

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

Project/Site: Transmission Line City/County: Tillamook Sampling Date: 04/06/2011
 Applicant/Owner: Tillamook PUD State: OR Sampling Point: W14SP2
 Investigator(s): P. O'Neill/C. Steinkoenig Section, Township, Range: T1S R10W S26
 Landform (hillslope, terrace, etc.): road shoulder Local relief (concave, convex, none): none Slope (%): 1%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 45.45874588 Long: -123.9226409 Datum: WGS84
 Soil Map Unit Name: Urban land-Udorthents (0 to 3% slope flooded) NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks: Sample plot on roadway prism adjacent to wetland.					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Herb Stratum (Plot size: <u>5'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum _____				
Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				
Remarks: No vegetation present.				

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

Project/Site: Transmission Line City/County: Tillamook Sampling Date: 04/06/2011
 Applicant/Owner: Tillamook PUD State: OR Sampling Point: W15SP1
 Investigator(s): P. O'Neill/C. Steinkoenig Section, Township, Range: T1S R10W S26
 Landform (hillslope, terrace, etc.): low terrace Local relief (concave, convex, none): none Slope (%): 1%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 45.45481517 Long: -123.8809356 Datum: WGS84
 Soil Map Unit Name: Urban land-Urdtothents complex, 0 to 7 percent slopes, flooded (101B) NWI classification: PFOA/PEMC

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Wetland boundary follows slight break in topography and drip line of Sitka spruce trees.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Picea sitchensis</u>	<u>60</u>	<u>X</u>	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	<u>60</u> = Total Cover			Prevalence Index worksheet:
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)				Total % Cover of: _____ Multiply by: _____
1. <u>Rubus discolor</u>	<u>5</u>		<u>FACU</u>	OBL species _____ x 1 = _____
2. _____				FACW species _____ x 2 = _____
3. _____				FAC species _____ x 3 = _____
4. _____				FACU species _____ x 4 = _____
5. _____	<u>5</u> = Total Cover			UPL species _____ x 5 = _____
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				Column Totals: _____ (A) _____ (B)
1. <u>Phalaris arundinaceae</u>	<u>95</u>	<u>X</u>	<u>FACW</u>	Prevalence Index = B/A = _____
2. _____				Hydrophytic Vegetation Indicators:
3. _____				<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
4. _____				<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
5. _____				<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
6. _____				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
7. _____				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
8. _____				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
9. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
10. _____				
11. _____	<u>95</u> = Total Cover			
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. _____				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks:				

SOIL

Sampling Point: W15SP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7	10YR 3/2		10YR 4/6	6	C	M	silt	
7-14	10YR 4/2		10YR 7/5	3	C	M	silt	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)		<input type="checkbox"/> Sandy Redox (S5)		<input type="checkbox"/> 2 cm Muck (A10)				
<input type="checkbox"/> Histic Epipedon (A2)		<input type="checkbox"/> Stripped Matrix (S6)		<input type="checkbox"/> Red Parent Material (TF2)				
<input type="checkbox"/> Black Histic (A3)		<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)		<input type="checkbox"/> Very Shallow Dark Surface (TF12)				
<input type="checkbox"/> Hydrogen Sulfide (A4)		<input type="checkbox"/> Loamy Gleyed Matrix (F2)		<input type="checkbox"/> Other (Explain in Remarks)				
<input type="checkbox"/> Depleted Below Dark Surface (A11)		<input type="checkbox"/> Depleted Matrix (F3)						
<input type="checkbox"/> Thick Dark Surface (A12)		<input checked="" type="checkbox"/> Redox Dark Surface (F6)						
<input type="checkbox"/> Sandy Mucky Mineral (S1)		<input type="checkbox"/> Depleted Dark Surface (F7)						
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		<input type="checkbox"/> Redox Depressions (F8)						
Restrictive Layer (if present):								
Type: <u>rock and gravel</u>								
Depth (inches): <u>14</u>						Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks:								

