BURKHART SITE WETLAND DELINEATION REPORT

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

Allen Martin, RG Geo Resources LLC PO Box 71852 Springfield, Oregon 97475

Office: (541) 946-1013

Email: georesources@comcast.net

Table of Contents

A)	LANDSCAPE SETTING AND LAND USE	1
	SITE DESCRIPTION	1
	VEGETATION	1
	SOIL HYDROLOGY	1 2
B)	SITE ALTERATIONS	2
C)	PRECIPITATION DATA AND ANALYSIS	2
D)	METHODS	3
E)	DESCRIPTION OF ALL WETLANDS AND OTHER NON-WETLAND WAT	ERS4
F)	DEVIATION FROM LWI OR NWI	5
G)	ADDITIONAL INFORMATION	5
H)	RESULTS AND CONCLUSIONS	6
I)	DISCLAIMER	6
	Tables	
	e 1: Tax Lot Information	1
	2: Rainfall Data for Field Visits	2
	3: Precipitation Summary based on Corvallis Hyslop Weather Station data 4: Summary of Wetland Areas	3 5
	Appendix	
Apper	ndix A: Maps	
•	Figure 1: Location Map	
•	Figure 2: Tax Lot Map	
•	Figure 3: NWI Map	
•	Figure 4: Linn County Soil Survey Map	
•	Figure 5A: 1998 Aerial	
•	Figure 5B: 2000 Aerial	
•	Figure 5C: 2005 Aerial Figure 5D: 2012 Aerial	
•	Figure 5E: 2017 Aerial	
•	Figure 5F: Shaded Relief	
•	Figure 6A: Wetland Map	
•	Figure 6B: Photo Location	
Appei	ndix B: Data Forms	
	ndix C: Ground Level Photographs	
Apper	ndix D: Literature Citations	

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. 12th 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.12th 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
		Mildred	
12S02W10B 00300	40.88	Steckley Marital	Farm use – address not assigned
		Trust	

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. 12th 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 lessor 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.

	207			WETS Avg PPT for	ormal 3 months preceding site visit based			
Date of Site Visit	PPT during site visit	PPT two weeks preceding	PPT since October (thru preceding month)	PPT for water year thru preceding month WE	water year based on WETS Avg.	Preceding month	2 nd preceding month	3 rd preceding month
8/09/17	0	0	61.28	41.46	148	o	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*	Rainfall relative to	30% Chance rai	30% WETS range	
Monun		average rainfall	WETS* average	Less than	More than	comparison to recorded rainfall
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
TOTAL	61.28	41.46	148	27.31	49.65	Above

*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)
TOTAL: 15.19 acres wetland		0.35 acres Waters	

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.

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. 12th 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.

