#### WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

A complete report and signed report cover form, along with applicable revi Department of State Lands. All applicants will receive an emailed confirma Ways to submit report:	iew fee, are required before a report review timeline can be initiated by the ation that includes the report's unique file number and other information. Ways to pay review fee:				
<ul> <li>Under 50MB - A single unlocked PDF can be emailed to: wetland.delineation@dsl.oregon.gov.</li> <li>50MB or larger - A single unlocked PDF can be uploaded to DSL's B After upload notify DSL by email at: wetland.delineation@dsl.oregon.</li> <li><u>OR</u> a hard copy of the unbound report and signed cover form can be Department of State Lands, 775 Summer Street NE, Suite 100, Saler</li> </ul>	<ul> <li>By credit card on DSL's epayment portal after receiving the unique file number from DSL's emailed confirmation.</li> <li>By check payable to the Oregon Department of State Lands attached to the unbound mailed hardcopy <u>OR</u> attached to the complete signed cover form if report</li> </ul>				
Contact and Authorization Information					
X Applicant X Owner Name, Firm and Address:	Business phone # (503) 440-5766				
Manzanita Loft LLLC	Mobile phone # (optional)				
11251 SE 232 <sup>nd</sup> Ave	E-mail: vito.cerelli@gmail.com				
Damascus, OR 97089					
Authorized Legal Agent, Name and Address (if different)	): Business phone # Mobile phone # (optional) E-mail:				
I either own the property described below or I have legal authority	y to allow access to the property. I authorize the Department to access the				
property for the purpose of confirming the information in the report					
Typed/Printed Name: Vito Cerelli	Signature: Vito Cerelli				
Date: 6.01.2022 Special instructions regarding s					
Project and Site Information	Latitude: 45.71638 Longitude: -123.929949				
Project Name: Manzanita Retreat	decimal degree - centroid of site or start & end points of linear project				
Proposed Use:	Tax Map # 3N1029D002100				
Commercial-Hospitality	Tax Lot(s) 2100				
	Tax Map # 3N1029DA02600				
Project Street Address (or other descriptive location):	Tax Lot(s) 2600				
Corner of Dorcas Lane and Classic Street	Township 3N Range 10W Section 29 QQ				
City: Manzanita County: Tillamook	Use separate sheet for additional tax and location information Waterway: River Mile:				
Wetland Delineation Information					
Wetland Consultant Name, Firm and Address:	Phone # (503) 440-0084				
NW Regolith	Mobile phone # (if applicable)				
Austin Tomlinson	E-mail: nwregolith@gmail.com				
523 S. Cottage Ave Gearhart, OR 97138					
The information and conclusions on this form and in the attached <b>Consultant Signature:</b> Austin Tomlinson	report are true and correct to the best of my knowledge. Date: 06/10/2022				
Primary Contact for report review and site access is 🛛					
Wetland/Waters Present? 🛛 Yes 🛛 No Study Ar	ea size: 4.7 acres Total Wetland Acreage:				
Check Applicable Boxes Below					
R-F permit application submitted	Fee payment submitted <b>\$</b>				
Mitigation bank site	Resubmittal of rejected report (\$100)				
EFSC/ODOE Proj. Mgr:	Request for Reissuance. See eligibility criteria. (no fee)				
Wetland restoration/enhancement project (not mitigation)	DSL # Expiration date				
Previous delineation/application on parcel If known, previous DSL # WD2022-0296 ;WD2017-0149	LWI shows wetlands or waters on parcel Wetland ID code				
For O	ffice Use Only				
DSL Reviewer: <u>DE</u> Fee Paid Date:	// DSL WD # _2022-0331				
Date Delineation Received: <u>6 / 12 / 22</u>	DSL App.#				

## Wetland Delineation

## For

## Manzanita Retreat

## Manzanita, Tillamook County, OR

(Township 3N, Range 10W, Section 29)

NOTICE: REPORTS ARE CONSIDERED DRAFT DOCUMENTS UNTIL REVIEW IS COMPLETED BY DSL. WETLAND MAPS MAY CHANGE AS A RESULT OF DSL REVIEW.

**Prepared for:** 

**Manzanita Loft LLC** 11251 SE 232<sup>nd</sup> Ave Damascus, OR 97089

Prepared by:

#### NW Regolith

Austin Tomlinson 523 S. Cottage Ave Gearhart, OR 97138 (503) 440-0084 <u>nwregolith@gmail.com</u>

June, 2022

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### I. INTRODCUTION

NW Regolith conducted a wetland delineation within the proposed study area. The study area includes tax lots 3N1029DA02600, and 3N1029D002100. The study area is located in the incorporated community of Manzanita in Tillamook County, Oregon. All of tax lot 2600 and the northern portion of tax lot 2100 of the study area is being proposed for development of a hospitality business containing a number of small cabin like dwellings and common areas. Wetland delineation field work was conducted on March 26<sup>th</sup> and June 11<sup>th</sup>, 2022. This report presents the results of NW Regolith's wetland delineation. Figures, including a map depicting sample plot locations within the study area, located in Appendix A. Data sheets documenting on-site conditions are provided in Appendix B. Ground- level photos of the study area are in Appendix C. A discussion of the wetland delineation methodology is provided in Appendix E for the client.

## II. RESULTS AND DISCUSSION

### A. Landscape Setting and Land Use

The study area is located within the City of Manzanita in Tillamook County, Oregon, adjacent to the Manzanita Golf Course. It is zoned Special Residential/Recreational Zone (SR-R). All platted public rights-of-way in and around the study area are developed. The nearest developed right-of-way and access point is at the corner of Dorcas Lane and Classic Street. The study area is bordered by Classic St. to the east, the Manzanita Golf Course to the West, and residential housing to the north and south. The total area of the study area is approximately 4.7 acres.

The study area consists of a mixture of mature dune forest/open system and highly disturbed/ruderal areas. The forested system lies along the western boundary, adjacent to the golf course. While the flat ruderal portion of the property lies along the toe of slope of Classic St. and the housing development to the south and east. The elevation rises in the southern portion of the tax lot 2100 and within tax lot 2600. The middle portion of the study area is the lowest point.

The study area has not been developed in the past but has been affected by adjacent land use changes including the development of Classic St and residential housing. A pedestrian trial has been observed through the center of the study area in historical photos and during the present day. A significant amount of fill material has been placed within the southern area of the tax lot 2100. This fill area appears to have been utilized for several years.

#### B. Site Alterations

A significant amount of fill material has been placed in the southern portion of tax lot 2100 and is documented in this report (See Data Sheet P7, P8, P9 & Photos 30-44). This area was included in a previously DSL approved wetland delineation (WD2017-0149), which found no wetlands on site. NW Regolith did not observe any evidence of recent fill, excavation, or other disturbance within the study area outside of the documented fill area. Therefore, normal environmental conditions are considered to be present. Vegetation has likely been mowed or removed in years past, but no recent vegetation removal or cutting was observed.

### C. Precipitation Data and Analysis

Table 1 compares the average monthly precipitation, as reported for the National Resources Conservation Service (NRCS) WETS Station in Tillamook County to the monthly precipitation observed at the Nehalem, OR in the three months prior to NW Regolith wetland delineation field work. Table 1 also compares the observed precipitation at the Nehalem recording station to the normal precipitation range, as identified in the NRCS WETS table.

It should be noted that the observed precipitation total for June in Table 1 is the amount of precipitation recorded on in the first 11 days of the month, prior to the start of NW Regolith wetland delineation field work. Spring 2022 has been significantly wet, all prior months to field investigation far exceed the normal range of precipitation. WETS data was taken from Tillamook station due to data availability from the Nehalem and Manzanita station.

# Table 1: Comparison of Average and Observed Precipitation at the Nehalem/Tillamook for the Three Months Prior to the Wetland Delineation Field Work

	America	30% Chanc	e Will Have	Observed	Percent of	
Month	Average Precipitation	Less Than Average <sup>a</sup>	More Than Average <sup>a</sup>	Observed Precipitation	Normal	
March	9.90	7.25	11.64	12.9	130%	
April	6.82	4.79	8.09	9.8	143%	
May	4.84	3.3	5.77	12.7	262%	
June 11 <sup>th</sup>	3.41	2.37	4.06	3.13	91%	

Notes: a. Source: NRCS WETS Table for the Tillamook, Tillamook County, Oregon <u>http://agacis.rcc-acis.org/?fips=41007</u>

- b. Source: Preliminary Monthly Climate Data for the Seaside, OR as reported by NOAA Regional Climate Center
- c. The average precipitation for January, as provided above, is for the first 12 days of January. This amount presumes that the average precipitation for the entire month of January is spread evenly across the entire month.

Total observed precipitation from the start of the water year (October 1<sup>st</sup>, 2021) to the date of field work (June 11<sup>th</sup>, 2022) was 123.34 inches which is approximately 147 percent above the normal, if you include the entire month of June in the average. It is NW Regolith's opinion that existing hydrology conditions were far exceeded the normal during field work of the delineation.

## D. Methods

NW Regolith conducted an initial reconnaissance on March 26<sup>th</sup> and completed the wetland delineation on June 11<sup>th</sup>, 2022. NW Regolith delineated the limits of jurisdictional wetlands in the study area based on the presence of wetland hydrology, hydric soils, and hydrophytic vegetation, in accordance with the Routine On-site Determination, as described in the Corps of Engineers Wetland Delineation Manual, Wetlands Research Program Technical Report Y-87-1 ("The 1987 Manual") and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual; Western Mountains, Valleys, and Coast Region.

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

NW Regolith identified no existing wetlands within the study area. All vegetation observed during the investigation contained little to no FACW or OBL wetland vegetation. A small area of spirea was observed within Plot 5, but no wetland soil or hydrology indicators were present. The forested portion of the study is dominated by Pinus contorta (FAC), Thuja Plicata (FAC), and Picea stichensis (FAC). Understory vegetation consisted of Vaccinum ovatum (FACU), Gaultheria shallon (FACU), and Rubus ursinus (FACU). Open areas within the study area is dominated by Gaultheria shallon (FACU), Holcus lanatus (FAC), Pteridium aquilium (FACU), Cytisus scoparius (n/l), and Rubus americanus (FAC). Disturbed areas (Plots 7-9) contained Cytisus scoparius (n/l) and Phalaris arundinacea (FAC).

Soils were consistent with NRCS mapped soil type, Netarts fine sandy loam, 5 to 30 percent slope. With a shallow dark surface horizon, and sandy subsurface horizons with no sign of streaking or concentrations. Plots 1-6 contained undisturbed soils that were consistent throughout. Plots 7-9 were in areas of historic disturbance and non-native soil material was found. These soils and the landscape on site appear to be well drained and significantly above any ground water elevation.

Despite the well above normal precipitation for this year, no hydrologic indicators were observed within the study area.

## F. Deviation from LWI or NWI

The U.S Fish and Wildlife Service (USFWS) NWI shows wetlands within the study area. No LWI exists within the City of Manzanita. The area mapped by the NWI was observed and data was collected throughout its footprint. No wetlands were found within the NWI mapped wetlands. Therefore, NW Regolith believes that the wetland delineation presented in this report which is based on on-the ground observations, is a true representation of the wetland and upland conditions within the study area.

