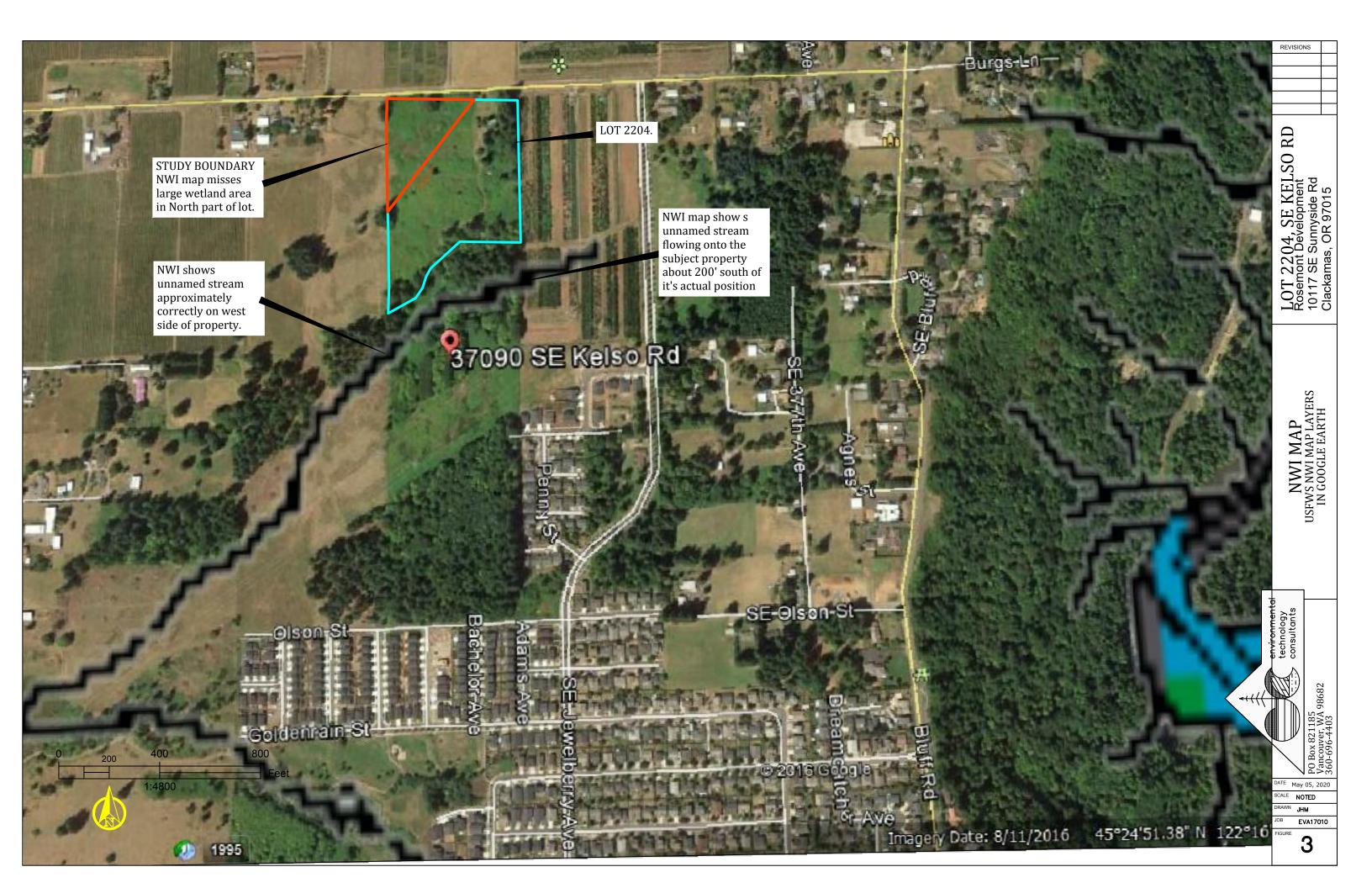
Figure 1: Figure 2: Figure 3: Figure 4: Figure 5:

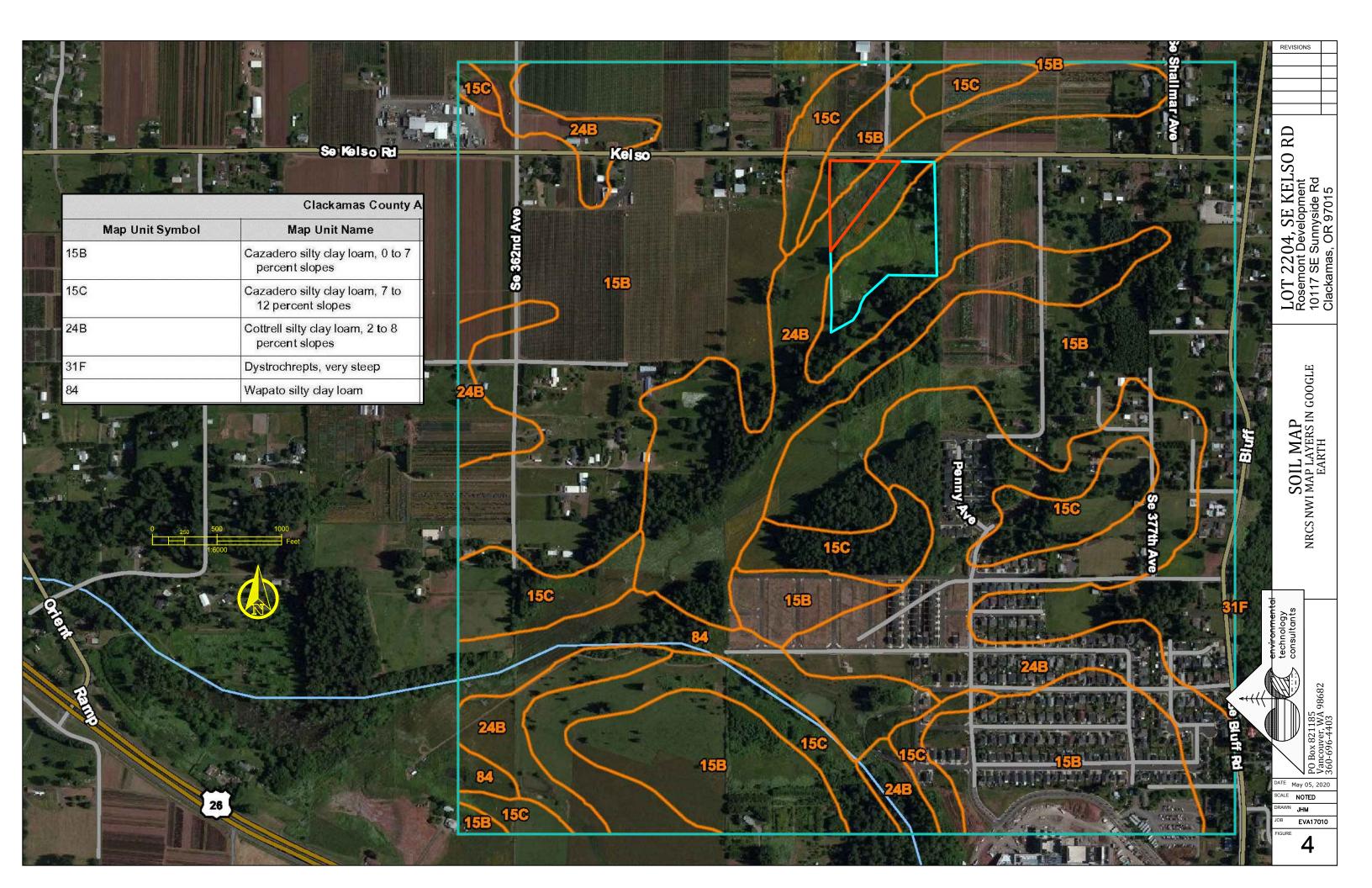
NWI Map Soil Map Aerial Photo (Google Earth 2017) Wetland "A" Wetland "A" enlarged

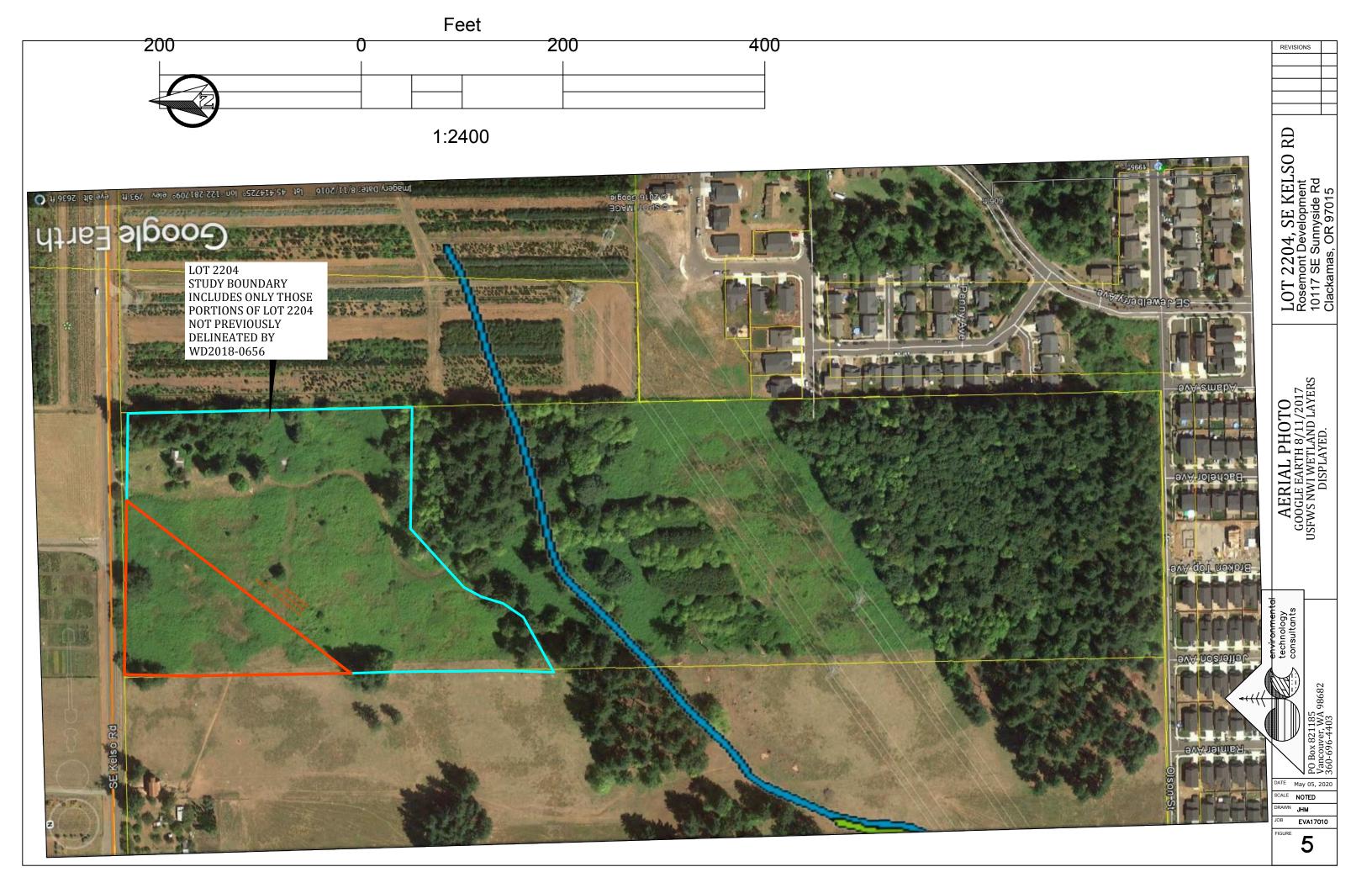
Figure 6A: Figure 6B:

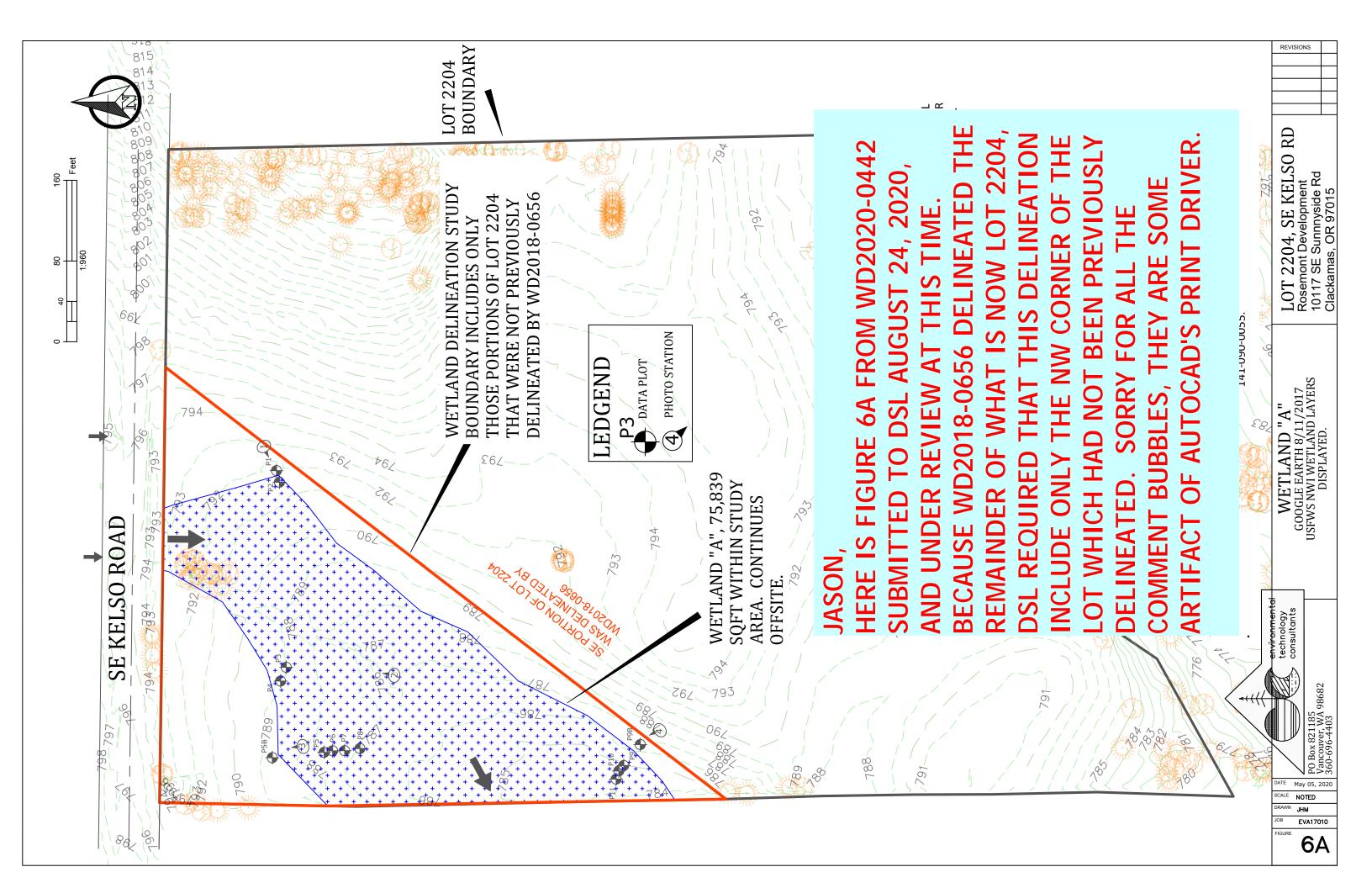


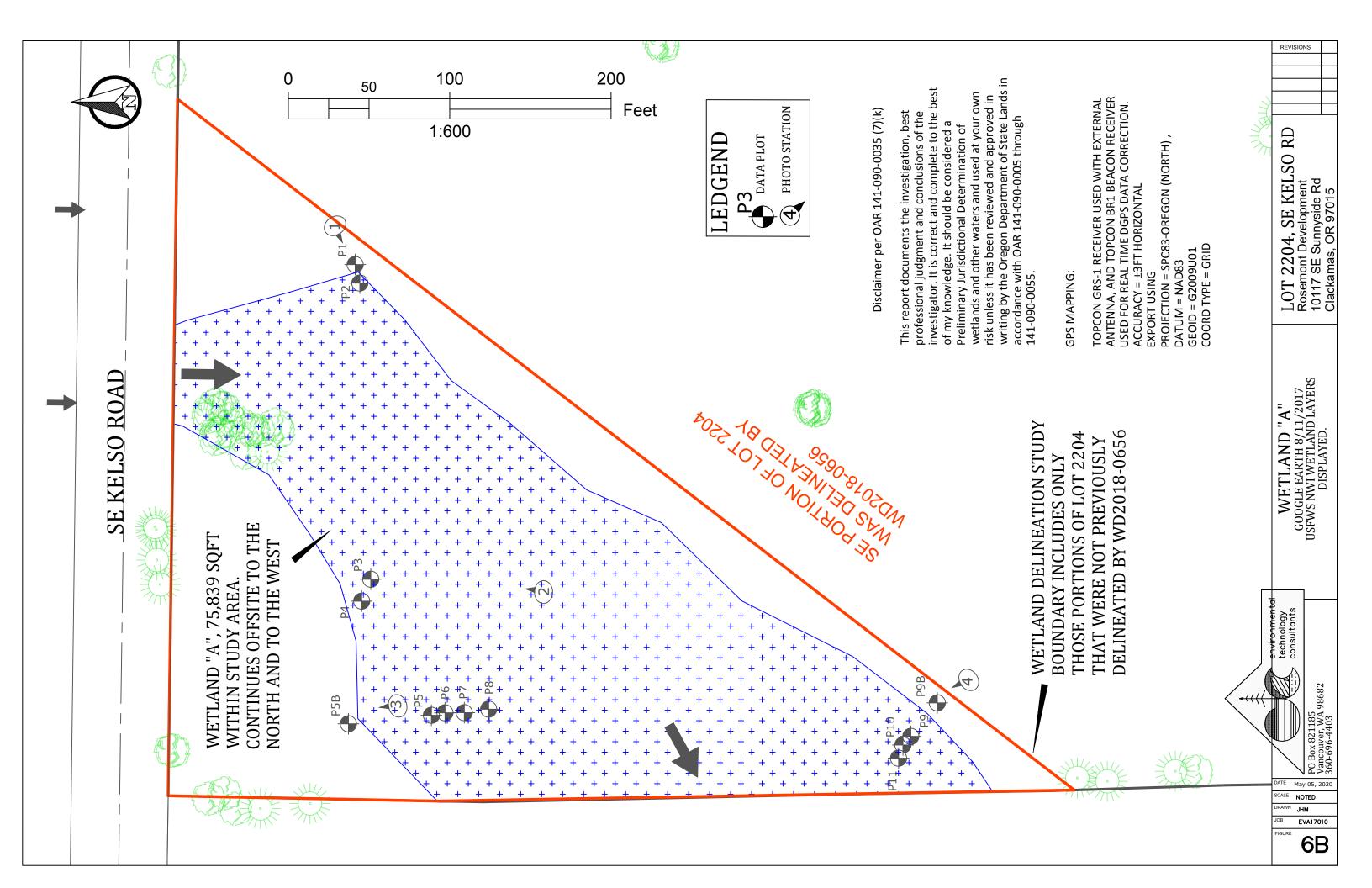












# **APPENDIX B - Data Forms**

## WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys & Coast

Project/Site: 37090 Kelso RD	Cit	ty/County: Sandy/Cla	Clackamas Sampling Date: 3/30/2017			
Applicant/Owner: <u>Joe Spaziani</u>			State: OR	_ Sampling Point: P1		
nvestigator(s): John McConnaughey, PWS# 2009		Section, Tov	wnship, Range: <u>T2S R4I</u>	E S11		
andform (hillslope, terrace, etc.): Valley Floor	L	ocal relief (concave,	convex, none): Flat	Slope (%): <u>1%</u>		
Subregion (LRR): <u>LRR-A</u>						
Soil Map Unit Name: <u>Cazado silt loam, Cottrell silty clay lo</u>						
Are climatic / hydrologic conditions on the site typical for th						
Are Vegetation YES, Soil, or Hydrology YES signifi	-		I Circumstances" preser			
Are Vegetation YES, Soil, or Hydrology nature			explain any answers in			
SUMMARY OF FINDINGS – Attach site map						
			,			
Hydrophytic Vegetation Present? Yes ⊠ No [	_	Is the Sampled	d Area			
Hydric Soil Present? Yes ☐ No ☐ Wetland Hydrology Present? Yes ☒ No ☐	<del></del>	within a Wetla	nd? Yes □	No ⊠		
Remarks: Above average rainfall in March and April. Till along Kelso Road.		nowed down blackber	ry field with hydrology c	oming in from drainage ditch		
along reasons						
/EGETATION – Use scientific names of plan						
Tree Stratum (Plot size: 30' East)		Dominant Indicator Species? Status	Dominance Test wo			
1			Number of Dominant That Are OBL, FACW			
2. NO TREES						
3			Total Number of Dom Species Across All St			
4			,			
Sapling/Shrub Stratum (Plot size: 30' East)		= Total Cover	Percent of Dominant That Are OBL, FACW			
1.			Prevalence Index we	orksheet:		
2			Total % Cover of	: Multiply by:		
3			OBL species 0	x 1 = <u>0</u>		
4	_		FACW species 0	x 2 = <u>0</u>		
5			FAC species 0	x 3 = <u>0</u>		
		= Total Cover	FACU species 0	x 4 = <u>0</u>		
Herb Stratum (Plot size:)			UPL species 0	x 5 = <u>0</u>		
1. Rubus Armeniacus		Y FAC	Column Totals: 0	(A) <u>0</u> (B)		
2			Prevalence Inde	$p_{X} = P/\Lambda = 0$		
3						
4			Hydrophytic Vegeta			
5			☐ Dominance Test			
I _			☐ Prevalence Index	aptations¹ (Provide supporting		
6						
7						
			data in Rema	rks or on a separate sheet)		
7 8			data in Rema			
7	100	= Total Cover	data in Rema	rks or on a separate sheet)		
7	100	= Total Cover	data in Rema  Problematic Hydr  Indicators of hydric s	rks or on a separate sheet) ophytic Vegetation¹ (Explain)		
7	100	= Total Cover	data in Rema  Problematic Hydr  Indicators of hydric s	rks or on a separate sheet) ophytic Vegetation¹ (Explain) soil and wetland hydrology must		
7	100	= Total Cover	data in Rema  Problematic Hydre  Indicators of hydric sets present, unless distribution  Hydrophytic Vegetation	rks or on a separate sheet) ophytic Vegetation¹ (Explain) soil and wetland hydrology must		