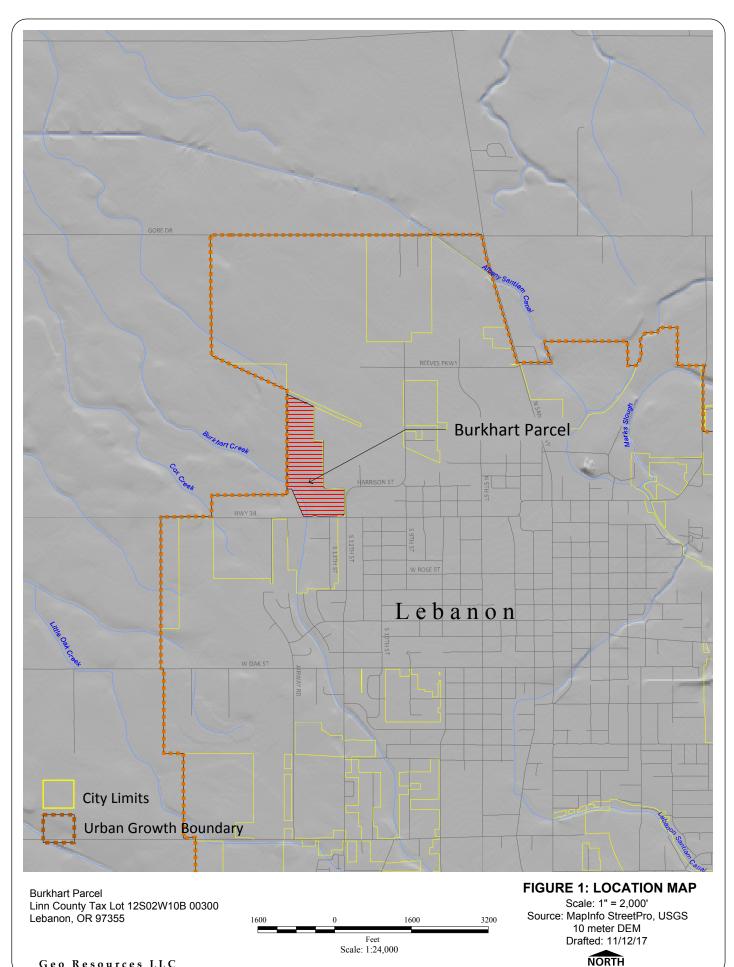
Allen Martin, RG

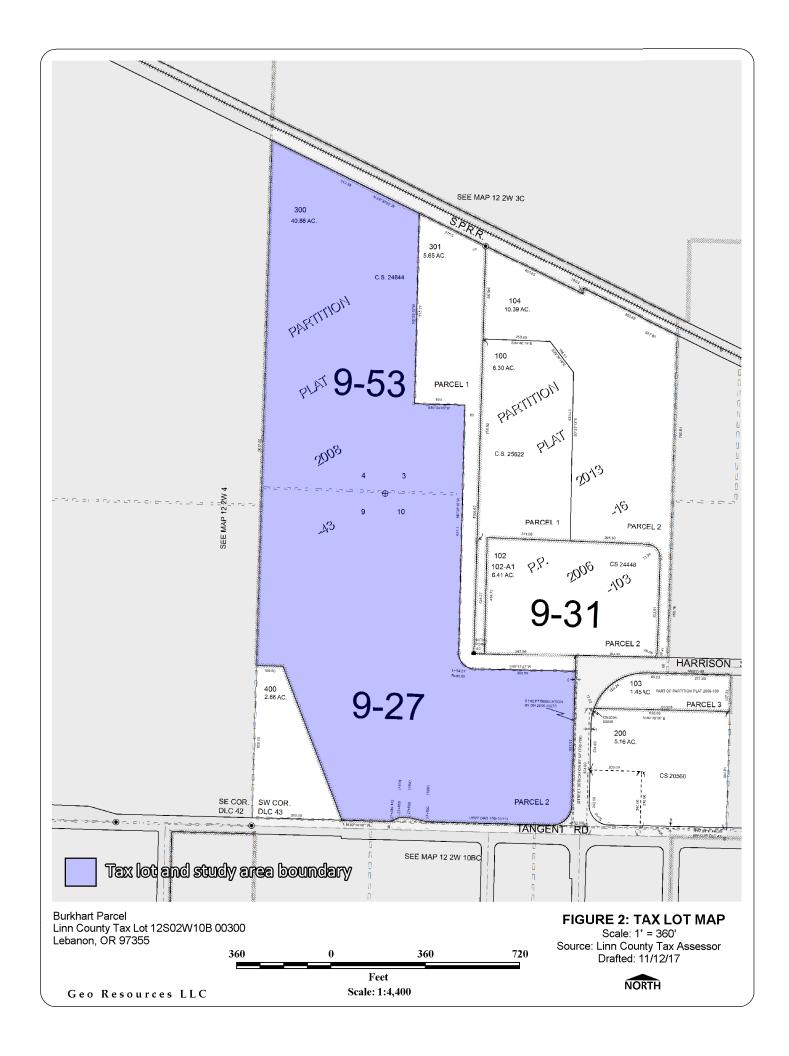
Geo Resources (541) 946-1013

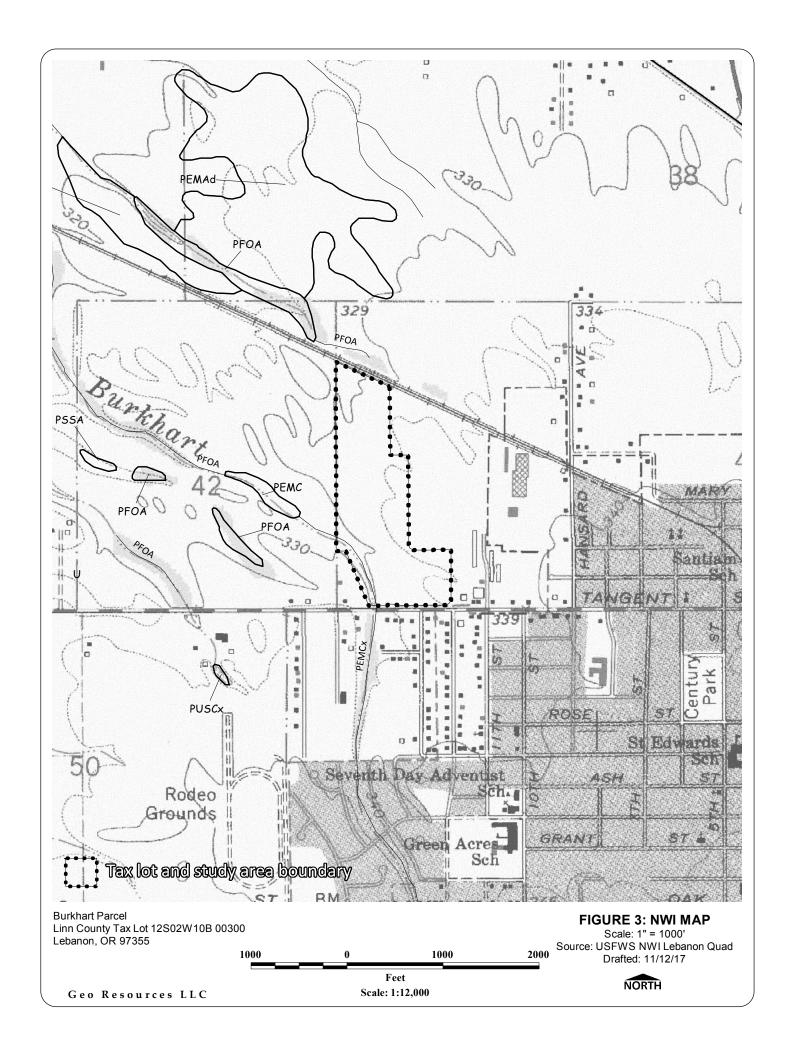
georesources@comcast.net

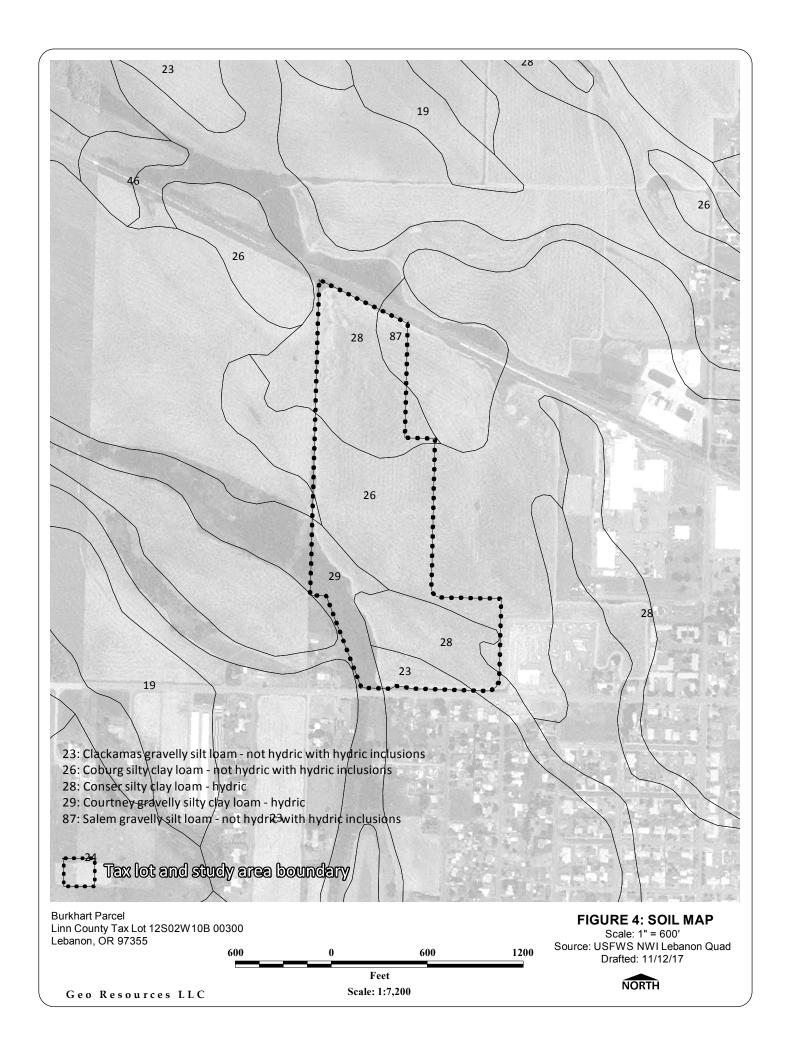
OREGON
ALLENE SI MONTO
GEOLOGIS

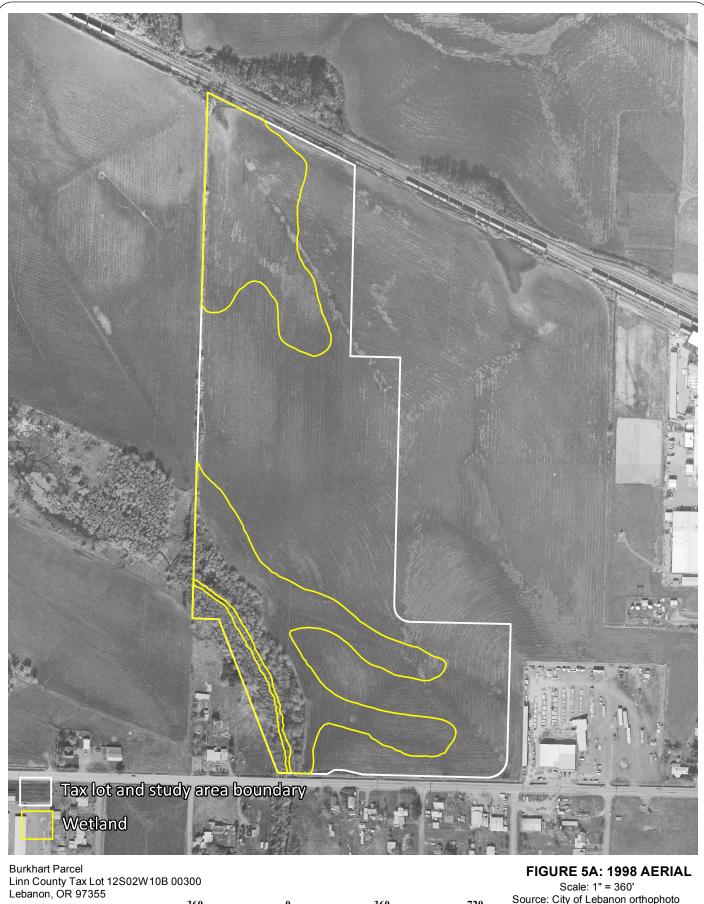
EXPINES 12/3, 18











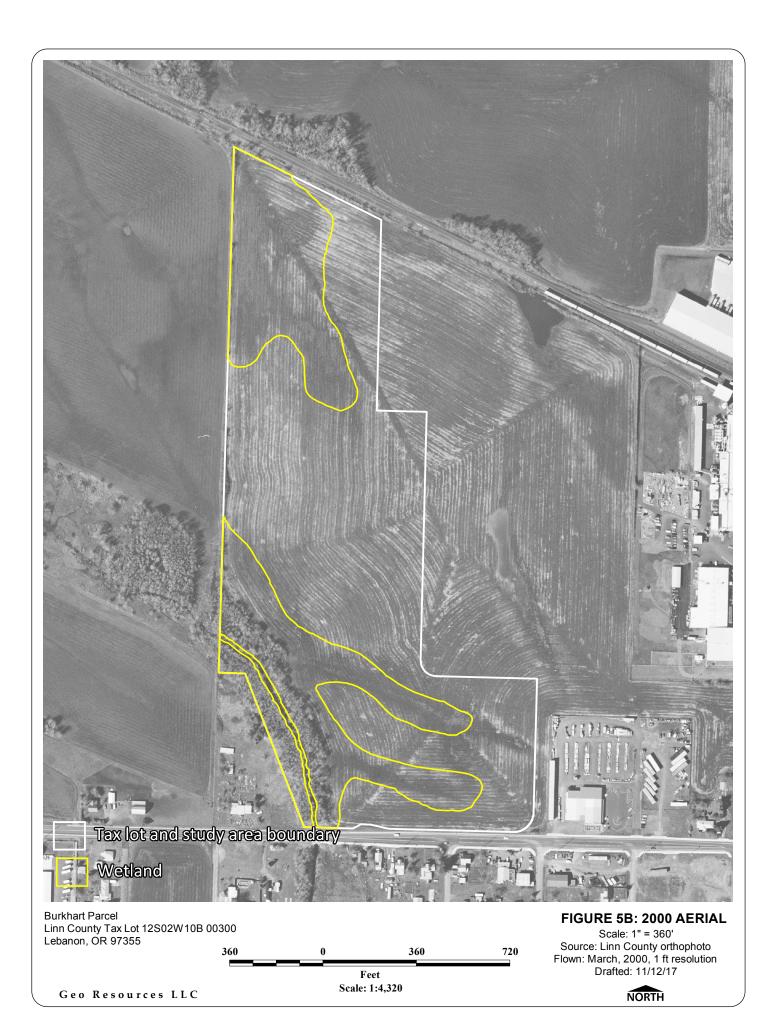
360

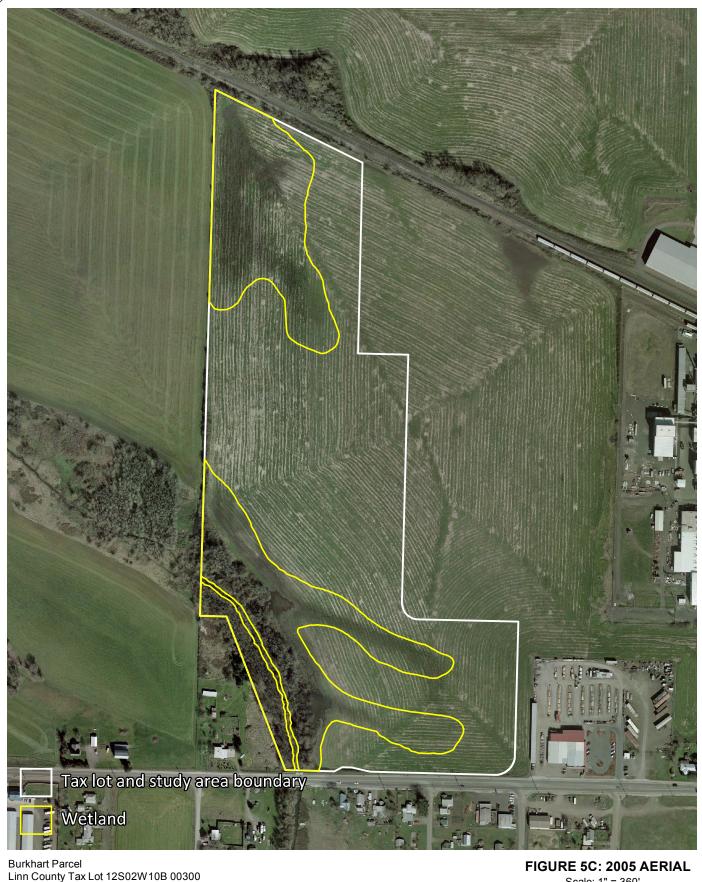
Geo Resources LLC

720 Feet Scale: 1:4,320

Scale: 1" = 360' Source: City of Lebanon orthophoto Flown: March 1998, 1 ft resolution Drafted: 11/12/17