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		
Field Observations:		
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u> </u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present? Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>12"</u>	
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>7</u>	
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Project/Site: Transmission Line City/County: Tillamook Sampling Date: 04/06/2011
 Applicant/Owner: Tillamook PUD State: OR Sampling Point: W15SP2
 Investigator(s): P. O'Neill/C. Steinkoenig Section, Township, Range: T1S R10W S26
 Landform (hillslope, terrace, etc.): low terrace Local relief (concave, convex, none): none Slope (%): 1%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 45.45490148 Long: -123.8808962 Datum: WGS84
 Soil Map Unit Name: Urban land-Urdtothents complex, 0 to 7 percent slopes, flooded (101B) NWI classification: NA
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <u>Area of W15SP2 and majority of adjacent area consists of gravel fill with minimal vegetation in much of the site.</u>	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
0 = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)				
1. <u>Rubus discolor</u>	<u>5</u>		<u>FACU</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5 = Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				
1. <u>Phalaris arundinaceae</u>	<u>50</u>	<u>X</u>	<u>FACW</u>	
2. <u>Holcus lanatus</u>	<u>50</u>	<u>X</u>	<u>FAC</u>	
3. <u>Rumex crispus</u>	<u>T</u>			
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
100 = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks: _____				

SOIL

Sampling Point: W15SP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 5/3						silt	
8-13	10YR 5/1						coarse silt	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)		<input type="checkbox"/> Sandy Redox (S5)		<input type="checkbox"/> 2 cm Muck (A10)				
<input type="checkbox"/> Histic Epipedon (A2)		<input type="checkbox"/> Stripped Matrix (S6)		<input type="checkbox"/> Red Parent Material (TF2)				
<input type="checkbox"/> Black Histic (A3)		<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)		<input type="checkbox"/> Very Shallow Dark Surface (TF12)				
<input type="checkbox"/> Hydrogen Sulfide (A4)		<input type="checkbox"/> Loamy Gleyed Matrix (F2)		<input type="checkbox"/> Other (Explain in Remarks)				
<input type="checkbox"/> Depleted Below Dark Surface (A11)		<input type="checkbox"/> Depleted Matrix (F3)		³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.				
<input type="checkbox"/> Thick Dark Surface (A12)		<input type="checkbox"/> Redox Dark Surface (F6)						
<input type="checkbox"/> Sandy Mucky Mineral (S1)		<input type="checkbox"/> Depleted Dark Surface (F7)						
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		<input type="checkbox"/> Redox Depressions (F8)						
Restrictive Layer (if present):								
Type: <u>rock and gravel</u>								
Depth (inches): <u>13</u>						Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks:								

HYDROLOGY

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

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

Project/Site: Transmission Line City/County: Tillamook Sampling Date: 04/06/2011
 Applicant/Owner: Tillamook PUD State: OR Sampling Point: W16SP1
 Investigator(s): P. O'Neill/C. Steinkoenig Section, Township, Range: T1S R10W S26
 Landform (hillslope, terrace, etc.): low terrace/floodplain Local relief (concave, convex, none): none Slope (%): 2%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 45.45726704 Long: -123.8841121 Datum: WGS84
 Soil Map Unit Name: Condorbridge gravelly medial loam, 0 to 7 percent slopes (57B) NWI classification: PEMAdh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <u>OOffsite determination; permission to access not granted. Wetland boundary follows roadway prism.</u>	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum	(Plot size: _____)			
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Herb Stratum	(Plot size: <u>10</u>)			
1. <u>pasture grasses</u>	<u>80</u>	<u>Y</u>	<u>FAC</u>	
2. <u>Ranunculus repens</u>	<u>15</u>	<u>N</u>	<u>FACW</u>	
3. <u>Lysichiton americanum</u>	<u>5</u>	<u>N</u>	<u>OBL</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100</u> = Total Cover				
Woody Vine Stratum	(Plot size: _____)			
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks: _____				