## G. Mapping Method

NW Regolith marked all data plots with pink pin flags. Data points were survey-located by Avensa Map app. The estimated accuracy of the app is one meter. No other surveying or on the ground markings were placed since no wetlands were present on site. A previous survey of the tax lots was conducted in years past, evidence of this survey were observed on the ground.

## H. Additional Information

Data points were chosen based on topographic position, field observations, and hydric vegetation within the study area. Soils and vegetation communities were relatively uniform throughout, indicating that further data points or investigation was not needed beyond what is presented in this report.

## I. Results and Conclusions

No wetlands were found within the study area. Data points were taken within the mapped NWI and throughout the entirety of the study area. A majority of the vegetation did not

meet wetland indicators. No wetland soils or hydrology indicators were found within the study area.

## J. Required Disclaimer

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

#### III. References

Adamus, P.R. and D. Field. 2001 Guidebook for Hydrogeomorphic (HGM)-based Assessment of Oregon Wetland and Riparian Sites. Willamette Valley Ecoregion, Riverine Impounding and Slopes/Flats Subclasses. Oregon Division of State Lands, Salem, OR.

Tillamook County Webmaps. maps.co.clatsop.or.us//

Hitchcock, CL and A. Cronquist. 1973. Flora of the Pacific Northwest: An Illustrated manual. University of Washington Press.

Munsell Color, 2009. Munsell Soil Color Charts.

NRCS WETS Tables for Nehelam, Tillamook County, Oregon. <u>http://www.wcc.nrcs.usda.gov/ftpref/support/climate/wetlands/or/41007.txt.</u> Accessed June 2022

National Weather Service. Preliminary Monthly Climate Data for the Manzanita. <u>http://www.nws.noaa.gov/climate/index.php?wfo=pqr.</u> Accessed June 2022.

US Army Corps of Engineers, Environmental Laboratory, 1987. Corps of Engineers Wetland Delineation Manual. Technical Report Y-87-1.

US Army Corps of Engineers, Environmental Laboratory, 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0).

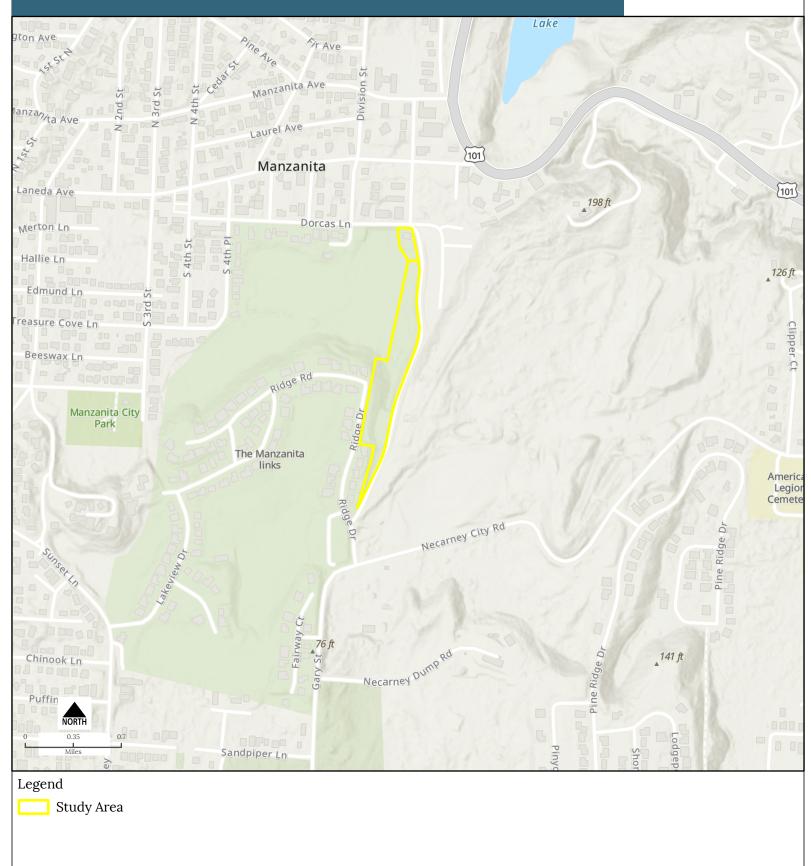
USDA, Web Soil Mapper 2011. Soil Survey of Tillamook County, Oregon. <u>http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx</u>

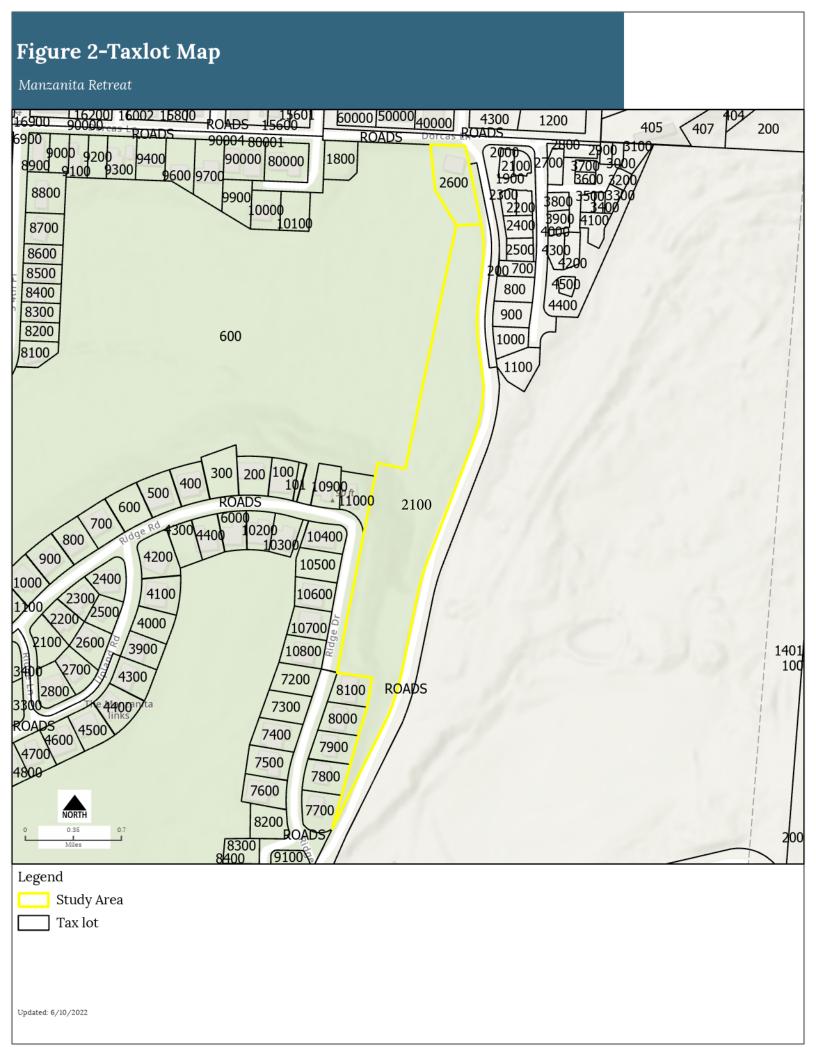
USFWS, National Wetland Inventory, 2015. Manzanita, OR. <u>http://www.fws.gov/wetlands/Wetlands-Mapper.html</u>