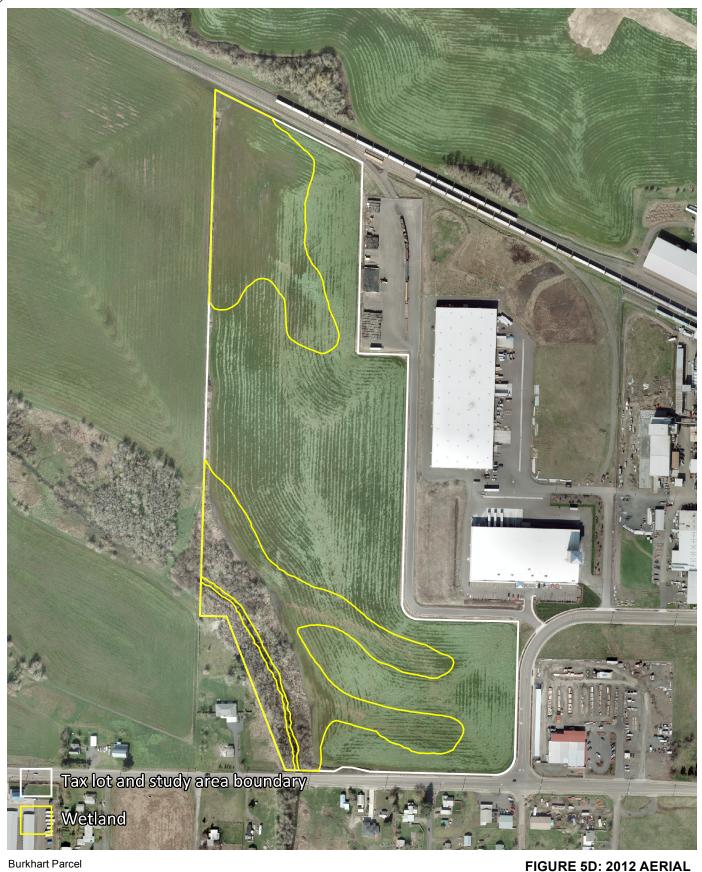
Burkhart Parcel Linn County Tax Lot 12S02W10B 00300 Lebanon, OR 97355 360 360

Geo Resources LLC

720 Feet Scale: 1:4,320

Scale: 1" = 360' Source: City of Lebanon orthophoto Flown: March 8, 2005, 0.5 ft resolution Drafted: 11/12/17



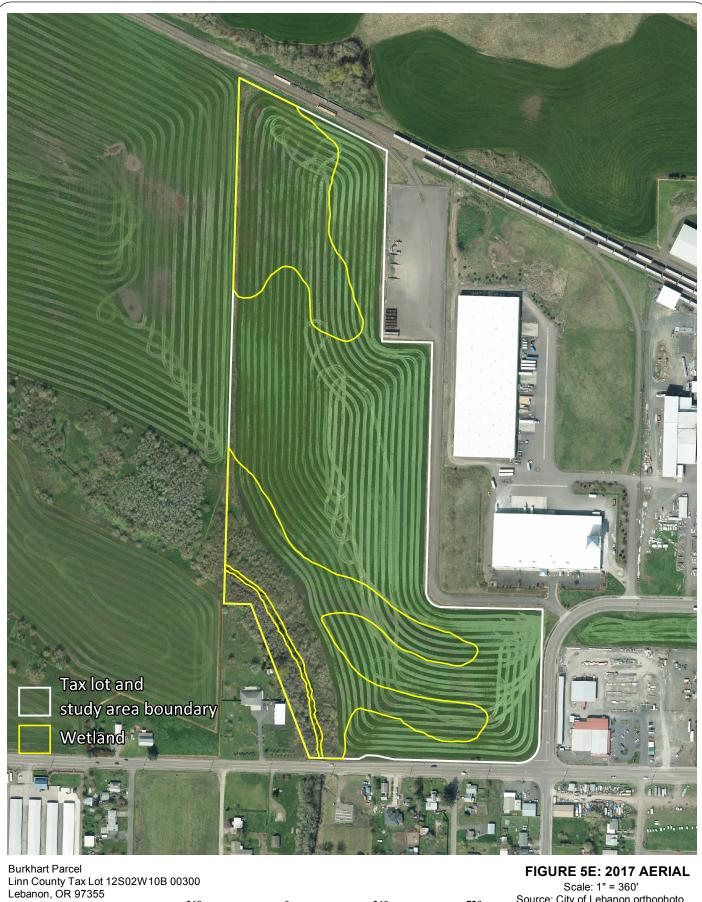


Burkhart Parcel Linn County Tax Lot 12S02W10B 00300 Lebanon, OR 97355 360 720

Feet Scale: 1:4,320 Geo Resources LLC

Scale: 1" = 360'
Source: City of Lebanon orthophoto
Flown: March 7, 2012, 3" resolution
Drafted: 11/12/17