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

Project/Site: Transmission Line City/County: Tillamook Sampling Date: 04/06/2011
 Applicant/Owner: Tillamook PUD State: OR Sampling Point: W16SP2
 Investigator(s): P. O'Neill/C. Steinkoenig Section, Township, Range: T1S R10W S26
 Landform (hillslope, terrace, etc.): road shoulder Local relief (concave, convex, none): none Slope (%): 2%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 45.45719468 Long: -123.8841924 Datum: WGS84
 Soil Map Unit Name: Condorbridge gravelly medial loam, 0 to 7 percent slopes (57B) NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = _____
3. _____	_____	_____	_____	FACW species _____ x 2 = _____
4. _____	_____	_____	_____	FAC species _____ x 3 = _____
5. _____	_____	_____	_____	FACU species _____ x 4 = _____
	_____	= Total Cover		UPL species _____ x 5 = _____
	<u>0</u>	= Total Cover		Column Totals: _____ (A) _____ (B)
				Prevalence Index = B/A = _____
<u>Herb Stratum</u> (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. _____	_____	_____	_____	___ 1 - Rapid Test for Hydrophytic Vegetation
2. _____	_____	_____	_____	___ 2 - Dominance Test is >50%
3. _____	_____	_____	_____	___ 3 - Prevalence Index is ≤3.0 ¹
4. _____	_____	_____	_____	___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. _____	_____	_____	_____	___ 5 - Wetland Non-Vascular Plants ¹
6. _____	_____	_____	_____	___ Problematic Hydrophytic Vegetation ¹ (Explain)
7. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	_____	= Total Cover		
	<u>0</u>	= Total Cover		
<u>Woody Vine Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	_____	= Total Cover		
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum _____				
Remarks: <u>No vegetation present.</u>				

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

Project/Site: Transmission Line City/County: Tillamook Sampling Date: 04/06/2011
 Applicant/Owner: Tillamook PUD State: OR Sampling Point: W17SP1
 Investigator(s): P. O'Neill/C. Steinkoenig Section, Township, Range: T1S R10W S26
 Landform (hillslope, terrace, etc.): low terrace Local relief (concave, convex, none): none Slope (%): 3%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 45.45785318 Long: -123.8850163 Datum: WGS84
 Soil Map Unit Name: Condorbridge gravelly medial loam, 0 to 7 percent slopes (57B) NWI classification: PEMAd
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <u>Offsite determination; permission to access not granted. Wetland boundary follows roadway prism.</u>	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = _____
3. _____	_____	_____	_____	FACW species _____ x 2 = _____
4. _____	_____	_____	_____	FAC species _____ x 3 = _____
5. _____	_____	_____	_____	FACU species _____ x 4 = _____
<u>0</u> = Total Cover				UPL species _____ x 5 = _____
<u>0</u> = Total Cover				Column Totals: _____ (A) _____ (B)
<u>0</u> = Total Cover				Prevalence Index = B/A = _____
<u>Herb Stratum</u> (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>pasture grasses</u>	<u>60</u>	<u>X</u>	<u>FAC</u>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Carex obnupta</u>	<u>10</u>	_____	<u>OBL</u>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. <u>Lysichiton americanum</u>	<u>10</u>	_____	<u>OBL</u>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. <u>Ranunculus repens</u>	<u>20</u>	<u>X</u>	<u>FACW</u>	<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. _____	_____	_____	_____	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
6. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
7. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100</u> = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks: <u>Pasture grasses assumed to be FAC or wetter.</u>				