(inches) Cold	Matrix			x Feature				
	or (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
<u>0-5</u> <u>7.5Y</u>	/R3/2	100		_			Silt loam	Lot's of roots
<u>5-10</u> <u>7.5Y</u>	/R4/4	90	7.5YR4/3	10	<u>C</u>	M	Silty clay loan	<u>n</u>
<u>10-18</u> 7.5Y	/R4/4	<u>75</u>	7.5YR4/3	<u>25</u>	<u>C</u>	<u>M</u>	Silty clay loan	n
Type: C=Concer Hydric Soil Indica Histosol (A1) Histic Epipedo Black Histic (A Hydrogen Sulf Stratified Laye 1 cm Muck (A9 Depleted Belo Thick Dark Su Sandy Mucky Sandy Gleyed	ntration, D=Dep ators: (Applicators: (Applicators: (Applicators) (A2) A3) fide (A4) ers (A5) (LRR C6) (LRR D) ow Dark Surface urface (A12) Mineral (S1)	letion, RM: able to all	Reduced Matrix, CS  LRRs, unless othe  Sandy Redox (S  Stripped Matrix  Loamy Mucky M  Loamy Gleyed M  Depleted Matrix  Redox Dark Su  Depleted Dark S  Redox Depress	S=Covererwise not (S6) (S6) Mineral (F Matrix (F2) (F3) rface (F6) Surface (F6)	d or Coate		Indicato  Red F  Other	cation: PL=Pore Lining, M=Matrix.  ors for Problematic Hydric Soils³:  a Muck (A9) (LRR C)  a Muck (A10) (LRR B)  uced Vertic (F18)  Parent Material (TF2)  or (Explain in Remarks)  ors of hydrophytic vegetation and and hydrology must be present, s disturbed or problematic.
Restrictive Layer	r (if present):							Present? Yes □ No ⊠
Remarks:								
YDROLOGY								
YDROLOGY Wetland Hydrolo	0,							
/DROLOGY Wetland Hydrolo	0,	ne require	d; check all that appl	ly)			Secor	ndary Indicators (2 or more required)
YDROLOGY Wetland Hydrolo	s (minimum of o	ne require	d; check all that appl ☐ Salt Crust				w	ater Marks (B1) (Riverine)
YDROLOGY Wetland Hydrolo Primary Indicators □ Surface Water □ High Water Ta	s (minimum of o r (A1) able (A2)	ne required	☐ Salt Crust	(B11) st (B12)			□ W	rater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine)
YDROLOGY  Wetland Hydrolo  Primary Indicators  □ Surface Water  ⊠ High Water Ta  ⊠ Saturation (A3	r (A1) able (A2)	•	☐ Salt Crust☐ Biotic Crus☐ Aquatic Inv	(B11) st (B12) vertebrate			☐ W ☐ Se	dater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine)
YDROLOGY  Wetland Hydrolo  Primary Indicators  □ Surface Water  ⊠ High Water Ta  ⊠ Saturation (A3	s (minimum of o r (A1) able (A2) B) (B1) ( <b>Non river</b>	ine)	☐ Salt Crust ☐ Biotic Crus ☐ Aquatic Inv	(B11) st (B12) vertebrate Sulfide O	dor (C1)		W Se	dater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10)
VDROLOGY  Wetland Hydrolo  Primary Indicators  □ Surface Water  ⊠ High Water Ta  ⊠ Saturation (A3  □ Water Marks ( □ Sediment Dep	s (minimum of o r (A1) able (A2) B) (B1) (Non river posits (B2) (Non	ine) n riverine)	☐ Salt Crust ☐ Biotic Crus ☐ Aquatic Inv ☐ Hydrogen ☐ Oxidized R	(B11) st (B12) vertebrate Sulfide O Rhizosphe	dor (C1) res along	_	W   Se   Dr   Dr   Dts (C3)   Dr	rater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2)
VDROLOGY  Wetland Hydrolo  Primary Indicators  □ Surface Water  ⊠ High Water Ta  ⊠ Saturation (A3  □ Water Marks (  □ Sediment Dep  □ Drift Deposits	s (minimum of o r (A1) able (A2) B) (B1) (Non river posits (B2) (Non (B3) (Non river	ine) n riverine)	☐ Salt Crust ☐ Biotic Crus ☐ Aquatic Inv ☐ Hydrogen ☐ Oxidized F ☐ Presence o	(B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduce	dor (C1) res along d Iron (C4	4)	W   Se   Dr   Dr   Dr   Cr	rater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8)
Metland Hydrolo Primary Indicators  Surface Water  High Water Ta  Saturation (A3  Water Marks (  Sediment Dep  Drift Deposits  Surface Soil C	s (minimum of o r (A1) able (A2) 3) (B1) (Non river posits (B2) (Non (B3) (Non river Cracks (B6)	ine) nriverine) rine)	☐ Salt Crust ☐ Biotic Crust ☐ Aquatic Inv ☐ Hydrogen ☐ Oxidized R ☐ Presence o	(B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduce n Reducti	dor (C1) res along ed Iron (C4 on in Tille	4)	W   Se   Dr   Dr   Dr   Cr   Cr   Se   Se   Se   Se   Se   Se   Se   S	rater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9)
Metland Hydrolo Primary Indicators  Surface Water High Water Ta Saturation (A3 Water Marks ( Sediment Dep Drift Deposits Surface Soil C Inundation Visi	s (minimum of o r (A1) able (A2) B) (B1) (Non river posits (B2) (Non (B3) (Non river Cracks (B6) ible on Aerial Im	ine) nriverine) rine)	☐ Salt Crust ☐ Biotic Crus ☐ Aquatic Inv ☐ Hydrogen ☐ Oxidized R ☐ Presence o ☐ Recent Iro ☐ Thin Muck	(B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduce n Reducti	dor (C1) res along d Iron (C4 on in Tille C7)	4)	W   Se   Dr   Dr   Dr   Cr   Se   Se   Se   Se   Sr   Sr   Sr   S	rater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) nallow Aquitard (D3)
Metland Hydrolo Primary Indicators  Surface Water High Water Ta Saturation (A3 Water Marks ( Sediment Dep Drift Deposits Surface Soil C	s (minimum of o r (A1) able (A2) B) (B1) (Non river posits (B2) (Non (B3) (Non river Cracks (B6) ible on Aerial Im	ine) nriverine) rine)	☐ Salt Crust ☐ Biotic Crust ☐ Aquatic Inv ☐ Hydrogen ☐ Oxidized R ☐ Presence o	(B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduce n Reducti	dor (C1) res along d Iron (C4 on in Tille C7)	4)	W   Se   Dr   Dr   Dr   Cr   Se   Se   Se   Se   Sr   Sr   Sr   S	rater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9)
VDROLOGY  Wetland Hydrolo Primary Indicators  □ Surface Water  ⊠ High Water Ta  □ Saturation (A3  □ Water Marks (  □ Sediment Dep  □ Drift Deposits  □ Surface Soil C  □ Inundation Visi  □ Water-Stained	s (minimum of o r (A1) able (A2) B) (B1) (Non river posits (B2) (Non (B3) (Non river Cracks (B6) ible on Aerial Im d Leaves (B9)	ine) nriverine) rine)	☐ Salt Crust ☐ Biotic Crus ☐ Aquatic Inv ☐ Hydrogen ☐ Oxidized R ☐ Presence o ☐ Recent Iro ☐ Thin Muck	(B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduce n Reducti	dor (C1) res along d Iron (C4 on in Tille C7)	4)	W   Se   Dr   Dr   Dr   Cr   Se   Se   Se   Se   Sr   Sr   Sr   S	rater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C9) reallow Aquitard (D3)
Metland Hydrolo Primary Indicators  Surface Water  High Water Ta  Saturation (A3  Water Marks ( Sediment Dep Drift Deposits Surface Soil C Inundation Visi Water-Stained	s (minimum of o r (A1) able (A2) B) (B1) (Non river posits (B2) (Non (B3) (Non river Cracks (B6) ible on Aerial In d Leaves (B9)	ine) n riverine) rine) nagery (B7	☐ Salt Crust ☐ Biotic Crus ☐ Aquatic Inv ☐ Hydrogen ☐ Oxidized R ☐ Presence o ☐ Recent Iro ☐ Thin Muck	(B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduce n Reducti Surface (	dor (C1) res along d Iron (C4 on in Tille C7) marks)	4)	W   Se   Dr   Dr   Dr   Cr   Se   Se   Se   Se   Sr   Sr   Sr   S	rater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C9) reallow Aquitard (D3)
Metland Hydrolo Primary Indicators  Surface Water  High Water Ta  Saturation (A3  Water Marks ( Sediment Dep Drift Deposits Surface Soil C Inundation Visi Water-Stained  Field Observation Surface Water Preservation	s (minimum of or (A1) able (A2) B) (B1) (Non river) cosits (B2) (Non (B3) (Non river) Cracks (B6) ible on Aerial Imd Leaves (B9) ins: esent? Y ent? Y	ine) n riverine) rine) nagery (B7 es □ No	Salt Crust  Biotic Crust  Aquatic Inv  Hydrogen  Oxidized F  Presence o  Recent Iro  Thin Muck  Other (Exp	(B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduce n Reducti Surface ( blain in Re	dor (C1) res along d Iron (C4 on in Tille C7) marks)	4) d Soils (C6	W   Se   Dr   Dr   Dr   Cr   Se   Se   Se   F /	rater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C9) rallow Aquitard (D3) AC-Neutral Test (D5)
Wetland Hydrolo Primary Indicators Surface Water High Water Ta Saturation (A3 Water Marks ( Sediment Dep Drift Deposits Surface Soil C Inundation Visi Water-Stained Field Observation Surface Water Presentation Presentation Presentation (Includes capillary)	s (minimum of o o r (A1) able (A2) B) (B1) (Non river) cosits (B2) (Non river) cracks (B6) ible on Aerial Imd Leaves (B9) ins: esent? ent? rit? y fringe)	ine) n riverine) rine) nagery (B7 es  No	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduce n Reducti Surface ( blain in Re s):	dor (C1) res along d Iron (C4 on in Tille C7) marks)	4) d Soils (C6	W   Se   Dr     Dts (C3)   Dr     Cr   Se     FA	rater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C9) rallow Aquitard (D3) AC-Neutral Test (D5)
Primary Indicators  Surface Water  High Water Ta  Saturation (A3  Water Marks ( Sediment Dep  Drift Deposits  Surface Soil C  Inundation Visi  Water-Stained  Field Observation  Surface Water Presentation Presentation Presentation (Includes capillary)  Describe Recorde	s (minimum of o o r (A1) able (A2) B) (B1) (Non river) cosits (B2) (Non river) cracks (B6) ible on Aerial Imd Leaves (B9) ins: esent? ent? rit? y fringe)	ine) n riverine) rine) nagery (B7 es  No	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduce n Reducti Surface ( blain in Re s):	dor (C1) res along d Iron (C4 on in Tille C7) marks)	4) d Soils (C6	W   Se   Dr     Dts (C3)   Dr     Cr   Se     FA	rater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C9) rallow Aquitard (D3) AC-Neutral Test (D5)
Wetland Hydrolo Primary Indicators Surface Water High Water Ta Saturation (A3 Water Marks ( Sediment Dep Drift Deposits Surface Soil C Inundation Visi Water-Stained Field Observation Surface Water Presentation Presentation Presentation (Includes capillary)	s (minimum of o o r (A1) able (A2) B) (B1) (Non river) cosits (B2) (Non river) cracks (B6) ible on Aerial Imd Leaves (B9) ins: esent? ent? rit? y fringe)	ine) n riverine) rine) nagery (B7 es  No	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro Thin Muck Other (Exp	(B11) st (B12) vertebrate Sulfide O Rhizosphe of Reduce n Reducti Surface ( blain in Re s):	dor (C1) res along d Iron (C4 on in Tille C7) marks)	4) d Soils (C6	W   Se   Dr     Dts (C3)   Dr     Cr   Se     FA	rater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C9) rallow Aquitard (D3) AC-Neutral Test (D5)

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

## WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys & Coast

Project/Site: <u>37090 Kelso RD</u>	c	ity/County: Sandy/Cla	ckamas	Sampling Date:3/30/2017
pplicant/Owner: <u>Joe Spaziani</u>			State: OR	Sampling Point: P2
nvestigator(s): John McConnaughey, PWS# 2009		Section, Tov	wnship, Range: <u>T2S R4</u>	E S11
andform (hillslope, terrace, etc.): Valley Floor	l	_ocal relief (concave,	convex, none): Flat	Slope (%): <u>6%</u>
Subregion (LRR): <u>LRR-A</u>	Lat: 45.418	300	Long: <u>-122.28202</u>	Datum:
Soil Map Unit Name: <u>Cazado silt loam, Cottrell silty cla</u>	ay loam		NWI classific	cation: No
are climatic / hydrologic conditions on the site typical f	for this time of year	? Yes ☐ No ☒ (If	no, explain in Remarks	s.)
are Vegetation <u>YES</u> , Soil, or Hydrology <u>YES</u> s	ignificantly disturbe	d? Are "Norma	I Circumstances" prese	nt? Yes □ No ⊠
re Vegetation <u>YES</u> , Soil, or Hydrology	-		explain any answers ir	n Remarks.)
SUMMARY OF FINDINGS – Attach site r				
_			, , , , , , , , , , , , , , , , , , , ,	
Hydrophytic Vegetation Present? Yes ⊠ Hydric Soil Present? Yes ⊠		Is the Sample	d Area	
Wetland Hydrology Present? Yes ⊠		within a Wetla	nd? Yes ⊠	No 🗆
Remarks: Above average rainfall in March and Apr		nowed down blackber	rry field, hydrology char	nged due to drainage ditch along
Kelso Road.				
/EGETATION – Use scientific names of	plants.			
T. O. J. (D. J. 1 201)	Absolute	Dominant Indicator	Dominance Test wo	orksheet:
Tree Stratum (Plot size: 30')	<u></u>	Species? Status	Number of Dominant	•
1			That Are OBL, FACV	V, or FAC: <u>1</u> (A)
2. <u>NO TREES</u> 3			Total Number of Dor	
4			Species Across All S	Strata: <u>1</u> (B)
7.		= Total Cover	Percent of Dominant	•
Sapling/Shrub Stratum (Plot size: 30')			That Are OBL, FACV	V, or FAC: <u>100%</u> (A/B)
1			Prevalence Index w	
2			Total % Cover o	f: Multiply by:
3			· ·	x 1 = <u>0</u>
4				x 2 = <u>0</u>
5				x 3 = 0
Herb Stratum (Plot size: 30')		= Total Cover	*	x 4 = 0
1. Rubus Armeniacus	100	Y FAC		x = 0
2			Column Totals: 0	(A) <u>0</u> (B)
3			Prevalence Ind	lex = B/A = 0
4.			Hydrophytic Vegeta	ation Indicators:
5			□ Dominance Test	is >50%
6.			☐ Prevalence Index	x is ≤3.0¹
7.			☐ Morphological Ad	daptations <sup>1</sup> (Provide supporting
				arks or on a separate sheet)
8			I ☐ Problematic Hyd	rophytic Vegetation¹ (Explain)
		= Total Cover		
Woody Vine Stratum (Plot size:)	100		The disease of building	
Woody Vine Stratum (Plot size:) 1	100			soil and wetland hydrology must isturbed or problematic.
Woody Vine Stratum (Plot size:)	100		be present, unless d	
Woody Vine Stratum (Plot size:) 1	100			
Woody Vine Stratum (Plot size:)  1 2	100	= Total Cover	be present, unless d  Hydrophytic  Vegetation	