Appendix A: Figures

# Figure 1-Topography & General Location

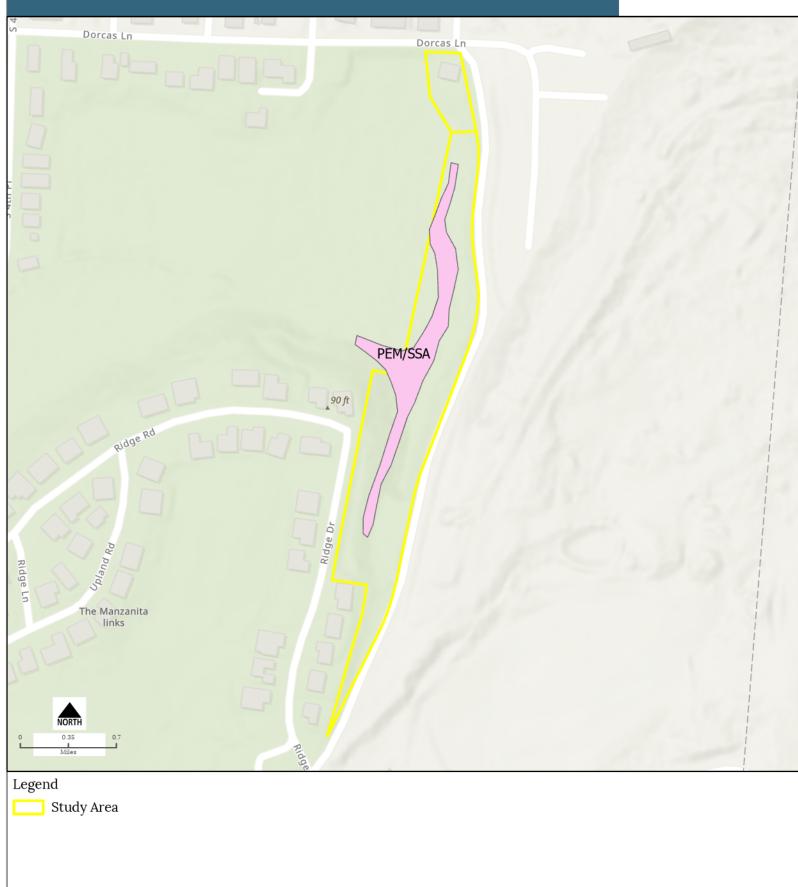
#### Manzanita Retreat



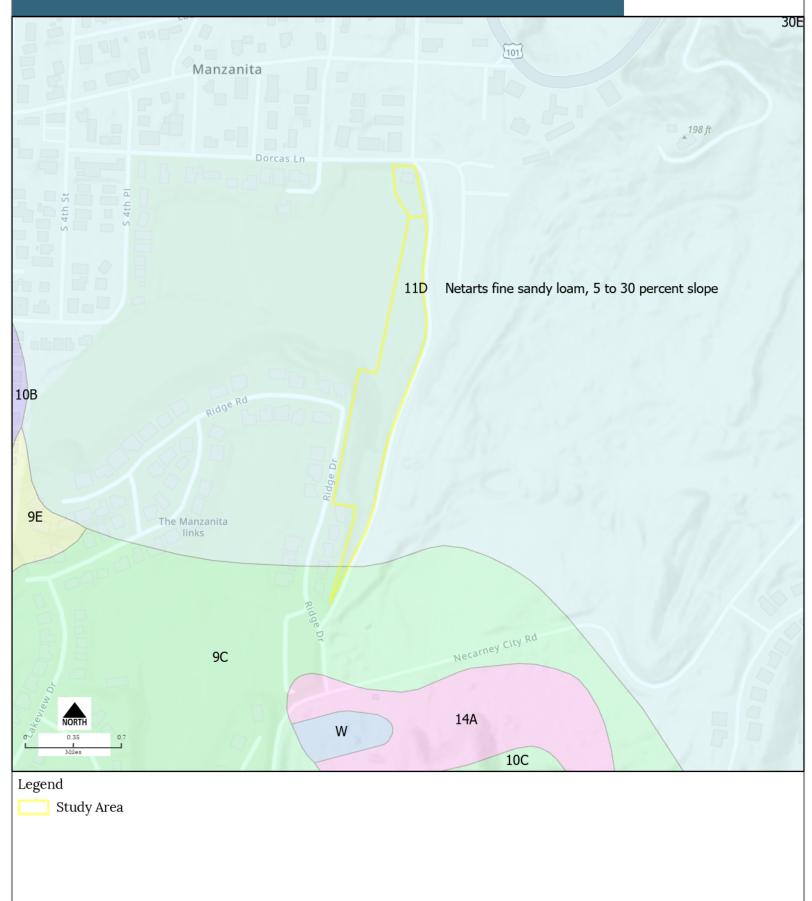


# Figure 3-NWI Map

### Manzanita Retreat



### Manzanita Retreat



# Figure 5-Aerial Map

Manzanita Retreat



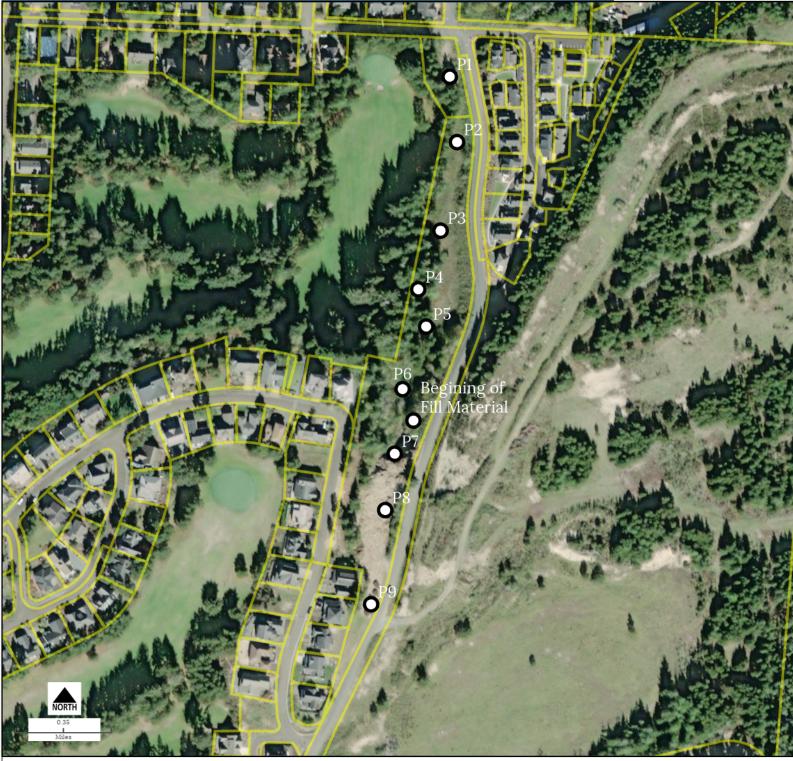
# Legend

Study Area

Updated: 6/11/2022 Data:

# Figure 6-Wetland Delineation Map

Manzanita Retreat



#### Legend

Study Area

NOTICE: REPORTS ARE CONSIDERED DRAFT DOCUMENTS UNTIL REVIEW IS COMPLETED BY DSL. WETLAND MAPS MAY CHANGE AS A RESULT OF DSL REVIEW.

Appendix B: Data Sheets

Project/Site:	Manz	anita Retreat		City/Coun	ty: Manz	anita/Tilla	mook	Samp	ling Date:	6/11/20	)22	
Applicant/Owner: Manzanita Loft LLC					State:	OR	Sampling P	oint:	P1			
Investigator(s)	): <u>A</u> r	ustin Tomlins	on	Sectio	n, Township	, Range:	3N-10W-2	9				
Landform (hill	slope, t	errace, etc.):	Dune Terra	се	Local relief	(concave	e, convex, noi	ne):	concave		Slope (%):	
Subregion (LF	R):	А		Lat: 45	5.7163	Long:	-123.9299		Datum:	NAD 8	3	
Soil Map Unit	Name:	Netarts fi	ne sandy loam	, 5 to 30 pe	rcent slope		NW	l classi	fication:			
Are climatic / I	hydrolo	gic conditions	s on the site ty	pical for this	s time of yea	r? Yes	x No	(If no	o, explain in	Remark	s.)	
Are Vegetatio	n	, Soil	, or Hydrold	ogy s	ignificantly d	listurbed?	Are "Norr	mal Cir	cumstances	" presen	t? Yes x	No
Are Vegetatio	n	, Soil	, or Hydrold	ogy r	aturally prob	lematic?	(If	needeo	d, explain ar	y answe	ers in Remark	s.)

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         x         No            Yes          No            Yes          No	Is the Sampled Area within a Wetland?	Yes No
Remarks: Sample point at highest r	point of the property.		

est point of ne property iyi

# VEGETATION – Use scientific names of plants.

	planter			
	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 20ft )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1. Alnus rubra	1		FAC	That Are OBL, FACW, or FAC: <u>3</u> (A)
2. Picea stichensis	5		FAC	Total Number of Dominant Species Across All Strata: 3 (B)
3. Pinus contorta	40	Y	FAC	Percent of Dominant Species
4				That Are OBL, FACW, or FAC: 100 (A/B)
				(***)
	46	= Total Cove	er	<b>-</b>
Sapling/Shrub Stratum (Plot size: 15ft )				Prevalence Index worksheet:
1. Cytisus scoparius	40	Y	N/L	Total % Cover of: Multiply by:
2. Rubus armeniacus	5		FACU	OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
	45	= Total Cove	er	UPL species x 5 =
Herb Stratum (Plot size: 15ft )				Column Totals: (A) (B)
1. Maianthemum dilatatum	5		FAC	
2. Holcus lanatus	30	Y	FAC	Prevalence Index = B/A =
3. Pteridium aquilinum	1		FACU	
4. Hypochaeris radicata	1		FACU	Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6.				× 2 - Dominance Test is >50%
7.	-			3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants <sup>1</sup>
				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11	37	= Total Cove	or	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: )			01	be present, unless disturbed or problematic.
1				
2		= Total Cove	or	Hydrophytic
% Bare Ground in Herb Stratum 35		= 10tai 000		Vegetation Present? Yes x No
% Bare Ground in Herb Stratum 35	-			Present? Yes <u>x</u> No
Demonder				
Remarks:				

SOIL							Sampling Poir	nt: P1
		to the dep				onfirm the a	bsence of indicators	.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Redox Fea %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-8	10YR 4/3	100					LS	
8-20	10YR 4/4	100					Sand	
							. <u></u>	
1Turnet 0=0		ation DM-	Reduced Matrix, CS	Covered		nd Craina	21 agention: DI -Dara	Lining M-Matrix
Type C=C	oncentration, D-Dep	elion, Rivi-	-Reduced Matrix, CS-	-Covered	or Coaled Sal	nu Grains.	<sup>2</sup> Location: PL=Pore	Elming, M–Maurx.
Hydric Soil	Indicators: (Applic	able to all	LRRs, unless other	wise note	d.)	Indi	cators for Problemat	tic Hydric Soils <sup>3</sup> :
Histoso		_	Sandy Redox (S5				2 cm Muck (A10)	
	pipedon (A2) listic (A3)	_	Stripped Matrix (S Loamy Mucky Min		excent MI R		Red Parent Material ( Very Shallow Dark Su	
	en Sulfide (A4)	_	Loamy Gleyed M		(except mert		Other (Explain in Rem	
	d Below Dark Surfac	e (A11)	Depleted Matrix (					
	ark Surface (A12) Mucky Mineral (S1)	_	Redox Dark Surfa Depleted Dark Surfa				<sup>3</sup> Indicators of hydroph wetland hydrology mu	
	Gleyed Matrix (S4)	_	Redox Depressio				unless disturbed or pro	
							-	
	ayer (if present):						v	
Type: Depth (inc					Hydric Sol	il Present?	Yes	No x
	noist with recent rainf	- 11						
Remarks: Soll n		all						

#### HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)           Primary Indicators (minimum of one required; check all that apply)         Water-Stained Leaves (B9) (exe           Surface Water (A1)         MLRA 1, 2, 4A, and 4B)           High Water Table (A2)         Salt Crust (B11)	Secondary Indicators (2 or more required)         Water-Stained Leaves (B9) (MLRA 1, 2,         4A, and 4B)         Drainage Patterns (B10)
Saturation (A3)       Aquatic Invertebrates (B13)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)         Sediment Deposits (B2)       Roots (C3)         Drift Deposits (B3)       Presence of Reduced Iron (C4)         Algal Mat or Crust (B4)       Soils (C6)	Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Iron Deposits (B5)       Stunted or Stressed Plants (D1)         Surface Soil Cracks (B6)       Other (Explain in Remarks)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)         Sparsely Vegetated Concave Surface (B8)       Stantadom	Raised Ant Mounds (D6) ( <b>LRR A</b> ) Frost-Heave Hummocks (D7)
Field Observations:         Surface Water Present?       Yes       No       x       Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	ctions), if available:
Remarks:	

Project/Site:	Manzanita Retreat		City/County:	Manza	nita/Tillar	nook	Samp	ling Date:	6/11/20	22		
Applicant/Owr	ner: Manzanita Lof		State:	OR	Sampling P	oint:	P2					
Investigator(s)	: Austin Tomlinso	on	Section, To	ownship,	Range:	3N-10W-29	9					
Landform (hill	slope, terrace, etc.):	Dune Terrac	e Loo	cal relief	(concave	, convex, nor	ne):	concave		Slope (%):		
Subregion (LF	RR): <u>A</u>		Lat: 45.716	63	Long:	-123.9299		Datum:	NAD 83	3		
Soil Map Unit	Name: Netarts fin	e sandy loam,	5 to 30 percent	t slope		NWI	classif	fication:				
Are climatic / I	nydrologic conditions	on the site typi	cal for this time	e of year	? Yes	x No	(If no	o, explain in	Remarks	s.)		
Are Vegetatio	n, Soil	, or Hydrolog	ıy signif	icantly dis	sturbed?	Are "Norr	nal Ciro	cumstances	" present	? Yes x	No	
Are Vegetatio	n, Soil	, or Hydrolog	y natur	ally probl	ematic?	(If i	needed	l, explain an	y answe	rs in Remark	s.)	