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

Project/Site: Transmission Line City/County: Tillamook Sampling Date: 04/06/2011
 Applicant/Owner: Tillamook PUD State: OR Sampling Point: W17SP2
 Investigator(s): P. O'Neill/C. Steinkoenig Section, Township, Range: T1S R10W S26
 Landform (hillslope, terrace, etc.): road shoulder Local relief (concave, convex, none): none Slope (%): 3%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 45.45789479 Long: -123.88489994 Datum: WGS84
 Soil Map Unit Name: Condorbridge gravelly medial loam, 0 to 7 percent slopes (57B) NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?		
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				Total Number of Dominant Species Across All Strata: _____ (B)
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
1. _____	_____	_____	_____	Prevalence Index worksheet:
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover				Total % Cover of: _____ Multiply by: _____
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				OBL species _____ x 1 = _____
1. _____	_____	_____	_____	FACW species _____ x 2 = _____
2. _____	_____	_____	_____	FAC species _____ x 3 = _____
3. _____	_____	_____	_____	FACU species _____ x 4 = _____
4. _____	_____	_____	_____	UPL species _____ x 5 = _____
5. _____	_____	_____	_____	Column Totals: _____ (A) _____ (B)
6. _____	_____	_____	_____	Prevalence Index = B/A = _____
7. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>0</u> = Total Cover				___ 1 - Rapid Test for Hydrophytic Vegetation
<u>Woody Vine Stratum</u> (Plot size: _____)				___ 2 - Dominance Test is >50%
1. _____	_____	_____	_____	___ 3 - Prevalence Index is ≤3.0 ¹
2. _____	_____	_____	_____	___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
<u>0</u> = Total Cover				___ 5 - Wetland Non-Vascular Plants ¹
% Bare Ground in Herb Stratum _____				___ Problematic Hydrophytic Vegetation ¹ (Explain)
Remarks: <u>No vegetation present.</u>				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

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

Project/Site: Transmission Line City/County: Tillamook Sampling Date: 04/05/2011
 Applicant/Owner: Tillamook PUD State: OR Sampling Point: W18SP1
 Investigator(s): P. O'Neill/C. Steinkoenig Section, Township, Range: T1S R10W S27
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 40%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 45.45734371 Long: -123.9005436 Datum: WGS84
 Soil Map Unit Name: Templeton-Ecola medial silt loams, 30 to 60 percent slopes (30E) NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Wetland boundary follows outside extent of <i>Juncus effusus</i> and <i>Carex obnupta</i> , along with a slight break in topography. Source of hydrology is hillside seep.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	
<u>0'</u> = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Rhamnus purshiana</u>	<u>15</u>	_____	<u>FAC</u>	Total % Cover of: _____ Multiply by: _____
2. <u>Rosa nutkana</u>	<u>5</u>	_____	<u>FAC</u>	OBL species _____ x 1 = _____
3. <u>Rubus discolor</u>	<u>T</u>	_____	<u>FACU</u>	FACW species _____ x 2 = _____
4. _____	_____	_____	_____	FAC species _____ x 3 = _____
5. _____	_____	_____	_____	FACU species _____ x 4 = _____
<u>20</u> = Total Cover				UPL species _____ x 5 = _____
<u>Herb Stratum</u> (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Column Totals: _____ (A) _____ (B)
1. <u>Juncus effusus</u>	<u>50</u>	<u>X</u>	<u>FACW</u>	Prevalence Index = B/A = _____
2. <u>Carex obnupta</u>	<u>30</u>	<u>X</u>	<u>OBL</u>	
3. <u>Unk grass</u>	<u>20</u>	<u>X</u>	<u>FAC</u>	
4. <u>Hypochaeris radicata</u>	<u>T</u>	_____	<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100</u> = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. _____	_____	_____	_____	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____	_____	_____	_____	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
				<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum _____				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:				

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

Project/Site: Transmission Line City/County: Tillamook Sampling Date: 04/05/2011
 Applicant/Owner: Tillamook PUD State: OR Sampling Point: W18SP2
 Investigator(s): P. O'Neill/C. Steinkoenig Section, Township, Range: T1S R10W S27
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 40%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 45.45727823 Long: -123.9005312 Datum: WGS84
 Soil Map Unit Name: Templeton-Ecola medial silt loams, 30 to 60 percent slopes (30E) NWI classification: NA
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

VEGETATION – Use scientific names of plants.

