

**BURKHART SITE  
WETLAND DELINEATION REPORT**

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**Linn County Tax Lots  
12S02W10B 00300**

Prepared for  
City of Lebanon

Site Description  
40.18 acres farmed for annual rye grass seed

Site Centroid  
Latitude 44.548583° N  
Longitude -122.9260691° W

Prepared by  
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## A) Landscape Setting and Land Use

### A.1 Site Description

The site is located on the north side of Highway 34 at the intersection with N. 12<sup>th</sup> Street on the west side of Lebanon. The study area is the entire 40.88 acres that lie within Linn County tax lot 12S02W10B 00300 (see table below). Agricultural fields lie to the north and west with industrial facilities on the east and a mix of residential and commercial use to the south and southeast. Highway 34 forms the south boundary, N.12<sup>th</sup> Street the southeast boundary with Laticrete International Facility on the northeast boundary and the Southern Pacific Railway tracks forming the northern boundary.

The site is cultivated for annual rye grass seed and has been farmed for more than fifty years. Topographically, the site is flat sloping gently to the northwest with the highest elevation of 336' in the southeast corner and the lowest elevation of 330' in the northwest corner.

Site description	Lot size (acres)	Ownership	Address
12S02W10B 00300	40.88	Mildred Steckley Marital Trust	Farm use – address not assigned

**Table 1: Tax Lot Information**

Burkhart Creek, a perennial stream flows diagonally northwesterly across the southwest corner of the site. The only area not cultivated on the parcel is a small riparian forested area bordering Burkhart Creek.

A delineation covering the same area as the current study was completed by SWCA in 2004 (WD04-0333). Land use on the site has not changed since the previous investigation, however, land use upgradient from the site has changed. After 2006, N. 12<sup>th</sup> Street and the Laticrete facility were constructed on the east side of the site.

### A.2 Vegetation

Vegetation consists of the annual rye grass over most of the site. Hedge rows along the west boundary contain patches of blackberry thickets. A mixed forested and scrub/shrub riparian area is present in the southwest corner. Dominant vegetation includes Oregon ash, mixed willow species, nootka rose, blackberry, and Reed canarygrass.

### A.3 Soil

Six soil types are mapped on the site by the Linn County Soil Survey:

- Clackamas gravelly silt loam (23): not hydric with hydric inclusions
- Coburg silty clay loam (26): not hydric with hydric inclusions
- Conser silty clay loam (28): hydric
- Courtney gravelly silty clay loam (29): hydric
- Salem gravelly silt loam (87): not hydric with hydric inclusions

Field visits occurred in August and all soil pits were dug at least 20 inches with a backhoe due to the hard ground. All colors recorded for soil plots refer to moist soil. Soil texture was mostly silty clay loam with lesser amounts of gravelly silt clay loams. Soil chroma was typically 10YR, hues were dominantly 3 with values of 2. Soil in upland areas and in the broad transitional zone between upland and wetland were typically 10YR 3/2 silty clay loams within 20" of the surface. In shallow depressions where saturation persisted for extended periods, hydric soil indicator F6 was most common.

## A.4 Hydrology

Hydrology is provided exclusively by precipitation. Two shallow swales on the south end and a broad flat depression at the north end collect rain and runoff. Low soil permeability and flat topography retains water. The swales and north depression stay saturated, occasionally ponded for extended periods in the springtime.

Water from the swales does not have evidence of flow but the swale slope gently toward the west side of the site where Burkhart Creek cuts across the southwest corner. Burkhart Creek is a perennial tributary to the Willamette River. Burkhart Creek is not known to contain fish due to a series of fish barrier culverts between the site and the Willamette River located about ten miles west.

## B) Site Alterations

Site alterations were observed.

## C) Precipitation Data and Analysis

The following table summarizes precipitation on the day of field visits, precipitation two weeks prior to the field investigation, the percent of normal rainfall for the water year to date, and the monthly percent of normal precipitation for each of the three months preceding the field investigation. All precipitation data is from the Corvallis Hyslop weather station (also referenced as “Corvallis State Univ.”). Elevations on the site range from 336 to 330 feet above mean sea level and the Hyslop weather station elevation is 230 feet. The subject property lies about 14 miles east-southeast of the Hyslop Farm where the US Weather Service Station is located.

Rainfall in the months preceding the August site was mixed with typically low rainfall in June and July but with higher than normal rainfall from March through June. Precipitation for the calendar year was above the normal WETS range recorded at the Hyslop weather station and rainfall for the water year was above the normal range. The site visit was conducted during the dry season and as a result primary wetland hydrology indicators were not present.

Date of Site Visit	PPT during site visit	PPT two weeks preceding	Recorded PPT since October (thru preceding month)	WETS Avg PPT for water year thru preceding month	% of Normal PPT for water year based on WETS Avg.	Monthly % of normal ppt for each of 3 months preceding site visit based on WETS avg.		
						Preceding month	2 <sup>nd</sup> preceding month	3 <sup>rd</sup> preceding month
8/09/17	0	0	61.28	41.46	148	0	106	180
8/11/17	0	0	61.28	41.46	148	0	106	180

**Table 2: Precipitation preceding site visits**

Month	Rainfall recorded for Water Year	WETS* average rainfall	Rainfall relative to WETS* average	30% Chance rainfall will be		30% WETS range comparison to recorded rainfall
				Less than	More than	
October	12.15	3.02	97%	1.70	3.68	Above
November	7.78	6.94	117%	4.55	8.34	Within
December	5.60	7.43	73%	5.03	8.88	Within
January	5.33	6.46	105%	3.95	7.82	Within
February	12.48	5.71	77%	3.91	6.80	Above
March	8.11	4.59	132%	3.46	5.35	Above
April	4.14	2.98	147%	2.09	3.53	Above
May	4.14	2.30	180	1.52	2.81	Above
June	1.55	1.46	106	0.93	1.76	Within
July	0	0.57	0	0.17	0.68	below
<b>TOTAL</b>	<b>61.28</b>	<b>41.46</b>	<b>148</b>	<b>27.31</b>	<b>49.65</b>	<b>Above</b>

\*WETS Data from Corvallis State University WETS Station 1971-2000

**Table 3: Precipitation Summary based on Corvallis Hyslop Weather Station data**

## D) Methods

For the office work that occurred prior to the site visit, we acquired a collection of recent orthophotos and wet season historical air photos. The information was used to prioritize areas for review during field visits. In addition, the site was reviewed using the Google Earth and Microsoft Bing websites. The areas to investigate were plotted as vector shapefiles to be used with the mobile GIS/GPS field equipment.

Normal circumstances exist on the site; however, the site visits occurred in the normally dry season of the year. Consequently, procedures for difficult wetland situations from the Corps regional supplemental manual were followed when necessary because primary hydrology was not present. The following procedure from Chapter 5 of the Corps supplement regional manual was considered when necessary because the site visit occurred in the dry season of the year.

### SITE VISIT DURING DRY SEASON

#### Chapter 5 – Difficult Wetland Situations

*Problem area as a result of lack of wetland hydrology due to normal seasonal rainfall variability*

#### **Wetlands that periodically lack indicators of wetland hydrology**

Step 1: Verify indicators of hydrophytic vegetation and hydric soil are present or absent.

*FIELD OBSERVATION FOR WETLAND PLOT: Hydrophytic vegetation and hydric soil are present.*

Step 2: Verify area is in landscape position likely to collect or concentrate water.

*FIELD OBSERVATION FOR WETLAND PLOT: Area is depression with a concave surface*

Step 3: Site visits during the dry season

*CONCLUSION: If the site visit occurred during the dry season on a site that contains hydric soils and hydrophytic vegetation and no significant hydrologic manipulation (e.g., no dams, levees, water diversions, land grading, etc., and the site is not within the zone of influence of any drainage ditches or subsurface drains), then consider the site to be a wetland.*

Site visits occurred on August 9 and August 11, 2017. A backhoe was used to dig all the soil pits. The site has been farmed for more than 75 years so vegetation was considered less of a factor for determining wetland status. Fieldwork was guided by multiple information sources including recently flown, high-resolution orthophotography and LIDAR topographic data. Soil colors were recorded for moist soil. Digital georeferenced photographs were taken to document site conditions (Appendix C). Forty (40) sample plots were completed. Sample plots were completed for paired plots, depressions, suspect areas where micro-topography indicated the potential presence of wetland, and areas of possible saturation seen on early growing season aerials.

The upland/wetland boundary and sample plot locations were mapped using a sub-meter resource grade GPS and a mobile GIS/GPS system that included a hand-held computer running ArcPad 10.0, linked by Bluetooth to the GPS receiver. All GPS mapping and field data were saved as ArcPad shape files, post-processed to ensure sub-meter accuracy, then downloaded to ArcGIS version 10.0 and MapInfo Professional version 12.5 GIS programs. All GPS data was post-processed using the Corvallis CORS station to sub-meter accuracy.

Field information including wetland/upland boundaries and accompanying figures meet the required DSL map precision standard of one meter precision for transferring boundaries of features on the ground to the maps included in this report. The GPS post-processing error estimate for the mapping precision is one meter.

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

Two wetland areas and one non-wetland water were identified with a total of 15.19 acres of wetland and 0.35 acres of non-wetland water. Wetland A consists of two shallow swales located at the south end of the site. The swales slope gently toward the northwest and are connected to the riparian forested area bordering Burkhart Creek. The swales are mapped in the Linn County Soil Survey as mostly Conser silty clay loam. Occasional ponding occurs locally within the swales but the wetland is primarily seasonally saturated. The riparian forested area covers approximately 3.25 acres in the southwest corner of the field with 0.35 acres between the top of the banks of Burkhart Creek and 5.11 acres of farmed wetland.

Wetland B is similar with almost all the wetland area mapped by Linn County Soil Survey as Conser silty clay loam soil. The wetland is a seasonally saturated depression with occasional ponding in small, deeper depressions.

A 740 foot-long ditch connects Wetland A to Wetland B. The ditch lies along the western property boundary on the edge of the cultivated field and is vegetated with a mix of rye grass, weedy species and scattered blackberry thickets. The ditch does not appear to be maintained regularly.

Wetland extends off the site on the west side of Wetland A at the northwest corner of the property. Wetland B extends off the site to the west where Burkhart Creek flows off the site. A culvert under Highway 34 forms the southern connection.

Wetland Size	Wetland Category	Other Waters	Description
Wetland A: 6.45 acres	PEM		Farmed wetland
Wetland B: 8.74 acres	PEM/PFO	820' section of Burkhart Ck.	Farmed wetland and riparian forest (5.11 acres PEM, 3.25 acres PFO, 0.35 Waters)
<b>TOTAL: 15.19 acres wetland</b>		<b>0.35 acres Waters</b>	

**Table 4: Summary of Wetland Areas**

## F) Deviation from LWI or NWI

The NWI does not identify wetland on the subject property but does identify Burkhart Creek as a PFOC waterway. The current study identified the Burkhart Creek as a non-wetland water with a forested riparian wetland bordering both sides of the creek.

## G) Mapping Method

Mapping of the wetland boundary, sample plot locations and top of bank along Burkhart Creek was completed using a mobile GIS/GPS system that included a hand-held computer running ArcPad, linked by Bluetooth to a Geneq SXBlue II GNSS GPS receiver. All GPS mapping and field data was saved as ArcPad shapefiles, which were downloaded to ArcGIS and MapInfo Professional GIS programs. Field data was post-processed using the Corvallis CORS base station data and Effigis OnPoz EZSurv software to verify sub-meter horizontal accuracy.

Field information, including wetland/upland boundaries and sample plot locations on accompanying figures, meets the required DSL map precision standard of one-meter precision for transferring boundaries of features on the ground to the maps included in this report. The GPS post-processed horizontal mapping precision is sub-meter. Boundaries for the area investigated (shown on the delineation map) are based on GPS readings from visible property corners, and the Linn County GIS tax lot parcel database.

## H) Additional Information

The study area is a farmed site so four early growing season aerials were reviewed. The high resolution 1998, 2005, and 2012 orthophotography (Figure 5A, 5C and 5D, 6 inch to 1 foot resolution) was provided by City of Lebanon GIS department. Linn County GIS Department provided the 2000 orthophoto (Figure 5B, 1 foot resolution). Aerial photography was useful to identify shading patterns that correlated with wetter areas. Shading indicative of wet areas was similar across the years, however, subtle differences exist between wet season aerials and the geometry and area of shaded patterns does not consistently correlate. Variability may be due to preceding rainfall, type of crop cover, height of vegetation, grass predation, plow patterns and location of seasonal drainage ditches.

The Willamette Valley Phase 1 LIDAR dataset was acquired from the Oregon Lidar Consortium and translated using ESRI ArcGIS and Spatial Analyst to produce a gridded dataset. The gridded data was used to generate 1-foot contour elevation lines (Figure 6A) and a bare earth 3-dimensional shaded relief raster image (Figure 5E).

A previous wetland delineation was completed by SWCA in 2004 (WD04-0333) and information from that report was used in the course of completing the current delineation.

March 2018

## I) Results and Conclusions

The current delineation examined approximately 41 acres of a farmed site referenced as Linn County tax lot 12S02W10B 300. The site lies at the northwest corner of the intersection between Highway 34 and N. 12<sup>th</sup> Street in Lebanon, Oregon. The site has been farmed for over 70 years.

Two wetland areas were identified with a total of 15.19 acres of wetland delineated. The wetlands are broad, shallow depressions, the southern wetland is connected to a riparian forested area bordering Burkhart Creek and the northern wetland is a depression that extends off the property to the west. Burkhart Creek flows northwesterly across the southwest corner of the parcel.