Depth

Matrix

Sampling Point: P2

0-4					Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> <u>Remarks</u>
	7.5YR3/2	100					Silt loam
<u>4-11</u>	7.5YR3/2	95	5YR4/6	4	<u>C</u>	<u>M</u>	Silty clay loam
			<u>2.5n</u>	1	C	M	Silty clay loam
11-18	5YR2.5/1	95	5YR4/6	5	<u>C</u>	<u>M</u>	<u>Clay</u>
			=Reduced Matrix, 0			ed Sand G	
-		licable to al	I LRRs, unless oth		ted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol	, ,		☐ Sandy Redox				1 cm Muck (A9) (LRR C)
☐ Histic E	pipedon (A2)		<ul><li>☐ Stripped Matri</li><li>☐ Loamy Mucky</li></ul>		1\		☐ 2 cm Muck (A10) ( <b>LRR B</b> ) ☐ Reduced Vertic (F18)
	en Sulfide (A4)		☐ Loamy Gleyed	•	,		☐ Reduced Vertic (P18) ☐ Red Parent Material (TF2)
	ed Layers (A5) ( <b>LRF</b>	R C)	☐ Depleted Matri	•	,		Other (Explain in Remarks)
	uck (A9) ( <b>LRR D</b> )	-,	☐ Redox Dark S				
	ed Below Dark Surf	ace (A11)	☐ Depleted Dark	, ,			
☐ Thick D	ark Surface (A12)		☐ Redox Depres	ssions (F8)			<sup>3</sup> Indicators of hydrophytic vegetation and
	Mucky Mineral (S1)	)					wetland hydrology must be present,
	Gleyed Matrix (S4)						unless disturbed or problematic.
	Layer (if present)	):					
Type: <u>Cl</u>	-		-				
Depth (ir	nches): <u>10</u>		-				Hydric Soil Present? Yes ⊠ No □
/DDOL 0/	O.V.						
Wetland Hy	ydrology Indicato		nd: chock all that an	nlv)			Secondary Indicators (2 or more require
Wetland Hy Primary Ind	ydrology Indicato		ed; check all that ap				Secondary Indicators (2 or more required
Wetland Hy Primary Ind  Surface	ydrology Indicator licators (minimum c water (A1)		☐ Salt Crus	st (B11)			☐ Water Marks (B1) (Riverine)
Wetland Hy Primary Ind ☐ Surface ☑ High Wa	ydrology Indicator licators (minimum o Water (A1) ater Table (A2)		☐ Salt Crus	st (B11) ust (B12)	ne (R13)		<ul><li>☐ Water Marks (B1) (Riverine)</li><li>☐ Sediment Deposits (B2) (Riverine)</li></ul>
Wetland Hy Primary Ind ☐ Surface ☑ High Wa ☑ Saturati	ydrology Indicator licators (minimum o Water (A1) ater Table (A2) ion (A3)	of one require	☐ Salt Crus ☐ Biotic Cru	st (B11) ust (B12) nvertebrate	, ,		<ul><li>☐ Water Marks (B1) (Riverine)</li><li>☐ Sediment Deposits (B2) (Riverine)</li><li>☐ Drift Deposits (B3) (Riverine)</li></ul>
Wetland Hy Primary Ind □ Surface □ High Wa □ Saturati □ Water M	ydrology Indicator licators (minimum o Water (A1) ater Table (A2) ion (A3) Marks (B1) (Non riv	of one require	Salt Crus Biotic Cru Aquatic II	st (B11) ust (B12) nvertebrate n Sulfide O	dor (C1)	Living Ro	<ul> <li>□ Water Marks (B1) (Riverine)</li> <li>□ Sediment Deposits (B2) (Riverine)</li> <li>□ Drift Deposits (B3) (Riverine)</li> <li>□ Drainage Patterns (B10)</li> </ul>
Wetland Hy Primary Ind □ Surface ☑ High Wa ☑ Saturati □ Water M □ Sedime	ydrology Indicator licators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Non riv ent Deposits (B2) (N	of one require verine) Non riverine)	Salt Crus Biotic Cru Aquatic II Hydroger Oxidized	st (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe	dor (C1) res along	_	☐ Water Marks (B1) (Riverine) ☐ Sediment Deposits (B2) (Riverine) ☐ Drift Deposits (B3) (Riverine) ☐ Drainage Patterns (B10) ots (C3) ☐ Dry-Season Water Table (C2)
Wetland Hy Primary Ind □ Surface ☑ High Wa ☑ Saturati □ Water N □ Sedime □ Drift De	ydrology Indicator licators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Non riv ent Deposits (B2) (Non riv	of one require verine) Non riverine)	Salt Crus Biotic Cru Aquatic I Hydroger Oxidized Presence	st (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe	dor (C1) res along ed Iron (C4	4)	☐ Water Marks (B1) (Riverine) ☐ Sediment Deposits (B2) (Riverine) ☐ Drift Deposits (B3) (Riverine) ☐ Drainage Patterns (B10) ots (C3) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8)
Wetland Hy Primary Ind □ Surface □ High Wa □ Saturati □ Water M □ Sedime □ Drift De □ Surface	ydrology Indicator licators (minimum of water (A1) ater Table (A2) ion (A3) Marks (B1) (Non riv ent Deposits (B2) (Non riv eposits (B3) (Non riv es Soil Cracks (B6)	of one require verine) Non riverine) iverine)	Salt Crus Biotic Cru Aquatic II Hydroger Oxidized Presence	st (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe e of Reduce	dor (C1) eres along ed Iron (C4 on in Tille	4)	☐ Water Marks (B1) (Riverine) ☐ Sediment Deposits (B2) (Riverine) ☐ Drift Deposits (B3) (Riverine) ☐ Drainage Patterns (B10) ots (C3) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery
Wetland Hy Primary Ind Surface High Wa Saturati Water M Sedime Drift De Surface	ydrology Indicator licators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Non riv ent Deposits (B2) (Non riv	verine) Non riverine) verine) verine)	Salt Crus Biotic Cru Aquatic II Hydroger Oxidized Presence	st (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe e of Reduce ron Reduct ck Surface	dor (C1) eres along ed Iron (C4 on in Tille (C7)	4)	☐ Water Marks (B1) (Riverine) ☐ Sediment Deposits (B2) (Riverine) ☐ Drift Deposits (B3) (Riverine) ☐ Drainage Patterns (B10) ots (C3) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8)
Wetland Hy Primary Ind Surface High Wa Saturati Water M Sedime Drift De Surface Inundation Water-S	ydrology Indicator licators (minimum of wWater (A1) ater Table (A2) ion (A3) Marks (B1) (Non rivent Deposits (B2) (Non rivent Deposits (B3) (Non rivent Castella (B6) exposits (B6) on Visible on Aeria Stained Leaves (B9)	verine) Non riverine) verine) verine)	Salt Crus Biotic Cru Aquatic Ii Hydroger Oxidized Presence Recent Ir	st (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe e of Reduce ron Reduct ck Surface	dor (C1) eres along ed Iron (C4 on in Tille (C7)	4)	<ul> <li>□ Water Marks (B1) (Riverine)</li> <li>□ Sediment Deposits (B2) (Riverine)</li> <li>□ Drift Deposits (B3) (Riverine)</li> <li>□ Drainage Patterns (B10)</li> <li>ots (C3) □ Dry-Season Water Table (C2)</li> <li>□ Crayfish Burrows (C8)</li> <li>□ Saturation Visible on Aerial Imagery</li> <li>□ Shallow Aquitard (D3)</li> </ul>
Wetland Hy Primary Ind Surface High Wa Saturati Water M Sedime Drift De Surface Inundatio Water-S	ydrology Indicator licators (minimum of a Water (A1) ater Table (A2) ion (A3) Marks (B1) (Non rivent Deposits (B2) (Non rivent Deposits (B3) (Non rivent Deposits (B6) on Visible on Aeria Stained Leaves (B9)	verine) Non riverine) iverine) I Imagery (B	Salt Crus Biotic Cru Aquatic In Hydroger Oxidized Presence Recent Ir Thin Muc	st (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe e of Reduce ron Reduct ck Surface xplain in Re	dor (C1) res along ed Iron (C- on in Tille (C7) emarks)	4)	<ul> <li>□ Water Marks (B1) (Riverine)</li> <li>□ Sediment Deposits (B2) (Riverine)</li> <li>□ Drift Deposits (B3) (Riverine)</li> <li>□ Drainage Patterns (B10)</li> <li>ots (C3) □ Dry-Season Water Table (C2)</li> <li>□ Crayfish Burrows (C8)</li> <li>□ Saturation Visible on Aerial Imagery</li> <li>□ Shallow Aquitard (D3)</li> </ul>
Wetland Hy Primary Ind  □ Surface □ High Wa □ Saturati □ Water M □ Sedime □ Drift De □ Surface □ Inundatia □ Water-S  Field Obse Surface Wa	ydrology Indicator licators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Non riv ent Deposits (B2) (Non riv eposits (B3) (Non riv eposits (B6) on Visible on Aeria Stained Leaves (B9) ervations: ater Present?	verine) Non riverine) iverine) Il Imagery (B	Salt Crus  Biotic Cru Aquatic In Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex	st (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe e of Reduce ron Reduct ck Surface explain in Re	dor (C1) res along ed Iron (C- on in Tille (C7) emarks)	4)	<ul> <li>□ Water Marks (B1) (Riverine)</li> <li>□ Sediment Deposits (B2) (Riverine)</li> <li>□ Drift Deposits (B3) (Riverine)</li> <li>□ Drainage Patterns (B10)</li> <li>ots (C3) □ Dry-Season Water Table (C2)</li> <li>□ Crayfish Burrows (C8)</li> <li>□ Saturation Visible on Aerial Imagery</li> <li>□ Shallow Aquitard (D3)</li> </ul>
Primary Ind Surface High Wa Saturati Water M Sedime Drift De Surface Inundation Water-S Field Obse Surface Wa Water Table Saturation F	ydrology Indicator licators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Non riv ent Deposits (B2) (Non riv ent Deposits (B3) (Non riv ent Cracks (B6) on Visible on Aeria Stained Leaves (B9 ervations: ater Present? Present?	verine) Non riverine) iverine) Il Imagery (Ba	Salt Crus Biotic Cru Aquatic In Hydroger Oxidized Presence Recent Ir Thin Muc	st (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe e of Reduct ron Reduct ck Surface explain in Re es):	dor (C1) res along ed Iron (C- on in Tille (C7) emarks)	4) d Soils (Ce	<ul> <li>□ Water Marks (B1) (Riverine)</li> <li>□ Sediment Deposits (B2) (Riverine)</li> <li>□ Drift Deposits (B3) (Riverine)</li> <li>□ Drainage Patterns (B10)</li> <li>ots (C3) □ Dry-Season Water Table (C2)</li> <li>□ Crayfish Burrows (C8)</li> <li>□ Saturation Visible on Aerial Imagery</li> <li>□ Shallow Aquitard (D3)</li> </ul>
Wetland Hy Primary Ind Surface High Wa Saturati Water N Sedime Drift De Surface Inundatio Water-S Field Obse Surface Wa Water Table Saturation F (includes ca	ydrology Indicator licators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Non riv ent Deposits (B2) (Non riv ent Deposits (B3) (Non riv ent Soil Cracks (B6) on Visible on Aeria Stained Leaves (B9 ervations: ater Present? e Present? papillary fringe)	verine) Non riverine) iverine) I Imagery (B7 9)  Yes	Salt Crus  Salt Crus  Biotic Cru  Aquatic II  Hydroger  Oxidized  Presence  Recent Ir  Thin Muc  Other (Ex	est (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe e of Reduce ron Reduct ck Surface explain in Re es): es): 7" es): 7"	dor (C1) eres along ed Iron (C- on in Tille (C7) emarks)	4) d Soils (Ce	<ul> <li>□ Water Marks (B1) (Riverine)</li> <li>□ Sediment Deposits (B2) (Riverine)</li> <li>□ Drift Deposits (B3) (Riverine)</li> <li>□ Drainage Patterns (B10)</li> <li>ots (C3) □ Dry-Season Water Table (C2)</li> <li>□ Crayfish Burrows (C8)</li> <li>(6) □ Saturation Visible on Aerial Imagery</li> <li>□ Shallow Aquitard (D3)</li> <li>□ FAC-Neutral Test (D5)</li> </ul>
Wetland Hy Primary Ind Surface High Wa Saturati Water N Sedime Drift De Surface Inundation Water-S Water Table Saturation F (includes ca	ydrology Indicator licators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) (Non riv ent Deposits (B2) (Non riv ent Deposits (B3) (Non riv ent Soil Cracks (B6) on Visible on Aeria Stained Leaves (B9 ervations: ater Present? e Present? papillary fringe)	verine) Non riverine) iverine) I Imagery (B7 9)  Yes	Salt Crus  Salt Crus  Biotic Cru  Aquatic II  Hydroger  Oxidized  Presence  Recent Ir  Thin Muc  Other (Ex	est (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe e of Reduce ron Reduct ck Surface explain in Re es): es): 7" es): 7"	dor (C1) eres along ed Iron (C- on in Tille (C7) emarks)	4) d Soils (Ce	

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

Redox Features

## WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys & Coast

roject/Site: <u>37090 Kelso RD</u>		C	ity/Cou	ınty: <u>Sandy/Cla</u>	ckamas	Sampling	ampling Date: <u>3/30/2017</u>	
pplicant/Owner: <u>Joe Spaziani</u>					State: OR	Sampling	Point: P3	
vestigator(s): John McConnaughey, PW	S# 2009			Section, Tov	vnship, Range: <u>T2S R4</u>	E S11		
andform (hillslope, terrace, etc.): <u>Valley F</u>	loor		Local r	elief (concave, d	convex, none): Flat		Slope (%	o): <u>4%</u>
ubregion (LRR): <u>LRR-A</u>		Lat: 45.250	079		Long: -122.16961		Datum:	
oil Map Unit Name: <u>Cazado silt loam, Co</u>	ttrell silty clay loam	1			NWI classific	cation: Not m	napped	
re climatic / hydrologic conditions on the								
re Vegetation <u>YES,</u> Soil, or Hydrol		-			Circumstances" prese		No 🏻	
re Vegetation <u>YES,</u> Soil, or Hydrol					explain any answers ir	_	140 🖂	
				,	' '	,	na faatuu	
SUMMARY OF FINDINGS – Atta	ich site map s	nowing s	sampi	iing point io	cations, transect	s, importa	ant reatur	es, etc
Hydrophytic Vegetation Present?	Yes ⊠ No 🗌			Is the Sampled	l Area			
Hydric Soil Present?	Yes ⊠ No □			within a Wetlaı		No □		
Wetland Hydrology Present?  Remarks: Above average rainfall in Ma	Yes ⊠ No □							
EGETATION – Use scientific n	ames of plants							
Tree Stratum (Plot size: 30' East)				nant Indicator ies? Status	Dominance Test wo			
1					Number of Dominant That Are OBL, FAC		1	(A)
2. NO TREES							-	_ (')
3.					Total Number of Dor Species Across All S		1	(B)
4.					·		-	_ (-)
					Percent of Dominant That Are OBL, FACV		100%	(A/B)
Sapling/Shrub Stratum (Plot size: 30' I		400	V/	F40	Prevalence Index w	vorkshoot:		
Rubus Armeniacus (recently mowed)					Total % Cover of		Multiply by	,-
2					OBL species 0			
3					FACW species 0			
4					FAC species 0			
5		100			FACU species 0			
Herb Stratum (Plot size:)		100	_ 10	tai Covei	UPL species 0		·	
1					Column Totals: 0			
2. Polystichum munitum		3	N	FACU	<u> </u>	()		(-)
3					Prevalence Inc	lex = B/A =	0	
4					Hydrophytic Vegeta	ation Indicat	ors:	
					□ D	is >50%		
5					□ Dominance Test			
5					☐ Prevalence Inde			
					☐ Prevalence Inde	daptations1 (I	Provide supp	orting
6			·		Prevalence Inde	daptations¹ (l arks or on a s	separate she	eet)
6					☐ Prevalence Inde	daptations¹ (l arks or on a s	separate she	eet)
6	)	3	= To	tal Cover	Prevalence Inde	daptations¹ (l arks or on a s rophytic Veg	separate she etation¹ (Exp	eet) plain)
6	)	3	= To	tal Cover	Prevalence Inde	daptations <sup>1</sup> (larks or on a strophytic Veg	separate she etation¹ (Exp and hydrolog	eet) plain)
6	)	3	= To	tal Cover	☐ Prevalence Inde. ☐ Morphological Addata in Rema ☐ Problematic Hyd	daptations <sup>1</sup> (larks or on a strophytic Veg	separate she etation¹ (Exp and hydrolog	eet) plain)
6	)	3	= To	tal Cover	Prevalence Index Morphological Addata in Remains Problematic Hyde  Indicators of hydric be present, unless de Hydrophytic Vegetation	daptations <sup>1</sup> (larks or on a strophytic Veg	separate she etation¹ (Exp and hydrolog roblematic.	eet) plain)

		e to the de	-			or comm	rm the absence of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	lox Feature %	Type <sup>1</sup>	Loc <sup>2</sup>	- Texture Remarks
0-5	7.5YR3/2	100	· · · · · ·				Silt loam
5-8	7.5YR3/2	97	5YR4/6	3	С	M	Silty clay loam
5-6	7.51K3/2	91	<u> </u>	<u>ა</u>	<u> </u>	IVI	Sitty Clay Idam
			<u>2.5n</u>	1	<u>C</u>	<u>M</u>	Silty clay loam
8-18	5YR2.3/3	90	5YR4/6	5	С	M	Clay
			5YR2.5/1	5	<u>C</u>	<u>M</u>	
¹Type: C=C	concentration, D=De	pletion, RN	/I=Reduced Matrix, C	CS=Covere	d or Coat	ed Sand C	Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appli	cable to a	II LRRs, unless oth	erwise no	ted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
☐ Histosol	(A1)		☐ Sandy Redox	(S5)			☐ 1 cm Muck (A9) ( <b>LRR C</b> )
	oipedon (A2)		☐ Stripped Matrix				☐ 2 cm Muck (A10) (LRR B)
☐ Black Hi	stic (A3)		☐ Loamy Mucky	Mineral (F	1)		☐ Reduced Vertic (F18)
	en Sulfide (A4)		☐ Loamy Gleyed		)		□ Red Parent Material (TF2)
	d Layers (A5) ( <b>LRR</b>	C)	Depleted Matrix				☐ Other (Explain in Remarks)
	ck (A9) ( <b>LRR D</b> )		Redox Dark S	, ,			
	d Below Dark Surfac	ce (A11)	☐ Depleted Dark		<del>-</del> 7)		•
	ark Surface (A12)		☐ Redox Depres	sions (F8)			<sup>3</sup> Indicators of hydrophytic vegetation and
	Mucky Mineral (S1)						wetland hydrology must be present,
	Gleyed Matrix (S4)						unless disturbed or problematic.
	Layer (if present):						
Type: Cla	-		_				
	iches): <u>10</u>		=				Hydric Soil Present? Yes ⊠ No □
Remarks: S	oil is brittle						
YDROLOG							
-	drology Indicators						
		one requir	ed; check all that app				Secondary Indicators (2 or more required)
Surface	` '		☐ Salt Crus	,			☐ Water Marks (B1) (Riverine)
	ater Table (A2)		☐ Biotic Cru	ıst (B12)			☐ Sediment Deposits (B2) (Riverine)
Saturation     Saturation	on (A3)		☐ Aquatic Ir	nvertebrate	es (B13)		☐ Drift Deposits (B3) ( <b>Riverine</b> )
☐ Water M	larks (B1) ( <b>Non rive</b>	erine)	☐ Hydroger	Sulfide O	dor (C1)		☐ Drainage Patterns (B10)
☐ Sedimer	nt Deposits (B2) ( <b>No</b>	on riverine	)	Rhizosphe	res along	Living Ro	oots (C3) Dry-Season Water Table (C2)
☐ Drift Dep	oosits (B3) (Non riv	erine)	☐ Presence	of Reduce	ed Iron (C	4)	☐ Crayfish Burrows (C8)
☐ Surface	Soil Cracks (B6)		☐ Recent Ire	on Reducti	on in Tille	d Soils (C	(C9 Saturation Visible on Aerial Imagery
☐ Inundation	on Visible on Aerial	lmagery (B	7) 🔲 Thin Muc	k Surface (	(C7)		☐ Shallow Aquitard (D3)
☐ Water-S	tained Leaves (B9)		☐ Other (Ex	plain in Re	emarks)		☐ FAC-Neutral Test (D5)
Field Obse	vations:						
Surface Wa	ter Present?	Yes ☐ N	lo 🛛 Depth (inche	es):			
Water Table	Present?	Yes 🛛 N	lo 🗌 Depth (inche	es): <u>6"</u>			
	pillary fringe)		lo Depth (inche				tland Hydrology Present? Yes 🛭 No 🗌
		m gauge, n	nonitoring well, aeria	I photos, p	revious in	spections)	), if available: 4/17/17 no water, 5/1/17 9" bgs water
Remarks:							

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

Project/Site: 37090 Kelso RD	City/County: Sandy/Clackamas Sampling Date:3/30/2017					2017	
Applicant/Owner: <u>Joe Spaziani</u>				State: OR	_ Sam	pling Point: P4	
Investigator(s): John McConnaughey, PWS# 2009			_ Section, Tov	vnship, Range: <u>T2S R4</u>	E S11		
Landform (hillslope, terrace, etc.): Valley Floor		Local re	elief (concave, o	convex, none): Flat		Slope (9	%): <u>3%</u>
Subregion (LRR): <u>LRR-A</u>	Lat: 45.41	796		Long: -122.20262		Datum:	
Soil Map Unit Name: <u>Cazado silt loam, Cottrell silty clay loa</u>	ım			NWI classific	ation: N	Not mapped	
Are climatic / hydrologic conditions on the site typical for thi							
Are Vegetation <u>YES</u> , Soil, or Hydrology <u>YES</u> signific	antly disturbe	d?	Are "Normal	l Circumstances" preser	nt? Ye	s 🗌 No 🛛	
Are Vegetation <u>YES,</u> Soil, or Hydrology natura	ally problemat	ic?	(If needed,	explain any answers in	Remar	·ks.)	
SUMMARY OF FINDINGS – Attach site map	showing s	ampli	ing point lo	cations, transects	s, imp	ortant featu	res, etc.
Hydrophytic Vegetation Present? Yes ⊠ No □	7						
Hydric Soil Present? Yes ⊠ No □			s the Sampled				
Wetland Hydrology Present? Yes ⊠ No □		V	vithin a Wetlaı	nd? Yes ⊠	No L		
Remarks: Above average rainfall in March and April. Th onto property. This was to be a boundary plot in the 201						dside ditch drain	ning water
		•					
VEGETATION – Use scientific names of plan	its.						
Tree Stratum (Plot size: 30')			es? Status	Dominance Test wo			
1				Number of Dominant That Are OBL, FACV			(A)
2. NO TREES				Total Number of Don	ninant		
3				Species Across All S		1	(B)
4	_			Percent of Dominant	Specie	9	
Sapling/Shrub Stratum (Plot size: 30')		= Tota	al Cover	That Are OBL, FACV			(A/B)
Rubus Armeniacus (recently mowed)	100	Υ	FAC	Prevalence Index w	orkshe	et:	
2				Total % Cover of	f:	Multiply b	y:
3.				OBL species 0			
4				FACW species 0		x 2 = <u>0</u>	
5	_			FAC species 0		x 3 = <u>0</u>	
11 1 0; ; (D) ; ; (O))		= Tota	al Cover	FACU species 0			
Herb Stratum (Plot size: 30')				UPL species 0			
1	<del></del>		<u> </u>	Column Totals: 0		(A) <u>0</u>	(B)
2. 3.				Prevalence Ind	ex = B/	A = 0	
4				Hydrophytic Vegeta			
5.				□ Dominance Test	is >50%	6	
6.				☐ Prevalence Index	is ≤3.0	)1	
7				☐ Morphological Ad		ns¹ (Provide sup on a separate sh	
8	_			☐ Problematic Hydi		•	,
Woody Vine Stratum (Plot size:)	103	= Tota	al Cover	r robicinatio riyul	Орпунс	vegetation (E)	кріант)
1. (Plot size)				<sup>1</sup> Indicators of hydric s	soil and	wetland hydrolo	oav must
2			<del>_</del>	be present, unless di			0,
			al Cover	Hydrophytic Vegetation			
% Bare Ground in Herb Stratum 0 % Co	over of Biotic (	Crust 09	%		Yes ⊠	No □	