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)				Dominance Test worksheet:
1. <u>Tsuga heterophylla</u>	<u>90</u>	<u>Y</u>	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40</u> (A/B)
4. _____				Prevalence Index worksheet:
	<u>90</u>	= Total Cover		Total % Cover of: _____ Multiply by: _____
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)				OBL species _____ x 1 = _____
1. <u>Rosa nutkana</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	FACW species _____ x 2 = _____
2. <u>Sambucus racemosa</u>	<u>T</u>	<u>N</u>	<u>FACU</u>	FAC species _____ x 3 = _____
3. <u>Rhamnus purshiana</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	FACU species _____ x 4 = _____
4. _____				UPL species _____ x 5 = _____
5. _____				Column Totals: _____ (A) _____ (B)
	<u>30</u>	= Total Cover		Prevalence Index = B/A = _____
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators:
1. <u>Agrostis sp.</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	___ 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Hypochaeris radicata</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	___ 2 - Dominance Test is >50%
3. <u>Digitalis purpurea</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	___ 3 - Prevalence Index is ≤3.0 ¹
4. <u>Myosotis discolor</u>	<u>T</u>	<u>N</u>	<u>FACW</u>	___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u>Polystichum munitum</u>	<u>40</u>	<u>Y</u>	<u>FACU</u>	___ 5 - Wetland Non-Vascular Plants ¹
6. _____				___ Problematic Hydrophytic Vegetation ¹ (Explain)
7. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____				
9. _____				
10. _____				
11. _____				
	<u>100</u>	= Total Cover		Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
<u>Woody Vine Stratum</u> (Plot size: _____)				
1. _____				
2. _____				
% Bare Ground in Herb Stratum _____				
Remarks: _____				

SOIL

Sampling Point: W18SP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-11	10YR 3/2						loam	lots of decomposing wood/bark
11-18	10YR 4/2		10YR 5/8	20	C	M	clayey loam	blocky structure w/ crumbly rock
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)		<input type="checkbox"/> Sandy Redox (S5)		<input type="checkbox"/> 2 cm Muck (A10)				
<input type="checkbox"/> Histic Epipedon (A2)		<input type="checkbox"/> Stripped Matrix (S6)		<input type="checkbox"/> Red Parent Material (TF2)				
<input type="checkbox"/> Black Histic (A3)		<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)		<input type="checkbox"/> Very Shallow Dark Surface (TF12)				
<input type="checkbox"/> Hydrogen Sulfide (A4)		<input type="checkbox"/> Loamy Gleyed Matrix (F2)		<input type="checkbox"/> Other (Explain in Remarks)				
<input type="checkbox"/> Depleted Below Dark Surface (A11)		<input type="checkbox"/> Depleted Matrix (F3)						
<input type="checkbox"/> Thick Dark Surface (A12)		<input checked="" type="checkbox"/> Redox Dark Surface (F6)						
<input type="checkbox"/> Sandy Mucky Mineral (S1)		<input type="checkbox"/> Depleted Dark Surface (F7)						
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		<input type="checkbox"/> Redox Depressions (F8)						
Restrictive Layer (if present): Type: _____ Depth (inches): _____						Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks: very marginally hydric								