## J) Disclaimer

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

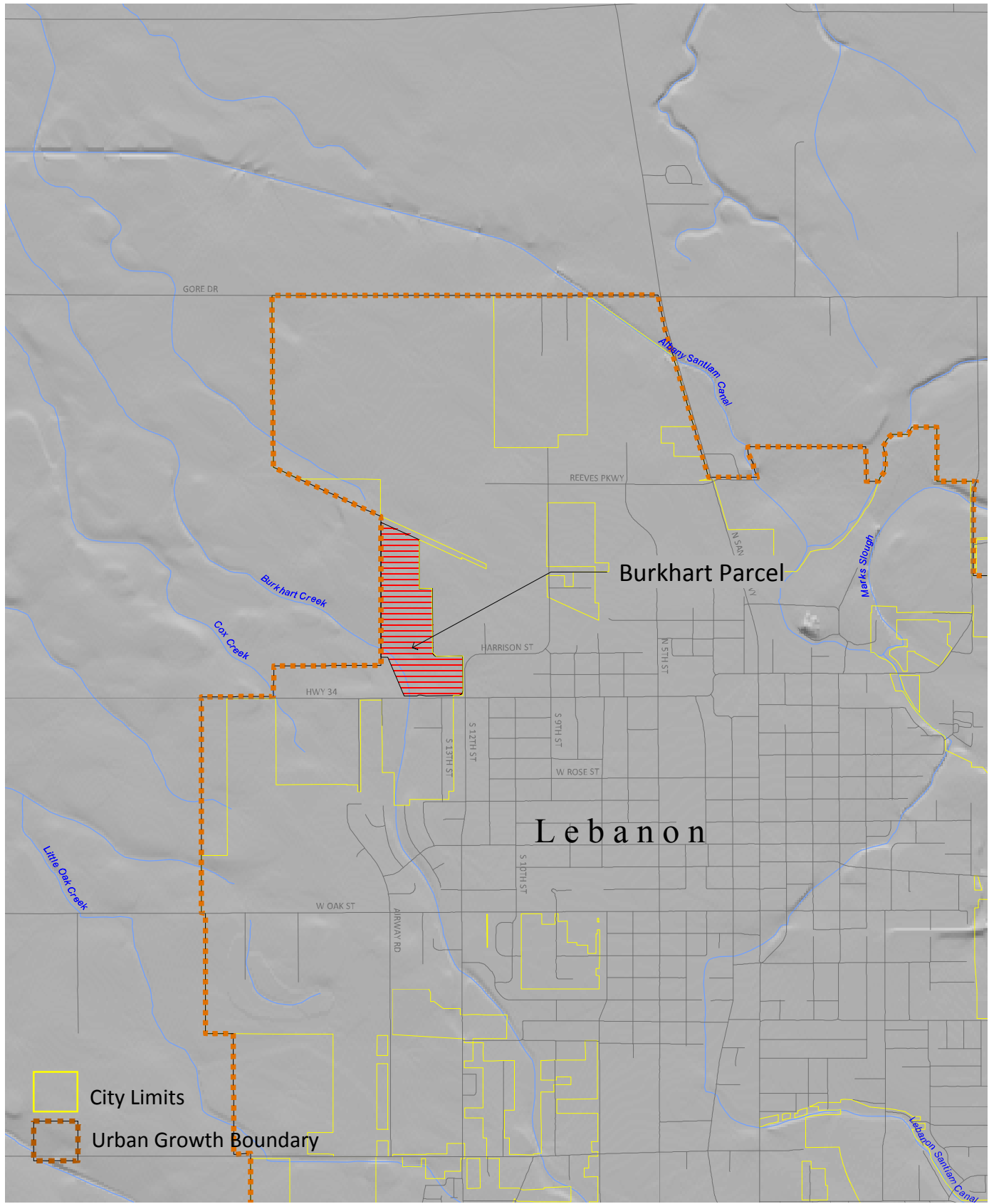


Allen Martin, RG

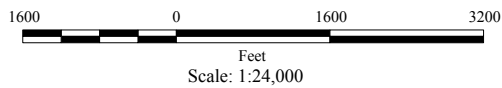
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(541) 946-1013  
[georesources@comcast.net](mailto:georesources@comcast.net)



expires 12/31/18



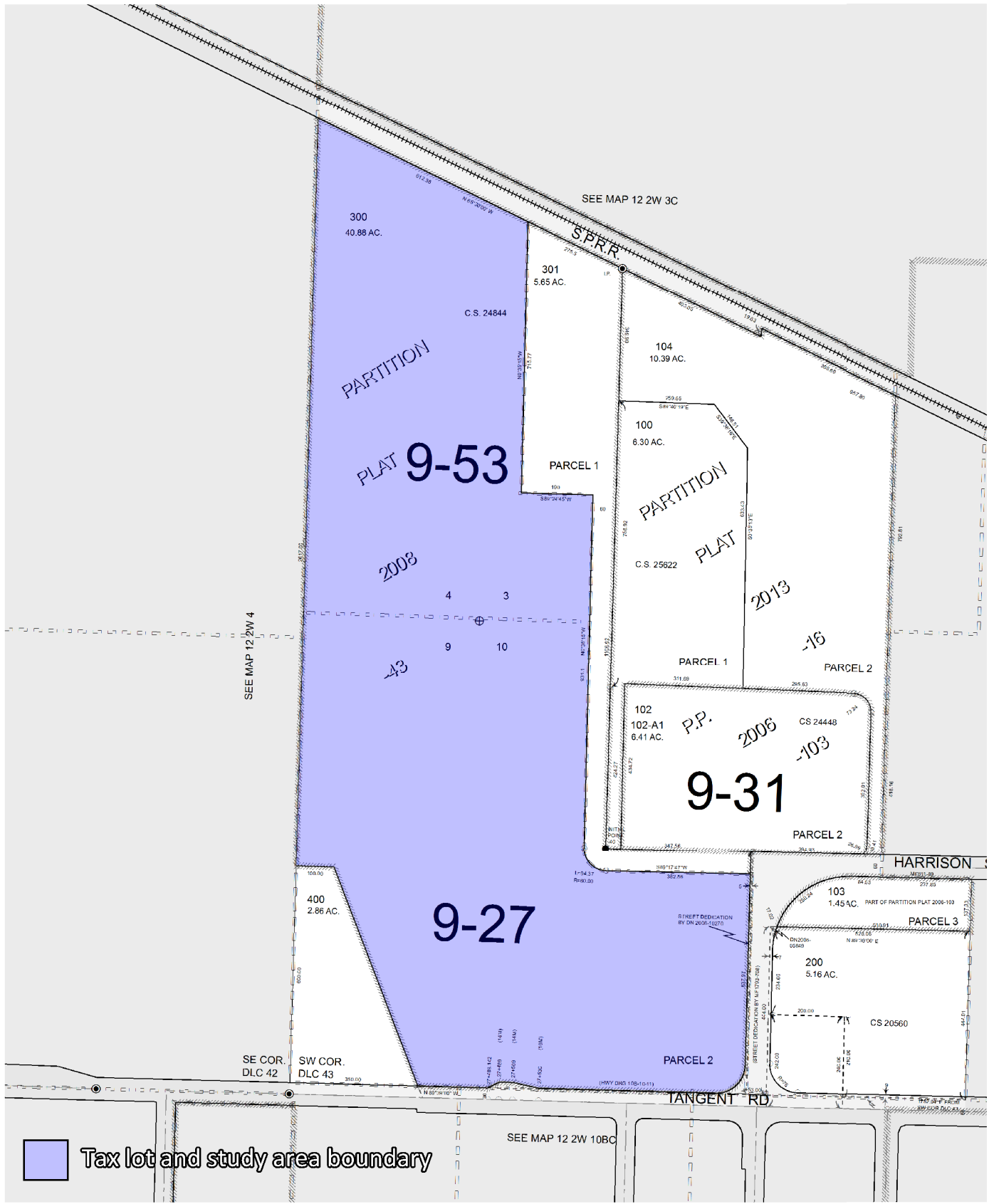
Burkhart Parcel  
 Linn County Tax Lot 12S02W10B 00300  
 Lebanon, OR 97355



**FIGURE 1: LOCATION MAP**

Scale: 1" = 2,000'  
 Source: MapInfo StreetPro, USGS  
 10 meter DEM  
 Drafted: 11/12/17





Burkhart Parcel  
 Linn County Tax Lot 12S02W10B 00300  
 Lebanon, OR 97355

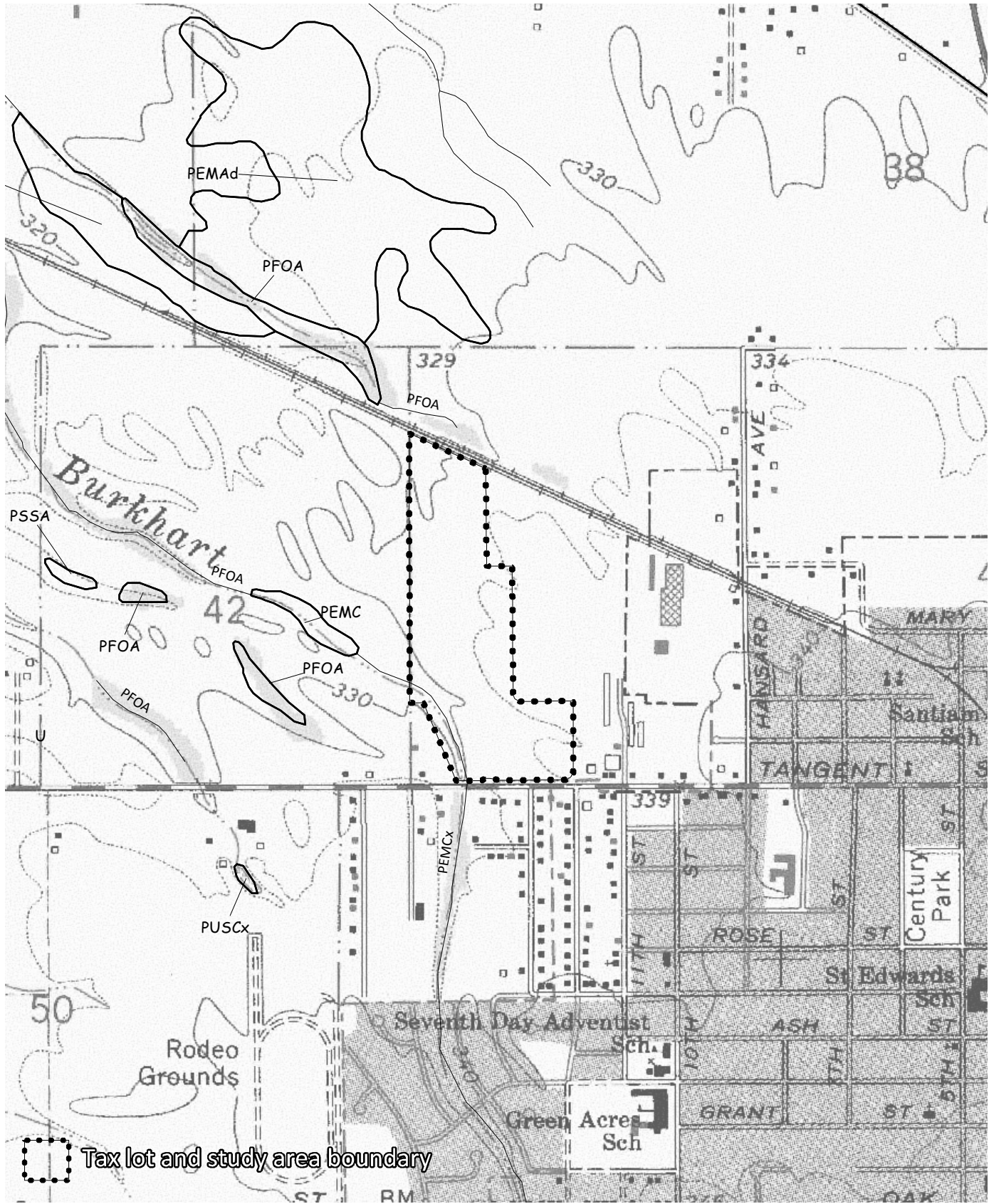
**FIGURE 2: TAX LOT MAP**  
 Scale: 1" = 360'  
 Source: Linn County Tax Assessor  
 Drafted: 11/12/17



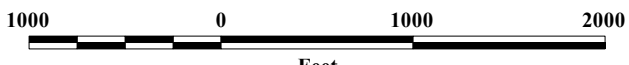
Feet  
 Scale: 1:4,400







Burkhart Parcel  
 Linn County Tax Lot 12S02W10B 00300  
 Lebanon, OR 97355



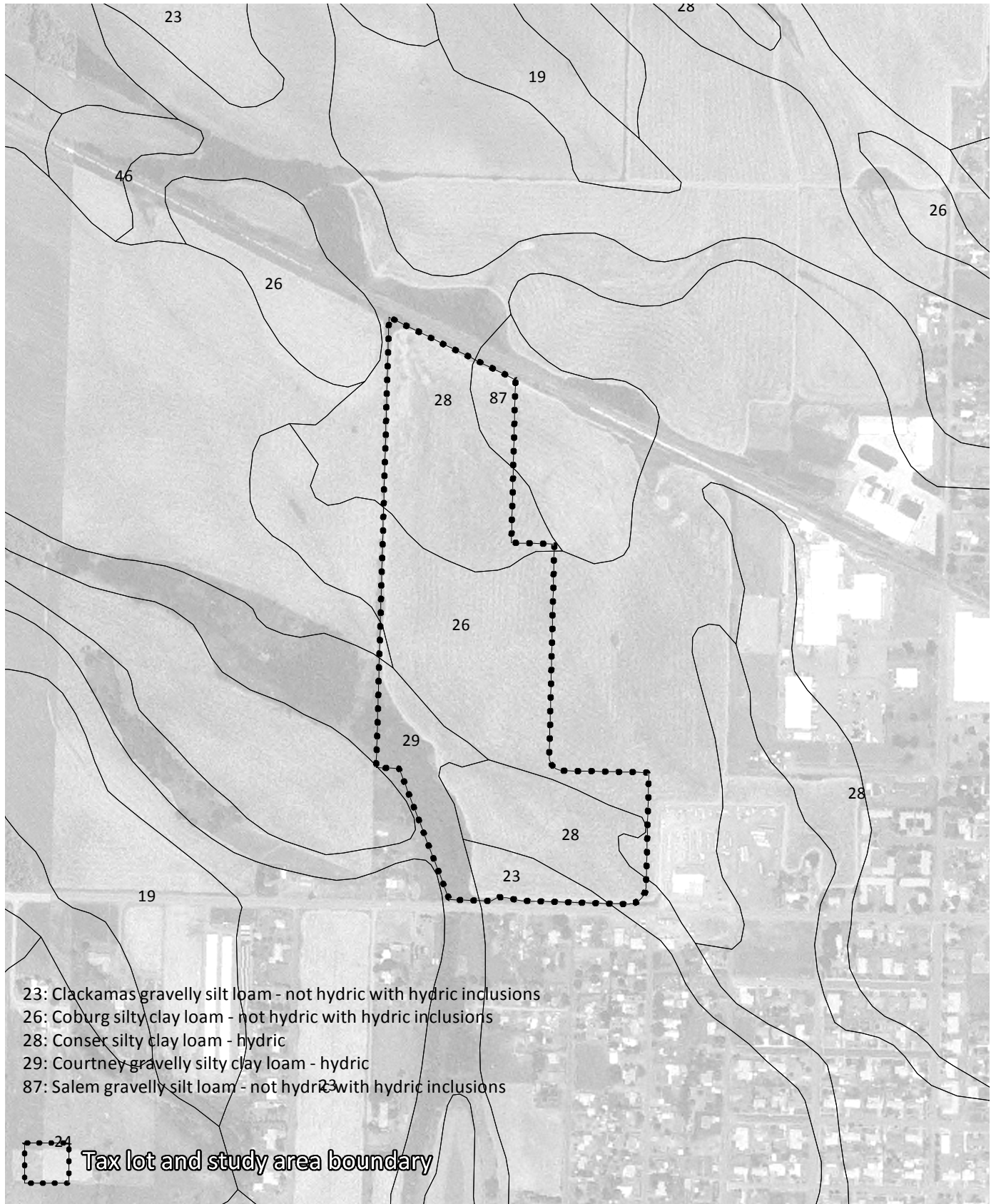
Feet  
 Scale: 1:12,000

**FIGURE 3: NWI MAP**

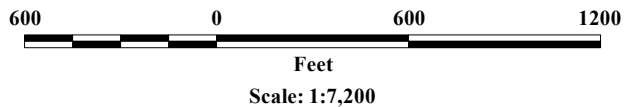
Scale: 1" = 1000'