Depth	Matri: Color (moist)	x %		Rec or (moist)	lox Featur	res Type <sup>1</sup>	Loc <sup>2</sup>	Touture	•	ı	Domorko
(inches)		· <u></u>	<u>Cold</u>	or (moist)	%	<u>Type</u>	LOC	Texture			Remarks
-5	7.5YR3/2	100						Silt loan			
-11	7.5YR3/2	97	<u>5YR</u>	4/6	3	<u>C</u>	<u>M</u>	Silty cla	y loam		
			<u>2.5n</u>		1	С	<u>M</u>	Silty cla	y loam		
1-18	5YR2.4/4	50	<u>7.5Y</u>	'R3/2	50			Clay	! !	Mixed matrix	(
						·	<del>-</del>				
	Concentration, D=E Indicators: (App						ted Sand G				ore Lining, M=Matrix.  ematic Hydric Soils <sup>3</sup> :
Histosol Histic E Black H Hydroge Stratifie	I (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) ( <b>LR</b>			Sandy Redox Stripped Matrix Loamy Mucky oamy Gleyed Depleted Matrix	(S5) x (S6) Mineral (F Matrix (F2 x (F3)	F1) 2)			1 cm l 2 cm l Reduc Red Pa	Muck (A9) ( <b>I</b> Muck (A10) ( ced Vertic (F arent Materia (Explain in F	LRR C) (LRR B) (18) al (TF2)
Deplete Thick Da Sandy M	ick (A9) ( <b>LRR D</b> ) d Below Dark Surf ark Surface (A12) Mucky Mineral (S1 Gleyed Matrix (S4)	)		Redox Dark Si Depleted Dark Redox Depres	Surface (	F7)		<sup>3</sup> ln	wetlan	d hydrology	ytic vegetation and must be present, r problematic.
estrictive	Layer (if present										
estrictive Type: <u>Cl</u>	Layer (if present							Hydric		resent?	Yes ⊠ No □
Type: Cl Depth (ir Cemarks: T	Layer (if present ay nches): 11 he F6 indicator is	):	th 3% red	dox features				Hydrid		Present?	Yes ⊠ No □
estrictive Type: CI Depth (ir emarks: T	Layer (if present ay nches): 11 he F6 indicator is	not met wit	  th 3% red	dox features				Hydrid		resent?	Yes ⊠ No 🗌
estrictive Type: CI Depth (ir emarks: T  DROLOG	Layer (if present ay naches): 11 The F6 indicator is GY	not met wit							c Soil P		
estrictive Type: Cl Depth (ir emarks: T  DROLOG /etland Hy rimary Ind	Layer (if present ay naches): 11 The F6 indicator is  GY  ydrology Indicator icators (minimum of the second content of the second co	not met wit		eck all that ap					c Soil F	lary Indicato	ors (2 or more required)
Type: Cl Depth (ir emarks: T DROLOG /etland Hy rimary Ind Surface	Layer (if present ay naches): 11 The F6 indicator is  GY Verdrology Indicator is icators (minimum of Water (A1)	not met wit		eck all that ap	t (B11)				Second	lary Indicato ter Marks (B	ors (2 or more required)
Type: Cl Depth (ir Demarks: T DROLOG Vetland Hy Irimary Ind Surface	Layer (if present ay naches): 11 The F6 indicator is  GY  ydrology Indicator icators (minimum of Water (A1) ater Table (A2)	not met wit		eck all that ap	t (B11) ust (B12)	es (B13)			Second	<u>lary Indicato</u> ter Marks (B diment Depo	ors (2 or more required) 11) (Riverine) sits (B2) (Riverine)
estrictive Type: Cl Depth (ir emarks: T  DROLOG /etland Hy rimary Ind Surface High Wa Saturati	Layer (if present ay naches): 11 The F6 indicator is GY  ydrology Indicator is icators (minimum of Water (A1) ater Table (A2) fon (A3)	not met wit		eck all that app Salt Crus Biotic Cru Aquatic Ir	t (B11) ust (B12) nvertebrat	. ,			Second Wa Sec	lary Indicato ter Marks (B diment Depo t Deposits (I	ors (2 or more required) (1) (Riverine) (B2) (Riverine) (B3) (Riverine)
estrictive Type: Cl Depth (ir emarks: T  DROLOG /etland Hy rimary Ind Surface High Wa Saturati Water M	Layer (if present ay naches): 11 The F6 indicator is  GY  ydrology Indicator is Water (A1) ater Table (A2) on (A3) Marks (B1) (Non ri	not met wit	uired; che	eck all that app Salt Crus Biotic Cru Aquatic Ir	t (B11) ust (B12) nvertebrat n Sulfide C	Odor (C1)	a Livina Ro		Second  Wa Sec Driff Dra	lary Indicato ter Marks (B diment Depo t Deposits (I inage Pattel	ors (2 or more required) (1) (Riverine) (3) (Riverine) (3) (Riverine) (4) (5)
estrictive Type: Cl Depth (ir emarks: T  DROLOG /etland Hy rimary Ind Surface High Wa Saturati Water M Sedime	Layer (if present ay naches): 11 The F6 indicator is  GY  ydrology Indicator icators (minimum of water (A1) ater Table (A2) on (A3) Marks (B1) (Non rint Deposits (B2) (I	not met wit  ors: of one requ  verine) Non riverir	uired; che	eck all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized	t (B11) ust (B12) nvertebrat n Sulfide C	Odor (C1) eres along	g Living Roo	ots (C3)	Second Wa Sec Drif Dra Dry	lary Indicato ter Marks (B diment Depo t Deposits (I inage Patter -Season Wa	ors (2 or more required) i1) (Riverine) sits (B2) (Riverine) i33) (Riverine) rns (B10) ater Table (C2)
Type: Cl Depth (ir Depth (ir Demarks: T  DROLOG  Vetland Hy rimary Ind Surface High Water M Sedime Drift De	Layer (if present ay naches): 11 The F6 indicator is  GY  ydrology Indicator is  Water (A1) ater Table (A2) on (A3) Marks (B1) (Non rint Deposits (B2) (Indicator is)	not met wit  ors: of one requ  verine) Non riverir	uired; che	eck all that ap Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence	t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph	Odor (C1) eres alonç ed Iron (C	24)	ots (C3)	Second  Wa  Sec  Driff  Dra  Dry  Cra	lary Indicato ter Marks (B diment Depo t Deposits (I inage Pattei -Season Wa yfish Burrov	ers (2 or more required) (1) (Riverine) (3) (Riverine) (3) (Riverine) (5) (6) (7) (8) (8) (8) (8) (9) (9) (9) (9) (9) (9) (9) (9) (9) (9
Type: Cl Depth (ir emarks: T DROLOG /etland Hy rimary Ind Surface High Wa Saturati Water M Sedime Drift De Surface	Layer (if present ay naches): 11 The F6 indicator is  GY  ydrology Indicator is  Water (A1) ater Table (A2) on (A3) Marks (B1) (Non rint Deposits (B2) (Ipposits (B3) (Non research)) Soil Cracks (B6)	not met wit  ors: of one requ  verine) Non riverir iverine)	uired; cho	eck all that ap Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence	t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph of Reduct on Reduct	Odor (C1) eres along ed Iron (C tion in Till	_	ots (C3)	Second Waa Sec Drif Dra Dry Cra Sat	lary Indicato ter Marks (B diment Depo t Deposits (I inage Pattei -Season Wa yfish Burrov	ers (2 or more required) (1) (Riverine) (3) (Riverine) (3) (Riverine) (5) (Riverine) (6) (Riverine) (7) (Riverine) (8) (Riverine) (9) (Riveri
Print Depth (in	Layer (if present ay naches): 11 The F6 indicator is  GY  ydrology Indicator is  Water (A1) ater Table (A2) on (A3) Marks (B1) (Non rint Deposits (B2) (Indicator is)	not met wit  ors: of one requ  verine) Non riverir iverine)	uired; cho	eck all that ap Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence	t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph of Reduc on Reduc k Surface	Odor (C1) eres along ed Iron (C tion in Till (C7)	24)	ots (C3)	Second War Second Drift Dra Dry Cra Sat Sha	lary Indicato ter Marks (B diment Depo t Deposits (I inage Pattei -Season Wa yfish Burrov uration Visib	ors (2 or more required) (1) (Riverine) (3) (Riverine) (3) (Riverine) (5) (6) (7) (8) (8) (8) (9) (9) (9) (9) (9) (9) (9) (1) (10) (10) (10) (10) (10) (10) (10)
Type: Cl Depth (ir Depth (ir Demarks: T DROLOG Vetland Hy Irimary Ind Surface High Wa Saturati Water M Sedime Drift De Surface	Layer (if present ay naches): 11 The F6 indicator is  GY Verology Indicator is Water (A1) ater Table (A2) ion (A3) Marks (B1) (Non rint Deposits (B2) (Iposits (B3) (Non resource) (Soil Cracks (B6) on Visible on Aeria Stained Leaves (B5)	not met wit  ors: of one requ  verine) Non riverir iverine)	uired; cho	eck all that ap Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir	t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph of Reduc on Reduc k Surface	Odor (C1) eres along ed Iron (C tion in Till (C7)	24)	ots (C3)	Second War Second Drift Dra Dry Cra Sat Sha	lary Indicato ter Marks (B diment Depo t Deposits (I inage Patter -Season Wa yfish Burrow uration Visib allow Aquitar	ors (2 or more required) (1) (Riverine) (3) (Riverine) (3) (Riverine) (5) (6) (7) (8) (8) (8) (9) (9) (9) (9) (9) (9) (9) (1) (10) (10) (10) (10) (10) (10) (10)
Type: Cl. Depth (ir Demarks: T  DROLOG Vetland Hy Timary Ind Surface High Wa Saturati Water M Sedime Drift De Surface Inundatio Water-S	Layer (if present ay naches): 11 The F6 indicator is  GY Verology Indicator is Water (A1) ater Table (A2) ion (A3) Marks (B1) (Non rint Deposits (B2) (Iposits (B3) (Non resource) (Soil Cracks (B6) on Visible on Aeria Stained Leaves (B5)	not met wit  ors: of one requ  verine) Non riverir iverine)	uired; cho	eck all that ap Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir	t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduc on Reduc k Surface xplain in R	Odor (C1) eres along ed Iron (C tion in Till (C7)	24)	ots (C3)	Second War Second Drift Dra Dry Cra Sat Sha	lary Indicato ter Marks (B diment Depo t Deposits (I inage Patter -Season Wa yfish Burrow uration Visib allow Aquitar	ors (2 or more required) (1) (Riverine) (3) (Riverine) (3) (Riverine) (5) (7) (8) (8) (8) (9) (9) (9) (9) (9) (9) (9) (9) (9) (9
rype: Cl Depth (ir Depth (ir Demarks: T DROLOG Vetland Hy rimary Ind Surface High Wa Saturati Water M Sedime Drift De Surface Inundatic Water-S ield Obse	Layer (if present ay naches): 11 The F6 indicator is  GY  ydrology Indicator is  Water (A1) ater Table (A2) fon (A3)  Marks (B1) (Non rint Deposits (B2) (Iposits (B3) (Non rint Deposits (B4) (Non ri	verine) Non riverine verine) Non riverine verine)	uired; cho	eck all that ap Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc	t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduct on Reduct k Surface cplain in R	Odor (C1) eres along ed Iron (C tion in Till (C7)	24)	ots (C3)	Second War Second Drift Dra Dry Cra Sat Sha	lary Indicato ter Marks (B diment Depo t Deposits (I inage Patter -Season Wa yfish Burrow uration Visib allow Aquitar	ors (2 or more required) (1) (Riverine) (3) (Riverine) (3) (Riverine) (5) (7) (8) (8) (8) (9) (9) (9) (9) (9) (9) (9) (9) (9) (9
Type: Cl. Depth (ir Remarks: T  DROLOG  Vetland Hy Primary Ind Surface High Wa Saturati Water M Sedime Drift De Surface Inundation Water-S  Vater Table Saturation F	Layer (if present ay naches): 11 The F6 indicator is  GY  Inder F6 indicator is  GY  Inder F6 indicator is  Indicator is  Inder F6 indicator is  Inder F6 indicator is  Inder F6 indicator is  Indicato	verine) Non riverine iverine) Al Imagery (	uired; che	eck all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex	t (B11) ust (B12) nvertebrat n Sulfide C Rhizosph e of Reduct on Reduct k Surface cplain in R	Odor (C1) eres along ed Iron (C tion in Till (C7)	(C) ed Soils (C)	ots (C3)	Second Second Sec Driff Dra Dry Sat Sha	lary Indicato ter Marks (B diment Depo t Deposits (I inage Patter -Season Wa yfish Burrov uration Visik allow Aquitar C-Neutral Te	ors (2 or more required) (1) (Riverine) (3) (Riverine) (3) (Riverine) (5) (7) (8) (8) (8) (9) (9) (9) (9) (9) (9) (9) (9) (9) (9

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

Project/Site: 37090 Kelso RD	(	City/Coun	ty: Sandy/Clad	v/Clackamas Sampling Date:3/30/2017				
Applicant/Owner: <u>Joe Spaziani</u>				State: OR	Sampling Point: P5			
nvestigator(s): John McConnaughey, PWS# 2009			Section, Tow	vnship, Range: <u>T2S R4</u>	E S11			
_andform (hillslope, terrace, etc.): Valley Floor		Local rel	ief (concave, c	convex, none): Flat	Slope (	%): <u>4%</u>		
Subregion (LRR): <u>LRR-A</u>	Lat: <u>45.25</u>	5073		Long: -122.16980	Datum:			
Soil Map Unit Name: <u>Cazado silt loam, Cottrell silty cla</u>								
Are climatic / hydrologic conditions on the site typical f								
Are Vegetation <u>YES</u> , Soil, or Hydrology <u>YES</u> s	ignificantly disturb	ed?	Are "Normal	Circumstances" prese	nt? Yes ☐ No ☒			
Are Vegetation YES, Soil, or Hydrology				explain any answers in				
SUMMARY OF FINDINGS – Attach site n			,	, ,	,	res etc		
Audon site ii	nap snowing		ng pomit io		o, important reata	103, 010.		
Hydrophytic Vegetation Present? Yes ⊠		Is	the Sampled	Area				
Hydric Soil Present?		w	ithin a Wetlar	nd? Yes □	No 🛛			
Wetland Hydrology Present? Yes  Remarks: Above average rainfall in March and Apr		mowed o	lown blackber	ny field hydrology alter	ed by roadside ditch ald	na Keleo		
Road that drains onto property.	ii. Triis piot is iii a	mowea	JOWIT DIACKDET	ry field, flydfology after	ed by roadside ditorraid	nig iteiso		
VEGETATION – Use scientific names of	plants.							
	Absolute	Domina	ant Indicator	Dominance Test wo	orksheet:			
<u>Tree Stratum</u> (Plot size: <u>30' north</u> )	·		s? Status	Number of Dominant				
1				That Are OBL, FACV	V, or FAC: 1	(A)		
2. NO TREES				Total Number of Don		( <del>-</del> )		
3				Species Across All S	strata: <u>1</u>	(B)		
4		= Tota		Percent of Dominant	Species	(A /D)		
Sapling/Shrub Stratum (Plot size: 30' north)		_ = 10ta	100001	I nat Are OBL, FACV	V, or FAC: <u>100%</u>	(A/B)		
1				Prevalence Index w	orksheet:			
2				Total % Cover o	f: Multiply b	<u>y:</u>		
3					x 1 = <u>0</u>			
4					x 2 = <u>0</u>			
5					x 3 = <u>0</u>			
Herb Stratum (Plot size: 30' north)		_ = Tota	l Cover	-	x 4 = 0			
1. Rubus Armeniacus	95	Y	<u>FAC</u>	-	x 5 = 0			
2. Poa sp.			FAC	Column Lotals: 0	(A) <u>0</u>	(B)		
3				Prevalence Ind	lex = B/A = 0			
4.				Hydrophytic Vegeta	ation Indicators:			
5.				□ Dominance Test	is >50%			
6.				☐ Prevalence Index	x is ≤3.0 <sup>1</sup>			
7					daptations <sup>1</sup> (Provide sup			
8		_			arks or on a separate sh rophytic Vegetation¹ (E:	•		
W 1 15 00 1 (D) 1	103	_ = Tota	l Cover	☐ Problematic Hydi	rophytic vegetation (E.	xpiairi)		
Woody Vine Stratum (Plot size:)				<sup>1</sup> Indicators of hydric	soil and wetland hydrol	nav must		
1					isturbed or problematic.			
2			l Cover	Hydrophytic				
		_		Vegetation	v 5 5			
% Bare Ground in Herb Stratum 0	% Cover of Biotic	Crust 0%	, D	Present?	Yes 🛛 No 🗌			

(inches)	Color (moist)	%	Color (moist)	dox Feature %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-4	7.5YR3/2	100					Silt loam	
	7.5YR3/2		EVD4/6			N.4		
<del>1-10</del>	7.51K3/Z	<u>96</u>	5YR4/6	3	<u>C</u>	<u>M</u>	Silty clay loa	ım
10-18	5YR2.3/3	60	10YR3/1	40			Clay	Mixed matrix
	oncentration, D=De Indicators: (Appli					ed Sand G		ocation: PL=Pore Lining, M=Matrix. ors for Problematic Hydric Soils³:
-		icable to al			ieu.)			· · · · · · · · · · · · · · · · · · ·
☐ Histosol	oipedon (A2)		<ul><li>☐ Sandy Redox</li><li>☐ Stripped Matr</li></ul>					m Muck (A9) ( <b>LRR C</b> ) m Muck (A10) ( <b>LRR B</b> )
☐ Black His			Loamy Mucky		1)			duced Vertic (F18)
	n Sulfide (A4)		☐ Loamy Gleyed		,			Parent Material (TF2)
	Layers (A5) (LRR	C)	☐ Depleted Matr		,			er (Explain in Remarks)
	ck (A9) ( <b>LRR D</b> )	,	☐ Redox Dark S	Surface (F6)	)			,
Depleted	d Below Dark Surfac	ce (A11)	☐ Depleted Dar	k Surface (I	F7)			
	ark Surface (A12)		☐ Redox Depre	ssions (F8)				tors of hydrophytic vegetation and
	lucky Mineral (S1)							and hydrology must be present,
	leyed Matrix (S4)						unle	ss disturbed or problematic.
Restrictive	Layer (if present):							
Type: Cla	av.							
. ) p o. <u>o.o</u>	·y		_					
	ches): <u>10</u>		- -				Hydric Soi	il Present? Yes ⊠ No □
Depth (in		ot met with	- - 3% redox features				Hydric Soi	il Present? Yes ⊠ No □
Depth (in Remarks: The Control of	ches): <u>10</u> ne F6 indicator is no		- - 3% redox features				Hydric Soi	il Present? Yes ⊠ No □
Depth (in Remarks: The DROLOG Wetland Hy	ches): 10 ne F6 indicator is no SY drology Indicators	s:		oply)				
Depth (increments: The Toronto Control of the	ches): 10 ne F6 indicator is no  GY  drology Indicators cators (minimum of	s:	ed; check all that ap				Seco	ondary Indicators (2 or more required)
Depth (increments: The TDROLOG Wetland Hyperimary Indianal Surface)	ches): 10 ne F6 indicator is no  GY  drology Indicators cators (minimum of Water (A1)	s:	ed; check all that ap	st (B11)			Secc	ondary Indicators (2 or more required) Vater Marks (B1) ( <b>Riverine</b> )
Depth (increments: The Control of	ches): 10 ne F6 indicator is no  GY  drology Indicators cators (minimum of Water (A1) ter Table (A2)	s:	ed; check all that ap ☐ Salt Cru ☐ Biotic Cr	st (B11) rust (B12)	es (B13)		Secc	ondary Indicators (2 or more required) Water Marks (B1) ( <b>Riverine</b> ) Sediment Deposits (B2) <b>(Riverine)</b>
Depth (increments: The Control of	ches): 10 ne F6 indicator is no  GY  drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3)	s: one require	ed; check all that ap Salt Cru Biotic Co	st (B11) rust (B12) Invertebrate	. ,		<u>Secc</u>	ondary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)
Depth (in Remarks: Tr	ches): 10 ne F6 indicator is no  GY  drology Indicators cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) (Non rive	s: one require	ed; check all that ap Salt Cru Biotic Cr Aquatic Hydroge	st (B11) rust (B12) Invertebrate en Sulfide O	dor (C1)	Living Roc	Second   V     S   C   C   C   C   C   C   C   C	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10)
Depth (increments: Tree Topic Control	ches): 10 ne F6 indicator is no  GY  drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Non rive nt Deposits (B2) (No	one require erine) on riverine	ed; check all that ap Salt Cru Biotic Ci Aquatic Hydroge	st (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe	dor (C1) eres along	_	Seccion   V   S   S   S   S   S   S   S   S   S	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2)
Depth (increments: The Control of th	ches): 10 ne F6 indicator is no  GY  drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Non rive nt Deposits (B2) (No posits (B3) (Non rive	one require erine) on riverine	ed; check all that an Salt Cru Salt Cru Biotic Ci Aquatic Hydroge Oxidized	st (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reduce	odor (C1) eres along ed Iron (C	4)	Seccion V	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8)
Depth (increments: Tree Topic Control	ches): 10 ne F6 indicator is no  GY  drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Non rive nt Deposits (B2) (No cosits (B3) (Non rive Soil Cracks (B6)	one require erine) on riverine erine)	ed; check all that ap  Salt Cru Biotic Ci Aquatic Hydroge Oxidized Presence	st (B11) rust (B12) Invertebrate an Sulfide O d Rhizosphe e of Reduce fron Reduct	odor (C1) eres along ed Iron (C ion in Tille	4)	Seccion   V   S   C   C   C   C   C   C   C   C   C	Ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C
Depth (increments)  TOROLOG  Wetland Hy Primary India  Surface  High Wa  Saturation  Water M  Sedimen  Drift Dep  Surface  Inundation	ches): 10 ne F6 indicator is no  GY  drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Non rive nt Deposits (B2) (No posits (B3) (Non rive	one require erine) on riverine erine)	ed; check all that ap  Salt Cru Biotic Ci Aquatic Hydroge Oxidized Presenc Recent I	st (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reduce	odor (C1) eres along ed Iron (C ion in Tille (C7)	4)	Second V V V V V V V V V V V V V V V V V V V	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8)
Depth (increment)  Permarks: Tr  DROLOG  Wetland Hy  Primary India  Surface  High Wa  Saturatio  Water M  Sediment  Drift Dept  Surface  Inundatio  Water-St	drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Non rive to Deposits (B2) (No cosits (B3) (Non rive soil Cracks (B6) on Visible on Aerial I tained Leaves (B9) vations:	one require erine) on riverine erine) Imagery (B	ed; check all that ap  Salt Cru Biotic Ci Aquatic Hydroge Oxidized Presenc Recent I Thin Mu Other (E	st (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe ee of Reduce fron Reduct ck Surface	odor (C1) eres along ed Iron (C ion in Tille (C7)	4)	Second V V V V V V V V V V V V V V V V V V V	Ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C6) Shallow Aquitard (D3)
Depth (in Remarks: Tr	ches): 10 ne F6 indicator is no ne F7 indica	one require erine) on riverine erine) Imagery (B	ed; check all that an Salt Cru Salt Cru Aquatic Hydroge Oxidized Recent I Recent I Other (E	st (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reduce fron Reduct ck Surface explain in Re	odor (C1) eres along ed Iron (C ion in Tille (C7)	4)	Second V V V V V V V V V V V V V V V V V V V	Ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8) Shallow Aquitard (D3)
Depth (increment)  Permarks: Tr  DROLOG  Wetland Hy  Primary India  Surface  High Wa  Saturatio  Water M  Sediment  Drift Dept  Surface  Inundatio  Water-St	ches): 10 ne F6 indicator is no ne F7 indica	one require erine) on riverine erine) Imagery (B	ed; check all that ap  Salt Cru Biotic Ci Aquatic Hydroge Oxidized Presenc Recent I Thin Mu Other (E	st (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reduce fron Reduct ck Surface explain in Re	odor (C1) eres along ed Iron (C ion in Tille (C7)	4)	Second V V V V V V V V V V V V V V V V V V V	Ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8) Shallow Aquitard (D3)
Depth (increase Poincillage Po	ches): 10 ne F6 indicator is no ne F7 indica	one require  erine)  on riverine erine)  Imagery (B'  Yes \( \) N  Yes \( \) N	ed; check all that an Salt Cru Salt Cru Aquatic Hydroge Oxidized Recent I Thin Mu Other (E	st (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reduce fron Reduct ck Surface explain in Re mes):	odor (C1) eres along ed Iron (C ion in Tille (C7) emarks)	4) d Soils (Ce	Second Process (C3) C C C C C C C C C C C C C C C C C C	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (increase Poincillage Po	ches): 10 ne F6 indicator is no ne F7 indica	one require  erine)  on riverine erine)  Imagery (B'  Yes \( \) N  Yes \( \) N	ed; check all that an Salt Cru Salt Cru Aquatic Hydroge Oxidized Recent I Thin Mu Other (E	st (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reduce fron Reduct ck Surface explain in Re mes):	odor (C1) eres along ed Iron (C ion in Tille (C7) emarks)	4) d Soils (Ce	Second Process (C3) C C C C C C C C C C C C C C C C C C	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Gediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Gaturation Visible on Aerial Imagery (C8) Shallow Aquitard (D3) FAC-Neutral Test (D5)