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

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

\_\_\_\_

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20ft</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
1			_	Total Number of Dominant
2				Species Across All Strata: 3 (B)
3 4.				Percent of Dominant Species
ч				That Are OBL, FACW, or FAC: 33 (A/B)
		= Total Cov	or	
Sapling/Shrub Stratum (Plot size: 15ft )		- 10(a) 000	CI	Prevalence Index worksheet:
1. Rubus armeniacus	15	Y	FACU	Total % Cover of: Multiply by:
2. Cytisus scoparius	5	1	N/L	OBL species x 1 =
3. Gaultheria shallon	30	Y	FACU	FACW species x 2 =
4. Rubus ursinus	5	I	FACU	
	J		TACO	FAC species x 3 =
5	55	= Total Cov	or	FACU species x 4 =
Herb Stratum (Plot size: 15ft )	55		er	UPL species x 5 =
	80	Y	EAC	Column Totals: (A) (B)
1. <u>Holcus lanatus</u> 2. Digitalis purpurea	1	T	FAC FACU	Prevalence Index = B/A =
	<u> </u>		FACU	
3 4.				Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6				2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants <sup>1</sup>
10				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11		<b>T</b> ( ) 0		
	81	= Total Cov	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: )				
1				
2				Hydrophytic
		= Total Cov	er	Vegetation
% Bare Ground in Herb Stratum	-			Present? Yes No x
Remarks:				

SOIL							Sampling Point:	P2
	cription: (Describe	to the dept		ent the ind Redox Fea		onfirm the a	bsence of indicators.)	
Depth (inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-4	10YR 2/1	100	, <u> </u>				LS	
4-8	10YR 4/1	100					Sand	
8-20	7.5YR 4/6	100					Sand	
0.20	1.011(4/0						ound	
17 0 0								
'Type: C=C	oncentration, D=Dep	etion, RM=	Reduced Matrix, CS	Covered a	or Coated Sai	nd Grains.	<sup>2</sup> Location: PL=Pore L	ining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all	LRRs, unless other	wise note	d.)	Indi	icators for Problematic	Hydric Soils <sup>3</sup> :
Histoso	( )	_	Sandy Redox (S5				2 cm Muck (A10)	0)
	pipedon (A2) istic (A3)	_	Stripped Matrix (S Loamy Mucky Min		except MI R		Red Parent Material (TF Very Shallow Dark Surfa	
	en Sulfide (A4)		Loamy Gleyed M		oxeept minit		Other (Explain in Remar	
	d Below Dark Surfac	e (A11)	Depleted Matrix (	,				
	ark Surface (A12) //ucky Mineral (S1)	_	Redox Dark Surfa Depleted Dark Surfa	( )			<sup>3</sup> Indicators of hydrophyti wetland hydrology must	
	Gleyed Matrix (S4)		Redox Depressio	( )			unless disturbed or prob	
	yer (if present):				Uburbelo O el		N	
Type: Depth (inc	hes).				Hydric Sol	il Present?	Yes	No x
	nes).	all						
Remarks. Soli n	Ioist with recent raini	all						

#### HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (2 or more required)
Primary Indicators (minimum of one required; check	all that apply) Water-Stained Leaves (B9) (exc MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)	ept       Water-Stained Leaves (B9) (MLRA 1, 2,         4A, and 4B)       Drainage Patterns (B10)         Dry-Season Water Table (C2)       Saturation Visible on Aerial Imagery (C9)
Field Observations:		
Surface Water Present? Yes No x	Depth (inches):	
	Depth (inches):	Wetland Hydrology Present? Yes No x
Saturation Present?		
	Depth (inches):	
Describe Recorded Data (stream gauge, monitoring w	vell, aerial photos, previous inspec	tions), if available:
Remarks:		

Project/Site:	Manzar	nita Retre	eat		City/C	county:	Manza	nita/Tillar	nook	Samp	ling Date:	6/11/20	022			
Applicant/Owne	er: Ma	anzanita	Loft L	LC			State:	OR	Sampling P	oint:	P3					
Investigator(s):	Aus	stin Tomli	nson		Se	ection, T	ownship,	Range:	3N-10W-2	9						
Landform (hillsl	ope, ter	race, etc.	.):	Dune Terra	ce	Lo	cal relief	(concave	, convex, noi	ne):	concave		Slope (%):			
Subregion (LRF	R): A	A			Lat:	45.716	63	Long:	-123.9299		Datum:	NAD 8	3			
Soil Map Unit N	lame:	Netarts	fine	sandy loam,	5 to 30	) percen	t slope		NW	classif	ication:					
Are climatic / hy	ydrologi	c conditic	ons o	n the site typ	oical for	this time	e of year	? Yes	x No	(If no	, explain in	Remark	s.)			
Are Vegetation		, Soil		, or Hydrolo	ду	signif	ficantly dis	sturbed?	Are "Norr	nal Ciro	cumstances'	" presen	t?Yes >	<b>(</b>	No	
Are Vegetation		, Soil		, or Hydrolo	ду	natur	ally probl	ematic?	(If	needed	l, explain an	y answe	ers in Rema	rks.)		

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

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

	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 20ft )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species	
1. Pinus contorta	10	Y	FAC	That Are OBL, FACW, or FAC: 2 (A)	
2				Total Number of Dominant Species Across All Strata: 6 (B)	
3				Percent of Dominant Species	
4				That Are OBL, FACW, or FAC: 33 (A/B)	
	10	= Total Cov	er	Dura velan en la deu vuenka ha stu	
Sapling/Shrub Stratum (Plot size: 15ft )				Prevalence Index worksheet:	
1. Vaccinium ovatum	5		FACU	Total % Cover of: Multiply by:	
2. Cytisus scoparius	25	Y	N/L	OBL species x 1 =	
3. Gaultheria shallon	35	Y	FACU	FACW species x 2 =	
4. Rubus ursinus	5		FACU	FAC species x 3 =	
5				FACU species x 4 =	
	70	= Total Cov	er	UPL species x 5 =	
Herb Stratum (Plot size: 15ft )				Column Totals: (A) (B)	
1. Hypochaeris radicata	10	Y	FACU		
2. Holcus lanatus	25	Y	FAC	Prevalence Index = B/A =	
3. Pteridium aquilinum	15	Y	FACU		
4				Hydrophytic Vegetation Indicators:	
5				1 - Rapid Test for Hydrophytic Vegetation	
6				2 - Dominance Test is >50%	
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>	
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporti	ng
9.				data in Remarks or on a separate sheet)	
10.				5 - Wetland Non-Vascular Plants <sup>1</sup>	
11.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
	50	= Total Cov	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology mus	t
Woody Vine Stratum (Plot size: )				be present, unless disturbed or problematic.	
1					
2.					
		= Total Cov	er	Hydrophytic Vegetation	
% Bare Ground in Herb Stratum				Present? Yes No x	
	-				
Remarks:					
· · · · · · · · · · · · · · · · · · ·					

SOIL						Sampling Point	t: P3
		to the dept			confirm the a	bsence of indicators.	)
Depth	Matrix	0/		edox Features	Loc <sup>2</sup>	Tautuma	Demontre
(inches)	Color (moist)	%	Color (moist)	% Type <sup>1</sup>	LOC	Texture	Remarks
0-6	10YR 2/1	100	·			LS	
6-11	10YR 5/2	100	·			Sand	
11-20	7.5YR 4/6	100				Sand	
	·		·				·
·	·		·			·	
. <u> </u>	·		·				. <u></u>
<sup>1</sup> Type: C=C	Concentration, D=Dep	letion, RM=I	Reduced Matrix, CS=0	Covered or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.
Hydric Soi	il Indicators: (Appli	cable to all	LRRs, unless otherw	/ise noted.)	Indi	cators for Problemati	c Hydric Soils <sup>3</sup> :
Histoso	ol (A1)		Sandy Redox (S5)			2 cm Muck (A10)	
	Epipedon (A2)	_	Stripped Matrix (Se	6)		Red Parent Material (T	
	Histic (A3)	_		eral (F1) (except ML		Very Shallow Dark Sur	
	jen Sulfide (A4) ed Below Dark Surfao	ο (Δ11) —	Loamy Gleyed Ma Depleted Matrix (F			Other (Explain in Rema	arks)
	Dark Surface (A12)	.e (ATT)	Redox Dark Surface			<sup>3</sup> Indicators of hydrophy	tic vegetation and
	Mucky Mineral (S1)	_	Depleted Dark Sur			wetland hydrology mus	
Sandy	Gleyed Matrix (S4)		Redox Depression	s (F8)		unless disturbed or pro	blematic
<b>Destrictive</b> L	over (if present).						
	ayer (if present):			Hydria S	oil Present?	Yes	No x
Type: Depth (inc	thes):				on Fresent?		No <u>x</u>
• •				I			
Remarks:							
HYDROLOC							
	rology Indicators:	o roquirod: o	book all that apply)		Saaa	adam (Indicatora (2 ar m	voro roquirod)
Primary Indica	ators (minimum of on	e required, d		Leaves (B9) (except		<u>ndary Indicators (2 or m</u> /ater-Stained Leaves (E	
Surface W	/ater (A1)		MLRA 1, 2, 4A			A, and 4B)	, ( <b>iii_i i i i i i i i i i i i i i i i i i</b>
	er Table (A2)		Salt Crust (B11			rainage Patterns (B10)	
Saturation			Aquatic Inverte	ebrates (B13)		ry-Season Water Table	
Water Mar	кѕ (ВТ)		Hydrogen Sulfi	de Odor (C1) ospheres along Living		aturation Visible on Aer	a imagery (C9)
Sediment	Deposits (B2)		Roots (C3)			eomorphic Position (D2	2)
Drift Depo			Presence of Re	educed Iron (C4)		nallow Aquitard (D3)	
				eduction in Tilled	-	AC Neutral Test (DC)	
Aigal Mat o	or Crust (B4)		Soils (C6)	essed Plants (D1)	F/	AC-Neutral Test (D5)	
Iron Depos	sits (B5)		(LRR A)		R	aised Ant Mounds (D6)	(LRR A)
	oil Cracks (B6)		Other (Éxplain	in Remarks)		ost-Heave Hummocks	

Raised Ant Mounds (D6) (LRR A
Frost-Heave Hummocks (D7)

Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)