Source: USFWS NWI Lebanon Quad  
 Drafted: 11/12/17





Burkhart Parcel  
 Linn County Tax Lot 12S02W10B 00300  
 Lebanon, OR 97355



Geo Resources LLC

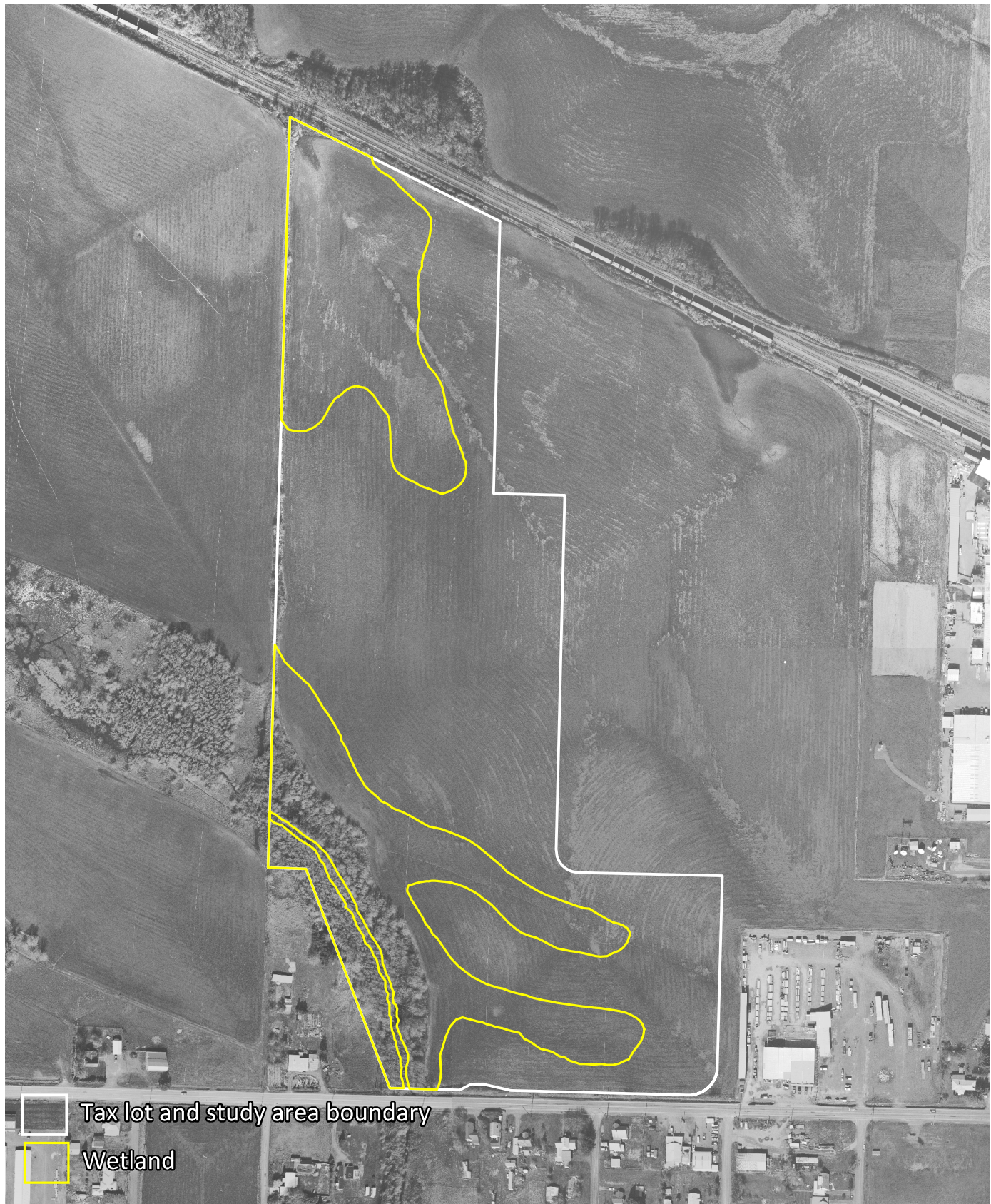
**FIGURE 4: SOIL MAP**

Scale: 1" = 600'

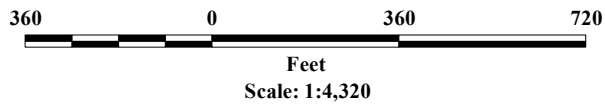
Source: USFWS NWI Lebanon Quad  
 Drafted: 11/12/17







Burkhart Parcel  
 Linn County Tax Lot 12S02W10B 00300  
 Lebanon, OR 97355



**FIGURE 5A: 1998 AERIAL**

Scale: 1" = 360'

Source: City of Lebanon orthophoto  
 Flown: March 1998, 1 ft resolution  
 Drafted: 11/12/17





Tax lot and study area boundary

Wetland

Burkhart Parcel  
Linn County Tax Lot 12S02W10B 00300  
Lebanon, OR 97355



Feet  
Scale: 1:4,320

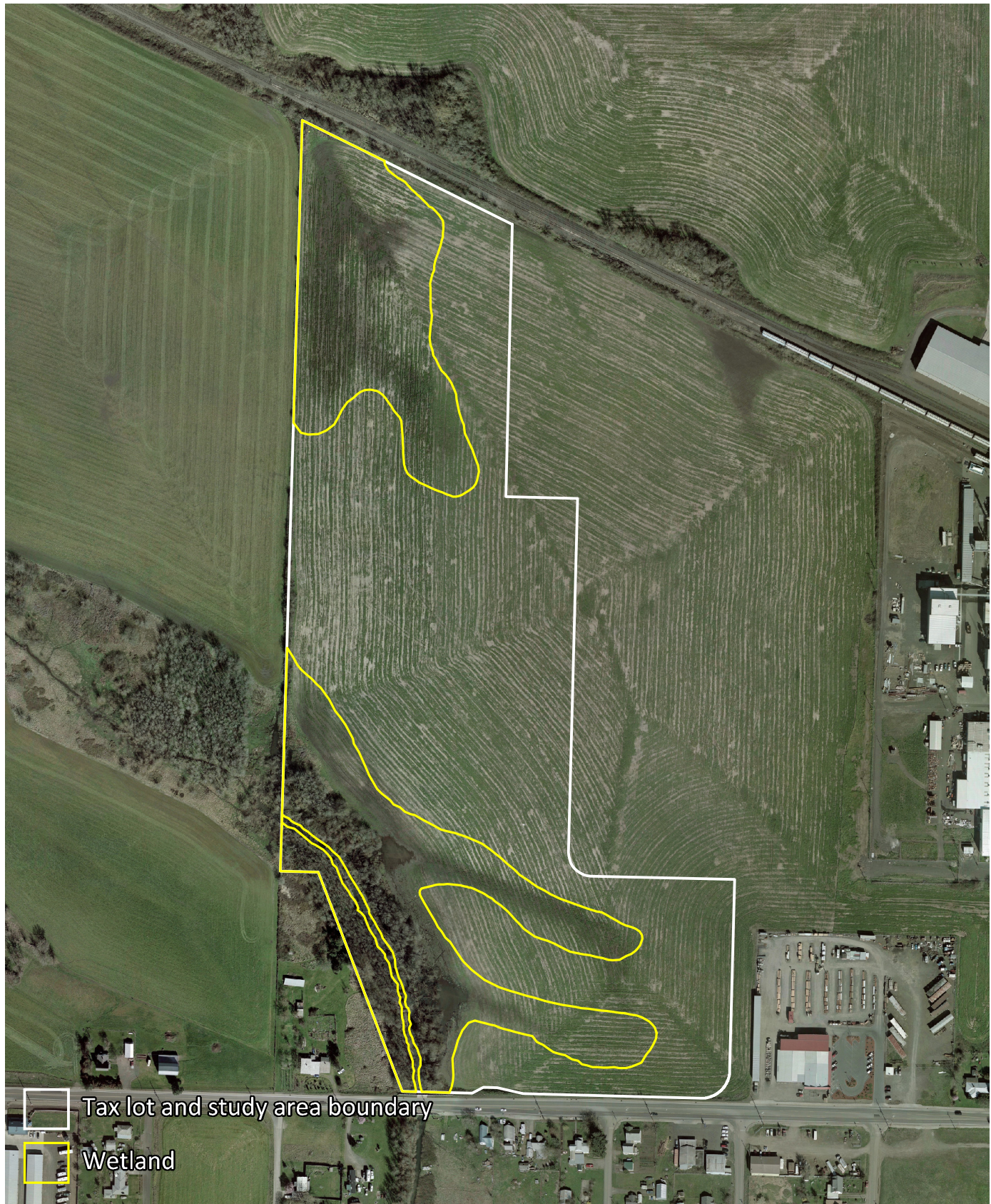
**FIGURE 5B: 2000 AERIAL**

Scale: 1" = 360'

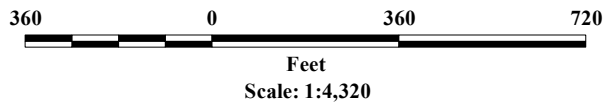
Source: Linn County orthophoto  
Flown: March, 2000, 1 ft resolution  
Drafted: 11/12/17







Burkhart Parcel  
 Linn County Tax Lot 12S02W10B 00300  
 Lebanon, OR 97355

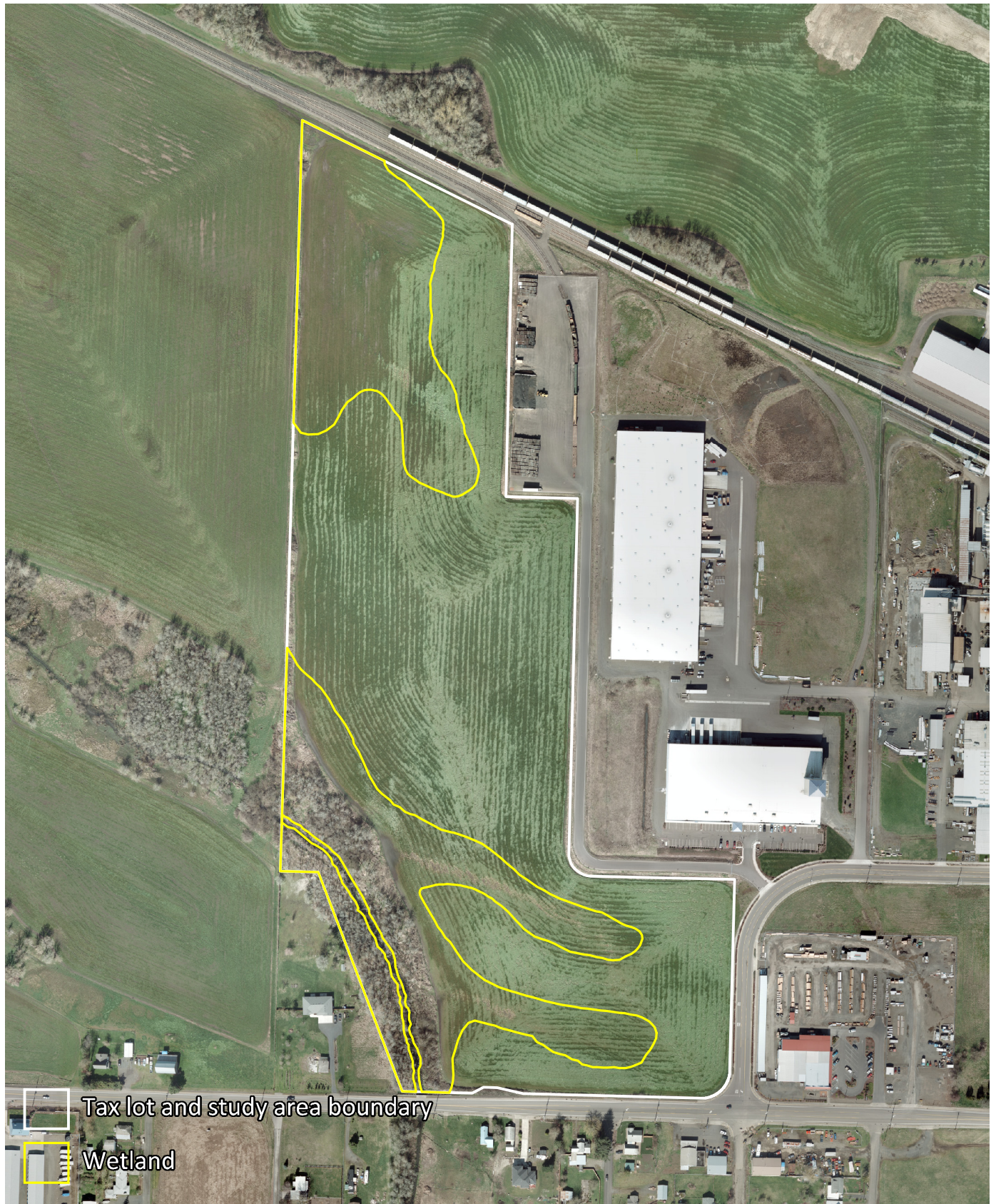


**FIGURE 5C: 2005 AERIAL**

Scale: 1" = 360'