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

Project/Site: 37090 Kelso RD	(	City/Co	unty: <u>Sandy/Clad</u>	ckamas	_ Sampling Date:4/15/	/20
Applicant/Owner: Joe Spaziani				_ State: OR	_ Sampling Point: P5E	3
Investigator(s): John McConnaughey, PWS# 2009			Section, Tov	vnship, Range: <u>T2S R4E</u>	≣ S11	
Landform (hillslope, terrace, etc.): Valley Floor		Local	relief (concave, o	convex, none): Flat	Slope (	%): <u>4%</u>
Subregion (LRR): <u>LRR-A</u>	Lat: <u>45.25</u>	5073		Long: <u>-122.16980</u>	Datum:	
Soil Map Unit Name: Cazado silt loam, Cottrell silty clay	loam			NWI classific	ation: Not mapped	
Are climatic / hydrologic conditions on the site typical for						
Are Vegetation YES, Soil, or Hydrology YES sign	nificantly disturb	ed?	Are "Normal	Circumstances" preser	nt? Yes □ No ⊠	
Are Vegetation YES, Soil, or Hydrology nat	turally problema	atic?	(If needed,	explain any answers in	Remarks.)	
SUMMARY OF FINDINGS – Attach site ma	p showing	samp	ling point lo	cations, transects	s, important featu	res, etc.
Hydrophytic Vegetation Present? Yes ⊠ No Hydric Soil Present? Yes ⊠ No Wetland Hydrology Present? Yes □ No Remarks: Moved upland plot approximately 10' up the time that wetland hydrology is absent.		plot 5.	Is the Sampled within a Wetlan	nd? Yes □	_	cluded each
VEGETATION – Use scientific names of plants	ants.					
<u>Tree Stratum</u> (Plot size: <u>30' north</u> )  1	% Cover	Spe	inant Indicator cies? Status	Dominance Test wo Number of Dominant That Are OBL, FACW		(A)
2. NO TREES 3.				Total Number of Dom Species Across All St		(B)
4 (Plot size: 30' north)			otal Cover	Percent of Dominant That Are OBL, FACW		(A/B)
1				Prevalence Index wo		
2				,	: Multiply b	
3					x 1 = 0	
4					x 2 = 0	
5					x 3 = <u>0</u> x 4 = <u>0</u>	
Herb Stratum (Plot size: 30' north)	-	_ = 10	otal Cover	-	x = 0 x = 0	
1. Rubus Armeniacus	25	Y	FAC	-	(A) <u>0</u>	
2. <u>Poa sp.</u>	20	_ Y	<u>FAC</u>	<u> </u>	( · · / · <u>-</u>	(-/
3. Cirsium arvense	<u>25</u>	<u>Y</u>	<u>FAC</u>	Prevalence Inde		
4. Agrostis sp				Hydrophytic Vegeta		
5. <u>Plantain lanceolata</u>				☐ Dominance Test i		
6				☐ Prevalence Index	∷is ≤3.0° laptations¹ (Provide su∣	porting
7					rks or on a separate sh	
8			otal Cover	☐ Problematic Hydr	ophytic Vegetation <sup>1</sup> (E	xplain)
1					soil and wetland hydrolosturbed or problematic.	
% Bare Ground in Herb Stratum 0			otal Cover	Hydrophytic Vegetation Present?	∕es⊠ No 🗆	
% Bare Ground in Herb Stratum 0  Remarks: minimal vegetation for identification because			otal Cover	Vegetation	∕es⊠ No □	

SOIL

Sampling Point: P5B

Depth		pth Matrix Redox Fo		Redox Featu				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-7	10YR3/3	97	7.5YR4/6	3	<u>C</u>	M	Silt loam	
7-16	10YR3/3	90	7.5YR4/6	10	<u>C</u>	<u>M</u>	Silty clay loam	
	oncentration, D=D					ted Sand C		n: PL=Pore Lining, M=Matrix.
•	Indicators: (App	olicable to			otea.)			or Problematic Hydric Soils <sup>3</sup> :
☐ Histosol ☐ Histic En	(A1) ipedon (A2)		☐ Sandy Ro	edox (S5) Matrix (S6)				ck (A9) ( <b>LRR C</b> ) ck (A10) ( <b>LRR B</b> )
☐ Black His				ucky Mineral (	F1)		☐ Reduced	
	n Sulfide (A4)		•	eyed Matrix (F	,			nt Material (TF2)
	Layers (A5) ( <b>LRF</b>	R C)	☐ Depleted	-	•			plain in Remarks)
1 cm Mud	ck (A9) ( <b>LRR D</b> )		□ Redox D	ark Surface (F	6)			
	Below Dark Surf	ace (A11)		Dark Surface	. ,			
	rk Surface (A12)		☐ Redox D	epressions (F8	3)			hydrophytic vegetation and
Sandy M	ucky Mineral (S1)							ydrology must be present,
<b>-</b>								
	leyed Matrix (S4)						unless dis	turbed or problematic.
Restrictive	leyed Matrix (S4) Layer (if present)						unless dis	turbed or problematic.
Restrictive	Layer (if present)	):						
Restrictive   Type: Depth (in	Layer (if present)	):	_				Hydric Soil Pres	sent? Yes ⊠ No □
Type: Depth (in Remarks: Tr	ches):	):	_	drological cond	litions that	existed wh	Hydric Soil Pres	·
Restrictive Type:  Depth (in Remarks: The	ches):ese soils may be	):	_	drological cond	ditions that	existed wh	Hydric Soil Pres	sent? Yes ⊠ No □
Type:	ches): nese soils may be n.	relic, perha	_	drological conc	litions that	existed wh	Hydric Soil Pres	sent? Yes ⊠ No □
Type:	ches):ese soils may be	relic, perha	aps reflecting hy		ditions that	existed wh	Hydric Soil Presenthe road and ditc	sent? Yes ⊠ No □
Type: Depth (in Remarks: The configuration DROLOG Wetland Hy	ches):ese soils may be it.  Grant drology Indicator cators (minimum c	relic, perha	aps reflecting hydrights and the second seco	at apply)	litions that	existed wh	Hydric Soil Presenthe road and ditc	sent? Yes ⊠ No □ hes upslope were in some other  / Indicators (2 or more required)
Type: Depth (in Remarks: Tronfiguration  DROLOG  Vetland Hy Primary India  Surface	ches):	relic, perha	aps reflecting hydrogen in the control of the contr	at apply) Crust (B11)	litions that	existed wh	Hydric Soil Presenthe road and ditc	hes upslope were in some other  / Indicators (2 or more required)  Marks (B1) (Riverine)
Restrictive   Type: Depth (increments: The onfiguration   DROLOG   Vetland Hy   Drimary India   Surface   High Wa	ches): lesse soils may be in.  is Y  drology Indicator cators (minimum of the cators)  Water (A1)  ter Table (A2)	relic, perha	aps reflecting hydicates and the last of t	at apply) Crust (B11) ic Crust (B12)		existed wh	en the road and ditc  Secondary  Water  Sedim	hes upslope were in some other  Indicators (2 or more required)  Marks (B1) (Riverine)  ent Deposits (B2) (Riverine)
Type: Depth (inclemarks: Tronfiguration  DROLOG  Vetland Hy  Primary India  Surface  High Wa  Saturation	ches):ese soils may be h.  is Y  drology Indicator (animum of the charter)  Water (A1)  ter Table (A2)  on (A3)	relic, perha	aps reflecting hydrights ired; check all th	at apply) Crust (B11)	tes (B13)	existed wh	Hydric Soil Presenthe road and ditc	hes upslope were in some other  Indicators (2 or more required)  Marks (B1) (Riverine)  ent Deposits (B2) (Riverine)  eposits (B3) (Riverine)
Restrictive Type: Depth (in- Remarks: Tr onfiguration  DROLOG  Vetland Hy Primary India Surface High Wa Saturatic Water M	ches):	relic, perhants: of one requi	ired; check all th	at apply) Crust (B11) c Crust (B12) atic Invertebra	tes (B13) Odor (C1)		Hydric Soil Presenther road and ditces  Secondary Water Sedim Drift D Draina	hes upslope were in some other  Indicators (2 or more required)  Marks (B1) (Riverine)  ent Deposits (B2) (Riverine)
Type: Depth (in Remarks: The onfiguration of the configuration of th	ches):	relic, perhars: of one requi	ired; check all the Biot Aqu	at apply) Crust (B11) c Crust (B12) atic Invertebra rogen Sulfide	tes (B13) Odor (C1) neres along	Living Ro	Hydric Soil Presenther road and ditc  Secondary Water Sedim Drift D Draina ots (C3) Dry-Se	hes upslope were in some other  Indicators (2 or more required)  Marks (B1) (Riverine)  ent Deposits (B2) (Riverine)  eposits (B3) (Riverine)  ge Patterns (B10)  eason Water Table (C2)
Type: Depth (in Remarks: The configuration of t	ches):	relic, perhars: of one requi	ired; check all the Biot Aqu	at apply) Crust (B11) c Crust (B12) atic Invertebra	tes (B13) Odor (C1) neres along ced Iron (C	Living Ro	Hydric Soil Presenthe road and ditc  Secondary Water Sedim Drift D Draina ots (C3) Crayfis	hes upslope were in some other  Indicators (2 or more required)  Marks (B1) (Riverine)  ent Deposits (B2) (Riverine)  eposits (B3) (Riverine)  ge Patterns (B10)  eason Water Table (C2)  sh Burrows (C8)
Type:	ches):	relic, perhars:  rs:  of one requiverine)  lon riverine  verine)	ired; check all th Salt Biot Aqu Hyd Pres	at apply) Crust (B11) ic Crust (B12) atic Invertebra rogen Sulfide dized Rhizosph sence of Redu ent Iron Reduc	tes (B13) Odor (C1) neres along ced Iron (C ction in Tille	Living Ro	Hydric Soil Present the road and ditce  Secondary  Water Sedim Drift D Draina ots (C3) Dry-Se Crayfis Satura	hes upslope were in some other  Indicators (2 or more required)  Marks (B1) (Riverine)  ent Deposits (B2) (Riverine)  eposits (B3) (Riverine)  ge Patterns (B10)  eason Water Table (C2)  th Burrows (C8)  tion Visible on Aerial Imagery (C9)
Restrictive Type: Depth (in- Remarks: Tr onfiguration  PROLOG  Vetland Hy Primary India Surface High Wa Saturatic Water M Sedimen Drift Dep Surface	ches):	relic, perharces:  rs: of one requiverine) Non riverine verine)	ired; check all the Salt   Salt   Biot   Aque   Prese   B7)   Thir	at apply) Crust (B11) ic Crust (B12) atic Invertebra rogen Sulfide dized Rhizosph sence of Redu	tes (B13) Odor (C1) neres along ced Iron (C ction in Tille e (C7)	Living Ro	Hydric Soil Present the road and ditces  Secondary  Water Sedim Drift D Draina ots (C3) Dry-Se Crayfis Satura Shallo	hes upslope were in some other  Indicators (2 or more required)  Marks (B1) (Riverine)  ent Deposits (B2) (Riverine)  eposits (B3) (Riverine)  ge Patterns (B10)  eason Water Table (C2)  sh Burrows (C8)
Restrictive Type: Depth (in Remarks: Theonfiguration  DROLOG  Vetland Hy Primary India Surface High Wa Saturatic Water M Sedimen Drift Dep Surface Inundatio Water-St	ches):  ches):  ches is in the solid may be an in the solid may be a	relic, perharces:  rs: of one requiverine) Non riverine verine)	ired; check all the Salt   Salt   Biot   Aque   Prese   B7)   Thir	at apply) Crust (B11) Ic Crust (B12) atic Invertebra rogen Sulfide dized Rhizosph sence of Redu ent Iron Reduc	tes (B13) Odor (C1) neres along ced Iron (C ction in Tille e (C7)	Living Ro	Hydric Soil Present the road and ditces  Secondary  Water Sedim Drift D Draina ots (C3) Dry-Se Crayfis Satura Shallo	hes upslope were in some other  Indicators (2 or more required)  Marks (B1) (Riverine)  ent Deposits (B2) (Riverine)  eposits (B3) (Riverine)  ge Patterns (B10)  eason Water Table (C2)  sh Burrows (C8)  tion Visible on Aerial Imagery (C9)  w Aquitard (D3)
Restrictive Type: Depth (in Remarks: Theonfiguration  DROLOG  Wetland Hy Primary India Surface High Wa Saturatic Water M Sedimen Drift Dep Surface Inundatio Water-St	ches):  ches):  ches is in the solid may be an interest of the solid may be an interest. The solid may be an interest of the s	relic, perhares:  verine)  Jon riverine verine)  I Imagery (I	ired; check all the Salt   Salt   Biot   Aque   Prese   Rece   B7)   Thire	at apply) Crust (B11) Ic Crust (B12) atic Invertebra rogen Sulfide dized Rhizosph sence of Redu ent Iron Reduc	tes (B13) Odor (C1) neres along ced Iron (C ction in Tille e (C7) Remarks)	Living Ro	Hydric Soil Present the road and ditces  Secondary  Water Sedim Drift D Draina ots (C3) Dry-Se Crayfis Satura Shallo	hes upslope were in some other  Indicators (2 or more required)  Marks (B1) (Riverine)  ent Deposits (B2) (Riverine)  eposits (B3) (Riverine)  ge Patterns (B10)  eason Water Table (C2)  sh Burrows (C8)  tion Visible on Aerial Imagery (C9)  w Aquitard (D3)
Restrictive Type: Depth (in: Remarks: Trenfiguration  DROLOG Wetland Hy Primary India Surface High Wa Saturation Water M Sediment Drift Depth (in: Surface Surface Surface Water-Si	ches):  ches):  dese soils may be be drology Indicator cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) (Non riv to Deposits (B2) (Non ri Soil Cracks (B6) n Visible on Aeria cained Leaves (B9) vations: er Present?	relic, perhares:  res:  of one requiverine)  Non riverine (verine)  I Imagery (I	ired; check all the Salt Salt Salt Salt Salt Salt Salt Salt	at apply) Crust (B11) ic Crust (B12) atic Invertebra rogen Sulfide dized Rhizosph sence of Redu ent Iron Reduc Muck Surface er (Explain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Tille e (C7) Remarks)	Living Ro	Hydric Soil Present the road and ditces  Secondary  Water Sedim Drift D Draina ots (C3) Dry-Se Crayfis Satura Shallo	hes upslope were in some other  Indicators (2 or more required)  Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9) w Aquitard (D3)
Type:	ches):  ches):  dese soils may be be dese soils may be ches soils may be ches soils may be dese soils	relic, perha	aps reflecting hydrights ired; check all the solution of solution	at apply) Crust (B11) ic Crust (B12) atic Invertebra rogen Sulfide dized Rhizosph sence of Redu ent Iron Reduc Muck Surface er (Explain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Tille e (C7) Remarks)	Living Ro 4) ed Soils (C	Hydric Soil Present the road and ditce Secondary Secondary Water Sedim Drift D Draina ots (C3) Dry-Se Crayfis Satura Shallor FAC-N	hes upslope were in some other  Indicators (2 or more required)  Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9) w Aquitard (D3) leutral Test (D5)
Restrictive Type: Depth (in Remarks: Theonfiguration DROLOG Wetland Hy Primary India Surface High Wa Saturation Unification Unifity Unification Unification Unification Unification Unification Un	ches):  ches):  dese soils may be be dese soils may be ches soils may be ches soils may be dese soils	relic, perha	aps reflecting hydrights ired; check all the solution of solution	at apply) Crust (B11) ic Crust (B12) atic Invertebra rogen Sulfide dized Rhizosph sence of Redu ent Iron Reduc Muck Surface er (Explain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Tille e (C7) Remarks)	Living Ro 4) ed Soils (C	Hydric Soil Present the road and ditces secondary Water Sedim Drift Department Crayfis Satura Shallor FAC-N	hes upslope were in some other  Indicators (2 or more required)  Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9) w Aquitard (D3) leutral Test (D5)

## WETLAND DETERMINATION DATA FORM – Arid West Region

roject/Site: 37090 Kelso RD		C	ity/Cour	nty: <u>Sandy/Cla</u>	ckamas	_ Sampling Date: 3/30/2	.017
pplicant/Owner: <u>Joe Spaziani</u>					_ State: OR	_ Sampling Point: P6	
vestigator(s): John McConnaughey, PWS# 20	09			_ Section, Tov	vnship, Range: <u>T2S R4l</u>	E S11	
andform (hillslope, terrace, etc.): Valley Floor			Local re	elief (concave,	convex, none): Flat	Slope (%	o): <u>4%</u>
ubregion (LRR): <u>LRR-A</u>		Lat: 45.41	796		Long: -122.20262	Datum:	
oil Map Unit Name: <u>Cazado silt loam, Cottrell s</u>							
re climatic / hydrologic conditions on the site ty							
re Vegetation, Soil, or Hydrology		-			nal Circumstances" pres		
re Vegetation, Soil, or Hydrology					•		
					d, explain any answers		
SUMMARY OF FINDINGS – Attach	site map s	howing s	sampli	ng point lo	cations, transects	s, important feature	es, etc
Hydrophytic Vegetation Present? Ye	s⊠ No□						
	s □ No □			s the Sampled			
	s⊠ No□		v	vithin a Wetla	nd? Yes ⊠	No 🗌	
Remarks: Above average rainfall in March ar		etated patch	n not mo	wed, hydrolog	y fed by roadside ditch		
_					-		
EGETATION – Use scientific name	s of plant						
	S OI PIAIIL	Absolute	Domin	ant Indicator	Dominance Test wo	rkahaati	
Tree Stratum (Plot size: 3' cir)				es? Status	Number of Dominant		
1					That Are OBL, FACW		(A)
2. NO TREES					Total Number of Dom	oinant.	
3					Total Number of Dom Species Across All S		(B)
4					Doroont of Dominant	Charina	
					Percent of Dominant That Are OBL, FACW		(A/B)
Sapling/Shrub Stratum (Plot size: 3' cir)		0.0	.,	E4.0			
1. Rubus Armeniacus					Prevalence Index w		
2						$ \begin{array}{ccc} \text{f:} & & & & & & \\ & & & & & \\ & & & & \\ & & & & $	
3						x = 0 x = 0	
4					*	x 3 = 0	
5		30	- Tota	al Cover	*	x = 0 $x = 0$	
Herb Stratum (Plot size: 3' cir)		<u>50</u>	100	ai Oovei		x 5 = 0	
1. Agrostis sp		40	Y	FAC	· · · · · · · · · · · · · · · · · · ·	(A) <u>0</u>	
2. Poa sp.		40	Y	<u>FAC</u>		( //	、
3. Moss		80			Prevalence Inde	ex = B/A = 0	
4. Galium aparine		2	N	FACU	Hydrophytic Vegeta		
5. <u>Herb 1</u>		2	N	<u>NA</u>	Dominance Test		
6. <u>Herb 2</u>		2	N	<u>NA</u>	☐ Prevalence Index		
7					☐ Morphological Ad	laptations¹ (Provide supp rks or on a separate she	orting
8						ophytic Vegetation <sup>1</sup> (Exp	
Moody Vino Stratum (Diet size)		86	= Tota	al Cover	1 Toblematic Hydr	ophytic vegetation (Exp	naii i
Woody Vine Stratum (Plot size:)					<sup>1</sup> Indicators of hydric s	soil and wetland hydrolog	nv must
1			-			sturbed or problematic.	jy mast
2.			_ Tate	al Cover	Hydrophytic		
		116	= Tota	al Cover	Hydrophytic Vegetation Present?	res⊠ No □	

Depth	Matri	ix	epth needed to doc Re	dox Feature	es			-
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-8	7.5YR3/2	100					Silt loam	
8-11	7.5YR3/2	95	5YR4/6	5	<u>C</u>	<u>M</u>	Silty clay loan	n
11-18	7.5YR3/2	50					clay	
	5YR4/6	50						Mixed matrix
					_			
Type: C=C	oncentration. D=	Depletion, RI	M=Reduced Matrix,	CS=Covere	ed or Coat	ed Sand G	Grains. <sup>2</sup> Loc	cation: PL=Pore Lining, M=Matrix.
			II LRRs, unless oth					ors for Problematic Hydric Soils <sup>3</sup> :
☐ Histosol	(A1)		☐ Sandy Redox	(S5)			☐ 1 cm	n Muck (A9) (LRR C)
	oipedon (A2)		Stripped Matr	` '				n Muck (A10) (LRR B)
Black Hi			Loamy Mucky		,			uced Vertic (F18)
	en Sulfide (A4)	ND (0)	☐ Loamy Gleyed		)			Parent Material (TF2)
	d Layers (A5) ( <b>LR</b> ck (A9) ( <b>LRR D</b> )	(K C)	<ul><li>☐ Depleted Matr</li><li>☑ Redox Dark S</li></ul>	. ,	١		∪ Othe	r (Explain in Remarks)
	d Below Dark Sur	face (Δ11)	☐ Depleted Dark	, ,				
	ark Surface (A12)		Redox Depres				3Indicate	ors of hydrophytic vegetation and
	lucky Mineral (S1			33.31.3 (1.3)				and hydrology must be present,
	Sleyed Matrix (S4)							ss disturbed or problematic.
estrictive	Layer (if presen	t):						
Type: Cla	ay		<u> </u>					
Depth (in	ches): <u>11</u>		_				Hydric Soil	Present? Yes ⊠ No □
Remarks:								
DROLOG	SY SY							
Wetland Hy	drology Indicate	ors:						
Primary Indi	cators (minimum	of one requir	ed; check all that ap	pply)			Secor	ndary Indicators (2 or more required)
Surface	Water (A1)		☐ Salt Crus	st (B11)			□ w	/ater Marks (B1) (Riverine)
	iter Table (A2)			ust (B12)				ediment Deposits (B2) (Riverine)
Saturation     Saturation			☐ Aquatic I	Invertebrate	es (B13)			rift Deposits (B3) (Riverine)
☐ Water M	arks (B1) ( <b>Non r</b> i	iverine)	☐ Hydroge	n Sulfide O	dor (C1)		☐ Di	rainage Patterns (B10)
Sedimer	nt Deposits (B2) (	Non riverine	e) 🔲 Oxidized	l Rhizosphe	eres along	Living Roo	ots (C3) 🔲 Di	ry-Season Water Table (C2)
	posits (B3) (Non i		☐ Presence		_	-		rayfish Burrows (C8)
Surface	Soil Cracks (B6)		☐ Recent I	ron Reduct	ion in Tille	ed Soils (Ce	6) 🗆 Sa	aturation Visible on Aerial Imagery (C9
☐ Inundation	on Visible on Aeria	al Imagery (E	37) 🔲 Thin Mud	ck Surface	(C7)		☐ SI	hallow Aquitard (D3)
☐ Water-S	tained Leaves (B	9)	Other (E.	xplain in Re	emarks)		☐ F/	AC-Neutral Test (D5)
ield Obser	vations:							
Surface Wat	ter Present?		No 🛛 Depth (inch	nes):				
Nater Table	Present?	Yes 🛛 1	No Depth (inch	nes): <u>7"</u>				
	pillary fringe)		No Depth (inch					y Present? Yes 🛛 No 🗌
Describe Re table.	ecorded Data (stre	eam gauge, r	nonitoring well, aeria	ai photos, p	revious in	spections)	, it available: 4/	17/17 no water, 5/1/17 9" bgs water
Remarks:								