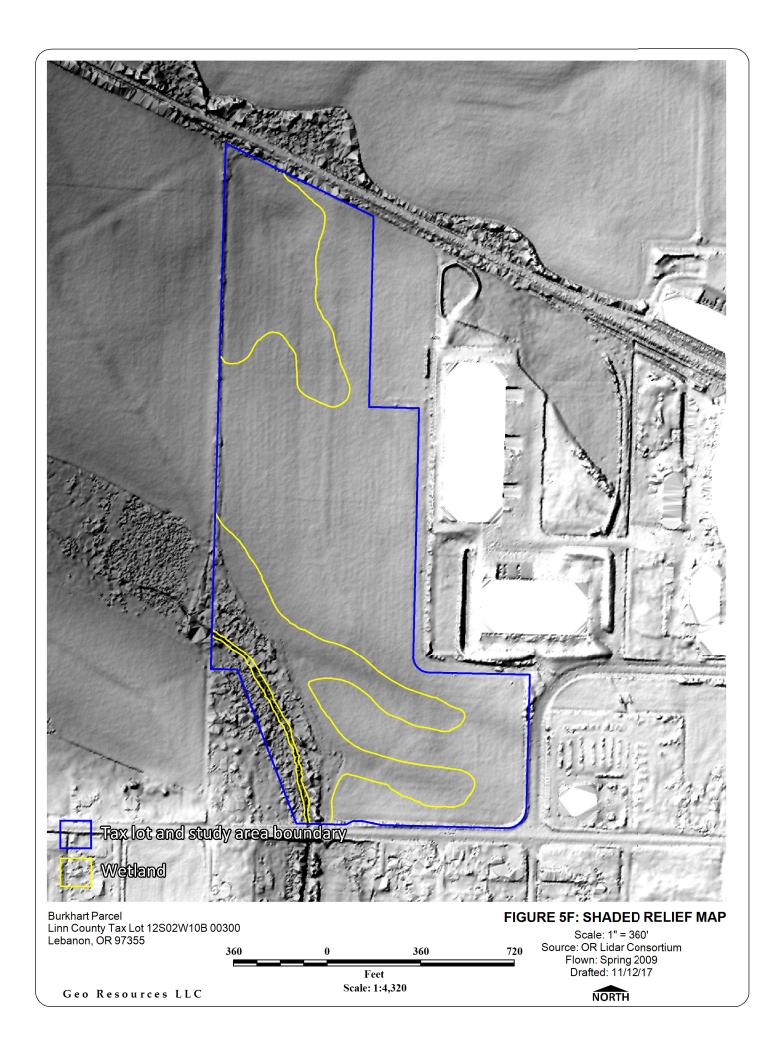
360 360

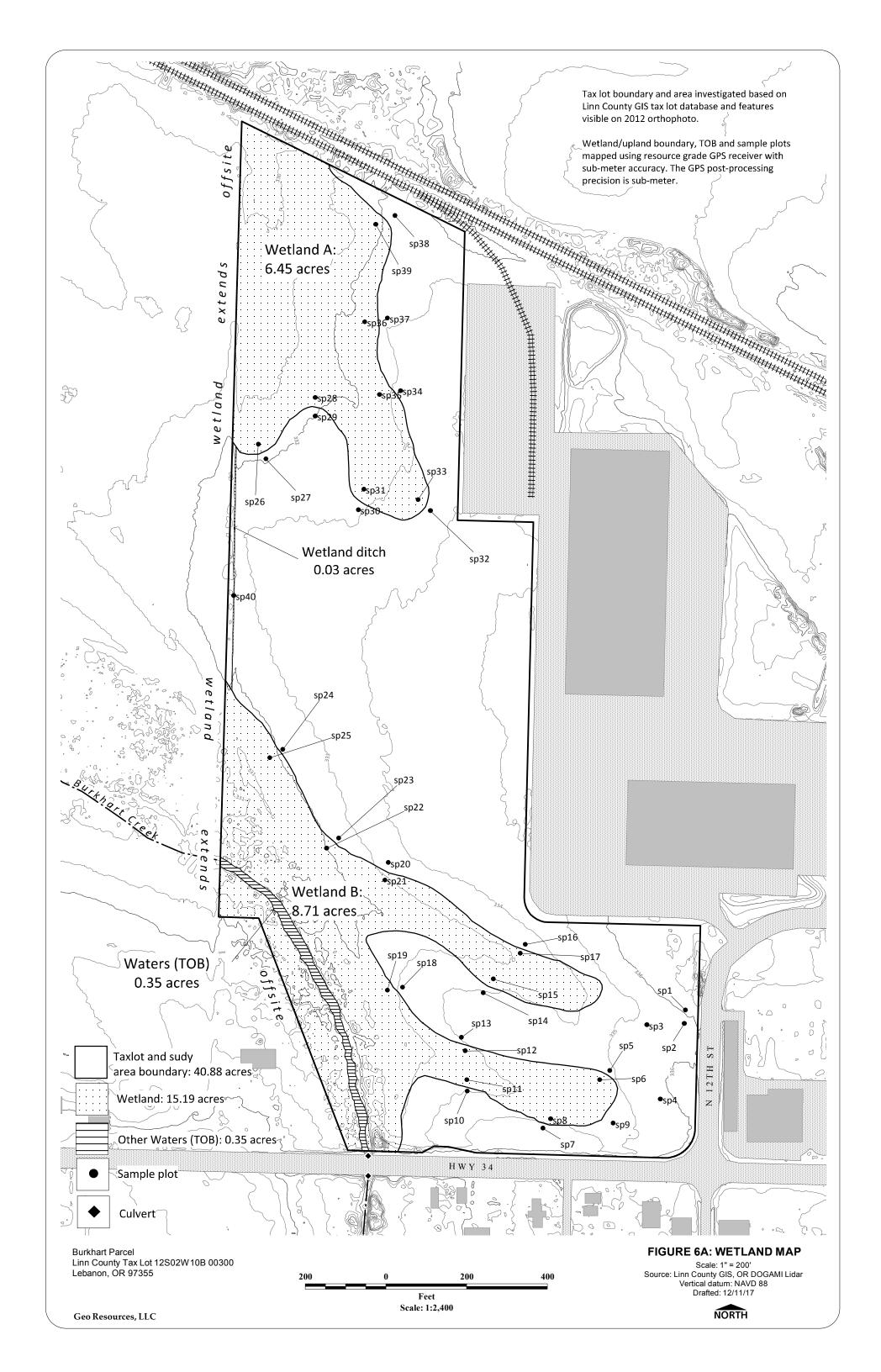
Geo Resources LLC

720 Feet Scale: 1:4,320

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









Applicant/Owner: Norman Steckley Investigator(s): Allen Martin Landform (hillslope, terrace, etc.): terrace Subregion (LRR): A Soil Map Unit Name: Conser silty clay loam Are climatic / hydrologic conditions on the site typi Are Vegetation , Soil , or Hydrologic	Local relief (concave, convex, r Lat: 44.548583 Long: -122.92600 N' cal for this time of year? Yes	none): none Slope (%): 0 Datum: D_North_American_1983_HARN (SP, Int ft) WI classification: upl (If no, explain in Remarks.) ormal Circumstances" present? Yes x No
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes Remarks:	e map showing sampling point I	ocations, transects, important features, etc. in a Wetland? Yes No _X
VEGETATION – Use scientific names Tree Stratum (Plot size: 30 ft 30	Absolute Dominant Indicator <u>% Cover Species? Status</u> 0	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: 30 ft)) 1. None 2 3 4 5 Herb Stratum (Plot size: 6 ft)) 1. Lolium perenne		Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = 0.0 FACW species x 2 = 0.0 FAC species x 3 = 0.0 FACU species x 4 = 0.0 UPL species x 5 = 0.0 Column Totals: 0 (A)
2. 3.		Prevalence Index = B/A = 0.0
4		Hydrophytic Vegetation Indicators: □ 1 - Rapid Test for Hydrophytic Vegetation □ 2 - Dominance Test is >50% □ 3 - Prevalence Index is ≤3.0¹ □ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) □ 5 - Wetland Non-Vascular Plants¹ □ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. NONE 2. Same Ground in Herb Stratum	0 = Total Cover	Hydrophytic Vegetation Present? Yes <u>×</u> No
Remarks: Vegetation is problematic. Agricultural site	consisting of 50-80% Lolium perenne and man	aged for monoculture

SOIL Sampling Point: SP1 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features % Color (moist) Color (moist) Loc² Remarks (inches) % Type¹ Texture 100 0-15 10YR2/2 SiCL 100 SiCL 15-24 10YR2/2 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils3: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and \Box Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) Д. Saturation (A3) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living ☐ Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): No X Wetland Hydrology Present? Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn	Sampling Date: 8/09/17
Applicant/Owner: Norman Steckley		State: OR Sampling	
Investigator(s): Allen Martin	Section, T	ownship, Range: Section 1	D, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, convex,	none): none Slope (%): 0
Subregion (LRR): A	Lat: 44.54858	B3 Long: -122.9260	D_North_American_1983_HARN (SP, Int ft)
Soil Map Unit Name: Conser silty clay loam		N	IWI classification: upl
Are climatic / hydrologic conditions on the site typ			
Are Vegetation , Soil , or Hydrolog			ormal Circumstances" present? Yes x No
Are Vegetation x , Soil , or Hydrolog	gy 🔲 natur	ally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach sit	e man sho	wing sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes ×	No		-
Hydric Soil Present? Yes	No x	Is the Sampled Area wit	hin a Wetland? Yes No X
Wetland Hydrology Present? Yes	NO <u>^</u>		
Plot located at east end of stu	dy area to	test eastward extensi	on of swale
1 for focated at east end of ste	idy arca to	icsi casiwalu caiciisi	on or sware.
VEGETATION – Use scientific names	of plants.		
	Absolute		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft)	% Cover	Species? Status	Number of Dominant Species
1. None	0		That Are OBL, FACW, or FAC: 1 (A)
2.	0		Total Number of Dominant Species Across All Strata: 1 (B)
3	0		Percent of Dominant Species
T			That Are OBL, FACW, or FAC: 100 (A/B)
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30 ft)		_	Prevalence Index worksheet:
1. None	0		Total % Cover of: Multiply by:
2	0		OBL species x 1 =0.0
3	0		FACW species x 2 = 0.0
4			FAC species x ₃ = 0.0
5	0	Tetal Cours	FACU species x ₄ =0.0
Herb Stratum (Plot size: 6 ft)	0	_ = Total Cover	UPL species x 5=0.0
1 Lolium perenne	70	FAC	Column Totals: 0 (A) 0 (B)
2.			Prevalence Index = B/A = 0.0
3.			
4.			Hydrophytic Vegetation Indicators:
5.			☐ 1 - Rapid Test for Hydrophytic Vegetation
6			☑ 2 - Dominance Test is >50%
7			☐ 3 - Prevalence Index is ≤3.01
8			4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
9.			5 - Wetland Non-Vascular Plants ¹
10.			Problematic Hydrophytic Vegetation ¹ (Explain)
11	70	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)			be present, unless disturbed or problematic.
1. NONE			
2.			ī
	0	= Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum			Present? Yes × No
Remarks:			
Vegetation is problematic. Agricultural site	consisting of 50	-80% Lolium perenne and man	naged for monoculture

SOIL Sampling Point: SP2 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) % Color (moist) % Loc² Remarks (inches) Type¹ Texture 100 0-19 10YR2/2 SiCL С 5 SiCL 19-22 10YR3/2 95 10YR4/4 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils3: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and \Box Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): No X Wetland Hydrology Present? Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

-	City/County: Lebanon/Linn	Sampling Date: 8/09/17
Applicant/Owner: Norman Steckley	State: OR Sampling	
Investigator(s): Allen Martin		, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, r	
	Lat: 44.548583 Long: -122.92600	
Soil Map Unit Name: Conser silty clay loam		WI classification: upl
Are climatic / hydrologic conditions on the site typic		
Are Vegetation x , Soil ☐ , or Hydrolog Are Vegetation x , Soil ☐ , or Hydrolog		ormal Circumstances" present? Yes x No
Are vegetation , Soil , or rigulolog	y III Haturally problematic:	If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site	e map showing sampling point I	ocations, transects, important features, etc.
7 · · · · · · · · · · · · · · · · · · ·	No	No. Y
	No $\frac{x}{x}$ Is the Sampled Area with	in a Wetland? Yes No _X
	NO _^	
Remarks: Plot located at east end of students.	dy area to test eastward extension	on of swale
1 lot located at east end of star	dy area to test eastward extensiv	on or sware.
VEGETATION – Use scientific names	of plants	
VEGETATION - Use scientific fiames	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30 ft)	% Cover Species? Status	Number of Dominant Species
1. None	0	That Are OBL, FACW, or FAC: 1 (A)
2.	0	Total Number of Dominant
3.	0	Species Across All Strata: 1 (B)
4	0	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
		(VB)
	0 = Total Cover	Dravalanas Inday warkshaati
Sapling/Shrub Stratum (Plot size: 30 ft)		Prevalence Index worksheet:
1. None	0	Total % Cover of: Multiply by:
2.	0	OBL species x 1 = 0.0
3.	0	FACW species x 2 = 0.0
4	0	FAC species $x_3 = 0.0$
5	0 = Total Cover	FACU species x 4 =0.0
Herb Stratum (Plot size: 6 ft)	- Total Cover	UPL species x 5 =0.0
1. Lolium perenne	70 FAC	Column Totals: 0 (A) 0 (B)
2.		Prevalence Index = B/A = 0.0
3.		
4.		Hydrophytic Vegetation Indicators:
5.		☐ 1 - Rapid Test for Hydrophytic Vegetation
6.		☑ 2 - Dominance Test is >50%
7.		☐ 3 - Prevalence Index is ≤3.01
8		4 - Morphological Adaptations¹ (Provide supporting
9		data in Remarks of on a separate sheet)
10		5 - Wetland Non-Vascular Plants ¹
11		Problematic Hydrophytic Vegetation¹ (Explain)
	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 12 ft)		be present, unless disturbed of problematic.
1. NONE		
2	0 = Total Cover	Hydrophytic
% Bare Ground in Herb Stratum	= Total Cover	Vegetation
% Bare Ground III Herb Stratum		Present? Yes x No
Remarks:		
remars.		
Vegetation is problematic. Agricultural site	consisting of 50-80% Lolium perenne and man	aged for monoculture

SOIL Sampling Point: SP3 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) % Color (moist) % Loc² Remarks (inches) Type¹ Texture 100 0-10 10YR2/2 SiCL С 10YR2/2 SiCL 10-18 96 10YR4/4 100 С 18-22 10YR2/1 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils3: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and 卫 Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) Д. Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): No X Wetland Hydrology Present? Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn	Sampling Date: 8/09/17
Applicant/Owner: Norman Steckley		State: OR Sampling	
Investigator(s): Allen Martin	Section, T	ownship, Range: Section 1	0, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, convex,	none): none Slope (%): 0
Subregion (LRR): A	Lat: 44.54858	B3 Long: -122.9260	D_North_American_1983_HARN (SP, Int ft)
Soil Map Unit Name: Conser silty clay loam			IWI classification: upl
Are climatic / hydrologic conditions on the site typ			
Are Vegetation , Soil , or Hydrolog		-	Iormal Circumstances" present? Yes x No
Are Vegetation x , Soil , or Hydrolog	gy 🔲 natur	ally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach sit	e man shov	wing sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes ×	No		
Hydric Soil Present? Yes	No ×	Is the Sampled Area wit	hin a Wetland? Yes No X
Wetland Hydrology Present? Yes	NO <u>^</u>		
Remarks: Plot located to test eastward	evtension o	of southernmost swal	۵
1 for focated to test castward	CALCHSION C	or southerninost swar	ic.
VEGETATION – Use scientific names	of plants.		
	Absolute		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft)	% Cover	Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
1. None	0		That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant
2.	0		Species Across All Strata: 1 (B)
3	0		Percent of Dominant Species
T	<u>.</u>		That Are OBL, FACW, or FAC: 100 (A/B)
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30 ft)		_	Prevalence Index worksheet:
1. None	0		Total % Cover of: Multiply by:
2			OBL species x 1=0.0
3	0		FACW species x 2 = 0.0
4			FAC species x 3 = 0.0
5	0	T.110	FACU species x 4 = 0.0
Llord Chrotium (Diet sine) 6 ft	-	= Total Cover	UPL species x 5= 0.0
Herb Stratum (Plot size: 6 ft) 1. Lolium perenne	80	FAC	Column Totals: 0 (A) 0 (B)
2.			Prevalence Index = B/A = 0.0
3.	-		
4.	· -		Hydrophytic Vegetation Indicators:
5.			1 - Rapid Test for Hydrophytic Vegetation
6			2 - Dominance Test is >50%
7			☐ 3 - Prevalence Index is ≤3.0¹
8			4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
9.			5 - Wetland Non-Vascular Plants ¹
10.			Problematic Hydrophytic Vegetation ¹ (Explain)
11	80	= Total Cover	¹Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)	- *		be present, unless disturbed or problematic.
1. NONE			
2.	· -		j
	0	= Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum			Present? Yes x No
Remarks:			
Vegetation is problematic. Agricultural site	consisting of 50	0-80% Lolium perenne and man	naged for monoculture