HYDROLOGY

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

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

Project/Site: Transmission Line City/County: Tillamook Sampling Date: 04/05/2011
 Applicant/Owner: Tillamook PUD State: OR Sampling Point: W19SP1
 Investigator(s): P. O'Neill/C. Steinkoenig Section, Township, Range: T1S R10W S28
 Landform (hillslope, terrace, etc.): small pond Local relief (concave, convex, none): concave Slope (%): 2%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 45.457 7 Long: -123.9005 Datum: WGS84
 Soil Map Unit Name: Kloutchie-Necanicum complex, 5 to 30 percent slopes (20D) NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <u>NA</u> Hydric Soil Present? Yes <input type="checkbox"/> No <u>NA</u> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Small steep-sided POW wetland apparently formed as a result of adjacent logging road. Pond is the headwater of stream S5. Boundary follows sharp break in topography.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u>)	1. _____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover				Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5'</u>)	1. _____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>0</u> = Total Cover				Hydrophytic Vegetation Present? Yes <u>NA</u> No _____
Woody Vine Stratum (Plot size: _____)	1. _____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				% Bare Ground in Herb Stratum _____
Remarks: No vegetation present; inundated.				

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

Project/Site: Transmission Line City/County: Tillamook Sampling Date: 04/05/2011
 Applicant/Owner: Tillamook PUD State: OR Sampling Point: W19SP2
 Investigator(s): P. O'Neill/C. Steinkoenig Section, Township, Range: T1S R10W S28
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 5%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 45.4578 Long: -123.900 Datum: WGS84
 Soil Map Unit Name: Kloutchie-Necanicum complex, 5 to 30 percent slopes (20D) NWI classification: NA
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>Pseudotsuga menziesii</u>	20	X	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u>	(A)
2. <u>Tsuga heterophylla</u>	60	X	FACU	Total Number of Dominant Species Across All Strata: <u>6</u>	(B)
3. <u>Alnus rubra</u>	20	X	FAC	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>17</u>	(A/B)
4. _____					
	100	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:	
1. <u>Galthera shallon</u>	30	X	FACU		
2. <u>Rubus discolor</u>	20	X	FACU	OBL species _____ x 1 = _____	
3. _____				FACW species _____ x 2 = _____	
4. _____				FAC species _____ x 3 = _____	
5. _____				FACU species _____ x 4 = _____	
	50	= Total Cover		UPL species _____ x 5 = _____	
Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Column Totals: _____ (A)	_____ (B)
1. <u>Polystichum munitum</u>	60	X	FACU	Prevalence Index = B/A = _____	
2. <u>Tolmeia menziesii</u>	10		FAC	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
	70	= Total Cover			
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	
1. _____					
2. _____					
% Bare Ground in Herb Stratum _____					
Remarks:					

SOIL

Sampling Point: W19SP2

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 3/2						loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1) (**except MLRA 1**)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living 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)

Secondary Indicators (2 or more required)

- 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)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

SOIL

Sampling Point: W20SP1

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks: No pit; inundated, mucky. Hydric soil assumed.

HYDROLOGY

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

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1</u> Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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

Project/Site: Transmission Line City/County: Tillamook Sampling Date: 04/05/2011
 Applicant/Owner: Tillamook PUD State: OR Sampling Point: W20SP2
 Investigator(s): P. O'Neill/C. Steinkoenig Section, Township, Range: T1S R10W S28
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 5%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 45.45785696 Long: -123.91363979 Datum: WGSS84
 Soil Map Unit Name: Kloutchie-Necanicum complex, 5 to 30 percent slopes (20D) NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>Tsuga heterophylla</u>	<u>80</u>	<u>Y</u>	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)	
2. <u>Alnus rubra</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	Total Number of Dominant Species Across All Strata: <u>4</u> (B)	
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)	
4. _____				Prevalence Index worksheet:	
	<u>100</u>	= Total Cover		Total % Cover of: _____ Multiply by: _____	
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				OBL species _____ x 1 = _____	
1. <u>Rubus spectabilis</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	FACW species _____ x 2 = _____	
2. <u>Gaultheria shallon</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	FAC species <u>30</u> x 3 = <u>90</u>	
3. _____				FACU species <u>140</u> x 4 = <u>560</u>	
4. _____				UPL species _____ x 5 = _____	
5. _____				Column Totals: <u>170</u> (A) <u>650</u> (B)	
	<u>40</u>	= Total Cover		Prevalence Index = B/A = _____	
Herb Stratum (Plot size: <u>10 ft</u>)				Hydrophytic Vegetation Indicators:	
1. <u>Polystichum munitum</u>	<u>50</u>	<u>Y</u>	<u>FACU</u>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
2. _____				<input type="checkbox"/> 2 - Dominance Test is >50%	
3. _____				<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹	
4. _____				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5. _____				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹	
6. _____				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
7. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. _____					
9. _____					
10. _____					
11. _____					
	<u>50</u>	= Total Cover		Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Woody Vine Stratum (Plot size: _____)					
1. _____					
2. _____					
% Bare Ground in Herb Stratum _____					
Remarks:					