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 37090 Kelso RD	(	City/Cou	unty: Sandy/Clad	ckamas	Sampling Date: 3/30/2017	
Applicant/Owner: <u>Joe Spaziani</u>				State: OR	Sampling Point: P7	
nvestigator(s): John McConnaughey, PWS# 2009			Section, Tov	vnship, Range: <u>T2S R4</u>	E S11	
andform (hillslope, terrace, etc.): Valley Floor		_Local r	elief (concave, o	convex, none): Flat	Slope (%): <u>2%</u>	
Subregion (LRR): <u>LRR-A</u>	Lat: <u>45.2</u> !	5066		Long: <u>-122.16981</u>	Datum:	
Soil Map Unit Name: Cazado silt loam, Cottrell silty clay						
are climatic / hydrologic conditions on the site typical for						
Are Vegetation, Soil, or Hydrology <u>YES</u> s	-			nal Circumstances" pres		
Are Vegetation, Soil, or Hydrology				d, explain any answers		
SUMMARY OF FINDINGS – Attach site ma	ap showing	samp	ling point io	cations, transects	s, important features, etc.	
Hydrophytic Vegetation Present? Yes ⊠ N	o 🗌		Is the Sampled	A Aroa		
Hydric Soil Present? Yes ⊠ N	o 🗆		within a Wetlar		No 🗆	
Wetland Hydrology Present? Yes ⊠ N	0 🗆		within a Wetiai	iu: Tes 🖂	NO [	
Remarks: Above average rainfall in March and April.	Vegetated pate	ch not m	lowed, hydrology	y fed by roadside ditch	along Kelso Road.	
/EGETATION – Use scientific names of p	lants.					
	Absolute	Domi	inant Indicator	Dominance Test wo	orksheet:	
Tree Stratum (Plot size: 30' East)	·		cies? Status	Number of Dominant		
1				That Are OBL, FACV	N, or FAC: <u>1</u> (A)	
2. NO TREES				Total Number of Don		
3				Species Across All S	Strata: <u>3</u> (B)	
4				Percent of Dominant		
Sapling/Shrub Stratum (Plot size: 30' East)		_ = 10	tal Cover	That Are OBL, FACV	N, or FAC: <u>33%</u> (A/B)	
1				Prevalence Index w	vorksheet:	
2.				Total % Cover o	of: Multiply by:	
3.				OBL species 0	x 1 = <u>0</u>	
4.				FACW species 0	x 2 = <u>0</u>	
5				FAC species 30	x 3 = <u>90</u>	
			tal Cover	FACU species 80	x 4 = <u>320</u>	
Herb Stratum (Plot size:)				UPL species 0	x 5 = <u>0</u>	
1. Agrostis sp		_ <u>Y</u>		Column Totals: 110	(A) <u>410</u> (B)	
Anthoxanthum odoratum		<u>Y</u>	<u>FACU</u>	Drayalanaa Ind	I D/A 9.7	
3. Rubus armeniacus					dex = B/A = 3.7	
4. Taraxacum officinale				Hydrophytic Vegeta  Dominance Test		
5. <u>Hieracium albiflorum</u>			NA NA	Prevalence Index		
6. Galium aparine				1 <del>-</del>	daptations <sup>1</sup> (Provide supporting	
7					arks or on a separate sheet)	
8				☐ Problematic Hyd	rophytic Vegetation <sup>1</sup> (Explain)	
Woody Vine Stratum (Plot size: )	103	_ = 10	tal Cover			
1					soil and wetland hydrology must	
				be present, unless di	isturbed or problematic.	
2.		_ = To	tal Cover	Hydrophytic		
2	6 Cover of Biotic			Vegetation	Yes □ No ⊠	

(inches)	Color (moist)	%	Color (moist)	Redox Featu %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
)-9	7.5YR3/2	100					Silt loam	
)-11		90	5YR4/6	10	C			
-11	7.5YR3/1	90	<u>51K4/6</u>	10	<u>C</u>	<u>M</u>	Silty clay loam	1
1-18	7.5YR2.5/2	95	5YR4/6	5	С	М	Silty clay loam	1
	7.10		<u> </u>	<u>~</u>			<u>omy owy rouri</u>	
			· -					
T C. C	Samuelan D. I		M. Dadwaad Ma			4- d Cand C	21	etion. Di Done Lining M Matrix
	Concentration, D=[ Indicators: (App					ilea Sana G		ration: PL=Pore Lining, M=Matrix. rs for Problematic Hydric Soils <sup>3</sup> :
Histosol		,	☐ Sandy R		,			Muck (A9) (LRR C)
	pipedon (A2)			Matrix (S6)			<del></del>	Muck (A10) (LRR B)
	istic (A3)		Loamy M	lucky Mineral (	F1)			uced Vertic (F18)
] Hydroge	en Sulfide (A4)		☐ Loamy G	eyed Matrix (F	2)		□ Red F	Parent Material (TF2)
Stratifie	d Layers (A5) (LR	R C)	□ Depleted	Matrix (F3)			☐ Other	(Explain in Remarks)
<del></del>	ıck (A9) ( <b>LRR D</b> )			ark Surface (Fe	,			
	d Below Dark Sur	face (A11)	•	Dark Surface	. ,			
	ark Surface (A12)		☐ Redox D	epressions (F8	5)			rs of hydrophytic vegetation and
	Mucky Mineral (S1							nd hydrology must be present,
	Gleyed Matrix (S4)						unles	s disturbed or problematic.
	Layer (if present	.):						
Type: Cla	ay							
Danth (in							Uludaia Call	December Vac V Na 🗆
	nches): <u>11</u>						Hydric Soil	Present? Yes ⊠ No □
	nches): <u>11</u> extremely wet. Ha	rd to see ind	 licators				Hydric Soil	Present? Yes ⊠ No □
		rd to see ind	 licators				Hydric Soil	Present? Yes ⊠ No □
		rd to see ind	 licators				Hydric Soil	Present? Yes ⊠ No □
Remarks: E	extremely wet. Ha	rd to see ind	 licators				Hydric Soil	Present? Yes ⊠ No □
Remarks: E	extremely wet. Ha		 licators				Hydric Soil	Present? Yes ⊠ No □
Remarks: E  DROLOG  Vetland Hy	extremely wet. Ha	ors:		at apply)				Present? Yes No \( \square \)
DROLOG Vetland Hy	CAT STATE OF THE STATE OF T	ors:	red; check all th	at apply) Crust (B11)			Secon	
DROLOG Vetland Hy rimary Indi	GY ydrology Indicato	ors:	red; check all th ☐ Salt				Secon	ndary Indicators (2 or more required)
PROLOGICAL STREET OF THE PROPERTY OF THE PROPE	GY  ydrology Indicator icators (minimum Water (A1) ater Table (A2)	ors:	red; check all th □ Salt □ Biot	Crust (B11)	tes (B13)		Secon	ndary Indicators (2 or more required) ater Marks (B1) ( <b>Riverine</b> )
DROLOG Vetland Hy Irimary Indi Surface High Wa	GY  ydrology Indicator icators (minimum Water (A1) ater Table (A2) on (A3)	ors: of one requi	red; check all th □ Salt □ Biot □ Aqu	Crust (B11) ic Crust (B12) atic Invertebra			Secon  W: Se	ndary Indicators (2 or more required) ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine)
DROLO( Vetland Hy Irimary Indi Surface High Wa Saturati Water M	GY  ydrology Indicator icators (minimum Water (A1) ater Table (A2)	ors: of one requi	red; check all th Salt Biot Aqu	Crust (B11) ic Crust (B12)	Odor (C1)	g Living Roc	Secon  We Secon  Do Dr	adary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10)
DROLOG Vetland Hy rimary Indi Surface High Wa Saturati Water M	GY ydrology Indicator icators (minimum Water (A1) ater Table (A2) on (A3) Marks (B1) (Non ri nt Deposits (B2) (I	ors: of one requi verine) Non riverine	red; check all th Salt Biot Aqu Hyce () Oxice	Crust (B11) ic Crust (B12) atic Invertebra	Odor (C1) neres alon		Secon   W:   Se   Dr   Dr   Dr   Dr   Dr   Dr   Dr   D	adary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2)
DROLOG Vetland Hy Vrimary India Surface High Wa Saturatia Water Marker M	gy ydrology Indicato icators (minimum Water (A1) ater Table (A2) ion (A3) Marks (B1) (Non ri nt Deposits (B2) (I	ors: of one requi verine) Non riverine	red; check all th Salt Biot Aqu Hyce) Oxie	Crust (B11) ic Crust (B12) atic Invertebra trogen Sulfide ( dized Rhizosph	Odor (C1) neres alon ced Iron (C	24)	Secon   W:   Se   Dr   Dr   Dr   Dr   Cr   Cr   Cr   Cr	adary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8)
DROLOG Vetland Hy Primary Indi Surface High Wa Saturati Water M Sedimel Drift Del	cxtremely wet. Har ydrology Indicator icators (minimum Water (A1) ater Table (A2) ion (A3) Marks (B1) (Non ri int Deposits (B2) (I posits (B3) (Non r	ors: of one requi verine) Non riverine iverine)	red; check all th Salt Biot Aqu Hyc e) Oxid Pre	Crust (B11) ic Crust (B12) atic Invertebra lrogen Sulfide ( dized Rhizosph sence of Reducent Iron Reducent	Odor (C1) heres along ced Iron (C ction in Till	24)	Secon   W:   Secon   Dr   Dr   Dr   Cr   Cr   Secon   Secon	adary Indicators (2 or more required) ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9
DROLOG Vetland Hy Primary Indi Surface High Wa Saturati Water M Sedimed Drift De Surface	GY  ydrology Indicator icators (minimum Water (A1) ater Table (A2) on (A3) Marks (B1) (Non ri nt Deposits (B2) (I posits (B3) (Non r Soil Cracks (B6) on Visible on Aeria	ors: of one requi verine) Non riverine iverine)	red; check all th	Crust (B11) ic Crust (B12) atic Invertebra lrogen Sulfide ( dized Rhizosph sence of Reducent Iron Reducent Iron Reducent Muck Surface	Odor (C1) heres along ced Iron (C ction in Till e (C7)	24)	Secon   W:   Se   Dr   Dr   Dr   Cr   Cr   Cr   Se   Sr   Sr   Sr   Sr   Sr   Sr   S	adary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2)
DROLOG Vetland Hy Primary Indi Surface Mater M Sedimen Drift De Surface Inundation	cxtremely wet. Har ydrology Indicator icators (minimum Water (A1) ater Table (A2) ion (A3) Marks (B1) (Non ri int Deposits (B2) (I posits (B3) (Non r	ors: of one requi verine) Non riverine iverine)	red; check all th	Crust (B11) ic Crust (B12) atic Invertebra lrogen Sulfide ( dized Rhizosph sence of Reducent Iron Reducent	Odor (C1) heres along ced Iron (C ction in Till e (C7)	24)	Secon   W:   Se   Dr   Dr   Dr   Cr   Cr   Cr   Se   Sr   Sr   Sr   Sr   Sr   Sr   S	adary Indicators (2 or more required) ater Marks (B1) (Riverine) addiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 nallow Aquitard (D3)
Primary Indi Surface High Wa Saturati Water M Sedimee Drift De Surface High Wa Surface	gy ydrology Indicator icators (minimum Water (A1) ater Table (A2) on (A3) Marks (B1) (Non ri nt Deposits (B2) (I posits (B3) (Non r Soil Cracks (B6) on Visible on Aeria Stained Leaves (B6)	ors: of one requi verine) Non riverine iverine)	red; check all th	Crust (B11) ic Crust (B12) atic Invertebra lrogen Sulfide ( dized Rhizosph sence of Reducent Iron Reducent Iron Reducent Muck Surface	Odor (C1) heres along ced Iron (C ction in Till e (C7)	24)	Secon   W:   Se   Dr   Dr   Dr   Cr   Cr   Cr   Se   Sr   Sr   Sr   Sr   Sr   Sr   S	adary Indicators (2 or more required) ater Marks (B1) (Riverine) addiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 nallow Aquitard (D3)
DROLOG  Vetland Hy Primary Indi Surface High Wa Saturati Water M Sedimen Drift De Surface Inundatio Water-S	gy ydrology Indicator icators (minimum Water (A1) ater Table (A2) on (A3) Marks (B1) (Non ri nt Deposits (B2) (I posits (B3) (Non r Soil Cracks (B6) on Visible on Aeria Stained Leaves (B6)	verine) Non riverine iverine) al Imagery (E	red; check all th Salt Biot Aqu Hyce Oxice Pre Rec B7) Thir	Crust (B11) ic Crust (B12) atic Invertebra lrogen Sulfide ( dized Rhizosph sence of Reducent Iron Reducent Iron Reducent Muck Surface	Odor (C1) heres along ced Iron (C tion in Till e (C7) Remarks)	24)	Secon   W:   Se   Dr   Dr   Dr   Cr   Cr   Cr   Se   Sr   Sr   Sr   Sr   Sr   Sr   S	adary Indicators (2 or more required) ater Marks (B1) (Riverine) addiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 nallow Aquitard (D3)
DROLOG  Vetland Hy Primary Indi Surface High Wa Saturati Water M Sedimen Drift De Surface Inundatio Water-S	catremely wet. Hard ydrology Indicator icators (minimum Water (A1) ater Table (A2) ion (A3) Marks (B1) (Non rint Deposits (B2) (Non rint Deposits (B2) (Non rint Deposits (B6) ion Visible on Aeria Stained Leaves (B6) rvations: iter Present?	verine) Non riverine iverine) al Imagery (E	red; check all th  Salt  Biot  Aqu  Hyce  Pre  Rec  37)	Crust (B11) ic Crust (B12) atic Invertebra frogen Sulfide ( dized Rhizosph sence of Reducent Iron Reducent Iron Reducent Iron Reducent (Explain in F	Odor (C1) heres along ced Iron (C tion in Till e (C7) Remarks)	24)	Secon   W:   Se   Dr   Dr   Dr   Cr   Cr   Cr   Se   Sr   Sr   Sr   Sr   Sr   Sr   S	adary Indicators (2 or more required) ater Marks (B1) (Riverine) addiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 nallow Aquitard (D3)
Primary Indi Surface High Water M Sedimer Drift Der Inundation Water-S	gy  ydrology Indicator icators (minimum Water (A1) ater Table (A2) on (A3) Marks (B1) (Non ri nt Deposits (B2) (I posits (B3) (Non ri Soil Cracks (B6) on Visible on Aeria Stained Leaves (B3) rvations: ater Present?	verine) Non riverine iverine) al Imagery (E	red; check all th  Salt  Biot  Aqu  Hyce  Pre  Rec  37) Thir  Oth	Crust (B11) ic Crust (B12) atic Invertebra lrogen Sulfide ( dized Rhizosph sence of Reduce ent Iron Reduce Muck Surface er (Explain in F	Odor (C1) heres along ced Iron (C tion in Till e (C7) Remarks)	c4) ed Soils (C6	Secon	adary Indicators (2 or more required) ater Marks (B1) (Riverine) addiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 nallow Aquitard (D3)
DROLOG  Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimel Drift Del Inundatio Water-S  Field Obset  Surface Water Table Saturation Fincludes ca	catremely wet. Hard drology Indicators (minimum) water (A1) ater Table (A2) fon (A3) Marks (B1) (Non rint Deposits (B2) (Non rint Deposits (B3) (Non rint Deposits (B6) on Visible on Aeria Stained Leaves (B6) for Visible on Aeria Stained Leav	verine) Non riverine iverine) al Imagery (E	red; check all th  Salt  Biot  Aqu  Hyce  Pre  Rec  37)	Crust (B11) ic Crust (B12) atic Invertebra lrogen Sulfide ( dized Rhizosph sence of Reduce ent Iron Reduce Muck Surface er (Explain in F  (inches): (inches): 5"  (inches): 5"	Odor (C1) heres along ced Iron (C tion in Till e (C7) Remarks)	(24) ed Soils (Ce	Secon   Ware   Secon   Ware   Secon   Dr.   Dr.   Dr.   Dr.   Cr.   Sa.   Sr.   Sr.   FA	adary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 hallow Aquitard (D3) AC-Neutral Test (D5)
DROLOG Vetland Hy rimary Indi Surface High Wa Saturati Water M Sedimel Drift Del Inundatio Water-S ield Obser urface Wa Vater Table aturation F ncludes ca	catremely wet. Hard drology Indicators (minimum) water (A1) ater Table (A2) fon (A3) Marks (B1) (Non rint Deposits (B2) (Non rint Deposits (B3) (Non rint Deposits (B6) on Visible on Aeria Stained Leaves (B6) for Visible on Aeria Stained Leav	verine) Non riverine iverine) al Imagery (E	red; check all th  Salt  Biot  Aqu  Hyce  Pre  Rec  37)	Crust (B11) ic Crust (B12) atic Invertebra lrogen Sulfide ( dized Rhizosph sence of Reduce ent Iron Reduce Muck Surface er (Explain in F  (inches): (inches): 5"  (inches): 5"	Odor (C1) heres along ced Iron (C tion in Till e (C7) Remarks)	(24) ed Soils (Ce	Secon   Ware   Secon   Ware   Secon   Dr.   Dr.   Dr.   Dr.   Cr.   Sa.   Sr.   Sr.   FA	adary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 hallow Aquitard (D3) AC-Neutral Test (D5)
DROLOG Vetland Hy rimary Indi Surface High Wa Saturati Water M Sedimel Drift Del Inundatio Water-S ield Obser urface Wa Vater Table aturation F ncludes ca	catremely wet. Hard drology Indicators (minimum) water (A1) ater Table (A2) fon (A3) Marks (B1) (Non rint Deposits (B2) (Non rint Deposits (B3) (Non rint Deposits (B6) on Visible on Aeria Stained Leaves (B6) for Visible on Aeria Stained Leav	verine) Non riverine iverine) al Imagery (E	red; check all th  Salt  Biot  Aqu  Hyce  Pre  Rec  37)	Crust (B11) ic Crust (B12) atic Invertebra lrogen Sulfide ( dized Rhizosph sence of Reduce ent Iron Reduce Muck Surface er (Explain in F  (inches): (inches): 5"  (inches): 5"	Odor (C1) heres along ced Iron (C tion in Till e (C7) Remarks)	(24) ed Soils (Ce	Secon   Ware   Secon   Ware   Secon   Dr.   Dr.   Dr.   Dr.   Cr.   Sa.   Sr.   Sr.   FA	adary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) iff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 allow Aquitard (D3) AC-Neutral Test (D5)

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 37090 Kelso RD	(	Sampling Date: <u>3/30/2017</u>			
pplicant/Owner: <u>Joe Spaziani</u>				State: OR	Sampling Point: P8
nvestigator(s): John McConnaughey, PWS# 2009			Section, Tov	wnship, Range: <u>T2S R4</u>	E S11
andform (hillslope, terrace, etc.): Valley Floor		Local r	elief (concave, o	convex, none): Flat	Slope (%): <u>3%</u>
Subregion (LRR): <u>LRR-A</u>	Lat: <u>45.25</u>	5067		Long: <u>-122.16979</u>	Datum:
oil Map Unit Name: <u>Cazado silt Ioam, Cottrell silty clay l</u>	oam			NWI classific	cation: Not mapped
are climatic / hydrologic conditions on the site typical for					
re Vegetation <u>YES</u> , Soil, or Hydrology sig	•			nal Circumstances" pres	
re Vegetation YES, Soil, or Hydrology nat				explain any answers ir	
SUMMARY OF FINDINGS – Attach site ma			,	' '	,
	<u> </u>		31	,	
Hydrophytic Vegetation Present? Yes ☐ No Hydric Soil Present? Yes ☒ No	_		Is the Sampled	d Area	
Wetland Hydrology Present? Yes ⊠ No			within a Wetlar	nd? Yes ⊠	No 🗌
Remarks: Above average rainfall in March and April.		h not m	owed, hydrolog	y altered by roadside d	itch along Kelso Road
/EGETATION – Use scientific names of pla	ants.				
	Absolute		nant Indicator	Dominance Test wo	orksheet:
Tree Stratum (Plot size: 5'cir)			cies? Status	Number of Dominant	
1				That Are OBL, FACV	V, or FAC: <u>1</u> (A)
2. NO TREES				Total Number of Dor	
3				Species Across All S	Strata: <u>2</u> (B)
4			tal Cover	Percent of Dominant	
Sapling/Shrub Stratum (Plot size: 5'cir)		_ = 10	tai Covei	That Are OBL, FACV	V, or FAC: <u>50%</u> (A/B)
1				Prevalence Index w	vorksheet:
2				Total % Cover o	
3					x 1 = <u>0</u>
4					x 2 = <u>0</u>
5					x 3 = <u>135</u>
Herb Stratum (Plot size: 5' cir)		_ = 10	tal Cover		x 4 = <u>332</u> x 5 = <u>0</u>
1. Agrostis sp	40	Υ	FAC		(A) $\frac{467}{}$ (B)
Anthoxanthum odoratum	50	Y	FACU	Coldifii Totals. 120	(A) 401 (D)
3. Holcus lanatus	5	N	FAC	Prevalence Ind	lex = B/A = 3.6
4. Taraxacum officinale	10	<u>N</u>	<u>FACU</u>	Hydrophytic Vegeta	ation Indicators:
5. Hypochaeris radicata	<u>15</u>	N	FACU	☐ Dominance Test	
6				□ Prevalence Index	
7					daptations <sup>1</sup> (Provide supporting arks or on a separate sheet)
8					rophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: )	<u>128</u>	_ = To	tal Cover	Z Troblematic riya	Tophysio vogotation (Explain)
1				<sup>1</sup> Indicators of hydric	soil and wetland hydrology must
2.					isturbed or problematic.
			tal Cover	Hydrophytic	
		_		Vegetation	
% Bare Ground in Herb Stratum 0 %	Cover of Biotic	_			Yes □ No ⊠