Source: City of Lebanon orthophoto  
 Flown: March 8, 2005, 0.5 ft resolution  
 Drafted: 11/12/17

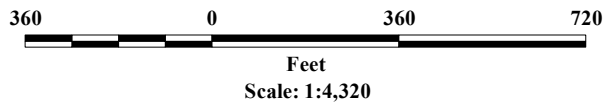




Tax lot and study area boundary

Wetland

Burkhart Parcel  
Linn County Tax Lot 12S02W10B 00300  
Lebanon, OR 97355



**FIGURE 5D: 2012 AERIAL**

Scale: 1" = 360'

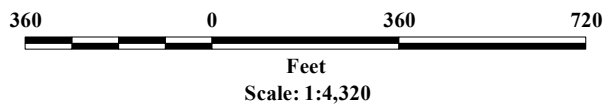
Source: City of Lebanon orthophoto  
Flown: March 7, 2012, 3" resolution  
Drafted: 11/12/17





Tax lot and study area boundary  
 Wetland

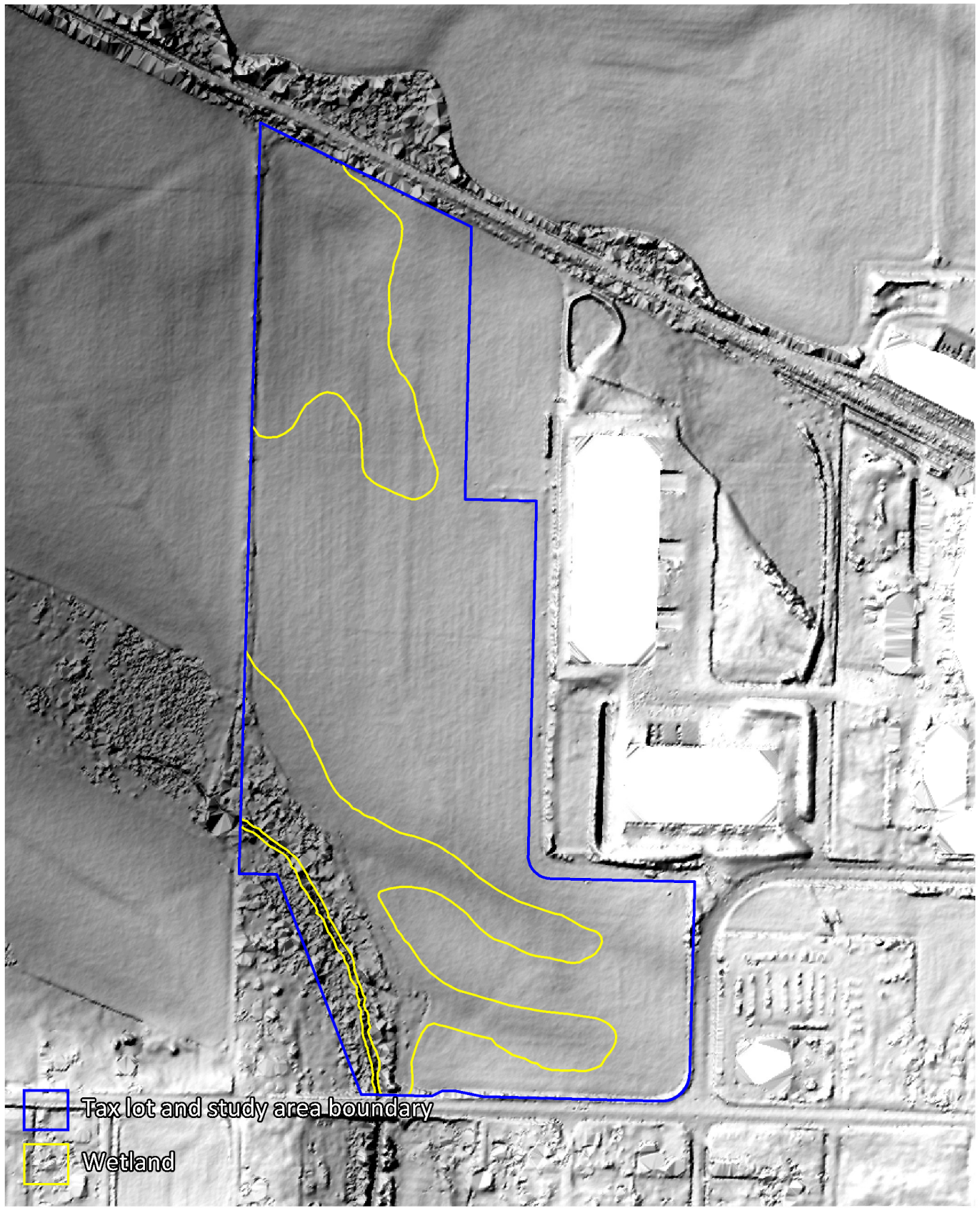
Burkhart Parcel  
 Linn County Tax Lot 12S02W10B 00300  
 Lebanon, OR 97355



**FIGURE 5E: 2017 AERIAL**

Scale: 1" = 360'  
 Source: City of Lebanon orthophoto  
 Flown: April 2, 2017, 3" resolution  
 Drafted: 11/12/17

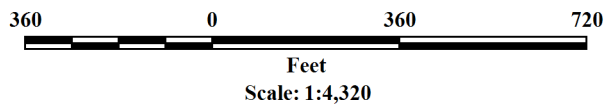




Burkhart Parcel  
 Linn County Tax Lot 12S02W10B 00300  
 Lebanon, OR 97355

**FIGURE 5F: SHADED RELIEF MAP**

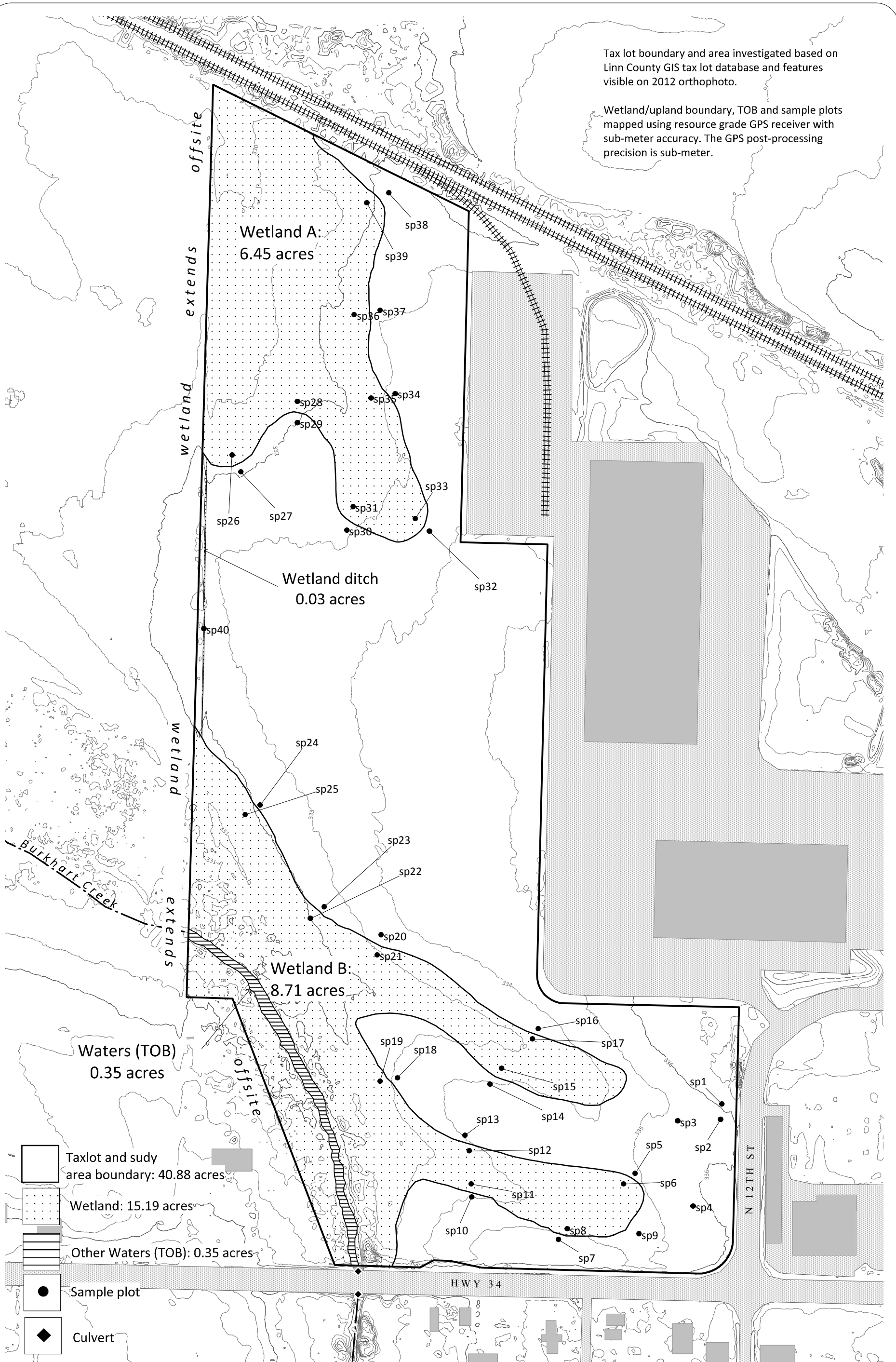
Scale: 1" = 360'  
 Source: OR Lidar Consortium  
 Flown: Spring 2009  
 Drafted: 11/12/17





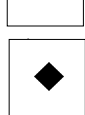




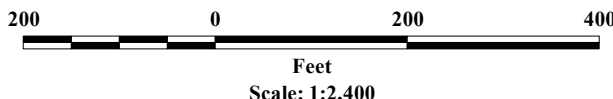
Tax lot boundary and area investigated based on Linn County GIS tax lot database and features visible on 2012 orthophoto.

Wetland/upland boundary, TOB and sample plots mapped using resource grade GPS receiver with sub-meter accuracy. The GPS post-processing precision is sub-meter.



-  Taxlot and study area boundary: 40.88 acres
-  Wetland: 15.19 acres
-  Other Waters (TOB): 0.35 acres
-  Sample plot
-  Culvert

Burkhart Parcel  
Linn County Tax Lot 12S02W10B 00300  
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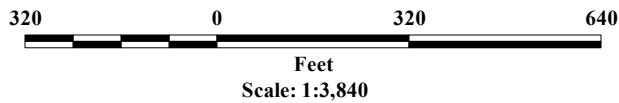


**FIGURE 6A: WETLAND MAP**  
Scale: 1" = 200'  
Source: Linn County GIS, OR DOGAMI Lidar  
Vertical datum: NAVD 88  
Drafted: 12/11/17





Burkhart Parcel  
 Linn County Tax Lot 12S02W10B 00300  
 Lebanon, OR 97355



**FIGURE 6B: PHOTO LOCATIONS**

Scale: 1" = 320'  
 Source: Google Earth aerial  
 Flown: 7/03/17  
 Drafted: 11/12/17





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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/09/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP1  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	Hydic Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
---	---	--	--

Remarks:  
 Plot located at east end of study area to test east end of swale.

### VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Dominance Test worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		0	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
		0	= Total Cover		Column Totals: <u>0</u> (A) <u>0</u> (B)
					Prevalence Index = B/A = <u>0.0</u>
<u>Herb Stratum</u>	<u>(Plot size: 6 ft )</u>				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Lolium perenne</u>		80	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		80	= Total Cover		
<u>Woody Vine Stratum</u>	<u>(Plot size: 12 ft )</u>				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP1

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-15	10YR2/2	100	-	-	-	-	SiCL	
15-24	10YR2/2	100	-	-	-	-	SiCL	

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

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

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

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

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)                          | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                    |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> (LRR A)  | <input type="checkbox"/> Frost-Heave Hummocks (D7)                         |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks)                               |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |  |

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:

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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/09/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP2  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	Hydic Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:  
 Plot located at east end of study area to test eastward extension of swale.

### VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Dominance Test worksheet:</b>
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
		<u>0</u>	= Total Cover		
<u>Sapling/Shrub Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		<u>0</u>	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
					Column Totals: <u>0</u> (A) <u>0</u> (B)
					Prevalence Index = B/A = <u>0.0</u>
<u>Herb Stratum</u>	<u>(Plot size: 6 ft )</u>				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Lolium perenne</u>		<u>70</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		<u>70</u>	= Total Cover		
<u>Woody Vine Stratum</u>	<u>(Plot size: 12 ft )</u>				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP2

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-19	10YR2/2	100	-	-	-	-	SiCL	
19-22	10YR3/2	95	10YR4/4	5	C		SiCL	

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

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

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

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

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)                          | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                    |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> (LRR A)  | <input type="checkbox"/> Frost-Heave Hummocks (D7)                         |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks)                               |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |  |

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:

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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/09/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP3  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	Hydic Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
---	---	--	--

Remarks:  
 Plot located at east end of study area to test eastward extension of swale.

### VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	Worksheet
<u>Tree Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Dominance Test worksheet:</b> 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)
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
<u>0</u> = Total Cover					<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <input type="checkbox"/> x 1 = <u>0.0</u> FACW species <input type="checkbox"/> x 2 = <u>0.0</u> FAC species <input type="checkbox"/> x 3 = <u>0.0</u> FACU species <input type="checkbox"/> x 4 = <u>0.0</u> UPL species <input type="checkbox"/> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
<u>Sapling/Shrub Stratum</u>	<u>(Plot size: 30 ft )</u>				
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
5. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
<u>0</u> = Total Cover					
<u>Herb Stratum</u>	<u>(Plot size: 6 ft )</u>				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium perenne</u>		<u>70</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
<u>70</u> = Total Cover					
<u>Woody Vine Stratum</u>	<u>(Plot size: 12 ft )</u>				
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
<u>0</u> = Total Cover					
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP3

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR2/2	100	-	-	-	-	SiCL	
10-18	10YR2/2	96	10YR4/4	4	C		SiCL	
18-22	10YR2/1	100	--	--	--	--	C	

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

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

<p><b>Restrictive Layer (if present):</b>          Type: _____          Depth (inches): _____</p>	<p><b>Hydric Soil Present?</b>    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></p>
---	--

Remarks:

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b>          Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<p>Water-Stained Leaves (B9) (<b>except MLRA 1, 2, 4A, and 4B</b>)</p> <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) ( <b>LRR A</b> ) <input type="checkbox"/> Other (Explain in Remarks)	<p>Secondary Indicators (2 or more required)</p> <input type="checkbox"/> Water-Stained Leaves (B9) ( <b>MLRA 1, 2, 4A, and 4B</b> ) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) ( <b>LRR A</b> ) <input type="checkbox"/> Frost-Heave Hummocks (D7)
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<p><b>Field Observations:</b>          Surface Water Present?    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/>    Depth (inches): _____          Water Table Present?    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/>    Depth (inches): _____          Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/>    Depth (inches): _____</p>	<p><b>Wetland Hydrology Present?</b>    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></p>
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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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/09/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP4  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	Hydic Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:  
 Plot located to test eastward extension of southernmost swale.