Sparsely Vegetated Cor	ncave Si	urface (B	8)					
Field Observations:								
Surface Water Present?	Yes	No	х	Depth (inches):				
Water Table Present?	Yes	No	х	Depth (inches):		Wetland Hydrology Present?	Yes No x	¢
Saturation Present?								
(includes capillary fringe)	Yes	No	х	Depth (inches):				
Describe Recorded Data (str	eam gau	uge, mon	itoring	well, aerial photo	s, previous inspe	ctions), if available:		
Remarks:								
- tomanto:								

zanita Retreat	City/Coun	ty: <u>Manza</u>	nita/Tillar	nook	Samp	ling Date:	6/11/2022			
Manzanita Loft LLC	C	State:	OR	Sampling Po	oint:	P4				
ustin Tomlinson	Sectio	n, Township,	Range:	3N-10W-29	)					
terrace, etc.): Du	une Terrace	Local relief	(concave	, convex, non	ne):	concave	Slope (	%):		
А	Lat: 45	.7163	Long:	-123.9299		Datum:	NAD 83			
Netarts fine san	ndy loam, 5 to 30 pe	rcent slope		NWI	classif	ication:				
gic conditions on th	he site typical for this	time of year	? Yes	x No	(If no	, explain in	Remarks.)			
, Soil , oi	or Hydrology s	ignificantly dis	sturbed?	Are "Norm	nal Circ	cumstances'	" present? Yes	х	No	
, Soil, oi	or Hydrology n	aturally probl	ematic?	(lf r	needed	l, explain an	y answers in Re	mark	s.)	
	Manzanita Loft LLC ustin Tomlinson errace, etc.): <u>Du</u> A <u>Netarts fine sa</u> gic conditions on t , Soil, c	Manzanita Loft LLC         ustin Tomlinson       Section         terrace, etc.):       Dune Terrace         A       Lat:       45         Netarts fine sandy loam, 5 to 30 per       gic conditions on the site typical for this         , Soil       , or Hydrology       s	Manzanita Loft LLC       State:         ustin Tomlinson       Section, Township,         terrace, etc.):       Dune Terrace       Local relief         A       Lat:       45.7163         Netarts fine sandy loam, 5 to 30 percent slope       Image: significantly discussion of the site typical for this time of years         , Soil       , or Hydrology       significantly discussion	Manzanita Loft LLC       State:       OR         ustin Tomlinson       Section, Township, Range:         terrace, etc.):       Dune Terrace       Local relief (concave         A       Lat:       45.7163       Long:         Netarts fine sandy loam, 5 to 30 percent slope       gic conditions on the site typical for this time of year? Yes       , soil       , or Hydrology       significantly disturbed?	Manzanita Loft LLC       State:       OR       Sampling Point         ustin Tomlinson       Section, Township, Range:       3N-10W-29         terrace, etc.):       Dune Terrace       Local relief (concave, convex, nor         A       Lat:       45.7163       Long:       -123.9299         Netarts fine sandy loam, 5 to 30 percent slope       NWI         gic conditions on the site typical for this time of year? Yes       x       No         , Soil       , or Hydrology       significantly disturbed?       Are "Norm	Manzanita Loft LLC       State:       OR       Sampling Point:         ustin Tomlinson       Section, Township, Range:       3N-10W-29         terrace, etc.):       Dune Terrace       Local relief (concave, convex, none):         A       Lat:       45.7163       Long:       -123.9299         Netarts fine sandy loam, 5 to 30 percent slope       NWI classif         igic conditions on the site typical for this time of year? Yes       x       No       (If no         , Soil       , or Hydrology       significantly disturbed?       Are "Normal Circo"	Manzanita Loft LLC       State:       OR       Sampling Point:       P4         ustin Tomlinson       Section, Township, Range:       3N-10W-29         terrace, etc.):       Dune Terrace       Local relief (concave, convex, none):       concave         A       Lat:       45.7163       Long:       -123.9299       Datum:         Netarts fine sandy loam, 5 to 30 percent slope       NWI classification:       gic conditions on the site typical for this time of year? Yes       x       No       (If no, explain in no, explain in no, soil         , Soil       , or Hydrology       significantly disturbed?       Are "Normal Circumstances	Manzanita Loft LLC       State:       OR       Sampling Point:       P4         ustin Tomlinson       Section, Township, Range:       3N-10W-29         terrace, etc.):       Dune Terrace       Local relief (concave, convex, none):       concave       Slope (         A       Lat:       45.7163       Long:       -123.9299       Datum:       NAD 83         Netarts fine sandy loam, 5 to 30 percent slope       NWI classification:	Manzanita Loft LLC       State:       OR       Sampling Point:       P4         ustin Tomlinson       Section, Township, Range:       3N-10W-29         terrace, etc.):       Dune Terrace       Local relief (concave, convex, none):       concave       Slope (%):         A       Lat:       45.7163       Long:       -123.9299       Datum:       NAD 83         Netarts fine sandy loam, 5 to 30 percent slope       NWI classification:	Manzanita Loft LLC       State:       OR       Sampling Point:       P4         ustin Tomlinson       Section, Township, Range:       3N-10W-29         terrace, etc.):       Dune Terrace       Local relief (concave, convex, none):       concave       Slope (%):         A       Lat:       45.7163       Long:       -123.9299       Datum:       NAD 83         Netarts fine sandy loam, 5 to 30 percent slope       NWI classification:

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         No         x           Yes         No         x           Yes         No         x	Is the Sampled Area within	a Wetland?	Yes Nox
Remarks:				

\_\_\_\_

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 20ft )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1. <u>Thuja plicata</u>	75	Y	FAC	That Are OBL, FACW, or FAC: (A)
2. Pinus contorta	40	Y	FAC	Total Number of Dominant
3. Picea stichensis	10		FAC	Species Across All Strata: 5 (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 40 (A/B)
	120	= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 15ft )				Prevalence Index worksheet:
1. Gaultheria shallon	5	Y	FACU	Total % Cover of: Multiply by:
2. Vaccinium ovatum	5	Y	FACU	OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
	10	= Total Cov	er	UPL species x 5 =
Herb Stratum (Plot size: 15ft )				Column Totals: (A) (B)
1. Pteridium aquilinum	1	Y	FACU	
2				Prevalence Index = B/A =
3				
4				Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6				2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants <sup>1</sup>
11				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	1	= Total Cov	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:)				be present, unless disturbed or problematic.
1				
2				Hydrophytic
		= Total Cov	er	Vegetation
% Bare Ground in Herb Stratum95	_			Present? Yes No x
Remarks:				·

							Sampling Point	t: P4
		to the dept	th needed to docur			onfirm the a	bsence of indicators.	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Redox Feature %	es Type¹	Loc <sup>2</sup>	Texture	Remarks
<u>/</u>					туре	LUC		Remarks
0-2	10YR 2/1	100	·	<u> </u>			LS	
2-6	10YR 5/2	100	·				Sand	
6-20	7.5YR 4/6	100					Sand	
				<u> </u>				
	Concentration, D=Dep	letion RM-	Reduced Matrix CS	S=Covered or C	`oated Sa	nd Grains	<sup>2</sup> Location: PL=Pore	Lining M-Matrix
					Joaleu Sa			
Hydric So	il Indicators: (Appli	cable to all	LRRs, unless othe	erwise noted.)		Ind	cators for Problemati	ic Hydric Soils <sup>3</sup> :
	ol (A1)		Sandy Redox (S	,			2 cm Muck (A10)	
	Epipedon (A2)	_	Stripped Matrix				Red Parent Material (T	
	Histic (A3) gen Sulfide (A4)	_	Loamy Mucky M Loamy Gleyed N		серт міск	(A 1)	Very Shallow Dark Sur Other (Explain in Rema	
	ted Below Dark Surfa	ce (A11)	Depleted Matrix					diks)
	Dark Surface (A12)	<u> </u>	Redox Dark Sur				<sup>3</sup> Indicators of hydrophy	tic vocatation and
	Mucky Mineral (S1)		Depleted Dark S				wetland hydrology mus	
	Gleyed Matrix (S4)	_	Redox Depressi				unless disturbed or pro	
	- <b>)</b> ( )		·	( - /			·	
<b>Restrictive L</b>	_ayer (if present):							
Type:				F	lydric So	il Present?	Yes	No x
Type: Depth (ind	ches):			ŀ	lydric So	il Present?	Yes	NO X
Depth (ind	ches):			<sup>+</sup>	lydric So	il Present?	Yes	NO <u>X</u>
Depth (inc	ches):			<sup>+</sup>	lydric So	il Present?	Yes	NO <u>X</u>
Depth (inc	ches):			<sup>•</sup>	lydric So	il Present?	Yes	NO <u>X</u>
Depth (inc	ches):			<u> </u>	lydric So	il Present?	Yes	NO <u>X</u>
Depth (inc	ches):			*	lydric So	il Present?	Yes	NO <u>X</u>
Depth (ind				<sup>k</sup>	lydric So	il Present?	Yes	NO <u>X</u>
Depth (ind Remarks: HYDROLO( Wetland Hyd	GY drology Indicators:			I	lydric So			
Depth (ind Remarks: HYDROLO( Wetland Hyd	GY	e required;		I	-	Seco	ndary Indicators (2 or m	nore required)
Depth (ind Remarks: HYDROLO( Wetland Hyd Primary Indic	GY drology Indicators: ators (minimum of on	e required;	Water-Staine	ed Leaves (B9)	-	Secol	ndary Indicators (2 or m ater-Stained Leaves (E	nore required)
Depth (ind temarks: IYDROLO( Wetland Hyd Primary Indic Surface W	GY drology Indicators: eators (minimum of on Vater (A1)	e required;	Water-Staine MLRA 1, 2, 4	ed Leaves (B9) <b>4A, and 4B</b> )	-	<u>Secol</u> W	ndary Indicators (2 or m ater-Stained Leaves (E A, and 4B)	nore required) 39) ( <b>MLRA 1, 2,</b>
Depth (ind emarks: IYDROLO( Wetland Hyd Primary Indic Surface W High Wate	GY drology Indicators: ators (minimum of on Vater (A1) er Table (A2)	e required;	Water-Staine MLRA 1, 2, 4 Salt Crust (B	ed Leaves (B9) <b>4A, and 4B</b> ) 311)	(except	<u>Seco</u> l W D	ndary Indicators (2 or m later-Stained Leaves (E A, and 4B) rainage Patterns (B10)	nore required) 39) ( <b>MLRA 1, 2,</b>
Depth (ind emarks: IYDROLOO Wetland Hyd Primary Indic Surface W High Wate Saturation	GY drology Indicators: eators (minimum of on Vater (A1) er Table (A2) n (A3)	e required;	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve	ed Leaves (B9) <b>4A, and 4B</b> ) 311) rtebrates (B13)	(except	<u>Secon</u> W D D	ndary Indicators (2 or m ater-Stained Leaves (E <b>A, and 4B</b> ) ry-Season Water Table	nore required) 39) ( <b>MLRA 1, 2,</b> e (C2)
Depth (ind Remarks: IYDROLO( Wetland Hyd Primary Indic Surface W High Wate	GY drology Indicators: eators (minimum of on Vater (A1) er Table (A2) n (A3)	e required;	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen Su	ed Leaves (B9) <b>4A, and 4B</b> ) 311) ortebrates (B13) ulfide Odor (C1	(except	<u>Secon</u> W D D	ndary Indicators (2 or m later-Stained Leaves (E A, and 4B) rainage Patterns (B10)	nore required) 39) ( <b>MLRA 1, 2,</b> e (C2)
Depth (ind temarks: IYDROLO( Wetland Hyd Primary Indic Surface W High Wate Saturation Water Ma	<b>GY</b> drology Indicators: eators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1)	e required;	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rh	ed Leaves (B9) <b>4A, and 4B</b> ) 311) rtebrates (B13)	(except	<u>Secon</u> W D D S	ndary Indicators (2 or m 'ater-Stained Leaves (E <b>A, and 4B</b> ) ry-Season Water Table aturation Visible on Aer	nore required) 39) ( <b>MLRA 1, 2,</b> e (C2) rial Imagery (C9)
Depth (ind temarks: IYDROLO( Wetland Hyd Primary Indic Surface W High Wate Saturation Water Ma	GY drology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2)	e required;	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rh Roots (C3)	ed Leaves (B9) <b>4A, and 4B</b> ) 311) ortebrates (B13) ulfide Odor (C1	(except ) ng Living	<u>Secon</u> W D D S G	ndary Indicators (2 or m ater-Stained Leaves (E <b>A, and 4B</b> ) ry-Season Water Table	nore required) 39) ( <b>MLRA 1, 2,</b> e (C2) rial Imagery (C9)
Depth (ind Remarks: HYDROLO( Wetland Hyd Primary Indic Surface W High Wate Saturation Water Ma Sediment	GY drology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2)	e required;	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rh Roots (C3) Presence of	ed Leaves (B9) <b>4A, and 4B</b> ) 311) Intebrates (B13) ulfide Odor (C1 izospheres alo	(except ) ng Living (C4)	<u>Secon</u> W D D S G	ndary Indicators (2 or m 'ater-Stained Leaves (E <b>A, and 4B</b> ) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2	nore required) 39) ( <b>MLRA 1, 2,</b> e (C2) rial Imagery (C9)
Depth (ind Remarks: HYDROLO( Wetland Hyd Primary Indic Surface W High Wate Saturation Water Ma Sediment Drift Depo	GY drology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2)	e required;	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6)	ed Leaves (B9) <b>4A, and 4B</b> ) 311) ulfide Odor (C1 izospheres alou Reduced Iron ( Reduction in Ti	(except ) ng Living (C4) lled	<u>Secol</u> W D S S	ndary Indicators (2 or m 'ater-Stained Leaves (E <b>A, and 4B</b> ) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2	nore required) 39) ( <b>MLRA 1, 2,</b> e (C2) rial Imagery (C9)
Depth (ind Remarks: HYDROLO( Wetland Hyd Primary Indic Surface W High Wate Saturation Water Ma Saturation Drift Depo Algal Mat	GY drology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4)	e required;	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S	ed Leaves (B9) <b>4A, and 4B</b> ) 311) ulfide Odor (C1 izospheres alou Reduced Iron (	(except ) ng Living (C4) lled	Secol W D D S S S	ndary Indicators (2 or m later-Stained Leaves (E <b>A, and 4B</b> ) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2 nallow Aquitard (D3) AC-Neutral Test (D5)	nore required) 39) ( <b>MLRA 1, 2,</b> 9 (C2) rial Imagery (C9) 2)
Depth (ind Remarks: HYDROLO( Wetland Hyd Primary Indic Surface W High Wate Saturation Water Ma Saturation Drift Depo Algal Mat Iron Depo	GY drology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4)	e required;	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A)	ed Leaves (B9) <b>4A, and 4B</b> ) 311) ulfide Odor (C1 izospheres alou Reduced Iron ( Reduction in Ti	(except ) ng Living (C4) lled (D1)	Secon W D D S S S F, R	ndary Indicators (2 or m later-Stained Leaves (E <b>A, and 4B</b> ) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2 nallow Aquitard (D3)	nore required) 39) ( <b>MLRA 1, 2,</b> 9 (C2) rial Imagery (C9) 2)