(inches)	Matrix		Redox Features		
(IIICIICS)	Color (moist)	%	Color (moist) % Type <sup>1</sup> Lo	oc² Textu	re Remarks
0-8	7.5YR5/3	100		Silt loa	<u> </u>
8-12	7.5YR2.5/1	100		Silty cl	ay loam
12-18	5YR3/4	100		Silty cl	ay loam
		· ·			
¹Type: C=C	Concentration D=Der	oletion RM-	Reduced Matrix, CS=Covered or Coated Sa	and Grains	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
			LRRs, unless otherwise noted.)		ndicators for Problematic Hydric Soils <sup>3</sup> :
☐ Black Hi☐ Hydroge☐ Stratified	pipedon (A2)	<b>C</b> )	☐ Sandy Redox (S5) ☐ Stripped Matrix (S6) ☐ Loamy Mucky Mineral (F1) ☐ Loamy Gleyed Matrix (F2) ☐ Depleted Matrix (F3) ☐ Redox Dark Surface (F6)		1 cm Muck (A9) (LRR C) 2 cm Muck (A10) (LRR B) Reduced Vertic (F18) Red Parent Material (TF2) Other (Explain in Remarks)
☐ Depleted☐ Thick Da☐ Sandy M☐ Sandy G	d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Layer (if present):	e (A11)	Depleted Dark Surface (F7) Redox Depressions (F8)	3	ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Type: <u>Cla</u>					
Depth (in	nches): <u>12</u>			Hydr	ic Soil Present? Yes 🛛 No 🗌
Remarks: Ex	xtremely wet. Hard t	o see indica	tors		
/DROLOC	GY				
	GY ydrology Indicators:	}			
Wetland Hy	drology Indicators:		; check all that apply)		Secondary Indicators (2 or more required)
Wetland Hy Primary Indi	drology Indicators:		i; check all that apply)  Salt Crust (B11)		Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)
Wetland Hy Primary Indi ☐ Surface ☑ High Wa	drology Indicators: icators (minimum of o Water (A1) ater Table (A2)				
Wetland Hy Primary Indi ☐ Surface ☑ High Wa	drology Indicators: icators (minimum of o Water (A1) ater Table (A2)		☐ Salt Crust (B11)		☐ Water Marks (B1) (Riverine)
Wetland Hy Primary Indi ☐ Surface ☑ High Wa ☑ Saturatio	drology Indicators: icators (minimum of o Water (A1) ater Table (A2)	one required	Salt Crust (B11) Biotic Crust (B12)		☐ Water Marks (B1) (Riverine) ☐ Sediment Deposits (B2) (Riverine)
Wetland Hy Primary Indi  ☐ Surface ☑ High Wa ☑ Saturatio ☐ Water M	rdrology Indicators: icators (minimum of o Water (A1) ater Table (A2) on (A3)	one required	☐ Salt Crust (B11) ☐ Biotic Crust (B12) ☐ Aquatic Invertebrates (B13)	g Roots (C3)	<ul> <li>□ Water Marks (B1) (Riverine)</li> <li>□ Sediment Deposits (B2) (Riverine)</li> <li>□ Drift Deposits (B3) (Riverine)</li> </ul>
Wetland Hy Primary Indi □ Surface ☑ High Wa ☑ Saturatic □ Water M □ Sedimer	rdrology Indicators: icators (minimum of o Water (A1) ater Table (A2) on (A3) farks (B1) (Non river	one required rine) n riverine)	☐ Salt Crust (B11) ☐ Biotic Crust (B12) ☐ Aquatic Invertebrates (B13) ☐ Hydrogen Sulfide Odor (C1)	g Roots (C3)	<ul> <li>Water Marks (B1) (Riverine)</li> <li>Sediment Deposits (B2) (Riverine)</li> <li>Drift Deposits (B3) (Riverine)</li> <li>Drainage Patterns (B10)</li> </ul>
Wetland Hy Primary Indi  ☐ Surface ☐ High Wa ☐ Saturatio ☐ Water M ☐ Sedimer ☐ Drift Dep	rdrology Indicators: icators (minimum of o Water (A1) ater Table (A2) on (A3) farks (B1) (Non river nt Deposits (B2) (Nor	one required rine) n riverine)	<ul> <li>☐ Salt Crust (B11)</li> <li>☐ Biotic Crust (B12)</li> <li>☐ Aquatic Invertebrates (B13)</li> <li>☐ Hydrogen Sulfide Odor (C1)</li> <li>☐ Oxidized Rhizospheres along Living</li> </ul>		<ul> <li>Water Marks (B1) (Riverine)</li> <li>Sediment Deposits (B2) (Riverine)</li> <li>Drift Deposits (B3) (Riverine)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> </ul>
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Surface	vdrology Indicators: icators (minimum of o Water (A1) ater Table (A2) on (A3) Marks (B1) (Non river nt Deposits (B2) (Non posits (B3) (Non river	one required rine) n riverine) erine)	☐ Salt Crust (B11) ☐ Biotic Crust (B12) ☐ Aquatic Invertebrates (B13) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres along Living ☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Soi		Water Marks (B1) (Riverine)     Sediment Deposits (B2) (Riverine)     Drift Deposits (B3) (Riverine)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Crayfish Burrows (C8)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Surface	rdrology Indicators: icators (minimum of o Water (A1) ater Table (A2) on (A3) Marks (B1) (Non river nt Deposits (B2) (Non posits (B3) (Non rive Soil Cracks (B6)	one required rine) n riverine) erine)	☐ Salt Crust (B11) ☐ Biotic Crust (B12) ☐ Aquatic Invertebrates (B13) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres along Living ☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Soi		<ul> <li>Water Marks (B1) (Riverine)</li> <li>Sediment Deposits (B2) (Riverine)</li> <li>Drift Deposits (B3) (Riverine)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> </ul>
Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Surface	rdrology Indicators: icators (minimum of o Water (A1) ater Table (A2) on (A3) farks (B1) (Non river nt Deposits (B2) (Nor posits (B3) (Non rive Soil Cracks (B6) on Visible on Aerial In Stained Leaves (B9)	one required rine) n riverine) erine)	☐ Salt Crust (B11) ☐ Biotic Crust (B12) ☐ Aquatic Invertebrates (B13) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres along Living ☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Soi ☐ Thin Muck Surface (C7)		Water Marks (B1) (Riverine)     Sediment Deposits (B2) (Riverine)     Drift Deposits (B3) (Riverine)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Crayfish Burrows (C8)     Saturation Visible on Aerial Imagery (C9)     Shallow Aquitard (D3)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S	rydrology Indicators: icators (minimum of o Water (A1) ater Table (A2) on (A3) Marks (B1) (Non river nt Deposits (B2) (Non posits (B3) (Non river Soil Cracks (B6) on Visible on Aerial In Stained Leaves (B9) ryations:	one required rine) n riverine) erine)	☐ Salt Crust (B11) ☐ Biotic Crust (B12) ☐ Aquatic Invertebrates (B13) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres along Living ☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Soi ☐ Thin Muck Surface (C7) ☐ Other (Explain in Remarks)		Water Marks (B1) (Riverine)     Sediment Deposits (B2) (Riverine)     Drift Deposits (B3) (Riverine)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Crayfish Burrows (C8)     Saturation Visible on Aerial Imagery (C9)     Shallow Aquitard (D3)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio	rdrology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3) flarks (B1) (Non river of the Deposits (B2) (Non river of the Soil Cracks (B6) on Visible on Aerial Instained Leaves (B9) rvations: ter Present?	one required rine) n riverine) erine) magery (B7)	□ Salt Crust (B11) □ Biotic Crust (B12) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi □ Thin Muck Surface (C7) □ Other (Explain in Remarks) □ Depth (inches): 1/4"		Water Marks (B1) (Riverine)     Sediment Deposits (B2) (Riverine)     Drift Deposits (B3) (Riverine)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Crayfish Burrows (C8)     Saturation Visible on Aerial Imagery (C9)     Shallow Aquitard (D3)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Obser Surface Water Water Table Saturation P	rvations:  ter Present?  Present?  rdators (minimum of composits (Mater	one required rine) n riverine) rine) magery (B7) res ⊠ No	□ Salt Crust (B11) □ Biotic Crust (B12) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi □ Thin Muck Surface (C7) □ Other (Explain in Remarks) □ Depth (inches): 1/4" □ Depth (inches):	ls (C6)	Water Marks (B1) (Riverine)     Sediment Deposits (B2) (Riverine)     Drift Deposits (B3) (Riverine)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Crayfish Burrows (C8)     Saturation Visible on Aerial Imagery (C9)     Shallow Aquitard (D3)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Obser Surface Wat Water Table Saturation P (includes ca Describe Re	rdrology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3) flarks (B1) (Non river of the Deposits (B2) (Non river of the Deposits (B3) (Non river of the Deposits (B6) on Visible on Aerial Instained Leaves (B9)  rvations: ter Present? Present? Present?	rine) n riverine) ragery (B7)  Yes \( \sum \) No Yes \( \sum \) No	□ Salt Crust (B11) □ Biotic Crust (B12) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi □ Thin Muck Surface (C7) □ Other (Explain in Remarks) □ Depth (inches): 1/4" □ Depth (inches):	ls (C6)  Wetland Hy	Water Marks (B1) (Riverine)     Sediment Deposits (B2) (Riverine)     Drift Deposits (B3) (Riverine)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Crayfish Burrows (C8)     Saturation Visible on Aerial Imagery (C9)     Shallow Aquitard (D3)     FAC-Neutral Test (D5)  drology Present? Yes ⊠ No □
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundatio Water-S Field Obser Surface Water Water Table Saturation P (includes ca	rdrology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3) flarks (B1) (Non river of the Deposits (B2) (Non river of the Deposits (B3) (Non river of the Deposits (B6) on Visible on Aerial Instained Leaves (B9)  rvations: ter Present? Present? Present?	rine) n riverine) ragery (B7)  Yes \( \sum \) No Yes \( \sum \) No	□ Salt Crust (B11)   □ Biotic Crust (B12)   □ Aquatic Invertebrates (B13)   □ Hydrogen Sulfide Odor (C1)   □ Oxidized Rhizospheres along Living   □ Presence of Reduced Iron (C4)   □ Recent Iron Reduction in Tilled Soi   □ Thin Muck Surface (C7)   □ Other (Explain in Remarks)    Depth (inches): 1/4"  Depth (inches):	ls (C6)  Wetland Hy	Water Marks (B1) (Riverine)     Sediment Deposits (B2) (Riverine)     Drift Deposits (B3) (Riverine)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Crayfish Burrows (C8)     Saturation Visible on Aerial Imagery (C9)     Shallow Aquitard (D3)     FAC-Neutral Test (D5)  drology Present? Yes ⊠ No □

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 37090 Kelso RD	C	ity/Cou	nty: <u>Sandy/Clad</u>	ckamas	Sampling Date: 3/30/2017		
Applicant/Owner: <u>Joe Spaziani</u>				State: OR	Sampling Point: P9		
nvestigator(s): John McConnaughey, PWS# 2009			_ Section, Tov	vnship, Range: <u>T2S R4I</u>	≣ S11		
_andform (hillslope, terrace, etc.): Valley Floor	I	Local re	elief (concave, d	convex, none): slope	Slope (%): <u>2%</u>		
Subregion (LRR): <u>LRR-A</u>	Lat: 45.250	023		Long: -122.16985	Datum:		
Soil Map Unit Name: <u>Cazado silt loam, Cottrell silty clay loam</u>	1			NWI classific	ation: Not mapped		
Are climatic / hydrologic conditions on the site typical for this							
Are Vegetation <u>YES</u> , Soil, or Hydrology signific	-			al Circumstances" pres			
Are Vegetation YES, Soil, or Hydrology natural				explain any answers in			
SUMMARY OF FINDINGS – Attach site map s			,		,		
			9 po		,portant router oo, oto		
Hydrophytic Vegetation Present? Yes ⊠ No ☐		ı	s the Sampled	l Area			
Hydric Soil Present? Yes ⊠ No ☐ Wetland Hydrology Present? Yes ⊠ No ☐		v	within a Wetlar	nd? Yes ⊠	No 🗌		
Remarks: Above average rainfall in March and April 2017.	Mowed do	wn veg	etation This is	a fringe plot on the side	of upland. The hydrophytic		
vegetation is problematic invasive and can be argued that upland, this plot was taken at 12" but with the amount of reversely the second of th	ainfall the we	eek of t	he survey it wa	s higher than normal.			
			nant Indicator	Dominance Test wo	rksheet:		
Tree Stratum (Plot size: 30'ese)			es? Status	Number of Dominant			
Pseudotsuga menziesii				That Are OBL, FACW	/, or FAC: <u>3</u> (A)		
2 3				Total Number of Dom			
4				Species Across All St	trata: <u>4</u> (B)		
Sapling/Shrub Stratum (Plot size: 30' ese)	5			Percent of Dominant That Are OBL, FACW			
1. Rubus armeniacus (mowed, probably was higher %)	25	Υ	<u>FAC</u>	Prevalence Index w	orksheet:		
2					: Multiply by:		
3					x 1 = <u>0</u>		
4					x 2 = <u>0</u>		
5					x 3 = <u>0</u>		
Horb Stretum (Plot size: 20' one)	<u>25</u>	= Tota	al Cover		x 4 = <u>0</u>		
Herb Stratum (Plot size: 30' ese)  1					x 5 = <u>0</u>		
Anthoxanthum odoratum			FACU	Column Totals: 0	(A) <u>0</u> (B)		
3. Agrostis sp.				Prevalence Inde	ex = B/A = 0		
Cirsium arvense			FAC	Hydrophytic Vegeta	tion Indicators:		
5				□ Dominance Test	is >50%		
6.				☐ Prevalence Index	is ≤3.0¹		
7					aptations <sup>1</sup> (Provide supporting		
8.					rks or on a separate sheet)		
	65			☐ Problematic Hydr	ophytic Vegetation <sup>1</sup> (Explain)		
Woody Vine Stratum (Plot size:)				4			
1					soil and wetland hydrology must sturbed or problematic.		
2				• '	station of problematic.		
% Bare Ground in Herb Stratum <u>0</u> % Cov	95 er of Biotic (			Hydrophytic Vegetation Present?	∕es ⊠ No □		
/o Date Ground in Field Stratum U % COV	ei oi Diolic (	ار ust <u>U</u>	/0				

/· · · -	Matrix				x Feature			<b>-</b> .	5
(inches) C	Color (moist)	%	Color (	moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
<u>-5</u> <u>7</u>	7.5YR3/2	100			-			Silt loam	
<u>-12 7</u>	7.5YR3/2	90	5YR4/0	3	10	<u>C</u>	<u>M</u>	Silty clay loam	
<u>2-18 7</u>	7.5YR3/2	97	5YR4/	3	3	<u>C</u>	<u>M</u>	Silty clay loam	
					· ·				
	centration, D=D	epletion, RI	M=Reduc	ed Matrix, CS	S=Covere	d or Coat	ed Sand G	rains. <sup>2</sup> Location	on: PL=Pore Lining, M=Matrix.
	dicators: (App								or Problematic Hydric Soils <sup>3</sup> :
Histosol (A	.1)		☐ Sa	ndy Redox (S	S5)			☐ 1 cm Mu	uck (A9) ( <b>LRR C</b> )
Histic Epip				ripped Matrix	` '				ıck (A10) ( <b>LRR B</b> )
Black Histic				amy Mucky M	•	•			d Vertic (F18)
	Sulfide (A4)			my Gleyed M		)			ent Material (TF2)
	ayers (A5) (LRR	(C)		oleted Matrix				☐ Other (E	xplain in Remarks)
	(A9) (LRR D)	200 (A11)		dox Dark Sur	, ,				
	Below Dark Surfa Surface (A12)	ice (ATT)		pleted Dark S dox Depressi		(1)		3Indicators o	of hydrophytic vegetation and
	cky Mineral (S1)		⊔ ке	uox pepiessi	10118 (FO)				nydrology must be present,
•	yed Matrix (S4)								sturbed or problematic.
	yer (if present)	:						1	
Type: Clay	,								
Depth (inch	es): <u>12</u>		_					Hydric Soil Pre	esent? Yes 🛛 No 🗌
temarks:									
DROLOGY	7								
	ology Indicator	s:							
				k all that anal					
Vetland Hydr	<u>tors (minimum o</u>	f one requir	ed; chec	r all that appi	<u>y)</u>			Secondar	ry Indicators (2 or more required)
letland Hydro	•	f one requir		Salt Crust					ry Indicators (2 or more required) r Marks (B1) (Riverine)
Vetland Hydro rimary Indicat Surface Wa	ater (A1)	f one requir			(B11)			☐ Water	
Vetland Hydro rimary Indicat Surface Wa High Water	ater (A1) r Table (A2)	<u>f one requir</u>		] Salt Crust	(B11) t (B12)	s (B13)		☐ Water	r Marks (B1) (Riverine)
rimary Indicat Surface Wa High Water Saturation	ater (A1) r Table (A2)			Salt Crust	(B11) t (B12) vertebrate			☐ Water☐ Sedin☐ Drift □	r Marks (B1) ( <b>Riverine</b> ) nent Deposits (B2) <b>(Riverine)</b>
Vetland Hydromery Indicate Surface Ware High Water Saturation Water Marl	ater (A1) r Table (A2) (A3)	erine)		Salt Crust Garden Biotic Crus Aquatic Inv	(B11) t (B12) vertebrate Sulfide O	dor (C1)	Living Roc	☐ Water☐ Sedin☐ Drift □	r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine)
Vetland Hydromery Indicate Surface Warder High Water Saturation Water Marl	ater (A1) r Table (A2) (A3) ks (B1) ( <b>Non riv</b>	erine) on riverine		Salt Crust Biotic Crus Aquatic Inv Hydrogen	(B11) t (B12) vertebrate Sulfide Och	dor (C1) res along	_	Water Sedin Drift [ Drain: ots (C3) Dry-S	r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10)
Vetland Hydromany Indicated Surface Work High Water Saturation Water Marl Sediment Deposit	ater (A1) r Table (A2) (A3) ks (B1) ( <b>Non riv</b> Deposits (B2) ( <b>N</b>	erine) on riverine		Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized R	(B11) It (B12) Vertebrate Sulfide Ool Chizosphe	dor (C1) res along ed Iron (C4	1)	Water Sedin Drift C Drain: ots (C3) Crayfi	r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) leason Water Table (C2) ish Burrows (C8)
Vetland Hydromary Indicated Surface Was High Water Saturation Water Marl Sediment In Drift Deposes Surface Sc	ater (A1) r Table (A2) (A3) ks (B1) (Non riv Deposits (B2) (Non riv sits (B3) (Non riv oil Cracks (B6)	erine) on riverine verine)	[ [ [ ] []	Salt Crust ( Biotic Crust ( Aquatic Inv ( Hydrogen ( Oxidized R Presence ( Recent Iron	(B11)  t (B12)  vertebrate Sulfide Ochizosphe of Reduce n Reducti	dor (C1) res along ed Iron (C4 on in Tille	1)	Water   Sedin   Sedin   Drift   Drain: ots (C3)   Dry-S   Crayfi   Satur:	r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) leason Water Table (C2) ish Burrows (C8)
Primary Indicated Surface Washington Water Marked Sediment In Drift Deposed Inundation	ater (A1) r Table (A2) (A3) ks (B1) ( <b>Non riv</b> Deposits (B2) ( <b>N</b> sits (B3) ( <b>Non ri</b> v	erine) on riverine verine) Imagery (B	[ [ [ ] []	Salt Crust (  Biotic Crust (  Aquatic Inv (  Hydrogen (  Oxidized R  Presence (	(B11)  It (B12)  Vertebrate Sulfide Oo  Chizosphe Of Reduce In Reducti Surface (	dor (C1) res along ed Iron (C4 on in Tille (C7)	1)	Water   Sedin   Drift   Drain:   Ots (C3)   Dry-S   Crayfi   Satur.   Shallo	r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) leason Water Table (C2) lish Burrows (C8) ation Visible on Aerial Imagery (C9
Vetland Hydromary Indicated Surface Was Saturation Water Marled Sediment Deposed Surface Solument Surface So	ater (A1) r Table (A2) (A3) ks (B1) ( <b>Non riv</b> Deposits (B2) ( <b>N</b> sits (B3) ( <b>Non riv</b> bil Cracks (B6) Visible on Aerial ned Leaves (B9)	erine) on riverine verine) Imagery (B	[ [ [ ] []	Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck	(B11)  It (B12)  Vertebrate Sulfide Oo  Chizosphe Of Reduce In Reducti Surface (	dor (C1) res along ed Iron (C4 on in Tille (C7)	1)	Water   Sedin   Drift   Drain:   Ots (C3)   Dry-S   Crayfi   Satur.   Shallo	r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Deason Water Table (C2) Dish Burrows (C8) Dation Visible on Aerial Imagery (CS) Dow Aquitard (D3)
Primary Indicated Surface Was Saturation Water Mark Sediment In Drift Deposed Inundation Water-Stair	ater (A1) r Table (A2) (A3) ks (B1) (Non riv Deposits (B2) (Non riv bil Cracks (B6) Visible on Aerial ned Leaves (B9)	erine) on riverine verine) Imagery (B	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck	(B11)  t (B12)  vertebrate Sulfide Ochizosphe of Reduce n Reducti Surface ( lain in Re	dor (C1) res along ed Iron (C- on in Tille C7) emarks)	1)	Water   Sedin   Drift   Drain:   Ots (C3)   Dry-S   Crayfi   Satur.   Shallo	r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Deason Water Table (C2) Dish Burrows (C8) Dation Visible on Aerial Imagery (CS) Dow Aquitard (D3)
Primary Indicat Surface Water Saturation Water Marl Sediment Depose Surface So Inundation Water-Stain	ater (A1) r Table (A2) (A3) ks (B1) (Non riv Deposits (B2) (Non riv Dil Cracks (B6) Visible on Aerial ned Leaves (B9) tions: Present?	erine) Ion riverine verine) Imagery (B	5) □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Salt Crust ( Biotic Crust ( Aquatic Inv ( Hydrogen ( Oxidized R Presence ( Recent Iron ( Thin Muck ( Other (Exp	(B11) It (B12) Vertebrate Sulfide Oo Ihizosphe of Reduce on Reducti Surface ( Islain in Re	dor (C1) res along ed Iron (C- on in Tille C7) emarks)	1)	Water   Sedin   Drift   Drain:   Ots (C3)   Dry-S   Crayfi   Satur.   Shallo	r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Deason Water Table (C2) Dish Burrows (C8) Dation Visible on Aerial Imagery (CS) Dow Aquitard (D3)
Wetland Hydromary Indicated Surface Was High Water Saturation Sediment Deposer Surface Solution Inundation Sediment Of Surface Solution Surface Solution Sediment Of Surface Solution Surface Sol	ater (A1) r Table (A2) (A3) ks (B1) (Non riv Deposits (B2) (Non riv bil Cracks (B6) Visible on Aerial ned Leaves (B9) titions: Present? resent?	erine) Ion riverine verine) Imagery (B	37)	Salt Crust ( Biotic Crust ( Aquatic Inv ( Hydrogen ( Oxidized R Presence ( Recent Iron ( Thin Muck ( Other (Exp	(B11) It (B12) Vertebrate Sulfide Oo Ihizosphe of Reducti Surface ( Idain in Re	dor (C1) res along ed Iron (Coon in Tille (C7) emarks)	t) d Soils (C6	Water Sedin Drift D Drains Ots (C3) Statura Shallo FAC-I	r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Deason Water Table (C2) Dish Burrows (C8) Dation Visible on Aerial Imagery (C9) Dow Aquitard (D3)
Primary Indicat Surface Water Saturation Surface So Surface So Inundation Water-Stain Water Table Prosection Presided Scapille	ater (A1) r Table (A2) (A3) ks (B1) (Non riv Deposits (B2) (Non riv Dil Cracks (B6) Visible on Aerial ned Leaves (B9) tions: Present? resent? lary fringe)	erine) Ion riverine verine) Imagery (B )  Yes	37)	Salt Crust ( Biotic Crust ( Aquatic Inv ( Hydrogen ( Oxidized R Presence ( Recent Iron ( Thin Muck ( Other (Exp Depth (inchest Depth (inchest	(B11) It (B12) Vertebrate Sulfide Oo Ihizosphe of Reduce on Reducti Surface ( Islain in Re	dor (C1) res along ed Iron (C- on in Tille C7) emarks)	t) d Soils (C6	Water Sedin Drift D Drain: Ots (C3) Crayfi Shallo FAC-I	r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Deason Water Table (C2) Dish Burrows (C8) Deation Visible on Aerial Imagery (C5) Deation Visible (D3) Deutral Test (D5)