SOIL Sampling Point: SP4 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features % Color (moist) Color (moist) Loc² Remarks (inches) % Type¹ Texture 100 0-14 10YR2/2 SiCL 100 SiCL 14-20 10YR2/2 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils3: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and 卫 Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) Д. Saturation (A3) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living ☐ Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): No X Wetland Hydrology Present? Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn	Sampling Date: 8/09/17
Applicant/Owner: Norman Steckley		State: OR Sai	mpling Point: SP5
Investigator(s): Allen Martin	Section, T	ownship, Range: Sec	ction 10, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, cor	nvex, none): none Slope (%): 0
Subregion (LRR): A	Lat: 44.5485	83 Long: -12	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 typ			
Are Vegetation , Soil , or Hydrolo		-	Are "Normal Circumstances" present? Yes x No No
Are Vegetation x , Soil , or Hydrolo	gy 🔲 natur	ally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach sit	te map sho	wing sampling po	oint locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes x	No		·
Hydric Soil Present? Yes Wetland Hydrology Present? Yes	No ×	Is the Sampled Are	ea within a Wetland? Yes No _x
Remarks:	<u></u>		
Plot located on north edge of	southern s	wale.	
VEGETATION – Use scientific names	of plants		
VEGETATION – Use scientific fiames	Absolute	Dominant Indic	cator Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft)	% Cover		atus Number of Dominant Species
1. None	0		That Are OBL, FACW, or FAC: 1 (A)
2.			Total Number of Dominant
3			Species Across All Strata: 1 (B) Percent of Dominant Species
4	0		That Are OBL, FACW, or FAC: 100 (A/B)
	0	- Total Caver	
Sapling/Shrub Stratum (Plot size: 30 ft)	-	= Total Cover	Prevalence Index worksheet:
4 None	0		Total % Cover of: Multiply by:
2. Notice	· -		OBL species x 1 = 0.0
3.			FACW species x 2 = 0.0
4.			FAC species $x_3 = 0.0$
5			FACU species x 4 = 0.0
	0	_ = Total Cover	UPL species x 5= 0.0
Herb Stratum (Plot size: 6 ft)	70	FAC	Column Totals: 0 (A) 0 (B)
Lolium perenne 2.	70	V PAC	Prevalence Index = B/A = 0.0
2	-		Trevalence much - DIA - 0.0
4.			Hydrophytic Vegetation Indicators:
5.			1 - Rapid Test for Hydrophytic Vegetation
6.			2 - Dominance Test is >50%
7			3 - Prevalence Index is ≤3.01
8			4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
9.			5 - Wetland Non-Vascular Plants ¹
10 11.			Problematic Hydrophytic Vegetation¹ (Explain)
11.	70	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)			be present, unless disturbed or problematic.
1. NONE			
2.			Hydrophytic
	0	= Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum			Present? Yes x No No
Remarks:			
Vegetation is problematic. Agricultural site	consisting of 50	0-80% Lolium perenne ar	nd managed for monoculture

SOIL Sampling Point: SP5 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Depth % Color (moist) Color (moist) % Loc² Remarks (inches) Type¹ Texture 100 0-10 10YR2/2 SiCL 3 10YR2/2 SiCL 10-15 97 10YR3/4 С m 2 С 15-24 10YR3/1 98 10YR3/4 С m ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils3: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and 卫 Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) Д. Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? No X Water Table Present? Saturation Present? Depth (inches): ☐ No (includes capillary fringe) Yes Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

-	City/County: Lebanon/Linn	Sampling Date: 8/09/17
Applicant/Owner: Norman Steckley	State: OR Sampling	
Investigator(s): Allen Martin		0, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, r	
	Lat: 44.548583 Long: -122.9260	
Soil Map Unit Name: Conser silty clay loam		WI classification: upl
Are climatic / hydrologic conditions on the site typic Are Vegetation , Soil , or Hydrology		ormal Circumstances" present? Yes × No
Are Vegetation × , Soil , or Hydrology		(If needed, explain any answers in Remarks.)
Ale Vegetation , on injurious	y Induitably problemate.	(II Heeded, explain any answers in remaine.)
	e map show <u>ing sampling point l</u>	locations, transects, important features, etc.
· · · · · · · · · · · · · · · · · · ·	No lo the Sampled Area with	-tra-Wattando Vas v No
	No Is the Sampled Area with	nin a Wetland? Yes <u>×</u> No
Remarks:		
Plot located in wetland swale	along northern edge.	
=		
VEGETATION – Use scientific names of	of plants.	
	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft)	% Cover Species? Status	Number of Dominant Species
1. None	0	That Are OBL, FACW, or FAC: 1 (A)
2		Total Number of Dominant
3	0	Species Across All Strata: 1 (B) Percent of Dominant Species
4	0	That Are OBL, FACW, or FAC: 100 (A/B)
	0 = Total Cover	
Sapling/Shrub Stratum (Plot size: 30 ft)	0 = Total Cover	Prevalence Index worksheet:
1 None	0	Total % Cover of: Multiply by:
2.		OBL species x 1 = 0.0
3.		FACW species x 2 = 0.0
4.		FAC species $x_3 = 0.0$
5.	0	FACU species x 4 = 0.0
	0 = Total Cover	UPL species x 5 = 0.0
Herb Stratum (Plot size: 6 ft)	Table 1	Column Totals: 0 (A) 0 (B)
1. Lolium perenne	60 FAC	
2.		Prevalence Index = B/A = 0.0
3 4.		Hydrophytic Vegetation Indicators:
4 5.		☐ 1 - Rapid Test for Hydrophytic Vegetation
6.		✓ 2 - Dominance Test is >50%
7.		☐ 3 - Prevalence Index is ≤3.01
8.		4 - Morphological Adaptations ¹ (Provide supporting
9.		data in Remarks or on a separate sheet)
10		5 - Wetland Non-Vascular Plants ¹
11		☑ Problematic Hydrophytic Vegetation¹ (Explain)
12.6	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 12 ft) 1. NONE		be present, unless disturbed of problematic.
1. NONE 2.		
2.	0 = Total Cover	Hydrophytic
% Bare Ground in Herb Stratum		Vegetation Present? Yes × No
	_	
Remarks:		
Vegetation is problematic. Agricultural site of	consisting of 50-80% Lolium perenne and man	naged for monoculture