 Inundation	Visible on	Aerial II	magery (	B7)
Sparcoly V/	onatatad (	`oncave	Surface	(R8)

Sparsely vegetated Col	icave a	unace (bo)				
Field Observations:						
Surface Water Present?	Yes	No	X Depth (inches):			
Water Table Present?	Yes	No	X Depth (inches):		Wetland Hydrology Present?	Yes No x
Saturation Present?						
(includes capillary fringe)	Yes	No	X Depth (inches):			
Describe Recorded Data (str	eam ga	uge, monitor	ring well, aerial photo	s, previous inspe	ctions), if available:	
Remarks:						

Project/Site:	Manzanita Re	etreat	City/County:	ity/County: Manzanita/Tillamoo				nook Sampling Date:				
Applicant/Owne	er: Manzani	ta Loft LLC		State:	OR	Sampling Po	oint:	P5				
Investigator(s):	Austin To	mlinson	Section, Township, Range:			3N-10W-29						
Landform (hillsl	lope, terrace, e	etc.): Dune Terra	ace Lo	Local relief (concave,			, convex, none): concave		Slope (%):			
Subregion (LRF	R): <u>A</u>		Lat: 45.71	63	Long:	-123.9299		Datum:	NAD 83	3		
Soil Map Unit N	lame: Neta	rts fine sandy loam	, 5 to 30 percer	nt slope		NWI	classif	fication:				
Are climatic / h	ydrologic conc	litions on the site ty	pical for this tim	ne of year	? Yes	x No	(If no	o, explain in	Remarks	s.)	_	
Are Vegetation	, Soi	I, or Hydrole	ogy signi	ficantly di	sturbed?	Are "Norn	nal Ciro	cumstances'	" present	? Yes x	No	
Are Vegetation	, Soi	I, or Hydrole	ogy natu	rally probl	ematic?	(If r	needed	l, explain an	iy answei	rs in Remark	s.)	

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

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

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20ft</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
1. Pinus contorta				
2				Total Number of Dominant Species Across All Strata: 3 (B)
3				Percent of Dominant Species
4				That Are OBL, FACW, or FAC: 33 (A/B)
		Tabal Osu		
Conting (Charthe Charthanne (Distaine) 45ft		= Total Cove	er	Prevalence Index worksheet:
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15ft</u> )	40	Y	FACW	Total % Cover of: Multiply by:
1. Spiraea douglasii	40	Y		
2. <u>Gaultheria shallon</u>	70	Y	FACU	OBL species x 1 =
3. Vaccinium ovatum				FACW species x 2 =
4. Rubus ursinus	5			FAC species x 3 =
5. Cytisus scoparius	5			FACU species x 4 =
	121	= Total Cove	er	UPL species x 5 =
Herb Stratum (Plot size: 15ft )				Column Totals: (A) (B)
1. Pteridium aquilinum	10	Y	FACU	
2				Prevalence Index = B/A =
3				
4				Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6				2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants <sup>1</sup>
11				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	10	= Total Cove	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: )				be present, unless disturbed or problematic.
1				
2.	. <u> </u>			
		= Total Cove	er	Hydrophytic Vegetation
% Bare Ground in Herb Stratum 5				Present? Yes No x
	_			
Remarks:				

SOIL						Sampling Poir	nt: P5
Profile Des		to the dept	h needed to docun		confirm the a	absence of indicators	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Redox Features % Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
				<u></u>			Terriarks
0-4	10YR 2/1	100	·	<u> </u>	- <u> </u>	LS	·
4-10	10YR 4/2	100			<u> </u>	Sand	
10-20	7.5YR 4/6	100			<u> </u>	Sand	
					<u> </u>		
<sup>1</sup> Type: C=0	Concentration, D=De	pletion, RM=I	Reduced Matrix, CS	S=Covered or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.
Hydric So	il Indicators: (Appl	icable to all	LRRs, unless othe	erwise noted.)	Ind	icators for Problema	tic Hydric Soils <sup>3</sup> :
Histos	ol (A1)		Sandy Redox (S	5)		2 cm Muck (A10)	
	Epipedon (A2)		Stripped Matrix	(S6)	_	Red Parent Material (	
	Histic (A3)			lineral (F1) (except MI	_RA 1)	Very Shallow Dark Su	
	gen Sulfide (A4) ted Below Dark Surfa	ce (A11)	Loamy Gleyed N Depleted Matrix			Other (Explain in Rem	arks)
	Dark Surface (A12)		Redox Dark Sur			<sup>3</sup> Indicators of hydroph	vtic vegetation and
	Mucky Mineral (S1)		Depleted Dark S			wetland hydrology mu	
Sandy	Gleyed Matrix (S4)	_	Redox Depressi	ons (F8)		unless disturbed or pr	oblematic
Restrictive I	_ayer (if present):						
Type:	ayer (ii present).			Hydric \$	Soil Present?	Yes	No x
Depth (in	ches):						
emarks:	,			I			
YDROLO	GY						
	drology Indicators:						
	ators (minimum of or	ne required; c				ndary Indicators (2 or i	
Cumferen M	(Ad)			ed Leaves (B9) (excep		Vater-Stained Leaves (	B9) ( <b>MLRA 1, 2,</b>
_ Surface V High Wate	er Table (A2)		MLRA 1, 2, 4 Salt Crust (B			<b>A, and 4B</b> ) Prainage Patterns (B10	)
Saturation				rtebrates (B13)		ry-Season Water Tabl	
Water Ma			Hydrogen Su	ulfide Odor (C1)		aturation Visible on Ae	
			Oxidized Rh	izospheres along Livin	g		
	Deposits (B2)		Roots (C3)	Deduced loss (OA)		Beomorphic Position (D	2)
_ Drift Depo	osiis (B3)			Reduced Iron (C4) Reduction in Tilled	S	hallow Aquitard (D3)	
Algal Mat	or Crust (B4)		Soils (C6)		F	AC-Neutral Test (D5)	
_ 0			Stunted or S	tressed Plants (D1)		(	
_ Iron Depo			(LRR A)			aised Ant Mounds (D6	, , , ,
Surface S	oil Cracks (B6)		Other (Expla	in in Remarks)	F	rost-Heave Hummocks	s (D7)

US Army Corps of Engineers

Field Observations: Surface Water Present?

Water Table Present?

Saturation Present? (includes capillary fringe)

Remarks:

Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)

Yes

Yes

Yes

No

No

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

No x Depth (inches):

x Depth (inches):

Depth (inches):

Yes No x

Wetland Hydrology Present?

Project/Site:	Manz	anita Retre	eat	City/Co	ounty:	Manza	nita/Tillar	nook Sampling Date:			6/11/20	)22	
Applicant/Own	ner: I	Manzanita	Loft LLC		State: OR State:			Sampling P	oint:	P6			
Investigator(s): Austin Tomlinson					Section, Township, Range:			3N-10W-29					
Landform (hill	slope, t	errace, etc	.): Dune Te	rrace	Lo	cal relief	concave	, convex, nor	ne):	concave		Slope (%):	
Subregion (LF	R):	А		Lat:	45.716	63	Long:	-123.9299		Datum:	NAD 8	3	
Soil Map Unit	Name:	Netarts	fine sandy loa	am, 5 to 30	percen	t slope		NW	classif	ication:			
Are climatic /	nydrolo	gic conditio	ons on the site	typical for	this time	e of year	? Yes	x No	(If no	, explain in	Remark	s.)	
Are Vegetatio	ו <u> </u>	, Soil	, or Hydr	ology	signif	icantly dis	sturbed?	Are "Norr	nal Ciro	cumstances	" presen	? Yes x	No
Are Vegetatio	n	, Soil	, or Hydr	ology	natur	ally probl	ematic?	(If	needed	l, explain an	y answe	rs in Remark	s.)