### 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> )				<b>Dominance Test worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		0	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
		0	= Total Cover		Column Totals: <u>0</u> (A) <u>0</u> (B)
					Prevalence Index = B/A = <u>0.0</u>
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Lolium perenne</u>		80	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		80	= Total Cover		
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP4

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR2/2	100	-	-	-	-	SiCL	
14-20	10YR2/2	100	-	-	-	-	SiCL	

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

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1) ( <b>except MLRA 1</b> ) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Redox Depressions (F8)	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks) <p><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic</p>
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<p><b>Restrictive Layer (if present):</b></p> Type: _____ Depth (inches): _____	<p><b>Hydric Soil Present?</b>    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></p>
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Remarks:

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<p>Water-Stained Leaves (B9) (<b>except MLRA 1, 2, 4A, and 4B</b>)</p> <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) ( <b>LRR A</b> ) <input type="checkbox"/> Other (Explain in Remarks)	<p>Secondary Indicators (2 or more required)</p> <p>Water-Stained Leaves (B9) (<b>MLRA 1, 2, 4A, and 4B</b>)</p> <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) ( <b>LRR A</b> ) <input type="checkbox"/> Frost-Heave Hummocks (D7)
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<p><b>Field Observations:</b></p> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<p><b>Wetland Hydrology Present?</b>    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></p>
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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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/09/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP5  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	Hydic Soil 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"/>
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

Remarks:  
 Plot located on north edge of southern swale.

### 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> )				<b>Dominance Test worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		0	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
		0	= Total Cover		Column Totals: <u>0</u> (A) <u>0</u> (B)
					Prevalence Index = B/A = <u>0.0</u>
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Lolium perenne</u>		70	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		70	= Total Cover		
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				<b>Hydrophytic Vegetation Present?</b>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP5

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR2/2	100	-	-	-	-	SiCL	
10-15	10YR2/2	97	10YR3/4	3	c	m	SiCL	
15-24	10YR3/1	98	10YR3/4	2	c	m	C	

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

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

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

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

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)                          | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                    |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> (LRR A)  | <input type="checkbox"/> Frost-Heave Hummocks (D7)                         |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks)                               |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |  |

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:

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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/09/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP6  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	Hydic Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 Plot located in wetland swale along northern edge.

### 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> )				<b>Dominance Test worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		<b>Prevalence Index worksheet:</b>
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				Total % Cover of: Multiply by:
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
		0	= Total Cover		Column Totals: <u>0</u> (A) <u>0</u> (B)
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				Prevalence Index = B/A = <u>0.0</u>
1. <u>Lolium perenne</u>		60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	<b>Hydrophytic Vegetation Indicators:</b>
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		60	= Total Cover		<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP6

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR2/2	100	--	--	--	--	GrSiCL	
6-11	10YR2/2	95	10YR4/4	5	C	M	SiCL	2%OR
11-24	10YR3/1	97	10YR3/4	2	C	M	C	1%MN

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

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

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

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

Secondary Indicators (2 or more required)

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1)                        | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (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 checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input checked="" type="checkbox"/> Geomorphic Position (D2)               |
| <input type="checkbox"/> Drift Deposits (B3)                       | <input type="checkbox"/> Presence of Reduced Iron (C4)                            | <input checked="" 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)                          | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                    |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> (LRR A)  | <input type="checkbox"/> Frost-Heave Hummocks (D7)                         |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks)                               |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |  |

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:

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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/09/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP7  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Clackamas Gravelly Silt Loam NWI classification: upl

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"/>	Hydic Soil 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"/>
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

Remarks:  
 Plot located in wetland swale near southern boundary.

### VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Dominance Test worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		0	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
		0	= Total Cover		Column Totals: <u>0</u> (A) <u>0</u> (B)
		0	= Total Cover		Prevalence Index = B/A = <u>0.0</u>
<u>Herb Stratum</u>	<u>(Plot size: 6 ft )</u>				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Lolium perenne</u>		50	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		50	= Total Cover		
<u>Woody Vine Stratum</u>	<u>(Plot size: 12 ft )</u>				<b>Hydrophytic Vegetation Present?</b>
1. <u>NONE</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum <u>50</u>					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture



**SOIL**

Sampling Point: SP7

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR2/2	100	--	-	-	-	SiCL	
14-22	10YR2/2	100	--	-	-	-	GrCL	

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

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

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

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

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  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

Wetland Hydrology Present? Yes  No

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

Remarks:



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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/09/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP8  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Clackamas Gravelly Silt Loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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"/>			

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> )				<b>Dominance Test worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		0	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
		0	= Total Cover		Column Totals: <u>0</u> (A) <u>0</u> (B)
		0	= Total Cover		Prevalence Index = B/A = <u>0.0</u>
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Lolium perenne</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		0	= Total Cover		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				<b>Hydrophytic Vegetation Present?</b>
1. <u>NONE</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	Yes <input checked="" type="checkbox"/>
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	No <input type="checkbox"/>
		0	= Total Cover		

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP8

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-5	10YR3/2	97	10YR4/4	3	C	PL	SiCL	
5-9	10YR3/2	95	10YR4/4	5	C	M	GrSiCL	
9-20	10YR2/1	100	--	-	-	-	C	

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

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

<p><b>Restrictive Layer (if present):</b>          Type: <u>Clay</u>          Depth (inches): <u>9-20+</u></p>	<p><b>Hydric Soil Present?</b>    Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></p>
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Remarks:

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b>          Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<p>Water-Stained Leaves (B9) (<b>except MLRA 1, 2, 4A, and 4B</b>)</p> <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) ( <b>LRR A</b> ) <input type="checkbox"/> Other (Explain in Remarks)	<p>Secondary Indicators (2 or more required)</p> <input type="checkbox"/> Water-Stained Leaves (B9) ( <b>MLRA 1, 2, 4A, and 4B</b> ) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input checked="" type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) ( <b>LRR A</b> ) <input type="checkbox"/> Frost-Heave Hummocks (D7)
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<p><b>Field Observations:</b>          Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>    Depth (inches): _____          Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>    Depth (inches): _____          Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>    Depth (inches): _____</p>	<p><b>Wetland Hydrology Present?</b>    Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></p>
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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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/09/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP9  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	Hydic Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:  
 Plot located to test eastward termination of southernmost swale.

### VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	Worksheet
<u>Tree Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Dominance Test worksheet:</b> 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)
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. _____		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>0</u> = Total Cover					<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <input type="checkbox"/> x 1 = <u>0.0</u> FACW species <input type="checkbox"/> x 2 = <u>0.0</u> FAC species <input type="checkbox"/> x 3 = <u>0.0</u> FACU species <input type="checkbox"/> x 4 = <u>0.0</u> UPL species <input type="checkbox"/> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
<u>Sapling/Shrub Stratum</u>	<u>(Plot size: 30 ft )</u>				
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. _____		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>0</u> = Total Cover					
<u>Herb Stratum</u>	<u>(Plot size: 6 ft )</u>				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium perenne</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>0</u> = Total Cover					
<u>Woody Vine Stratum</u>	<u>(Plot size: 12 ft )</u>				
1. <u>NONE</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>0</u> = Total Cover					
% Bare Ground in Herb Stratum _____					
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP9

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-11	10YR3/2	100	--	--	--	--	SiCL	
11-12	10YR3/2	97	10YR3/4	3	C	M	SiCL	
12-16	10YR2/1	100	--	--	--	-	SiC	
16-18	10YR3/1	99	10YR4/4	1	C	M	C	

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

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

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>	<b>Secondary Indicators (2 or more required)</b>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<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): _____	<b>Wetland Hydrology Present?</b> 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? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	

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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/09/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP10  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Clackamas Gravelly Silt Loam NWI classification: upl

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"/>	Hydic Soil 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"/>
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

Remarks:  
 Plot located on south side of shallow swale on south end of study area.

### VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Dominance Test worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		0	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
<u>Herb Stratum</u>	<u>(Plot size: 6 ft )</u>				Column Totals: <u>0</u> (A) <u>0</u> (B)
1. <u>Lolium perenne</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	Prevalence Index = B/A = <u>0.0</u>
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		0	= Total Cover		
<u>Woody Vine Stratum</u>	<u>(Plot size: 12 ft )</u>				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>NONE</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
		0	= Total Cover		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
% Bare Ground in Herb Stratum _____					<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
					<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
					<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
					<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
					<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP10

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR2/2	100	--	--	--	--	VGSiCL	
14-20	10YR2/2	95	10YR3/4	5	C	M	GrCL	

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

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

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

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

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  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

Wetland Hydrology Present? Yes  No

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

Remarks:

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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/09/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP11  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Clackamas Gravelly Silt Loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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"/>			

Remarks:  
 Plot paired with Sp10 to define southern wetland boundary of swale.

## VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b>	(Plot size: <u>30 ft</u> )				<b>Dominance Test worksheet:</b> 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)
1. <u>None</u>		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		0	= Total Cover		
<b>Sapling/Shrub Stratum</b>	(Plot size: <u>30 ft</u> )				<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <input type="checkbox"/> x 1 = <u>0.0</u> FACW species <input type="checkbox"/> x 2 = <u>0.0</u> FAC species <input type="checkbox"/> x 3 = <u>0.0</u> FACU species <input type="checkbox"/> x 4 = <u>0.0</u> UPL species <input type="checkbox"/> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
1. <u>None</u>		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		0	= Total Cover		
<b>Herb Stratum</b>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium perenne</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		0	= Total Cover		
<b>Woody Vine Stratum</b>	(Plot size: <u>12 ft</u> )				
1. <u>NONE</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture



**SOIL**

Sampling Point: SP11

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR3/2	--	--	--	--	--	SiCL	
8-14	10YR2/2	95	10YR4/4	5	C	M	SiC	
14-22	10YR2/2	95	10YR5/3	5	C	M	VGC	

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

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

<p><b>Restrictive Layer (if present):</b>          Type: SiC/C          Depth (inches): begins 8"bg</p>	<p><b>Hydric Soil Present?</b>    Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></p>
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Remarks:

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b>          Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<p>Water-Stained Leaves (B9) (<b>except MLRA 1, 2, 4A, and 4B</b>)</p> <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) ( <b>LRR A</b> ) <input type="checkbox"/> Other (Explain in Remarks)	<p>Secondary Indicators (2 or more required)</p> <input type="checkbox"/> Water-Stained Leaves (B9) ( <b>MLRA 1, 2, 4A, and 4B</b> ) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input checked="" type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) ( <b>LRR A</b> ) <input type="checkbox"/> Frost-Heave Hummocks (D7)
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<p><b>Field Observations:</b>          Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>    Depth (inches): _____          Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>    Depth (inches): _____          Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>    Depth (inches): _____</p>	<p><b>Wetland Hydrology Present?</b>    Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></p>
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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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/09/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP12  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	Hydic Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 Plot located near northern edge of shallow swale to define wetland.

### VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	Worksheet
<u>Tree Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Dominance Test worksheet:</b> 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)
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. _____		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. _____		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>0</u> = Total Cover					<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>  </u> x 1 = <u>0.0</u> FACW species <u>  </u> x 2 = <u>0.0</u> FAC species <u>  </u> x 3 = <u>0.0</u> FACU species <u>  </u> x 4 = <u>0.0</u> UPL species <u>  </u> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
<u>Sapling/Shrub Stratum</u>	<u>(Plot size: 30 ft )</u>				
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. _____		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>0</u> = Total Cover					
<u>Herb Stratum</u>	<u>(Plot size: 6 ft )</u>				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium perenne</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>0</u> = Total Cover					
<u>Woody Vine Stratum</u>	<u>(Plot size: 12 ft )</u>				
1. <u>NONE</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>0</u> = Total Cover					
% Bare Ground in Herb Stratum _____					
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP12

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-9	10YR3/2	95	10YR4/4	5	C	M		
9-20	10YR2/1	95	10YR4/4	5	C	M/PL	GrC	2%OR

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

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

- 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 Soils<sup>3</sup>:**

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

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

**Restrictive Layer (if present):**

Type: GrC  
 Depth (inches): begins 9"bg

Hydric Soil Present? Yes  No

Remarks:

**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  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

Wetland Hydrology Present? Yes  No

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

Remarks:

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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/09/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP13  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	Hydic Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:  
 Plot located on north side of southern swale paired with SP12 to define north edge of wetland.