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: <u>37090 Kelso RD</u>	C	City/County: <u>Sandy/Clackamas</u> Sampling Date: <u>4/15/20</u>					
Applicant/Owner: <u>Joe Spaziani</u>			State: OR	Sampling Point: P9B			
nvestigator(s): John McConnaughey, PWS# 2009		Section, Tov	wnship, Range: <u>T2S R4</u>	IE S11			
andform (hillslope, terrace, etc.): Valley Floor		_ocal relief (concave,	convex, none): slope	Slope (%): <u>2%</u>			
Subregion (LRR): <u>LRR-A</u>	Lat: 45.250	)23	Long: -122.16985	Datum:			
Soil Map Unit Name: <u>Cazado silt loam, Cottrell silty c</u>							
Are climatic / hydrologic conditions on the site typical	-						
Are Vegetation <u>YES</u> , Soil, or Hydrology	-		nal Circumstances" pres				
Are Vegetation YES, Soil, or Hydrology			•				
			, explain any answers ir				
SUMMARY OF FINDINGS – Attach site	map showing s	ampling point lo	cations, transect	s, important features, etc.			
Hydrophytic Vegetation Present? Yes ☐	No ⊠	Is the Sample	d Aroa				
Hydric Soil Present? Yes □	No ⊠	within a Wetla		No ⊠			
Wetland Hydrology Present? Yes □	No ⊠	within a vvena	iid: 165 🗆	NO 🖸			
Remarks: 15' north of plot 9							
VEGETATION – Use scientific names of	plants.						
	Absolute	Dominant Indicator	Dominance Test wo	orksheet:			
Tree Stratum (Plot size: 30'ese)	<u>-</u>	Species? Status	Number of Dominan				
Pseudotsuga menziesii			That Are OBL, FACV	N, or FAC: <u>1</u> (A)			
2			Total Number of Dor	ninant			
3			Species Across All S	Strata: <u>2</u> (B)			
4			Percent of Dominant	Species			
Sapling/Shrub Stratum (Plot size: 30' ese)	<u>5</u>	= Total Cover	That Are OBL, FACV	N, or FAC: <u>50%</u> (A/B)			
1. Rubus armeniacus	100	Y FAC	Prevalence Index w	vorksheet:			
2.			Total % Cover o	of: Multiply by:			
3.			OBL species 0	x 1 = <u>0</u>			
4			FACW species 0	x 2 = <u>0</u>			
5			FAC species 0	x 3 = <u>0</u>			
		= Total Cover	FACU species 0	x 4 = <u>0</u>			
Herb Stratum (Plot size: 30' ese)			UPL species 0	x 5 = <u>0</u>			
1			Column Totals: 0	(A) <u>0</u> (B)			
2			Dravalance Inc	Joy D/A O			
3			Hydrophytic Vegeta	dex = B/A = 0			
4			Dominance Test				
5			☐ Prevalence Inde				
6			_	daptations <sup>1</sup> (Provide supporting			
7			data in Rema	arks or on a separate sheet)			
8		= Total Cover	☐ Problematic Hyd	Irophytic Vegetation <sup>1</sup> (Explain)			
Woody Vine Stratum (Plot size:)	100	= Total Cover					
1				soil and wetland hydrology must			
			be present, unless d	isturbed or problematic.			
2.							
		= Total Cover	Hydrophytic				
			Vegetation	Yes □ No ⊠			

SOIL

Sampling Point: P9B

Profile Des	cription: (Describe	to the de	pth needed to do	cument the	indicato	or confir	m the absenc	e of indicators.)
Depth	Matrix	0/		edox Feature		1 2		Domonto
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-9	10YR3/2	70					Silt loam	Mixed matrix
	7.5YR4/6	30						<u> </u>
9-11	7.5YR4/6	96	10YR3/2	4	<u>C</u>	M	Clay layer	·
<u>11-16</u>	10YR3/2	50						Mixed matrix
	7.5YR4/6	50						
17		- Indian DA	A. De de ce d'Aleire				21	
	oncentration, D=Deplication   Indicators: (Application)					ed Sand (		ocation: PL=Pore Lining, M=Matrix. tors for Problematic Hydric Soils <sup>3</sup> :
☐ Histosol			☐ Sandy Redox		,			m Muck (A9) (LRR C)
	oipedon (A2)		☐ Stripped Mat					m Muck (A10) (LRR B)
☐ Black Hi			Loamy Muck	y Mineral (F	1)			duced Vertic (F18)
	en Sulfide (A4)		☐ Loamy Gleye		)			Parent Material (TF2)
	d Layers (A5) (LRR	C)	☐ Depleted Mat	. ,			☐ Oth	er (Explain in Remarks)
	ck (A9) ( <b>LRR D</b> )		☐ Redox Dark	` ,				
-	d Below Dark Surfac ark Surface (A12)	e (A11)	☐ Depleted Date ☐ Redox Depre		-7)		3lndino	tors of hydrophytic vegetation and
	Mucky Mineral (S1)		☐ Redox Depie	:5510H5 (F6)				land hydrology must be present,
-	Gleyed Matrix (S4)							ess disturbed or problematic.
	Layer (if present):							γ
Type: Cla	ay		_					
	iches): <u>12</u>		_				Hydric So	il Present? Yes □ No ⊠
	oil appeared to be a is a result of soils sl							solid reddish color. We speculate this vas farmed.
IYDROLOG	aY							
	drology Indicators							
_	cators (minimum of		ed: check all that a	(vlaa			Sec	ondary Indicators (2 or more required)
	Water (A1)		☐ Salt Cru					Water Marks (B1) ( <b>Riverine</b> )
· <del></del>	ater Table (A2)			rust (B12)				Sediment Deposits (B2) (Riverine)
☐ Saturation	` '			Invertebrate	s (B13)			Orift Deposits (B3) ( <b>Riverine</b> )
	larks (B1) (Non rive	rine)	 ☐ Hydroge	en Sulfide O	dor (C1)			Orainage Patterns (B10)
	nt Deposits (B2) ( <b>No</b>			d Rhizosphe		Living Ro		Ory-Season Water Table (C2)
☐ Drift Dep	oosits (B3) (Non rive	erine)	☐ Presend	e of Reduce	ed Iron (C	4)		Crayfish Burrows (C8)
☐ Surface	Soil Cracks (B6)		☐ Recent	Iron Reducti	on in Tille	d Soils (C	6) 🗆 5	Saturation Visible on Aerial Imagery (C9)
☐ Inundation	on Visible on Aerial I	magery (B	7) 🔲 Thin Mu	ick Surface (	(C7)			Shallow Aquitard (D3)
☐ Water-S	tained Leaves (B9)		☐ Other (E	Explain in Re	emarks)		☐ F	FAC-Neutral Test (D5)
Field Observe	nations.							
Field Obser Surface Wat		∕es □ N	No ⊠ Depth (inc	hee).				
Water Table				hes):				
				hes): <u>&gt; 16"</u>		1A/-	Hond Uselests	my Bracont2 Voc 🗆 No 🖂
Saturation P (includes ca	resent? pillary fringe)	∕es □ N	lo ⊠ Depth (incl	nes):		We	tiand Hydrolo	gy Present? Yes □ No ⊠
	ecorded Data (stream	n gauge, n	nonitoring well, aer	al photos, p	revious in	spections	), if available:	
Remarks:								

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 37090 Kelso RD		C	ity/Cour	nty: <u>Sandy/Cla</u>	ckamas	Sampling Date: 3/30	/2017
pplicant/Owner: <u>Joe Spaziani</u>					State: OR	Sampling Point: P10	)
nvestigator(s): <u>John McConnaughey, PV</u>	VS# 2009			_ Section, Tov	vnship, Range: <u>T2S R4E</u>	S11	
andform (hillslope, terrace, etc.): Valley	Floor		Local re	elief (concave, d	convex, none): slope	Slope (	%): <u>3%</u>
Subregion (LRR): <u>LRR-A</u>		Lat: 45.41	777		Long: <u>-122.28298</u>	Datum: _	
soil Map Unit Name: <u>Cazado silt Ioam, C</u>	ottrell silty clay loa	m			NWI classifica	ation: Not mapped	
are climatic / hydrologic conditions on the	e site typical for this	s time of year	? Yes [	□ No 🛛 (If	no, explain in Remarks.)	1	
re Vegetation, Soil, or Hy	drology sign	nificantly distu	urbed?	Are "Nor	mal Circumstances" pre	sent? Yes ⊠ No [	
re Vegetation, Soil, or Hy					d, explain any answers i		_
SUMMARY OF FINDINGS – At							ıres, etc
Hadron baria Vanada ii an Brassa (0					<u> </u>	<u>-</u>	
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes ⊠ No □ Yes □ No ⊠		ls	s the Sampled	l Area		
Wetland Hydrology Present?		-	W	vithin a Wetlai	nd? Yes ⊠	No 🗌	
Remarks: Above average rainfall in M		•					
	·						
/EGETATION – Use scientific	names of plan	ts.					
	<u> </u>	Absolute	Domin	ant Indicator	Dominance Test wor	rksheet:	
Tree Stratum (Plot size: 5' cir)				es? Status	Number of Dominant	Species	
1					That Are OBL, FACW	, or FAC: <u>3</u>	(A)
2					Total Number of Dom	inant	
3					Species Across All St	rata: <u>3</u>	(B)
4					Percent of Dominant S	Species	
Sapling/Shrub Stratum (Plot size: 5'	cir)		_ = Tota	al Cover	That Are OBL, FACW	, or FAC: <u>100%</u>	(A/B)
1. Rubus armeniacus		40	Υ	FAC	Prevalence Index wo	orksheet:	
2.						Multiply k	ov:
3					OBL species 0		
4					FACW species 0		
5					FAC species 0		
9.		40			FACU species 0		
Herb Stratum (Plot size: 30' ese)					UPL species 0		
1. Poa sp.			Y	FAC	Column Totals: 0		
2. moss		80	<u>Y</u>	NA			` ` ′
3. Agrostis sp.		20	Y	FAC	Prevalence Inde	ex = B/A = 0	
4. Cirsium arvense		<u>10</u>	N	FAC	Hydrophytic Vegetat	ion Indicators:	
5. <u>Herb 1</u>		<u>10</u>	N	<u>NA</u>	□ Dominance Test is		
6					☐ Prevalence Index	is ≤3.0 <sup>1</sup>	
7					☐ Morphological Ada		
8		_				ks or on a separate sl	
		80		al Cover	☐ Problematic Hydro	philitic vedetation, (F	xpiain)
Woody Vine Stratum (Plot size:	<u></u> .				The disease of books	all and make a discrete	
1					<sup>1</sup> Indicators of hydric so be present, unless dis		
2				-1 Cours	Hydrophytic	·	
		<u>120</u>	_ = I ota	ai Cover	Vegetation		
% Bare Ground in Herb Stratum 0	% Co	ver of Biotic	Crust 09	<u>/</u>		es ⊠ No □	

(inches)	Color (moist)	%	Colo	r (moist)	edox Featur %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
)-6	7.5YR3/3	100			_			Silt loam	
6-13	7.5YR3/2	100						Silty clay loa	am
	<u> </u>							<u>,,</u>	
3-18	7.5YR3/4	100						Silty clay loa	am
									_
									_
	Concentration, D=D						ed Sand G		ocation: PL=Pore Lining, M=Matrix.
	Indicators: (App	licable to				itea.)			tors for Problematic Hydric Soils <sup>3</sup> :
Histosol	i (A1) pipedon (A2)			Sandy Redo Stripped Ma	, ,				m Muck (A9) (LRR C)
	istic (A3)				ky Mineral (F	:1)			m Muck (A10) ( <b>LRR B</b> ) duced Vertic (F18)
	en Sulfide (A4)			•	ed Matrix (F2	•			d Parent Material (TF2)
	d Layers (A5) ( <b>LRF</b>	R C)		Depleted Ma		-,		· <del></del>	er (Explain in Remarks)
	ick (A9) ( <b>LRR D</b> )	/		•	Surface (F6	)			(
=	d Below Dark Surfa	ace (A11)		Depleted Da	ark Surface (	, F7)			
] Thick Da	ark Surface (A12)			Redox Depr	essions (F8)			<sup>3</sup> Indica	tors of hydrophytic vegetation and
	Mucky Mineral (S1)								land hydrology must be present,
	Gleyed Matrix (S4)							unle	ess disturbed or problematic.
estrictive	Layer (if present)	:							
	, , ,								
Type: <u>Cla</u>									
Type: Cla			<u> </u>					Hydric So	il Present? Yes □ No ⊠
Type: <u>Cla</u> Depth (in	ay		<u> </u>					Hydric So	il Present? Yes □ No ⊠
Type: <u>Cla</u> Depth (ir emarks:	ay nches): <u>13</u>		<u> </u>					Hydric So	oil Present? Yes □ No ⊠
Type: <u>Cla</u> Depth (ir emarks:	ay nches): <u>13</u>	rs:	_					Hydric So	oil Present? Yes □ No ⊠
Type: Classification   Depth (in emarks:  DROLOG   Vetland Hy	ay nches): <u>13</u>		uired; che	eck all that a	apply)				ondary Indicators (2 or more required)
Type: Cla Depth (in emarks: DROLOG etland Hy rimary Indi	ay nches): 13  GY vdrology Indicator		uired; che	eck all that a				Seco	
Type: Cli Depth (in emarks:  DROLOG etland Hy rimary Indi ] Surface	ay nches): 13  GY /drology Indicator icators (minimum c		uired; che	☐ Salt Cr				Seco	ondary Indicators (2 or more required)
Type: Cla Depth (in emarks: DROLOC etland Hy rimary Indi ] Surface ] High Wa	ay  nches): 13  GY  /drology Indicator icators (minimum of Water (A1) ater Table (A2)		uired; cho	☐ Salt Cr	ust (B11)	es (B13)		Second Se	ondary Indicators (2 or more required) Water Marks (B1) ( <b>Riverine</b> )
Type: Cla Depth (in emarks: DROLOG etland Hy rimary Indi Surface High Wa	ay  nches): 13  GY  /drology Indicator icators (minimum of Water (A1) ater Table (A2)	of one requ	uired; che	☐ Salt Cr ☐ Biotic C	ust (B11) Crust (B12)			Second Se	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Type: Cla Depth (in emarks: DROLOG fetland Hy rimary Indi Surface High Wa Saturati Water M	ay nches): 13  GY /drology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3)	of one requ		☐ Salt Cr ☐ Biotic C ☐ Aquatic ☐ Hydrog	ust (B11) Crust (B12) CInvertebrate	dor (C1)	Living Roc	Seco	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
Type: Cli Depth (in emarks:  DROLOG /etland Hy rimary Indi ] Surface ] High Wa ] Saturati ] Water M ] Sedimen	ay Inches): 13  GY Idrology Indicator Idrology Indi	of one requ verine) Ion riverir		Salt Cr Biotic C Aquatic Hydrog Oxidize	ust (B11) Crust (B12) c Invertebrate gen Sulfide C	odor (C1) eres along	-	Second   Sec	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
Type: Cli Depth (in Demarks:  DROLOC Vetland Hy Trimary Indi Surface High Wa Saturati Water M Sedimer Drift Dep	ay Inches): 13  GY Inches): 13  Inches): 13  Inches): 14  Inches): 15  Inches): 16  Inches): 16  Inches): 16  Inches): 18	of one requ verine) Ion riverir		Salt Cr Biotic C Aquatio Hydrog Oxidize	ust (B11) Crust (B12) c Invertebrati gen Sulfide C	odor (C1) eres along ed Iron (C	1)	Second   S	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Type: Cli Depth (ir emarks:  DROLOC /etland Hy rimary Indi Surface High Wa Saturati Water M Sedimer Drift Dep	ay Inches): 13  GY Inches): 13  GY Inches): 13  Inches): 13  Inches): 14  Inches): 14  Inches): 14  Inches): 15  Inches): 16  Inches): 16  Inches): 16  Inches): 16  Inches): 16  Inches): 16  Inches): 17  Inches): 18  Inches):	rerine) Ion riverir verine)	ne)	Salt Cr Biotic C Aquatio Hydrog Oxidize Presen Recent Thin M	ust (B11) Crust (B12) Crust (B	odor (C1) eres along ed Iron (Ca ion in Tille (C7)	1)	Second   S	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Type: Cla Depth (in Remarks:  DROLOC Vetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Dep Surface	ay Inches): 13  GY Inches): 13  Inches): 13  Inches): 13  Inches): 14  Inches): 15  Inches): 16  Inches): 16  Inches): 16  Inches): 16  Inches): 16  Inches): 18	rerine) Ion riverine) I Imagery	ne)	Salt Cr Biotic C Aquatio Hydrog Oxidize Presen Recent Thin M	ust (B11) Crust (B12) c Invertebrate gen Sulfide Ced Rhizosphe ce of Reduce	odor (C1) eres along ed Iron (Ca ion in Tille (C7)	1)	Second   S	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Type: Cli Depth (in Temarks:  DROLOG Vetland Hy Trimary Indi Surface High Wa Saturati Water M Sedimen Drift Dep Surface Inundation Water-S	ay Inches): 13  GY Inches): 13  GY Inches): 13  Inches): 13  Inches): 13  Inches): 14  Inches): 14  Inches): 15  Inches): 15  Inches): 16  Inches): 16  Inches): 16  Inches): 17  Inches): 18  Inches):	rerine) Ion riverine) I Imagery	ne)	Salt Cr Biotic C Aquatio Hydrog Oxidize Presen Recent Thin M	ust (B11) Crust (B12) Crust (B	odor (C1) eres along ed Iron (Ca ion in Tille (C7)	1)	Second   S	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8) Shallow Aquitard (D3)
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# APPENDIX C - Ground Level Color Photographs: Photos of Wetland "A" are from the 2017 wetland delineation and new photos from the 2020 delineation.



Photo 1. Wetland "A" data plots P1 Upland (left), and P2 Wetland (right). The blackberries had bee recently mowed to give surveyors access. The wetland determination was based on soils and hydrology. ETC Photo 4/28/2017.



Photo 2. Lower portion of Wetland "A" showing excessive algal growth due to fertilizers washed down from farms and nurseries upslope. ETC Photo 4/28/2017



Photo 3. New P5B upland plot, photo looking into upland to the southeast. ETC Photo 4/15/2020



Photo 4:.Looking the south at P5B into Wetland "A". ETC Photo 4/15/2020

### **APPENDIX D - Sensitive Area Certification:**

#### Fish Presence:

No fish are thought to be present on the subject property, nor would they be expected.

#### **Endangered Species:**

No endangered species of plants or animals were observed or reported.

#### **Critical Habitat Features:**

The property was surveyed for the following critical habitat features. Not all of these features are considered rare or critical by the City Sandy:

Talus slopes – none
Caves, cliffs, crevasses, rock outcrops – none
Large oak trees, or oak groves or oak savanna – none
Snags – none
Large woody debris – none
Springs, seeps - None.
Deep water habitat – None
Vernal pool wetlands – None
Old growth forest – None.
Wetlands – Described above.

Fish spawning or rearing habitat – none. It is believed that there is no fish access to this property.