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

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

—————**—**—

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20ft</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
1				Total Number of Dominant
2 3			-	Species Across All Strata: <u>2</u> (B)
4.				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
				$\frac{1}{1}$
		= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 15ft )				Prevalence Index worksheet:
1. Gaultheria shallon	100	Y	FACU	Total % Cover of: Multiply by:
2. Rubus ursinus	15		FACU	OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
	115	= Total Cov	er	UPL species x 5 =
Herb Stratum (Plot size: 15ft )				Column Totals: (A) (B)
1. Polystichum munitum	1		FACU	
2. Digitalis purpurea	1		FACU	Prevalence Index = B/A =
3. Holcus lanatus	5	Y	FACU	
4				Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6				2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants <sup>1</sup>
11				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	7	= Total Cov	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:)				be present, unless disturbed or problematic.
1				
2				Hydrophytic
		= Total Cov	er	Vegetation
% Bare Ground in Herb Stratum	_			Present? Yes No x
Remarks:				

SOIL							Sampling Point:	P6
	cription: (Describe t	o the depti	n needed to docum	ent the ind	cator or co	onfirm the a	absence of indicators.)	
Depth	Matrix			Redox Featu				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10YR 2/1	100					LS	
3-10	10YR 4/2	100					Sand	
10-20	7.5YR 4/6	100					Sand	
		<u> </u>						
		<u> </u>			. <u> </u>			
<sup>1</sup> Type: C=C	Concentration, D=Depl	etion, RM=F	Reduced Matrix, CS	=Covered or	Coated Sa	nd Grains.	<sup>2</sup> Location: PL=Pore L	₋ining, M=Matrix.
Hydric Soi	I Indicators: (Applic	able to all I	LRRs, unless other	wise noted	.)	Ind	icators for Problemation	: Hydric Soils <sup>3</sup> :
Histoso			Sandy Redox (S5		,		2 cm Muck (A10)	•
	Epipedon (A2)		Stripped Matrix (S				Red Parent Material (TF	-2)
	Histic (A3)		Loamy Mucky Mi		except MLR	RA 1)	Very Shallow Dark Surf	
	en Sulfide (A4)		Loamy Gleyed M				Other (Explain in Rema	
	ed Below Dark Surface	e (A11)	Depleted Matrix (					
	Dark Surface (A12)	· · /	Redox Dark Surfa				<sup>3</sup> Indicators of hydrophyt	ic vegetation and
	Mucky Mineral (S1)		Depleted Dark Su	urface (F7)			wetland hydrology must	be present,
Sandy	Gleyed Matrix (S4)		Redox Depressio	ons (F8)			unless disturbed or prot	
Restrictive L	ayer (if present):							
Туре:					Hydric So	il Present?	Yes	No x
Depth (inc	hes):							
Remarks:								
HYDROLOG	2V							
	rology Indicators:							
	ators (minimum of one	required; c	heck all that apply)			Seco	ndary Indicators (2 or mo	ore required)
			Water-Stained	d Leaves (B	9) (except	V	/ater-Stained Leaves (B	9) ( <b>MLRA 1, 2</b> ,
Surface W	/ater (A1)		MLRA 1, 2, 4	A, and 4B)		4	A, and 4B)	
High Wate	r Table (A2)		Salt Crust (B1			D	rainage Patterns (B10)	
Saturation			Aquatic Invert	tebrates (B1	3)		ry-Season Water Table	
Water Mar	'ks (B1)		Hydrogen Sul			S	aturation Visible on Aeri	al Imagery (C9)
			Oxidized Rhiz	zospheres a	ong Living			
	Deposits (B2)		Roots (C3)				eomorphic Position (D2)	)
Drift Depo	sits (B3)		Presence of F			S	hallow Aquitard (D3)	
			Recent Iron R	Reduction in	Tilled	_		
Algal Mat	or Crust (B4)		Soils (C6)			F	AC-Neutral Test (D5)	
Iron Done	aita (PE)		Stunted or Stu	ressed Plan	is (D1)	-	ained Ant Mounda (DC)	
Iron Depos	oil Cracks (B6)		( <b>LRR A</b> ) Other (Explair	n in Domort	c)		aised Ant Mounds (D6) rost-Heave Hummocks (	
	Visible on Aerial Ima	10ry (P7)			5)	r	TUST-THEAVE HUITITIOCKS (	ויט

Field Observations:

Sparsely Vegetated Co		<b>o</b> , .	,			
Field Observations:						
Surface Water Present?	Yes	No	Х	Depth (inches):		
Water Table Present?	Yes	No	Х	Depth (inches):	Wetland Hydrology Present?	Yes No x
Saturation Present?						
(includes capillary fringe)	Yes	Nc	Х	Depth (inches):		
Describe Recorded Data (str	eam gau	uge, mor	nitoring	ı well, aerial photos, previous inspe	ctions), if available:	
Remarks:						

Project/Site:	Manz	anita Retre	eat		City/Co	ounty:	Manza	nita/Tillar	nook	Samp	ling Date:	6/11/2022				
Applicant/Owr	ner: M	Manzanita	Loft L	LC			State:	OR	Sampling P	oint:	P7					
Investigator(s): Austin Tomlinson Se					Se	ction, To	ownship,	Range:	3N-10W-2	9						
Landform (hillslope, terrace, etc.): Dune Terrace					ce	Lo	cal relief	(concave	, convex, no	ne):	concave		Slope (%	):		
					Lat:	45.716	63	Long: -123.9299 Datum:			NAD 8	3				
Soil Map Unit	Name:	Netarts	fine s	andy loam,	5 to 30 percent slope			NW	IWI classification:							
Are climatic / ł	hydrolog	gic conditio	ons on	the site typ	ical for	this time	e of year'	? Yes	x No	(If no	o, explain in	Remark	s.)			
Are Vegetation	n	, Soil		, or Hydrolo	ду	signif	icantly di	sturbed?	Are "Norr	nal Cir	cumstances	" presen	t? Yes	x	No	
Are Vegetation	า	, Soil	,	, or Hydrolo	ду	natur	ally probl	ematic?	(If	needeo	d, explain an	y answe	rs in Rem	arks.)		

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

Hydrophytic Vegetation Present?	Yes	No	x				
Hydric Soil Present?	Yes	No	x	Is the Sampled Area within a Wetland?	Yes	No x	
Wetland Hydrology Present?	Yes	No	x		-		
Remarks: Sample location is within recent fill area not to little vegetation exists. Soils are unconsolidated fill material							

etation exists. Soils are unconsolidated fill material ent fill area not to little veg

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20ft</u> ) 1	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
				Total Number of Dominant
2 3				Species Across All Strata: <u>2</u> (B)
				Percent of Dominant Species
4				That Are OBL, FACW, or FAC: 100 (A/B)
		= Total Cove	er	
Sapling/Shrub Stratum (Plot size: 15ft )		-	01	Prevalence Index worksheet:
1. Rubus americanus	1	Y	FAC	Total % Cover of: Multiply by:
2.	· · · ·			OBL species x 1 =
3.				FACW species x 2 =
4.				FAC species x 3 =
5				FACU species x 4 =
	1	= Total Cove	er	UPL species x 5 =
Herb Stratum (Plot size: 15ft )		-		
1. Phalaris arundinacea	1	Y	FACW	Column Totals: (A) (B)
2.				Prevalence Index = B/A =
3.				·
4.				Hydrophytic Vegetation Indicators:
5.				1 - Rapid Test for Hydrophytic Vegetation
6.				× 2 - Dominance Test is >50%
7.				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants <sup>1</sup>
11				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	1	= Total Cove	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: )				be present, unless disturbed or problematic.
1				
2				Hydrophytic
		= Total Cove	er	Vegetation
% Bare Ground in Herb Stratum	_			Present? Yes <u>x</u> No
Remarks:				•

SOIL							Sampling Poi	nt: P7	
	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features								
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Redox Fea	atures Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
		/0		/0	Туре	LUC			
0-20	10YR 3/3						Sand	Fill material	
. <u> </u>									
<sup>1</sup> Type: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, CS=	Covered	or Coated Sa	nd Grains.	<sup>2</sup> Location: PL=Por	e Lining, M=Matrix.	
Hydric Soil	Indicators: (Applic	able to all	LRRs, unless other	wise note	d.)	Ind	icators for Problema	tic Hydric Soils <sup>3</sup> :	
Histosol			Sandy Redox (S5				2 cm Muck (A10)		
	pipedon (A2)		Stripped Matrix (S				Red Parent Material (	(TF2)	
	istic (A3)		Loamy Mucky Mi	,	(except MLF	RA 1)	Very Shallow Dark St		
Hydroge	en Sulfide (A4)		Loamy Gleyed M	atrix (F2)	· ·	·	Other (Explain in Ren		
	d Below Dark Surface	e (A11)	Depleted Matrix (						
	ark Surface (A12) /lucky Mineral (S1)	_	Redox Dark Surfa Depleted Dark Surfa				<sup>3</sup> Indicators of hydroph		
	Gleyed Matrix (S4)		Redox Depressio				wetland hydrology mu unless disturbed or pl		
<u> </u>									
Restrictive La	yer (if present):								
Type:					Hydric So	il Present?	Yes	No x	
Depth (inch	nes):								
Remarks:uncons	solidated fill material								

#### HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; ch	Secondary Indicators (2 or more required)	
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> </ul>	pt       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)         Geomorphic Position (D2)         Shallow Aquitard (D3)         FAC-Neutral Test (D5)         Raised Ant Mounds (D6) (LRR A)         Frost-Heave Hummocks (D7)	
Water Table Present? Yes No	X         Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous inspectio	ons), if available:
Remarks:		

Project/Site:	Manz	anita Retreat		City/Coun	ity: Manza	anita/Tilla	lamook Sampling Date:		6/11/2	022			
Applicant/Owr	ner: I	Manzanita Loft	LLC		State:	OR	Sampling P	oint:	P8				
Investigator(s)	): A	ustin Tomlinso	n	Sectio	on, Township,	Range:	3N-10W-2	9					
Landform (hills	slope, t	errace, etc.):	Dune Terra	се	Local relief	(concave	, convex, noi	ne):	concave		Slope (%):		
Subregion (LF	₹R):	А		Lat: 45	5.7163	Long:	-123.9299		Datum:	NAD 8	3		
Soil Map Unit	Name:	Netarts fine	e sandy loam,	5 to 30 pe	rcent slope		NW	l classi	fication:				
Are climatic / ł	nydrolo	gic conditions	on the site typ	oical for this	s time of year	? Yes	x No	(If no	o, explain in	Remark	s.)		
Are Vegetation	n	, Soil	, or Hydrolo	gy s	significantly d	sturbed?	Are "Norr	nal Cir	cumstances	" presen	it? Yes x	No	
Are Vegetation	n	, Soil	, or Hydrolo	gy r	naturally prob	lematic?	(If	needeo	l, explain an	y answe	ers in Remark	s.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         x         No         X           Yes         No         X           Yes         No         X	Is the Sampled Area within a Wetland?	Yes No
Remarks:			

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	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>20ft</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
1				Total Number of Dominant
2 3				Species Across All Strata: <u>3</u> (B)
4.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
		= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 15ft )				Prevalence Index worksheet:
1. Cytisus scoparius	60	Y	N/L	Total % Cover of: Multiply by:
2. Rubus americanus	15	Y	FAC	OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
	75	= Total Cov	er	UPL species x 5 =
Herb Stratum (Plot size: 15ft )				Column Totals: (A) (B)
1. Phalaris arundinacea	75	Y	FACW	
2. Lotus corniculatus	30	Y	FAC	Prevalence Index = B/A =
3				
4				Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6				× 2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants <sup>1</sup>
11				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	105	= Total Cov	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: )				be present, unless disturbed of problematic.
1				
2				Hydrophytic
		= Total Cov	er	Vegetation
% Bare Ground in Herb Stratum	_			Present? Yes <u>x</u> No
Demonto				
Remarks:				