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

Project/Site: Transmission Line City/County: Tillamook Sampling Date: 04/05/2011
 Applicant/Owner: Tillamook PUD State: OR Sampling Point: W21SP1
 Investigator(s): P. O'Neill/C. Steinkoenig Section, Township, Range: T1S R10W S28
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 5%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 45.45780716 Long: -123.9138541 Datum: WGS84
 Soil Map Unit Name: Kloutchie-Necanicum complex, 5 to 30 percent slopes (20D) NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> <u>NA</u> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Small depressional wetland downslope from wetland W20. Wetland boundary follows shift in vegetation from obligate wetland vegetation to sword fern and salal.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Alnus rubra</u>	90	X	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. <u>Tsuga heterophylla</u>	10		FACU	
3. _____				
4. _____				
	100 = Total Cover			
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. _____				
3. _____				
4. _____				
5. _____				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Scirpus microcarpus</u>	60	X	OBL	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Lysichiton americanum</u>	20	X	OBL	
3. <u>Oenanthe sarmentosa</u>	5		OBL	
4. <u>Rorippa nasturtium-aquaticum</u>	5		OBL	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
	90 = Total Cover			
Woody Vine Stratum (Plot size: _____)				
1. _____				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____				
	_____ = Total Cover			
% Bare Ground in Herb Stratum _____				
Remarks:				

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

Project/Site: Transmission Line City/County: Tillamook Sampling Date: 04/05/2011
 Applicant/Owner: Tillamook PUD State: OR Sampling Point: W21SP2
 Investigator(s): P. O'Neill/C. Steinkoenig Section, Township, Range: T1S R10W S28
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 5%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 45.4577126 Long: -123.9139062 Datum: WGS84
 Soil Map Unit Name: Kloutchie-Necanicum complex, 5 to 30 percent slopes (20D) NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>Tsuga heterophylla</u>	80	X	FACU	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>2</u> (A)
2. <u>Alnus rubra</u>	20	X	FAC	Total Number of Dominant Species Across All Strata:	<u>4</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>50</u> (A/B)
4. _____				Prevalence Index worksheet:	
	100	= Total Cover		Total % Cover of:	Multiply by:
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				OBL species	x 1 = _____
1. <u>Rubus spectabilis</u>	30	X	FAC	FACW species	x 2 = _____
2. <u>Gaultheria shallon</u>	10		FACU	FAC species	<u>30</u> x 3 = <u>90</u>
3. _____				FACU species	<u>140</u> x 4 = <u>560</u>
4. _____				UPL species	x 5 = _____
5. _____				Column Totals:	<u>170</u> (A) <u>650</u> (B)
	40	= Total Cover		Prevalence Index = B/A = _____	
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators:	
1. <u>Polystichum munitum</u>	50	X	FACU	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
2. _____				<input type="checkbox"/> 2 - Dominance Test is >50%	
3. _____				<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹	
4. _____				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5. _____				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹	
6. _____				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
7. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. _____					
9. _____					
10. _____					
11. _____					
	50	= Total Cover		Hydrophytic Vegetation Present?	
Woody Vine Stratum (Plot size: _____)				Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
1. _____					
2. _____					
	0	= Total Cover			
% Bare Ground in Herb Stratum _____					
Remarks:					