SOIL Sampling Point: SP6 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features % Color (moist) Color (moist) % Loc² (inches) Type¹ Texture Remarks 100 0-6 10YR2/2 **GrSiCL** 5 С 6-11 10YR2/2 M SiCL 2%OR 95 10YR4/4 2 С С 11-24 10YR3/1 97 10YR3/4 M 1%MN ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils3: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) \checkmark ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) П Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) \checkmark Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) --Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? ☐ No Depth (inches): □ No Depth (inches): Wetland Hydrology Present? Yes X No Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn	Sampling Date:	8/09/17
Applicant/Owner: Norman Steckley		State: OR Sa	ampling Point: SP7	
Investigator(s): Allen Martin	Section, T	ownship, Range: S	ection 10, T12S, R02W	
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, co	onvex, none): none	Slope (%): 0
Subregion (LRR): A	Lat: 44.5485	B3 Long: -1	22.926069 Datum:	D_North_American_1983_HARN (SP, Int ft)
Soil Map Unit Name: Clackamas Gravelly Silt Loan	1		NWI classification:	upl
Are climatic / hydrologic conditions on the site typ				
Are Vegetation , Soil , or Hydrolog		•		es" present? Yes x No No
Are Vegetation x , Soil Z , or Hydrolog	gy 🔲 natur	ally problematic?	(If needed, explain a	any answers in Remarks.)
SUMMARY OF FINDINGS – Attach sit	e man sho	wing sampling r	onint locations trans	sects important features etc
Hydrophytic Vegetation Present? Yes x	No			
	No ×	Is the Sampled A	rea within a Wetland?	Yes No _x
Wetland Hydrology Present? Yes	NO x			
Plot located in wetland swale	near coutl	ern houndary		
1 lot located in wetland sware	iicai souu	iciii bouildai y.		
VEGETATION – Use scientific names	of plants.			
Tree Otreture (District 20 ft	Absolute		Dominance Tes	
Tree Stratum (Plot size: 30 ft) 1. None	% Cover	Species? S	Number of Dom That Are OBL, F	
•			Total Number of	, ,
3.	0		Species Across	
4.	0		Percent of Dom	·
			That Are OBL, F	FACW, or FAC: 100 (A/B)
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 30 ft)			Prevalence Ind	
1. None	0		Total % Cover of	
2			OBL species	x 1= 0.0
3.			FACW species	
4.			FAC species	x 3 = 0.0
5	0	= Total Cover	FACU species	x 4 = 0.0
Herb Stratum (Plot size: 6 ft)		_ = Total Cover	UPL species	x 5= 0.0
1. Lolium perenne	50		Column Totals:	0 (A) 0 (B)
2.			Prevalence Inde	ex = B/A = 0.0
3.				
4			Hydrophytic Ve	egetation Indicators:
5				st for Hydrophytic Vegetation
6				ce Test is >50%
7.				ce Index is ≤3.0¹
8.			data in Remark	gical Adaptations ¹ (Provide supporting arks or on a separate sheet)
9.				Non-Vascular Plants¹
10. 11.				Hydrophytic Vegetation ¹ (Explain)
· · · ·	50	= Total Cover	¹Indicators of hy	dric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)		_		ess disturbed or problematic.
1. NONE				
2	. <u> </u>		Undranhutia	
	0	_ = Total Cover	Hydrophytic Vegetation	
% Bare Ground in Herb Stratum 50			Present?	Yes x No
Remarks:				
Vegetation is problematic. Agricultural site	consisting of 50	0-80% 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 Matrix Redox Features % Color (moist) Color (moist) Loc² (inches) % Type¹ Texture Remarks 100 0-14 10YR2/2 SiCL 100 **GrCL** 14-22 10YR2/2 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils3: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and \Box Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) Д. Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living ☐ Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) --Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? No X Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn		Sampling Date:	8/09/17		
Applicant/Owner: Norman Steckley		State: OR Sampling		0.00			
Investigator(s): Allen Martin	Section, T	Section, Township, Range: Section 10,		12S, R02W			
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, c	convex, non	ex, none): none Slope (%): 0			
,	Lat: 44.5485	83 Long: <u>-</u>	122.926069	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 x No							
Are Vegetation x , Soil d , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)							
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.							
Hydrophytic Vegetation Present? Yes × No							
Hydric Soil Present? Yes You	No	Is the Sampled A	Area within	a Wetland?	Yes x	No	
Wetland Hydrology Present? Yes x	NO						
Remarks:							
VEGETATION – Use scientific names	of plants.						
	Absolute Dominant Indicator			Dominance Test worksheet:			
Tree Stratum (Plot size: 30 ft)	% Cover	Species? S	Status	Number of Domi			
1. None	0			(1)			
2 3.	0			Total Number of Dominant Species Across All Strata: 1 (B)			
3	0			Percent of Dominant Species			
T				That Are OBL, F	ACW, or FAC:	100 (A/B)	
	0	= Total Cover					
Sapling/Shrub Stratum (Plot size: 30 ft)				Prevalence Inde	ex worksheet:		
1. None	0			Total % Cover o	f: Multip	oly by:	
2	0			OBL species	x 1=	0.0	
3	0			FACW species	x 2=	0.0	
4	0			FAC species	x 3=	0.0	
5	0	Tatal Osusa		FACU species	x 4=	0.0	
Herb Stratum (Plot size: 6 ft)	0	= Total Cover		UPL species	x 5=	0.0	
1. Lolium perrenne				Column Totals:	0 (A)	0 (B)	
2.				Prevalence Inde	ex = B/A =	0.0	
3.							
4.				Hydrophytic Ve	getation Indica	ators:	
5.				1 - Rapid Test for Hydrophytic Vegetation			
6				2 - Dominano	ce Test is >50%		
7					ce Index is ≤3.0¹		
8				4 - Morpholo	gical Adaptation arks or on a sepa	ns ¹ (Provide supporting	
9					Non-Vascular Pl	· ·	
10.						getation¹ (Explain)	
11	0	= Total Cover				tland hydrology must	
Woody Vine Stratum (Plot size: 12 ft)				be present, unle			
1. NONE							
2.							
	0	= Total Cover		Hydrophytic Vegetation			
% Bare Ground in Herb Stratum				-	Yes x	No	
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 Matrix Redox Features Color (moist) % Color (moist) Loc² Remarks (inches) % Type¹ Texture 3 С PL 0-5 10YR3/2 97 10YR4/4 SiCL С 5 **GrSiCL** 5-9 10YR3/2 95 10YR4/4 M 9-20 100 С 10YR2/1 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils3: Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) \checkmark ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): Type: Clay **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) П Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) --Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? Yes X No Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Applicant/Owner: Norman Steckley Investigator(s): Allen Martin Landform (hillslope, terrace, etc.): terrace Subregion (LRR): A Soil Map Unit Name: Conser silty clay loam Are climatic / hydrologic conditions on the site typic Are Vegetation , Soil , or Hydrolog Are Vegetation , Soil , or Hydrolog SUMMARY OF FINDINGS – Attach site	Local relief (concave, convex, r Lat: 44.548583 Long: -122.92606 N cal for this time of year? Yes	0, T12S, R02W none): none Slope (%): 0 Datum: D_North_American_1983_HARN (SP, Int ft) WI classification: upl
Hydric Soil Present? Yes	No x Is the Sampled Area with	nin a Wetland? Yes No _×
Plot located to test eastward t	ermination of southernmost swa	ale.
VEGETATION – Use scientific names	of plants.	
Tree Stratum (Plot size: 30 ft)) 1. None 2. 3. 4.	Absolute Dominant Indicator <u>% Cover Species? Status</u> 0	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: 30 ft) 1. None 2 3 5 Herb Stratum (Plot size: 6 ft)	0	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = 0.0 FACW species x 2 = 0.0 FAC species x 3 = 0.0 FACU species x 4 = 0.0 UPL species x 5 = 0.0 Column Totals: 0 (A) 0 (B)
 Lolium perenne 3. 		Prevalence Index = B/A = 0.0
4		Hydrophytic Vegetation Indicators: □ 1 - Rapid Test for Hydrophytic Vegetation □ 2 - Dominance Test is >50% □ 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) □ 5 - Wetland Non-Vascular Plants¹ □ Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size: 12 ft) 1. NONE 2. Stratum (Plot size: 12 ft) 8 Bare Ground in Herb Stratum	0 = Total Cover 0 = Total Cover	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes x No
Remarks: Vegetation is problematic. Agricultural site	consisting of 50-80% Lolium perenne and man	aged for monoculture

SOIL Sampling Point: SP9 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Depth % Color (moist) Color (moist) % Loc² Remarks (inches) Type¹ Texture 100 0-11 10YR3/2 SiCL 3 С 10YR3/2 M SiCL 11-12 97 10YR3/4 SiC 12-16 10YR2/1 100 10YR4/4 С С 16-18 10YR3/1 M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils³: ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and 卫 Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) Д. Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? No X Water Table Present? Saturation Present? Depth (inches): ☐ No (includes capillary fringe) Yes Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn	Sampling Date: 8/09/17		
Applicant/Owner: Norman Steckley		State: OR Sampling	Point: SP10		
Investigator(s): Allen Martin	Section, T	ownship, Range: Section 10	, T12S, R02W		
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, convex, r	none): none Slope (%): 0		
Subregion (LRR): A	Lat: 44.54858	B3 Long: -122.92600	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 typ	ical for this time	e of year? Yes 🔽 No 📗	(If no, explain in Remarks.)		
Are Vegetation , Soil , or Hydrolog	gy 🔲 signif	icantly disturbed? Are "No	ormal Circumstances" present? Yes x No		
Are Vegetation \underline{x} , Soil $\underline{\square}$, or Hydrolog	gy 🔲 natur	ally problematic? (If needed, explain any answers in Remarks.)		
		wing sampling point I	ocations, transects, important features, etc.		
Hydrophytic Vegetation Present? Yes Yes Hydric Soil Present? Yes	No	Is the Sampled Area with	nin a Wetland? Yes No ×		
Wetland Hydrology Present? Yes	No ×				
Remarks:					
Plot located on south side of	shallow sw	ale on south end of s	tudy area.		
			3		
VEGETATION – Use scientific names	of plants.				
	Absolute	Dominant Indicator	Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size: 30 ft)	% Cover		Number of Dominant Species		
1. None	0		That Are OBL, FACW, or FAC: 1 (A)		
2.	0		Total Number of Dominant		
3.	0		Species Across All Strata: 1 (B)		
4	0		Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)		
			That Are OBL, I ACW, OF I AC. 100 (A/B)		
	0	_ = Total Cover			
Sapling/Shrub Stratum (Plot size: 30 ft)			Prevalence Index worksheet:		
1. None	0		Total % Cover of: Multiply by:		
2	0		OBL species x 1=		
3	0		FACW species x 2 = 0.0		
4	0		FAC species x ₃ =		
5	0		FACU species x 4 =0.0		
	0	_ = Total Cover	UPL species x 5= 0.0		
Herb Stratum (Plot size: 6 ft)			Column Totals: 0 (A) 0 (B)		
1. Lolium perrenne	· —		Drawalana ladau DA		
2.			Prevalence Index = B/A = 0.0		
3.	· -		Hydrophytic Vegetation Indicators:		
4					
5.			1 - Rapid Test for Hydrophytic Vegetation		
6			Z 2 - Dominance Test is >50%3 - Prevalence Index is ≤3.0¹		
7. 8.	· <u> </u>		3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting		
	· -		data in Remarks or on a separate sheet)		
9. 10.			5 - Wetland Non-Vascular Plants ¹		
4.4			Problematic Hydrophytic Vegetation¹ (Explain)		
11.	0	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must		
Woody Vine Stratum (Plot size: 12 ft)			be present, unless disturbed or problematic.		
1. NONE					
2.					
	0	= Total Cover	Hydrophytic Vegetation		
% Bare Ground in Herb Stratum	_	_	Present? Yes × No		
	_				
Remarks:					
**		. 000/ X 1'	16		
Vegetation is problematic. Agricultural site	consisting of 50	1-80% Lolium perenne and man	aged for monoculture		