**VEGETATION – Use scientific names of plants.**

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
(Plot size: <u>30 ft</u> )				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>0</u> (A)
1. <u>None</u>	<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Total Number of Dominant Species Across All Strata:	<u>1</u> (B)
2. _____	<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>0</u> (A/B)
3. _____	<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
4. _____	<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
	<u>0</u>	= Total Cover			
Sapling/Shrub Stratum				Prevalence Index worksheet:	
(Plot size: <u>30 ft</u> )				Total % Cover of:	Multiply by:
1. <u>None</u>	<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	OBL species	<u>0.0</u>
2. _____	<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FACW species	<u>0.0</u>
3. _____	<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FAC species	<u>0.0</u>
4. _____	<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FACU species	<u>0.0</u>
5. _____	<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	UPL species	<u>0.0</u>
	<u>0</u>	= Total Cover		Column Totals:	<u>0</u> (A) <u>0</u> (B)
				Prevalence Index = B/A =	<u>0.0</u>
Herb Stratum				Hydrophytic Vegetation Indicators:	
(Plot size: <u>6 ft</u> )				<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
1. <u>Lolium perenne</u>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%	
2. _____		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
3. _____		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
4. _____		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>	
5. _____		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
6. _____		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
7. _____		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
8. _____		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
9. _____		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
10. _____		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
11. _____		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
	<u>0</u>	= Total Cover			
Woody Vine Stratum					
(Plot size: <u>12 ft</u> )				<b>Hydrophytic Vegetation Present?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>NONE</u>		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
2. _____		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum	_____				

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP13

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-15	10YR2/2	100	-	-	-	-	GrCL	
15-20	10YR2/2	100	-	-	-	-	C	

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

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

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

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

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

**Restrictive Layer (if present):**

Type: Clay  
Depth (inches): begins 15"bg

Hydric Soil Present? Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

Secondary Indicators (2 or more required)

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1)                        | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (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)                          | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                    |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> (LRR A)  | <input type="checkbox"/> Frost-Heave Hummocks (D7)                         |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks)                               |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |  |

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:

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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/09/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP14  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u>	(Plot size: <u>30 ft</u> )				<b>Dominance Test worksheet:</b> 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)
1. <u>None</u>		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
0 = Total Cover					<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <input type="checkbox"/> x 1 = <u>0.0</u> FACW species <input type="checkbox"/> x 2 = <u>0.0</u> FAC species <input type="checkbox"/> x 3 = <u>0.0</u> FACU species <input type="checkbox"/> x 4 = <u>0.0</u> UPL species <input type="checkbox"/> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				
1. <u>None</u>		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
0 = Total Cover					
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium perenne</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
0 = Total Cover					
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				
1. <u>NONE</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
0 = Total Cover					
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP14

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR2/2	100	-	-	-	-	GrSiCL	
12-16	10YR2/2	95	10YR4/4	5	C	M	GrSiCL	
16-20	10YR2/2	90	10YR4/4	10	C	M	C	

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

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1) ( <b>except MLRA 1</b> ) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Redox Depressions (F8)	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks) <p><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic</p>
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<p><b>Restrictive Layer (if present):</b></p> Type: _____ Depth (inches): _____	<p><b>Hydric Soil Present?</b>    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></p>
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Remarks:

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) ( <b>except MLRA 1, 2, 4A, and 4B</b> ) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> (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)	<p>Secondary Indicators (2 or more required)</p> <input type="checkbox"/> Water-Stained Leaves (B9) ( <b>MLRA 1, 2, 4A, and 4B</b> ) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) ( <b>LRR A</b> ) <input type="checkbox"/> Frost-Heave Hummocks (D7)
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<p><b>Field Observations:</b></p> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<p><b>Wetland Hydrology Present?</b>    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></p>
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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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/09/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP15  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	Hydic Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 Plot located near southern edge of shallow depression.

### VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	Worksheet
<u>Tree Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Dominance Test worksheet:</b> 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)
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. _____		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. _____		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>0</u> = Total Cover					<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0.0</u> FACW species <u>0</u> x 2 = <u>0.0</u> FAC species <u>0</u> x 3 = <u>0.0</u> FACU species <u>0</u> x 4 = <u>0.0</u> UPL species <u>0</u> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
<u>Sapling/Shrub Stratum</u>	<u>(Plot size: 30 ft )</u>				
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. _____		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. _____		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. _____		<u>0</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>0</u> = Total Cover					
<u>Herb Stratum</u>	<u>(Plot size: 6 ft )</u>				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium perenne</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>0</u> = Total Cover					
<u>Woody Vine Stratum</u>	<u>(Plot size: 12 ft )</u>				
1. <u>NONE</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>0</u> = Total Cover					
% Bare Ground in Herb Stratum _____					
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP15

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR2/2	100	-	-	-	-	GrSiCL	
8-13	10YR2/2	95	10YR4/4	5	C	M	GrSiCL	
13-20	10YR2/2	90	10YR4/4	10	C	M	C	

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

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<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)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic
<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)	

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (2 or more required)</b>
Primary Indicators (minimum of one required; check all that apply)		
<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 checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" 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)	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)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	

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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/09/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP16  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Dominance Test worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		0	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
		0	= Total Cover		Column Totals: <u>0</u> (A) <u>0</u> (B)
		0	= Total Cover		Prevalence Index = B/A = <u>0.0</u>
<u>Herb Stratum</u>	<u>(Plot size: 6 ft )</u>				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Lolium perenne</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		0	= Total Cover		
<u>Woody Vine Stratum</u>	<u>(Plot size: 12 ft )</u>				<b>Hydrophytic Vegetation Present?</b>
1. <u>NONE</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture



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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/09/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP17  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	Hydic Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 Plot located on north side of shallow swale.

### VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Dominance Test worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		0	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
		0	= Total Cover		Column Totals: <u>0</u> (A) <u>0</u> (B)
		0	= Total Cover		Prevalence Index = B/A = <u>0.0</u>
<u>Herb Stratum</u>	<u>(Plot size: 6 ft )</u>				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Lolium perenne</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		0	= Total Cover		
<u>Woody Vine Stratum</u>	<u>(Plot size: 12 ft )</u>				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>NONE</u>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP17

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR2/2	100	-	-	-	-	SiCL	
6-10	10YR3/2	95	10YR4/4	5	C	M/PL	SiCL	2%or
10-15	10YR3/2	100	-	-	--	-	GrSiCL	
15-20	10YR3/1	100	-	-			C	

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

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<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)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic
<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)	

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (2 or more required)</b>
Primary Indicators (minimum of one required; check all that apply)		
<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 checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" 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)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

<b>Field Observations:</b>	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	

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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP18  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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 checked="" type="checkbox"/>	No <input type="checkbox"/>			

Remarks:  
 Plot designed to locate upland edge of southern swale.

### 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> )				<b>Dominance Test worksheet:</b> 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)
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <input type="checkbox"/> x 1 = <u>0.0</u> FACW species <input type="checkbox"/> x 2 = <u>0.0</u> FAC species <input type="checkbox"/> x 3 = <u>0.0</u> FACU species <input type="checkbox"/> x 4 = <u>0.0</u> UPL species <input type="checkbox"/> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium perenne</u>		60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		60	= Total Cover		
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP18

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR3/2	98	10YR4/4	2	C	PL	GSiCL	2%OR
8-18	10YR2/2	100	-	-	-	-	GrSiCL	

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

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

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

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

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 checked="" 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)                   | 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)                          | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                    |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> (LRR A)  | <input type="checkbox"/> Frost-Heave Hummocks (D7)                         |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks)                               |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |  |

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:

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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP19  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	Hydic Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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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> )				<b>Dominance Test worksheet:</b> 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)
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
<u>0</u> = Total Cover					<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <input type="checkbox"/> x 1 = <u>0.0</u> FACW species <input type="checkbox"/> x 2 = <u>0.0</u> FAC species <input type="checkbox"/> x 3 = <u>0.0</u> FACU species <input type="checkbox"/> x 4 = <u>0.0</u> UPL species <input type="checkbox"/> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
5. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
<u>0</u> = Total Cover					
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium perenne</u>		<u>60</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
<u>60</u> = Total Cover					
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
<u>0</u> = Total Cover					
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP19

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-7	10YR3/2	95	10YR4/4	5	C	PL	GSiCL	5%OR
7-12	10YR2/2	100	-	-	-	-	GrCL	
12-20	10YR3/1	90	10YR5/4	10	C	M	GrC	

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

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<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)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic
<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)	

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (2 or more required)</b>
Primary Indicators (minimum of one required; check all that apply)		
<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 checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" 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)	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)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	

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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP20  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Coburg silty clay loam NWI classification: upl

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"/>	Hydic Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:  
 Plot located centrally in field on north edge of shallow swale.

### VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b>	(Plot size: <u>30 ft</u> )				<b>Dominance Test worksheet:</b>
1. None		0	<input type="checkbox"/>	<input type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2.		0	<input type="checkbox"/>	<input type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3.		0	<input type="checkbox"/>	<input type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4.		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		<b>Prevalence Index worksheet:</b>
<b>Sapling/Shrub Stratum</b>	(Plot size: <u>30 ft</u> )				Total % Cover of: Multiply by:
1. None		0	<input type="checkbox"/>	<input type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
2.		0	<input type="checkbox"/>	<input type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
3.		0	<input type="checkbox"/>	<input type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
4.		0	<input type="checkbox"/>	<input type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
5.		0	<input type="checkbox"/>	<input type="checkbox"/>	UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
		0	= Total Cover		Column Totals: <u>0</u> (A) <u>0</u> (B)
					Prevalence Index = B/A = <u>0.0</u>
<b>Herb Stratum</b>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b>
1. Lolium perenne		60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2.			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6.			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7.			<input type="checkbox"/>	<input type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8.			<input type="checkbox"/>	<input type="checkbox"/>	
9.			<input type="checkbox"/>	<input type="checkbox"/>	
10.			<input type="checkbox"/>	<input type="checkbox"/>	
11.			<input type="checkbox"/>	<input type="checkbox"/>	
		60	= Total Cover		
<b>Woody Vine Stratum</b>	(Plot size: <u>12 ft</u> )				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. NONE			<input type="checkbox"/>	<input type="checkbox"/>	
2.			<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP20

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR3/2	-	-	-	-	-	GrSiCL	
12-18	10YR3/2	95	10YR4/4	5	C	M	VGSiCL	

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

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

<p><b>Restrictive Layer (if present):</b></p> Type: _____ Depth (inches): _____	<p><b>Hydric Soil Present?</b>    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></p>
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Remarks:

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<p>Water-Stained Leaves (B9) (<b>except MLRA 1, 2, 4A, and 4B</b>)</p> <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) ( <b>LRR A</b> ) <input type="checkbox"/> Other (Explain in Remarks)	<p>Secondary Indicators (2 or more required)</p> <input type="checkbox"/> Water-Stained Leaves (B9) ( <b>MLRA 1, 2, 4A, and 4B</b> ) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) ( <b>LRR A</b> ) <input type="checkbox"/> Frost-Heave Hummocks (D7)
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<p><b>Field Observations:</b></p> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<p><b>Wetland Hydrology Present?</b>    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></p>
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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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP21  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Courtney gravelly silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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"/>			

Remarks:  
 Plot located in shallow swale near center of field.

### 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> )				<b>Dominance Test worksheet:</b> 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)
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				<b>Prevalence Index worksheet:</b> Total % Cover of:      Multiply by: OBL species <input type="checkbox"/> x 1 = <u>0.0</u> FACW species <input type="checkbox"/> x 2 = <u>0.0</u> FAC species <input type="checkbox"/> x 3 = <u>0.0</u> FACU species <input type="checkbox"/> x 4 = <u>0.0</u> UPL species <input type="checkbox"/> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium perenne</u>		60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		60	= Total Cover		
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP21

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR3/2	95	10YR4/4	5	C	PL/M	GrSiCL	3%OR
8-16	10YR2/2	100	-	-	-	-	GrSiCL	
16-24	10YR3/2	85	10YR5/4	15	C	M	GrCL	

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

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

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

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

Secondary Indicators (2 or more required)

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Surface Water (A1)                        | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (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 checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2)                    | <input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input checked="" 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)                   | 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)                          | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                       |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> (LRR A)  | <input type="checkbox"/> Frost-Heave Hummocks (D7)                            |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks)                               |   |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |   |

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:



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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP22  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Courtney gravelly silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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"/>			

Remarks:  
 Plot located in shallow swale near center of field.

### 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> )				<b>Dominance Test worksheet:</b> 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)
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <input type="checkbox"/> x 1 = <u>0.0</u> FACW species <input type="checkbox"/> x 2 = <u>0.0</u> FAC species <input type="checkbox"/> x 3 = <u>0.0</u> FACU species <input type="checkbox"/> x 4 = <u>0.0</u> UPL species <input type="checkbox"/> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium perenne</u>		60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		60	= Total Cover		
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP22

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR3/2	-	-	-	-	-	GrSiCL	
4-11	10YR3/2	95	10YR4/4	5	C	M	GrC	
11-14	10YR3/1	95	10YR4/4	5	C	M	GrC	
14-20	10YR4/1	80	7.5YR5/6	20	C	M	GrC	

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

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

<p><b>Restrictive Layer (if present):</b></p> Type: _____ Depth (inches): _____	<p><b>Hydric Soil Present?</b>    Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></p>
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Remarks:

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<p>Water-Stained Leaves (B9) (<b>except MLRA 1, 2, 4A, and 4B</b>)</p> <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) ( <b>LRR A</b> ) <input type="checkbox"/> Other (Explain in Remarks)	<p>Secondary Indicators (2 or more required)</p> <p>Water-Stained Leaves (B9) (<b>MLRA 1, 2, 4A, and 4B</b>)</p> <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) ( <b>LRR A</b> ) <input type="checkbox"/> Frost-Heave Hummocks (D7)
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<p><b>Field Observations:</b></p> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<p><b>Wetland Hydrology Present?</b>    Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></p>
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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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP23  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Coburg silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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 checked="" type="checkbox"/>	No <input type="checkbox"/>			

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> )				<b>Dominance Test worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		0	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
		0	= Total Cover		Column Totals: <u>0</u> (A) <u>0</u> (B)
		0	= Total Cover		Prevalence Index = B/A = <u>0.0</u>
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Lolium perenne</u>		60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		60	= Total Cover		
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				<b>Hydrophytic Vegetation Present?</b>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	Yes <input checked="" type="checkbox"/>
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	No <input type="checkbox"/>
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP23

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR3/2	-	-	-	-	-	GrSiCL	
6-8	10YR3/2	95	10YR4/4	5	C	M/PL	GrSiCL	2%OR
8-12	10YR2/2	100	-	-	-	-	GrCL	
13-22	10YR3/1	85	10YR5/4	15	C	M	GrC	

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

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

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (2 or more required)</b>
Primary Indicators (minimum of one required; check all that apply)		
<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 checked="" 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)	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)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	

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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP24  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Coburg silty clay loam NWI classification: upl