SOIL							Sampling Point:	P8
Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features								
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Redox Fea	atures Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
· · · · · · · · · · · · · · · · · · ·		70		-70	Туре			Remarks
0-18	10YR 3/3						Sand/gravels	
							·	
		·						
<sup>1</sup> Type: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, CS=	Covered	or Coated Sa	nd Grains.	<sup>2</sup> Location: PL=Pore L	₋ining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all	LRRs, unless other	wise note	ч)	Indi	cators for Problemation	- Hydric Soils <sup>3,</sup>
-					u.)			ingune cons .
Histosol	pipedon (A2)	-	Sandy Redox (S5 Stripped Matrix (S5)	,			2 cm Muck (A10) Red Parent Material (TF	=2)
	istic (A3)	-	Loamy Mucky Mi		(except MLR		Very Shallow Dark Surf	
	en Sulfide (A4)		Loamy Gleyed M		(		Other (Explain in Rema	
	d Below Dark Surface	e (A11)	Depleted Matrix (					,
	ark Surface (A12)	_	Redox Dark Surfa				<sup>3</sup> Indicators of hydrophyt	
	/lucky Mineral (S1) Gleyed Matrix (S4)	_	Depleted Dark Su Redox Depressio				wetland hydrology must unless disturbed or prot	
				IIS (FO)			unless disturbed of proc	Jiemalic
Restrictive La	yer (if present):							
Type:	<b>,</b> , , , , , , , , , , , , , , , , , ,				Hydric So	il Present?	Yes	No x
Depth (incl	nes):				,			
• •	solidated material				I			

#### HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; ch	Secondary Indicators (2 or more required)	
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> </ul>	pt       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)         Geomorphic Position (D2)         Shallow Aquitard (D3)         FAC-Neutral Test (D5)         Raised Ant Mounds (D6) (LRR A)         Frost-Heave Hummocks (D7)	
Water Table Present? Yes No	X         Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous inspection	ons), if available:
Remarks:		

Project/Site:	Manza	anita Retre	eat		City/Co	ounty:	Manza	nita/Tillar	nook	Sampling Date:		6/11/2	022		
Applicant/Owr	ner: N	/lanzanita	Loft	LLC			State:	OR	Sampling P	oint:	P9				
Investigator(s)	): <u>A</u> ı	ustin Toml	insor	า	Se	ction, T	ownship,	Range:	3N-10W-2	9					
Landform (hill:	slope, te	errace, etc	:.):	Dune Terra	се	Lo	cal relief	(concave	, convex, noi	ne):	concave		Slope (%):		
Subregion (LF	₹R):	А			Lat:	45.716	63	Long:	-123.9299		Datum:	NAD 8	3		
Soil Map Unit	Name:	Netarts	s fine	sandy loam,	5 to 30	percen	t slope		NW	l classif	fication:				
Are climatic / I	hydrolog	gic condition	ons c	on the site typ	oical for	this time	e of year	? Yes	x No	(If no	o, explain in	Remark	s.)		
Are Vegetatio	n	, Soil		, or Hydrolo	ду	signif	icantly dis	sturbed?	Are "Norr	nal Ciro	cumstances'	" presen	it? Yes x	No	
Are Vegetatio	n	, Soil		, or Hydrolo	ду	natur	ally probl	ematic?	(If	needed	l, explain an	y answe	ers in Remark	s.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes No x Yes No x	Is the Sampled Area within a Wetland?	Yes Nox
Wetland Hydrology Present?	Yes No		
Remarks:			

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	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 20ft )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant Species Across All Strata: 2 (B)
3				Percent of Dominant Species
4				That Are OBL, FACW, or FAC: 0 (A/B)
		- Total Car		
Conting (Charthe Charthanne (Dist size) (15th		= Total Cov	er	Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: <u>15ft</u> )	F	Y	FACU	Total % Cover of: Multiply by:
1. <u>Rubus ursinus</u>	5	Y	FACU	
2				
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
	5	= Total Cov	er	UPL species x 5 =
Herb Stratum (Plot size: 15ft )				Column Totals: (A) (B)
1. Holcus lanatus	80	Y	FACU	
2. Rumex occidentalis	15		FACW	Prevalence Index = B/A =
3. plantago lanceolata	25		FACU	
4. Agrostis spp.	10		FAC	Hydrophytic Vegetation Indicators:
5. Trifolium spp.	20		FAC	1 - Rapid Test for Hydrophytic Vegetation
6				2 - Dominance Test is >50%
7				3 - Prevalence Index is ≤3.0 <sup>1</sup>
8				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants <sup>1</sup>
11				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	140	= Total Cov	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: )				be present, unless disturbed or problematic.
1				
2				Ub des she dia
		= Total Cov	er	Hydrophytic Vegetation
% Bare Ground in Herb Stratum	_			Present? Yes No x
Remarks:				1

SOIL							Sampling Point:	P9	
Profile Desc	cription: (Describe	o the depth	needed to docun	nent the inc	licator or co	onfirm the a	bsence of indicators.)		
Depth	Matrix			Redox Fea					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-5	10YR 2/1	100					LS		
6-16	10YR 3/3	100					Sand		
1Turnet C=C	oncentration, D=Depl	ation DM-F	Deduced Metrix CC		r Cootod Co	nd Craina	21 agentions DI - Dara I	ining M-Matrix	
	•					nu Grains.	<sup>2</sup> Location: PL=Pore L	ining, w–waux.	
Hydric Soil	Indicators: (Applic	able to all I	_RRs, unless othe	rwise note	d.)	Ind	icators for Problemation	Hydric Soils <sup>3</sup> :	
Histoso	· · ·		Sandy Redox (S				2 cm Muck (A10)		
	pipedon (A2)		_ Stripped Matrix (			—	Red Parent Material (TF		
	listic (A3)		Loamy Mucky M		except MLF	RA 1)	Very Shallow Dark Surfa		
	en Sulfide (A4)	- (	Loamy Gleyed N				Other (Explain in Rema	'KS)	
	ed Below Dark Surfac	e (ATT)	Depleted Matrix Bodox Dark Sur				31. dla standard for data data d		
	ark Surface (A12) Mucky Mineral (S1)		Redox Dark Sur Depleted Dark S	· · ·			<sup>3</sup> Indicators of hydrophyt wetland hydrology must		
	Gleyed Matrix (S4)		Redox Depressi				unless disturbed or prob		
Restrictive La Type: Depth (inc Remarks:	ayer (if present):				Hydric So	il Present?	Yes	No <u>x</u>	
	Trology Indicators: Itors (minimum of one	required: c	heck all that apply)			Seco	ndary Indicators (2 or mo	pre required)	
			Water-Staine		39) ( <b>except</b>		Water-Stained Leaves (B9) ( <b>MLRA 1, 2</b> ,		
Surface Wa	ater (A1)		MLRA 1, 2, 4				A, and 4B)	, (	
	r Table (A2)		Salt Crust (B				rainage Patterns (B10)		
Saturation	(A3)		Aquatic Inve	Aquatic Invertebrates (B13)			ry-Season Water Table (C2)		
Water Mar	ks (B1)		Hydrogen Su	ulfide Odor (	C1)	S	aturation Visible on Aeria	al Imagery (C9)	
			Oxidized Rhi	izospheres a	along Living				
	Deposits (B2)						eomorphic Position (D2)		
Drift Depos	sits (B3)		Presence of			S	hallow Aquitard (D3)		
	0 (0)		Recent Iron	Reduction ir	n Tilled	-			
	or Crust (B4)		Soils (C6) Stunted or S	traceed Dia	ate (D1)	F.	AC-Neutral Test (D5)		
Iron Depos	its (B5)		(LRR A)	uesseu Plar	ווס (דיד)	P	aised Ant Mounds (D6)		
	bil Cracks (B6)		Other (Expla	in in Remar	ks)		rost-Heave Hummocks (		
	Visible on Aerial Ima	nerv (R7)				[		.,	
	egetated Concave S								

Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
Surface Water Present? Yes No x Dep	th (inches):
Water Table Present? Yes No x Dep	th (inches): Wetland Hydrology Present? Yes No x
Saturation Present?	
(includes capillary fringe) Yes No x Dep	th (inches):
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspections), if available:
2 oboline i lobel ded Edla (oli balli gadge, meinening i bil,	
Remarks:	

Appendix C: Site Photos



Photo 1: P1 soils



Photo 2: P1 looking west



Photo 3: P1 looking east



Photo 4: P1 looking south



Photo 5: P1 looking north



Photo 6: P2



Photo 7: P2 looking west



Photo 8: P2 looking north



Photo 9: P2 looking east



Photo 10: P2 looking south



Photo 11: P3



Photo 12: P3 looking south



Photo 13: P3 looking west



Photo 14: P3 looking north



Photo 15: P3 looking east



Photo 16: P4 soils



Photo 17: P4 looking south



Photo 18: P4 looking west



Photo 19: P4 looking north



Photo 20: P4 looking east



Photo 21: P5 soils



Photo 22: P5 looking south



Photo 23: P5 looking west



Photo 24: P5 looking north



Photo 25: P5 looking east



Photo 26: P6 looking south



Photo 27: P6 looking west

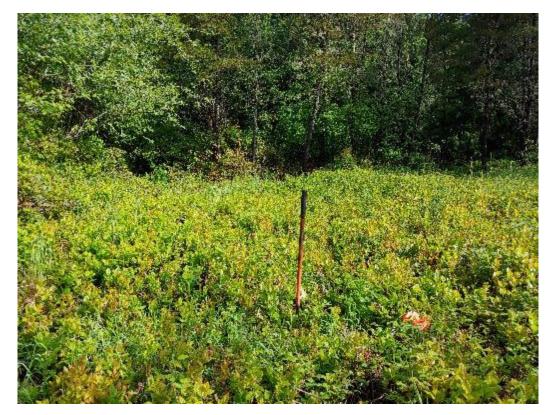


Photo 28: P6 looking north



Photo 29: P6 looking east



Photo 30: Location of fill area



Photo 31: P7 looking north



Photo 32: P7 looking east



Photo 33: P7 looking south



Photo 34: P7 looking west



Photo 35: P8 looking south



Photo 36: P8 looking north



Photo 37: P8 looking west



Photo 38: P8 looking east



Photo 39: P9 soils



Photo 40: P9 looking west



Photo 41: P9 looking south



Photo 42: P9 looking north



Photo 43: P9 looking east



Photo 44: Fill area taken from Classic Road



Photo 45: Looking south towards the southern end of tax lot 2100



Photo 46: Looking south; Taken from Classic Road about the middle of tax lot 2100



Photo 47: Looking west; Taken from Classic Road about the middle of tax lot 2100



Photo 48: Looking north; Taken from Classic Road near northern boundary of tax lot 2100