SOIL Sampling Point: SP10 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) % Color (moist) % Loc² Remarks (inches) Type¹ Texture 100 0-14 10YR2/2 **VGSiCL** С 5 **GrCL** 14-20 10YR2/2 95 10YR3/4 M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and \Box Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? No X Water Table Present? Saturation Present? Depth (inches): ☐ No (includes capillary fringe) Yes Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt	City/County: Lebanon/Linn	Sampling Date: 8/09/17
Applicant/Owner: Norman Steckley	State: OR Sampling	
Investigator(s): Allen Martin	Section, Township, Range: Section 10	, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, r	none): none Slope (%): 0
,	Lat: 44.548583 Long: -122.9260	D_North_American_1983_HARN (SP, Int ft)
Soil Map Unit Name: Clackamas Gravelly Silt Loam	N'	WI classification: upl
Are climatic / hydrologic conditions on the site typi		
		ormal Circumstances" present? Yes x No
Are Vegetation x , Soil Z , or Hydrolog	naturally problematic?	If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach sit	e man showing sampling point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes x	No	
Hydric Soil Present? Yes ×	No Is the Sampled Area with	in a Wetland? Yes X No
Wetland Hydrology Present? Yes x	NO	
Plot paired with Sp10 to defin	ne southern wetland boundary o	of swale
That paired with Spro to dem	ie southern wettand boundary o	i swaie.
VEGETATION – Use scientific names	•	Barriago Tastarrado hasta
Tree Stratum (Plot size: 30 ft)	Absolute Dominant Indicator % Cover Species? Status	Dominance Test worksheet:
1. None	0 Species: Status	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2	0	Total Number of Dominant
3.		Species Across All Strata: 1 (B)
4.	0	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
		That Are OBE, I AGW, OF I AG. 100 (A/B)
	0 = Total Cover	Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 30 ft)		
1. None	0	Total % Cover of: Multiply by: OBL species x 1 = 0.0
2.		
3.		FACW species
4 5.	0	
	0 = Total Cover	1 / 100 oposios / 1
Herb Stratum (Plot size: 6 ft)		X 5
1. Lolium perrenne		Column Totals: 0 (A) 0 (B)
2		Prevalence Index = B/A = 0.0
3		
4		Hydrophytic Vegetation Indicators:
5.		1 - Rapid Test for Hydrophytic Vegetation
6		Z 2 - Dominance Test is >50%3 - Prevalence Index is ≤3.0¹
0		4 - Morphological Adaptations ¹ (Provide supporting
9.		data in Remarks or on a separate sheet)
10.		□ 5 - Wetland Non-Vascular Plants¹
11.		Problematic Hydrophytic Vegetation¹ (Explain)
	0 = Total Cover	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)		be present, unless disturbed or problematic.
1. NONE		
2		Hydrophytic
% Bare Ground in Herb Stratum	0 = Total Cover	Vegetation
76 Bare Ground III Herb Stratum		Present? Yes x No No
Remarks:		
Vacatation is problematic. A original rite	consisting of 50, 200/ I alium perang and man	aged for managulture
vegetation is problematic. Agricultural site	consisting of 50-80% Lolium perenne and man	aged for monoculture

SOIL Sampling Point: SP11 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) % Color (moist) % Loc² (inches) Type¹ Texture Remarks 0-8 10YR3/2 SiCL 5 С 8-14 10YR2/2 95 SiC 10YR4/4 M 14-22 5 С M **VGC** 10YR2/2 95 10YR5/3 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) \checkmark ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): SiC/C Type: **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) Д. Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? Yes X No Water Table Present? Saturation Present? Depth (inches): ☐ No (includes capillary fringe) Yes Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt	City/County: Lebanon/Linn	Sampling Date: 8/09/17
Applicant/Owner: Norman Steckley	State: OR Sampling	
Investigator(s): Allen Martin	Section, Township, Range: Section 10	0, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex,	none): none Slope (%): 0
Subregion (LRR): A	Lat: 44.548583 Long: -122.9260	D_North_American_1983_HARN (SP, Int ft)
Soil Map Unit Name: Conser silty clay loam		IWI classification: upl
Are climatic / hydrologic conditions on the site type		
		lormal Circumstances" present? Yes x No
Are Vegetation x , Soil , or Hydrolog	gy <u> </u>	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach sit	e man showing sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes x	No	-
	No Is the Sampled Area with	hin a Wetland? Yes × No
Wetland Hydrology Present? Yes x	NO	
Remarks: Plot located near northern ed	ge of shallow swale to define w	retland
i for focated fical flortificini ed	ge of shallow swale to define w	Ctiana.
VEGETATION – Use scientific names	of plants.	
	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft)	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
1. None	0	That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant
2.	0	Species Across All Strata: 1 (B)
4	0	Percent of Dominant Species
		That Are OBL, FACW, or FAC: 100 (A/B)
	0 = Total Cover	
Sapling/Shrub Stratum (Plot size: 30 ft)		Prevalence Index worksheet:
1. None	0	Total % Cover of: Multiply by:
2		OBL species x 1=0.0
3		FACW species x 2 = 0.0
4	0	FAC species x ₃ =0.0
5	0 = Total Cover	FACU species $x_4 = 0.0$
Herb Stratum (Plot size: 6 ft)	- Total Cover	UPL species $x_5 = 0.0$
1 Lolium perrenne		Column Totals: 0 (A) 0 (B)
2.		Prevalence Index = B/A = 0.0
3.		
4.		Hydrophytic Vegetation Indicators:
5		□ 1 - Rapid Test for Hydrophytic Vegetation
6		2 - Dominance Test is >50%
7		☐ 3 - Prevalence Index is ≤3.01
8.		4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
9		5 - Wetland Non-Vascular Plants¹
10. 11.		Problematic Hydrophytic Vegetation¹ (Explain)
···	0 = Total Cover	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)		be present, unless disturbed or problematic.
1. NONE		
2		Hydrophytic
	0 = Total Cover	Vegetation
% Bare Ground in Herb Stratum	<u></u>	Present? Yes x No
Remarks:		
Vegetation is problematic. Agricultural site	consisting of 50-80% Lolium perenne and man	naged for monoculture

SOIL Sampling Point: SP12 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) % Color (moist) % Loc² (inches) Type¹ Texture Remarks 5 С 0-9 10YR3/2 95 10YR4/4 M С 95 5 M/PL GrC 9-20 10YR2/1 10YR4/4 2%OR ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) \square ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): Type: GrC **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Saturation (A3) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) П Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) \checkmark Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? ☐ No Depth (inches): □ No Depth (inches): Wetland Hydrology Present? Yes X No Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Applicant/Owner: Norman Steckley Investigator(s): Allen Martin Landform (hillslope, terrace, etc.): terrace Subregion (LRR): A Soil Map Unit Name: Conser silty clay loam Are climatic / hydrologic conditions on the site typi	Local relief (concave, convex, r Lat: 44.548583 Long: -122.9260 N cal for this time of year? Yes	N, T12S, R02W
Hydrophytic Vegetation Present? Yes Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes Remarks:	No x Is the Sampled Area with	ocations, transects, important features, etc. nin a Wetland? Yes No _× 2 to define north edge of wetland.
VEGETATION – Use scientific names Tree Stratum (Plot size: 30 ft 20 ft 30	Absolute Dominant Indicator <u>% Cover Species? Status</u> 0	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A) (B)
Sapling/Shrub Stratum (Plot size: 30 ft)) 1. None 2 3 4 5 Herb Stratum (Plot size: 6 ft)) 1. Lolium perrenne		Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = 0.0 FACW species x 2 = 0.0 FAC species x 3 = 0.0 FACU species x 4 = 0.0 UPL species x 5 = 0.0 Column Totals: 0 (A)
2. 3.		Prevalence Index = B/A = 0.0
4		Hydrophytic Vegetation Indicators: □ 1 - Rapid Test for Hydrophytic Vegetation □ 2 - Dominance Test is >50% □ 3 - Prevalence Index is ≤3.0¹ □ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) □ 5 - Wetland Non-Vascular Plants¹ □ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes x No
Remarks: Vegetation is problematic. Agricultural site	consisting of 50-80% Lolium perenne and man	aged for monoculture

SOIL Sampling Point: SP13 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features % Color (moist) Color (moist) Loc² (inches) % Type¹ Texture Remarks 100 0-15 10YR2/2 **GrCL** 100 15-20 10YR2/2 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and \Box Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): Type: Clay **Hydric Soil Present?** Depth (inches): begins 15"bg Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) Д. Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? Yes X No Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn		Sampling Date:	8/09/17	
Applicant/Owner: Norman Steckley		State: OR S.	 Sampling Poi	0.5.4.4		
Investigator(s): Allen Martin	Section, T	ownship, Range: S	Section 10, T1	2S, R02W		
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, c	convex, none	e): none	Slope	e (%): 0
Subregion (LRR): A	Lat: 44.54858	B3 Long: -1	122.926069	Datum:	D_North_America	an_1983_HARN (SP, Int ft)
Soil Map Unit Name: Conser silty clay loam			NWI o	classification:	upl	
Are climatic / hydrologic conditions on the site type						
Are Vegetation , Soil , or Hydrolo		-		al Circumstance		
Are Vegetation x , Soil , or Hydrolo	gy 🔲 natur	ally problematic?	(If ne	eeded, explain a	iny answers in R	temarks.)
SUMMARY OF FINDINGS - Attach sit	to man show	wina samnlina r	noint loc:	atione trans	acts import	ant features etc
Hydrophytic Vegetation Present? Yes ×	No		point iou	ationo, trano		
Hydric Soil Present? Yes	No ×	Is the Sampled A	Area within a	Wetland?	Yes	No _ <u>x</u>
Wetland Hydrology Present? Yes	NO ×					
Remarks:						
VEGETATION – Use scientific names	of plants.					
	Absolute		ulcatoi	Dominance Tes	t worksheet:	
Tree Stratum (Plot size: 30 ft)	% Cover	Species? S		Number of Domi		1 (A)
1. None	0 0			That Are OBL, F Total Number of		1 (A)
2. 3.	0			Species Across		1 (B)
3	0			Percent of Domi		
T				That Are OBL, F	ACW, or FAC:	100 (A/B)
	0	= Total Cover				
Sapling/Shrub Stratum (Plot size: 30 ft)				Prevalence Inde	ex worksheet:	
1. None	0			Total % Cover o	f: Multip	ly by:
2				OBL species	x 1=	0.0
3	0			FACW species	x 2=	0.0
4.				FAC species	x 3=	0.0
5	0	Tetal Occur		FACU species	x 4=	0.0
Herb Stratum (Plot size: 6 ft)	-	= Total Cover		UPL species	x 5=	0.0
1. Lolium perrenne			l	Column Totals:	0 (A)	0 (B)
2.	<u> </u>			Prevalence Inde	x = B/A =	0.0
3.						
4.				Hydrophytic Ve	getation Indica	itors:
5.				1 - Rapid Tes	st for Hydrophyti	c Vegetation
6				2 - Dominano	ce Test is >50%	
7	_				ce Index is ≤3.01	
8	_			4 - Morpholo	gical Adaptation arks or on a sepa	s ¹ (Provide supporting
9.					Non-Vascular Pl	•
10.				_		getation¹ (Explain)
11.	0	= Total Cover		-		land hydrology must
Woody Vine Stratum (Plot size: 12 ft)				be present, unle		
1. NONE						
2.						
	0	= Total Cover		Hydrophytic Vegetation		
% Bare Ground in Herb Stratum				-	Yes x	No
Remarks:			l			
Vegetation is problematic. Agricultural site	consisting of 50	0-80% Lolium perenne	e and managed	d for monoculture		
- · · · · ·	-	•	-			