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

### VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>30 ft</u> )					<b>Dominance Test worksheet:</b> 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)
1. None		0	<input type="checkbox"/>	<input type="checkbox"/>	
2.		0	<input type="checkbox"/>	<input type="checkbox"/>	
3.		0	<input type="checkbox"/>	<input type="checkbox"/>	
4.		0	<input type="checkbox"/>	<input type="checkbox"/>	
0 = Total Cover					<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <input type="checkbox"/> x 1 = <u>0.0</u> FACW species <input type="checkbox"/> x 2 = <u>0.0</u> FAC species <input type="checkbox"/> x 3 = <u>0.0</u> FACU species <input type="checkbox"/> x 4 = <u>0.0</u> UPL species <input type="checkbox"/> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
<b>Sapling/Shrub Stratum</b> (Plot size: <u>30 ft</u> )					
1. None		0	<input type="checkbox"/>	<input type="checkbox"/>	
2.		0	<input type="checkbox"/>	<input type="checkbox"/>	
3.		0	<input type="checkbox"/>	<input type="checkbox"/>	
0 = Total Cover					
<b>Herb Stratum</b> (Plot size: <u>6 ft</u> )					<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Lolium perenne		60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	
2.			<input type="checkbox"/>	<input type="checkbox"/>	
3.			<input type="checkbox"/>	<input type="checkbox"/>	
4.			<input type="checkbox"/>	<input type="checkbox"/>	
5.			<input type="checkbox"/>	<input type="checkbox"/>	
6.			<input type="checkbox"/>	<input type="checkbox"/>	
7.			<input type="checkbox"/>	<input type="checkbox"/>	
8.			<input type="checkbox"/>	<input type="checkbox"/>	
9.			<input type="checkbox"/>	<input type="checkbox"/>	
10.			<input type="checkbox"/>	<input type="checkbox"/>	
60 = Total Cover					
<b>Woody Vine Stratum</b> (Plot size: <u>12 ft</u> )					
1. NONE			<input type="checkbox"/>	<input type="checkbox"/>	
2.			<input type="checkbox"/>	<input type="checkbox"/>	
0 = Total Cover					
% Bare Ground in Herb Stratum _____					
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP24

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR2/2	98	10YR4/4	2	C	M	GrSiCL	
10-18	10YR2/2	100	-	-	-	-	GrCL	
18-22	10YR2/2	90	10YR5/4	10	C	M	GrCL	

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

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

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

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks: \_\_\_\_\_

**HYDROLOGY**

Wetland Hydrology Indicators:			Secondary Indicators (2 or more required)		
Primary Indicators (minimum of one required; check all that apply)			Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> 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)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)			
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)				
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)					

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" 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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP25  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Coburg silty clay loam NWI classification: upl

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

### VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Dominance Test worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		0	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
		0	= Total Cover		Column Totals: <u>0</u> (A) <u>0</u> (B)
					Prevalence Index = B/A = <u>0.0</u>
<u>Herb Stratum</u>	<u>(Plot size: 6 ft )</u>				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Lolium perenne</u>		60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		60	= Total Cover		
<u>Woody Vine Stratum</u>	<u>(Plot size: 12 ft )</u>				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP25

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR3/2	95	10YR4/4	5	C	M	GrSiCL	2%OR
8-14	10YR2/2	95	10YR3/4	5	C	M	GrSiCL	
14-22	10YR4/1	80	10YR5/4	20	C	M	GrCL	

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

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

<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)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic
<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  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (2 or more required)</b>
<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 checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" 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)	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)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	

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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP26  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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"/>			

Remarks:  
 Plot located on north end of field on southern wetland boundary.

### 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> )				<b>Dominance Test worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		0	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
		0	= Total Cover		Column Totals: <u>0</u> (A) <u>0</u> (B)
		0	= Total Cover		Prevalence Index = B/A = <u>0.0</u>
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Lolium perenne</u>		60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		60	= Total Cover		
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				<b>Hydrophytic Vegetation Present?</b>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP26

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-7	10YR3/2	100	-	-	-	-	SiCL	
7-10	10YR3/2	95	10YR4/4	5	C	M/PL	SiCL	2% OR
10-19	10YR3/2	95	10YR4/4	5	C	M	CL	
20-25	10YR3/1	75	10YR4/4	25	C	M	C	

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

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

<p><b>Restrictive Layer (if present):</b>          Type: <u>CL</u>          Depth (inches): <u>begins 10"bg</u></p>	<p><b>Hydric Soil Present?</b>    Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></p>
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Remarks:

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b>          Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<p>Water-Stained Leaves (B9) (<b>except MLRA 1, 2, 4A, and 4B</b>)</p> <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) ( <b>LRR A</b> ) <input type="checkbox"/> Other (Explain in Remarks)	<p>Secondary Indicators (2 or more required)</p> <input type="checkbox"/> Water-Stained Leaves (B9) ( <b>MLRA 1, 2, 4A, and 4B</b> ) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input checked="" type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) ( <b>LRR A</b> ) <input type="checkbox"/> Frost-Heave Hummocks (D7)
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<p><b>Field Observations:</b>          Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>    Depth (inches): _____          Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>    Depth (inches): _____          Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>    Depth (inches): _____</p>	<p><b>Wetland Hydrology Present?</b>    Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></p>
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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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP27  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u>	(Plot size: <u>30 ft</u> )				<b>Dominance Test worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		0	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
		0	= Total Cover		Column Totals: <u>0</u> (A) <u>0</u> (B)
		0	= Total Cover		Prevalence Index = B/A = <u>0.0</u>
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Lolium perenne</u>		60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		60	= Total Cover		
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				<b>Hydrophytic Vegetation Present?</b>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	Yes <input checked="" type="checkbox"/>
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	No <input type="checkbox"/>
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP27

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR3/2	100	--	-	-	-	SiCL	
10-24	10YR2/2	100	--	-	-	-	SiCL/CL	

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

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

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

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

<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

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

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (2 or more required)</b>
<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)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____

**Wetland Hydrology Present?** Yes  No

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

Remarks:



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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP28  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	Hydic Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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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> )				<b>Dominance Test worksheet:</b> 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)
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
		<u>0</u>	= Total Cover		
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <input type="checkbox"/> x 1 = <u>0.0</u> FACW species <input type="checkbox"/> x 2 = <u>0.0</u> FAC species <input type="checkbox"/> x 3 = <u>0.0</u> FACU species <input type="checkbox"/> x 4 = <u>0.0</u> UPL species <input type="checkbox"/> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
5. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
		<u>0</u>	= Total Cover		
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium perenne</u>		<u>60</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		<u>60</u>	= Total Cover		
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		<u>0</u>	= Total Cover		

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP28

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-5	10YR3/2	100	-	-	-	-	SiCL	-
5-10	10YR3/2	95	10YR4/4	5	C	M/PL	SiCL	2%OR
10-22	10YR2/2	90	10YR5/3	10	C	M	CL	

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

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

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

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

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

**Restrictive Layer (if present):**

Type: CL  
 Depth (inches): begins 10"bg

Hydric Soil Present? Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

Secondary Indicators (2 or more required)

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Surface Water (A1)                        | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (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 checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2)                    | <input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input checked="" type="checkbox"/> Geomorphic Position (D2)                  |
| <input type="checkbox"/> Drift Deposits (B3)                       | <input type="checkbox"/> Presence of Reduced Iron (C4)                            | <input checked="" 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)                          | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                       |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> (LRR A)  | <input type="checkbox"/> Frost-Heave Hummocks (D7)                            |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks)                               |   |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |   |

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:

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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP29  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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 checked="" type="checkbox"/>	No <input type="checkbox"/>			

Remarks:  
 Plot located on southern boundary of north depression in upland.

### 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> )				<b>Dominance Test worksheet:</b> 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)
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <input type="checkbox"/> x 1 = <u>0.0</u> FACW species <input type="checkbox"/> x 2 = <u>0.0</u> FAC species <input type="checkbox"/> x 3 = <u>0.0</u> FACU species <input type="checkbox"/> x 4 = <u>0.0</u> UPL species <input type="checkbox"/> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium perenne</u>		60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		60	= Total Cover		
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP29

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-9	10YR3/2	100	-	-	-	-	SiCL	
9-12.5	10YR2/2	95	10YR4/4	5	C	M/PL	SiCL	
12.5-20	10YR2/2	90	10YR5/3	10	C	M	CL	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	<sup>3</sup> 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)	

<b>Restrictive Layer (if present):</b> Type: <u>CL</u> Depth (inches): <u>begins 12.5"bg</u>	Hydric Soil Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:

**HYDROLOGY**

Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)
Primary Indicators (minimum of one required; check all that apply)		
<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)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present?    Yes <input type="checkbox"/> No <input checked="" 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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP30  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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:  
 Plot located in upland on south end of broad depression that extends to north end of study area.

### 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> )				<b>Dominance Test worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		0	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
		0	= Total Cover		Column Totals: <u>0</u> (A) <u>0</u> (B)
					Prevalence Index = B/A = <u>0.0</u>
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Lolium perenne</u>		60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		60	= Total Cover		
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				<b>Hydrophytic Vegetation Present?</b>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	Yes <input checked="" type="checkbox"/>
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	No <input type="checkbox"/>
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP30

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR3/2	100	-	-	-	-	SiCL	
4-9	10YR3/2	98	10YR4/4	2	C	PL	SiCL	1%OR
9-12	10YR2/2	100	-	-	-	-	SiCL	
12-22	10YR3/2	80	10YR5/4	20	C	M	CL	

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

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

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

<b>Restrictive Layer (if present):</b> Type: <u>CL</u> Depth (inches): <u>begins 12"bg</u>	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one required; check all that apply)		<b>Secondary Indicators (2 or more required)</b>
<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)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" 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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP31  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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"/>			

Remarks:  
 Plot located in wetland of broad shallow depression that covers north end of study area.

### 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> )				<b>Dominance Test worksheet:</b> 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)
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <input type="checkbox"/> x 1 = <u>0.0</u> FACW species <input type="checkbox"/> x 2 = <u>0.0</u> FAC species <input type="checkbox"/> x 3 = <u>0.0</u> FACU species <input type="checkbox"/> x 4 = <u>0.0</u> UPL species <input type="checkbox"/> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium perenne</u>		60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		60	= Total Cover		
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP31

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-5	10YR3/2	98	10YR4/4	2	C	M	SiCL	
5-10	10YR3/2	95	10YR4/4	5	C	M/PL	SiCL	2%OR
10-14	10YR3/2	90	10YR5/3	10	C	M	SiCL	
14-22	10YR3/2	90	10YR5/3	10	C	M	CL	

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

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

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

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

Secondary Indicators (2 or more required)

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Surface Water (A1)                        | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (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 checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2)                    | <input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input checked="" 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)                          | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                       |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> (LRR A)  | <input type="checkbox"/> Frost-Heave Hummocks (D7)                            |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks)                               |   |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |   |

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:



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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP32  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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:  
 Plot designed to located east edge of broad depression on north end of study area.

**VEGETATION – Use scientific names of plants.**

Tree Stratum	Plot size:	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> 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)
1. None	<u>30 ft</u>	0	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
Sapling/Shrub Stratum	Plot size:	Absolute % Cover	Dominant Species?	Indicator Status	<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <input type="checkbox"/> x 1 = <u>0.0</u> FACW species <input type="checkbox"/> x 2 = <u>0.0</u> FAC species <input type="checkbox"/> x 3 = <u>0.0</u> FACU species <input type="checkbox"/> x 4 = <u>0.0</u> UPL species <input type="checkbox"/> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
1. None	<u>30 ft</u>	0	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
Herb Stratum	Plot size:	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium perenne</u>	<u>6 ft</u>	60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		60	= Total Cover		
Woody Vine Stratum	Plot size:	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. NONE	<u>12 ft</u>		<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP32

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR3/2	100	--	-	-	-	SiCL	
6-8	10YR3/2	99	10YR4/4	1	CL	PL	SiCL	1%OR
8-17	10YR3/2	100	-	-	-	-	SiCL	
17-24	10YR2/2	100	-	-	-	-	CL	

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

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

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (2 or more required)</b>
Primary Indicators (minimum of one required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) <b>(except MLRA 1, 2, 4A, and 4B)</b>	<input type="checkbox"/> Water-Stained Leaves (B9) <b>(MLRA 1, 2, 4A, and 4B)</b>
<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)	<input type="checkbox"/> Raised Ant Mounds (D6) <b>(LRR A)</b>
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> <b>(LRR A)</b>	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____		
Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____		
Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____		

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

Remarks:  
Less than 2%OR

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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP33  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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"/>			

Remarks:  
 Plot located inside broad low-lying area on north end of study area

**VEGETATION – Use scientific names of plants.**

Tree Stratum	Plot size:	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> 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)
1. None	<u>30 ft</u>	0	<input type="checkbox"/>	<input type="checkbox"/>	
2.		0	<input type="checkbox"/>	<input type="checkbox"/>	
3.		0	<input type="checkbox"/>	<input type="checkbox"/>	
4.		0	<input type="checkbox"/>	<input type="checkbox"/>	
				0 = Total Cover	
<b>Sapling/Shrub Stratum</b> (Plot size: <u>30 ft</u> )					<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. None		0	<input type="checkbox"/>	<input type="checkbox"/>	
2.		0	<input type="checkbox"/>	<input type="checkbox"/>	
3.		0	<input type="checkbox"/>	<input type="checkbox"/>	
4.		0	<input type="checkbox"/>	<input type="checkbox"/>	
5.		0	<input type="checkbox"/>	<input type="checkbox"/>	
				0 = Total Cover	
<b>Herb Stratum</b> (Plot size: <u>6 ft</u> )					
1. Lolium perenne		60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	
2.			<input type="checkbox"/>	<input type="checkbox"/>	
3.			<input type="checkbox"/>	<input type="checkbox"/>	
4.			<input type="checkbox"/>	<input type="checkbox"/>	
5.			<input type="checkbox"/>	<input type="checkbox"/>	
6.			<input type="checkbox"/>	<input type="checkbox"/>	
7.			<input type="checkbox"/>	<input type="checkbox"/>	
8.			<input type="checkbox"/>	<input type="checkbox"/>	
9.			<input type="checkbox"/>	<input type="checkbox"/>	
10.			<input type="checkbox"/>	<input type="checkbox"/>	
11.			<input type="checkbox"/>	<input type="checkbox"/>	
				60 = Total Cover	
<b>Woody Vine Stratum</b> (Plot size: <u>12 ft</u> )					
1. NONE			<input type="checkbox"/>	<input type="checkbox"/>	
2.			<input type="checkbox"/>	<input type="checkbox"/>	
				0 = Total Cover	
% Bare Ground in Herb Stratum _____					
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP33

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3	10YR3/2	-	-	-	-	M	SiCL	
3-10	10YR3/2	95	10YR4/4	5	C	M/PL	SiCL	2%OR
10-14	10YR2/2	95	10YR4/4	5	C	M	SiCL	
14-22	10YR3/2	80	10YR5/4	20	C	M	SiCL	

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

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

<p><b>Restrictive Layer (if present):</b></p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p><b>Hydric Soil Present?</b>    Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></p>
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Remarks:

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p>	<p>Water-Stained Leaves (B9) (<b>except MLRA 1, 2, 4A, and 4B</b>)</p> <p><input type="checkbox"/> Salt Crust (B11)</p> <p><input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p>Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input type="checkbox"/> (LRR A)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p>Secondary Indicators (2 or more required)</p> <p>Water-Stained Leaves (B9) (<b>MLRA 1, 2, 4A, and 4B</b>)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input checked="" type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p> <p><input type="checkbox"/> Raised Ant Mounds (D6) (<b>LRR A</b>)</p> <p><input type="checkbox"/> Frost-Heave Hummocks (D7)</p>
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<p><b>Field Observations:</b></p> <p>Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>    Depth (inches): _____</p> <p>Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>    Depth (inches): _____</p> <p>Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>    Depth (inches): _____</p>	<p><b>Wetland Hydrology Present?</b>    Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></p>
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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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP34  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:  
 Plot located on east edge of low-lying area on east side of study area at north end.

### 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> )				<b>Dominance Test worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		0	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
					Column Totals: <u>0</u> (A) <u>0</u> (B)
					Prevalence Index = B/A = <u>0.0</u>
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Lolium perenne</u>		60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		60	= Total Cover		
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture



**SOIL**

Sampling Point: SP34

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-13	10YR2/2	100	-	-	-	-	GrSiCL	
13-16	10YR3/2	95	10YR5/4	5	C	M	SiCL	
16-20	10YR4/2	80	10YR5/4	20	C	M	GrSiCL	

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

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

<p><b>Restrictive Layer (if present):</b></p> Type: _____ Depth (inches): _____	<p><b>Hydric Soil Present?</b>    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></p>
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Remarks:

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<p>Water-Stained Leaves (B9) (<b>except MLRA 1, 2, 4A, and 4B</b>)</p> <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) ( <b>LRR A</b> ) <input type="checkbox"/> Other (Explain in Remarks)	<p>Secondary Indicators (2 or more required)</p> <input type="checkbox"/> Water-Stained Leaves (B9) ( <b>MLRA 1, 2, 4A, and 4B</b> ) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) ( <b>LRR A</b> ) <input type="checkbox"/> Frost-Heave Hummocks (D7)
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<p><b>Field Observations:</b></p> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<p><b>Wetland Hydrology Present?</b>    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></p>
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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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP35  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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"/>			

Remarks:  
 Plot lies within depression at north end of study area.

### VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Dominance Test worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		0	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
		0	= Total Cover		Column Totals: <u>0</u> (A) <u>0</u> (B)
		0	= Total Cover		Prevalence Index = B/A = <u>0.0</u>
<u>Herb Stratum</u>	<u>(Plot size: 6 ft )</u>				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Lolium perenne</u>		60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		60	= Total Cover		
<u>Woody Vine Stratum</u>	<u>(Plot size: 12 ft )</u>				<b>Hydrophytic Vegetation Present?</b>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP35

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR2/2	-	-	-	-	-	GrSiCL	
6-10	10YR2/2	95	10YR4/4	5	C	M/PL	GrSiCL	2%OR
10-22	10YR4/2	80	7.5YR5/6	20	C	M	GrCL	

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

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

- 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 Soils<sup>3</sup>:**

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

- 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  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

Wetland Hydrology Present? Yes  No

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

Remarks:

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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP36  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 Plot on east edge of northern depression.

### VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Dominance Test worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		0	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
		0	= Total Cover		Column Totals: <u>0</u> (A) <u>0</u> (B)
		0	= Total Cover		Prevalence Index = B/A = <u>0.0</u>
<u>Herb Stratum</u>	<u>(Plot size: 6 ft )</u>				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Lolium perenne</u>		60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		60	= Total Cover		
<u>Woody Vine Stratum</u>	<u>(Plot size: 12 ft )</u>				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP36

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR2/2	-	-	-	-	-	GrSiCL	
12-24	10YR4/2	85	10YR5/4	15	C	M	GrCL	

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

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

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

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

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 checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2)                    | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)            | <input checked="" 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)                          | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                       |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> (LRR A)  | <input type="checkbox"/> Frost-Heave Hummocks (D7)                            |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks)                               |   |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |   |

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:



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

Project/Site: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP37  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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

## VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	Worksheet
<u>Tree Stratum</u>	(Plot size: <u>30 ft</u> )				<b>Dominance Test worksheet:</b> 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)
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
<u>0</u> = Total Cover					<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <input type="checkbox"/> x 1 = <u>0.0</u> FACW species <input type="checkbox"/> x 2 = <u>0.0</u> FAC species <input type="checkbox"/> x 3 = <u>0.0</u> FACU species <input type="checkbox"/> x 4 = <u>0.0</u> UPL species <input type="checkbox"/> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
5. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
<u>0</u> = Total Cover					
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium perenne</u>		<u>60</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
<u>60</u> = Total Cover					
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
<u>0</u> = Total Cover					
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP37

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-9	10YR3/2	100	-	-	-	-	GrSiCL	
9-16	10YR2/2	100	-	-	-	-	GrSiCL	
16-20	10YR3/2	80	10YR4/4	20	C	M	GrC	

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

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

<p><b>Restrictive Layer (if present):</b></p> Type: _____ Depth (inches): _____	<p><b>Hydric Soil Present?</b>    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></p>
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Remarks:

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<p>Water-Stained Leaves (B9) (<b>except MLRA 1, 2, 4A, and 4B</b>)</p> <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) ( <b>LRR A</b> ) <input type="checkbox"/> Other (Explain in Remarks)	<p>Secondary Indicators (2 or more required)</p> <input type="checkbox"/> Water-Stained Leaves (B9) ( <b>MLRA 1, 2, 4A, and 4B</b> ) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) ( <b>LRR A</b> ) <input type="checkbox"/> Frost-Heave Hummocks (D7)
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<p><b>Field Observations:</b></p> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<p><b>Wetland Hydrology Present?</b>    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></p>
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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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP38  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Salem gravelly silt loam NWI classification: upl

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"/>	Hydic Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:  
 Plot near north end of wetland defining east edge of wetland

### VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Dominance Test worksheet:</b>
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	
		<u>0</u>	= Total Cover		
<u>Sapling/Shrub Stratum</u>	<u>(Plot size: 30 ft )</u>				<b>Prevalence Index worksheet:</b>
1. <u>None</u>		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	Total % Cover of: Multiply by:
2. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	OBL species <input type="checkbox"/> x 1 = <u>0.0</u>
3. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	FACW species <input type="checkbox"/> x 2 = <u>0.0</u>
4. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	FAC species <input type="checkbox"/> x 3 = <u>0.0</u>
5. _____		<u>0</u>	<input type="checkbox"/>	<input type="checkbox"/>	FACU species <input type="checkbox"/> x 4 = <u>0.0</u>
		<u>0</u>	= Total Cover		UPL species <input type="checkbox"/> x 5 = <u>0.0</u>
		<u>0</u>	= Total Cover		Column Totals: <u>0</u> (A) <u>0</u> (B)
		<u>0</u>	= Total Cover		Prevalence Index = B/A = <u>0.0</u>
<u>Herb Stratum</u>	<u>(Plot size: 6 ft )</u>				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Lolium perenne</u>		<u>60</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		<u>60</u>	= Total Cover		
<u>Woody Vine Stratum</u>	<u>(Plot size: 12 ft )</u>				<b>Hydrophytic Vegetation Present?</b>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP38

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR2/2	-	-	-	-	-	GrSiCL	
10-17	10YR2/2	95	10YR4/4	5	C	M	GrSiCL	
17-20	10YR4/2	80	10YR5/6	15	C	M	GrSiCL	
17-20	-	-	10YR2/2	5	C	M	GrSiCL	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.						<sup>2</sup> Location: PL=Pore Lining, M=Matrix.		

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

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks: \_\_\_\_\_

**HYDROLOGY**

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

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?     Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" 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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP39  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conser silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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"/>			

Remarks:  
 Plot defines upland boundary at northeast corner of northern wetland.

## 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> )				<b>Dominance Test worksheet:</b> 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)
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <input type="checkbox"/> x 1 = <u>0.0</u> FACW species <input type="checkbox"/> x 2 = <u>0.0</u> FAC species <input type="checkbox"/> x 3 = <u>0.0</u> FACU species <input type="checkbox"/> x 4 = <u>0.0</u> UPL species <input type="checkbox"/> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium perenne</u>		60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
3. _____			<input type="checkbox"/>	<input type="checkbox"/>	
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		60	= Total Cover		
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
		0	= Total Cover		
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture



**SOIL**

Sampling Point: SP39

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR2/2	100	-	-	-	-	SiCL	
8-12	10YR2/2	98	10YR4/4	2	C	M	SiCL	
12-24	10YR4/2	80	10YR5/4	20	C	M	GrCL	

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

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p> <p><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic</p>
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<p><b>Restrictive Layer (if present):</b></p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p><b>Hydric Soil Present?</b>    Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></p>
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Remarks:

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</p> <p><input type="checkbox"/> Salt Crust (B11)</p> <p><input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input type="checkbox"/> (LRR A)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p>Secondary Indicators (2 or more required)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input checked="" type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p> <p><input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)</p> <p><input type="checkbox"/> Frost-Heave Hummocks (D7)</p>
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<p><b>Field Observations:</b></p> <p>Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>    Depth (inches): _____</p> <p>Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>    Depth (inches): _____</p> <p>Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>    Depth (inches): _____</p>	<p><b>Wetland Hydrology Present?</b>    Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></p>
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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: Burkhart City/County: Lebanon/Linn Sampling Date: 8/16/17  
 Applicant/Owner: Norman Steckley State: OR Sampling Point: SP40  
 Investigator(s): Allen Martin Section, Township, Range: Section 10, T12S, R02W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): A Lat: 44.548583 Long: -122.926069 Datum: D\_North\_American\_1983\_HARN (SP, Int ft)  
 Soil Map Unit Name: Conburg silty clay loam NWI classification: upl

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"/>	<b>Is the Sampled Area within a Wetland?</b>	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"/>			

Remarks:  
 Plot located in ditch on west side of field. Ditch is not a permanent feature but is plowed over annually.  
 Feature does not have well defined bed and bank or evidence of high water mark.

## 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> )				<b>Dominance Test worksheet:</b> 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)
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
0 = Total Cover					<b>Prevalence Index worksheet:</b> Total % Cover of:      Multiply by: OBL species <input type="checkbox"/> x 1 = <u>0.0</u> FACW species <input type="checkbox"/> x 2 = <u>0.0</u> FAC species <input type="checkbox"/> x 3 = <u>0.0</u> FACU species <input type="checkbox"/> x 4 = <u>0.0</u> UPL species <input type="checkbox"/> x 5 = <u>0.0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>0.0</u>
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>30 ft</u> )				
1. <u>None</u>		0	<input type="checkbox"/>	<input type="checkbox"/>	
2. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
3. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
4. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
5. _____		0	<input type="checkbox"/>	<input type="checkbox"/>	
0 = Total Cover					
<u>Herb Stratum</u>	(Plot size: <u>6 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium perenne</u>		60	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	
2. <u>Phalaris arundinaceus</u>		20	<input checked="" type="checkbox"/>	<input type="checkbox"/> FACW	
3. <u>Rubus armeniacus</u>		20	<input checked="" type="checkbox"/>	<input type="checkbox"/> FAC	
4. _____			<input type="checkbox"/>	<input type="checkbox"/>	
5. _____			<input type="checkbox"/>	<input type="checkbox"/>	
6. _____			<input type="checkbox"/>	<input type="checkbox"/>	
7. _____			<input type="checkbox"/>	<input type="checkbox"/>	
8. _____			<input type="checkbox"/>	<input type="checkbox"/>	
9. _____			<input type="checkbox"/>	<input type="checkbox"/>	
10. _____			<input type="checkbox"/>	<input type="checkbox"/>	
11. _____			<input type="checkbox"/>	<input type="checkbox"/>	
100 = Total Cover					
<u>Woody Vine Stratum</u>	(Plot size: <u>12 ft</u> )				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>NONE</u>			<input type="checkbox"/>	<input type="checkbox"/>	
2. _____			<input type="checkbox"/>	<input type="checkbox"/>	
0 = Total Cover					
% Bare Ground in Herb Stratum _____					

Remarks:  
 Vegetation is problematic. Agricultural site consisting of 50-80% Lolium perenne and managed for monoculture

**SOIL**

Sampling Point: SP40

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR3/2	98	10YR 4/4	2	C	PL	SiCL	2% OR
8-24	10YR2/2	95	10YR 4/4	5	C	M	SiCL/CL	

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

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

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

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

Secondary Indicators (2 or more required)

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1)                        | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (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 checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input checked="" 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)                   | 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)                          | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                    |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> (LRR A)  | <input type="checkbox"/> Frost-Heave Hummocks (D7)                         |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks)                               |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |  |

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:





Photo 1: View looking west of south end of field (8/09/17).



Photo 2: East side of field bordering N. 12<sup>th</sup> Street (8/09/17).





Photo 3: South end of field looking west taken from southeast corner. Quad is in southern wetland swale (8/09/17).



Photo 4: Looking southwest across southern swale in Wetland B. Wetland is on right side of backhoe pit (8/09/17).





Photo 5: View looking to the northwest with backhoe pits in distance defining northern swale in Wetland B (8/09/17).



Photo 6: Looking west across southern field at riparian forested area bordering Burkhart Creek (8/09/17).





Photo 7: View from southwest corner of site looking northeast with Wetland B in foreground (8/09/17).



Photo 8: Looking south at section of Burkhardt Creek (8/09/17).





Photo 9: East side of site with Laticrete International facility on the right (8/11/17).



Photo 10: Looking south along eastern edge of riparian forested area bordering Burkhart Creek (8/11/17).





Photo 11: View of west side of field looking north from the riparian area (8/11/17).



Photo 12: View looking north at north end of field. Red line defines Wetland A (8/11/17).





Photo 13: Looking north across Wetland A (8/11/17).



Photo 14: View looking to the southwest with Wetland A in foreground and riparian forest in distance (8/11/17).





Photo 15: Looking south across Wetland A with west edge of field defined by hedge row (8/11/17).



Photo 16: View of north end of Wetland A with railroad tracks defining property boundary (8/11/17).



## APPENDIX E: Literature Citations

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Schoeneberger, P.J., D.A. Wysocki, E.C. Benham, and Soil Survey Staff. 2012. Field book for describing and sampling soils, Version 3.0. Natural Resources Conservation Service, National Soil Survey Center, Lincoln, NE.

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