SOIL Sampling Point: SP14 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) % Color (moist) % Loc² (inches) Type¹ Texture Remarks 100 0-12 10YR2/2 **GrSiCL** 5 С 10YR2/2 **GrSiCL** 12-16 95 10YR4/4 M 90 10 С С 16-20 10YR2/2 10YR4/4 M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and 卫 Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) Д. Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? No X Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn	Sampling Date: 8/09/17
Applicant/Owner: Norman Steckley		State: OR Sam	pling Point: SP15
Investigator(s): Allen Martin	Section, T	ownship, Range: Secti	on 10, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, conv	vex, none): none Slope (%): 0
Subregion (LRR): A	Lat: 44.5485	83 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 type			
Are Vegetation , Soil , or Hydrolo		-	e "Normal Circumstances" present? Yes x No
Are Vegetation x , Soil , or Hydrolo	gy 🔲 natur	ally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach si	to man sho	wing sampling no	int locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes x	No		
Hydric Soil Present? Yes ×	No	Is the Sampled Area	within a Wetland? Yes X No No
Wetland Hydrology Present? Yes x	NO		
Plot located near southern ed	lge of chall	ow denression	
1 lot located fical southern ce	ige of shall	ow acpiession.	
VEGETATION – Use scientific names	of plants.		
Trace Otractions (Diet sines 20 ft	Absolute		
<u>Tree Stratum</u> (Plot size: 30 ft) 1. None	% Cover	Species? State	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
•			Total Number of Dominant
3.	0		Species Across All Strata: 1 (B)
4.	0		Percent of Dominant Species
			That Are OBL, FACW, or FAC: 100 (A/B)
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30 ft)			Prevalence Index worksheet:
1. None			Total % Cover of: Multiply by:
2			OBL species x 1 = 0.0
3.	_		FACW species x 2 = 0.0
4.			FAC species x 3 = 0.0
5	0	= Total Cover	FACU species x 4 = 0.0
Herb Stratum (Plot size: 6 ft)			UPL species x 5 = 0.0
1. Lolium perrenne			Column Totals: 0 (A) 0 (B)
2.	_		Prevalence Index = B/A = 0.0
3.			
4	_		Hydrophytic Vegetation Indicators:
5	_		1 - Rapid Test for Hydrophytic Vegetation
6			2 - Dominance Test is >50%
7.	_		3 - Prevalence Index is ≤3.0¹
8.			4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
9			5 - Wetland Non-Vascular Plants ¹
10. 11.			Problematic Hydrophytic Vegetation ¹ (Explain)
11.	0	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)		_	be present, unless disturbed or problematic.
1. NONE			
2	_		Livedyson by disc
	0	= Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum			Present? Yes x No
Remarks:			
Vegetation is problematic. Agricultural site	e consisting of 50	0-80% 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 Matrix Redox Features Color (moist) % Color (moist) % Loc² Remarks (inches) Type¹ Texture 100 0-8 10YR2/2 **GrSiCL** 5 С 8-13 10YR2/2 **GrSiCL** 95 10YR4/4 M 90 10 С С 13-20 10YR2/2 10YR4/4 M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) \checkmark ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) П Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) \checkmark Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? Yes X No Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Applicant/Owner: Norman Steckley Investigator(s): Allen Martin Landform (hillslope, terrace, etc.): terrace Subregion (LRR): A Soil Map Unit Name: Conser silty clay loam Are climatic / hydrologic conditions on the site typi	Local relief (concave, convex, r Lat: 44.548583 Long: -122.9260 N cal for this time of year? Yes	0, T12S, R02W none): none Slope (%): 0 69 Datum: D_North_American_1983_HARN (SP, Int ft) WI classification: upl
	· <u> </u>	ocations, transects, important features, etc.
Tree Stratum (Plot size: 30 ft) 1. None 2. 3. 4.	Absolute Dominant Species? Status O Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: 30 ft)) 1. None 2. 3. 4. 5. 4. 6 ft) 4. Lolium perrenne 6 ft)	0	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = 0.0 FACW species x 2 = 0.0 FAC species x 3 = 0.0 FACU species x 4 = 0.0 UPL species x 5 = 0.0 Column Totals: 0 (A) 0 (B)
2		Prevalence Index = B/A = 0.0 Hydrophytic Vegetation Indicators:
4.		1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
% Bare Ground in Herb Stratum	0 = Total Cover	Hydrophytic Vegetation Present? Yes X No
Remarks: Vegetation is problematic. Agricultural site	consisting of 50-80% Lolium perenne and man	aged for monoculture

SOIL Sampling Point: SP16 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) % Color (moist) % Loc² (inches) Type¹ Texture Remarks 100 0-6 10YR2/2 SiCL 5 С M/PL 6-8 10YR2/2 SiCL 95 10YR4/4 SiCL 8-12 10YR2/2 100 5 С 12-24 10YR2/1 95 10YR4/4 M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and \Box Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): Clay Type: **Hydric Soil Present?** Depth (inches): begins 12"bg Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) Д. Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? ☐ No Depth (inches): □ No Depth (inches): Wetland Hydrology Present? No X Water Table Present? Saturation Present? Depth (inches): ☐ No (includes capillary fringe) Yes Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn	Sampling Date: 8/09/17
Applicant/Owner: Norman Steckley		State: OR Sam	oling Point: SP17
Investigator(s): Allen Martin	Section, T	ownship, Range: Secti	on 10, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, conv	ex, none): none Slope (%): 0
Subregion (LRR): A	Lat: 44.5485	83 Long: -122.	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 typ			
Are Vegetation , Soil , or Hydrolo		-	e "Normal Circumstances" present? Yes x No
Are Vegetation \underline{x} , Soil $\underline{\square}$, or Hydrological	gy 🔲 natur	ally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach sit	te map sho	wing sampling po	nt locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes x	No		
Hydric Soil Present? Wetland Hydrology Present? Yes x Yes x	No	Is the Sampled Area	within a Wetland? Yes x No No
Remarks:			
Plot located on north side of	shallow sw	vale	
The focused on north stac of	SIGIIO W SW	410.	
VEGETATION – Use scientific names	of plants		
VEGETATION - Use scientific fiames	Absolute	Dominant Indica	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30 ft)	% Cover		
1. None	0		That Are OBL, FACW, or FAC: 1 (A)
2			Total Number of Dominant
3			Species Across All Strata: 1 (B) Percent of Dominant Species
4	0		That Are OBL, FACW, or FAC: 100 (A/B)
	0	- Tatal Cayes	
Sapling/Shrub Stratum (Plot size: 30 ft)		= Total Cover	Prevalence Index worksheet:
4 None	0		Total % Cover of: Multiply by:
2. Notice			OBL species x 1 = 0.0
3.			FACW species x 2 = 0.0
4.	_		FAC species x 3 = 0.0
5	0		FACU species x 4 = 0.0
	0	= Total Cover	UPL species x 5 =0.0
Herb Stratum (Plot size: 6 ft)			Column Totals: 0 (A) 0 (B)
Lolium perrenne 2.			Prevalence Index = B/A = 0.0
2			Trevalence index = B/A = 0.0
4.			Hydrophytic Vegetation Indicators:
5.			1 - Rapid Test for Hydrophytic Vegetation
6.			2 - Dominance Test is >50%
7	_		☐ 3 - Prevalence Index is ≤3.01
8	_		4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
9.			5 - Wetland Non-Vascular Plants ¹
10. 11.			Problematic Hydrophytic Vegetation¹ (Explain)
11.	0	= Total Cover	¹Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)			be present, unless disturbed or problematic.
1. NONE			
2.			Li vilra plantia
	0	= Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum			Present? Yes x No No
Remarks:			
Vegetation is problematic. Agricultural site	consisting of 50	0-80% 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 Matrix Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 0-6 10YR2/2 100 SiCL 5 С M/PL 6-10 10YR3/2 SiCL 95 10YR4/4 2%or **GrSiCL** 10-15 10YR3/2 100 С 15-20 10YR3/1 100 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) \checkmark ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) П Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) \checkmark Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? ☐ No Depth (inches): □ No Depth (inches): Wetland Hydrology Present? Yes X No Water Table Present? Saturation Present? Depth (inches): ☐ No (includes capillary fringe) Yes Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn	Sampling Date:	8/16/17
Applicant/Owner: Norman Steckley			mpling Point: SP18	
Investigator(s): Allen Martin	Section, T	ownship, Range: Se	ection 10, T12S, R02W	
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, co	nvex, none): none	Slope (%): 0
Subregion (LRR): A	Lat: 44.5485	83 Long: -12	22.926069 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 type				
Are Vegetation , Soil , or Hydrolo		-		s" present? Yes x No
Are Vegetation x , Soil , or Hydrolog	gy 🔲 natur	ally problematic?	(If needed, explain a	iny answers in Remarks.)
SUMMARY OF FINDINGS – Attach sit	a man sho	wing sampling p	oint locations trans	ects important features etc
Hydrophytic Vegetation Present? Yes ×	No		onic roodirono, tranc	
Hydric Soil Present? Yes	No ×	Is the Sampled Are	ea within a Wetland?	Yes No X
Wetland Hydrology Present? Yes x	NO			
Plot designed to locate uplan	d adga of s	outhern esvale		
That designed to locate uplan	u cuge or s	outiletti swate.		
VEGETATION – Use scientific names	of plants.			
Tree Ottobare (Diet siese 20 ft	Absolute		cator Dominance Tes	
Tree Stratum (Plot size: 30 ft) 1. None	% Cover	Species? Sta	atus Number of Domi That Are OBL, F	
•			Total Number of	, ,
3.	0		Species Across	
4.	0		Percent of Domi	·
			That Are OBL, F	ACW, or FAC: 100 (A/B)
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 30 ft)			Prevalence Ind	
1. None			Total % Cover o	1 1 1
2			OBL species	x 1= 0.0
3.			FACW species	
4.			FAC species	x 3 = 0.0
5	0	= Total Cover	FACU species	x 4 = 0.0
Herb Stratum (Plot size: 6 ft)		= 10tal Covel	UPL species	x 5= 0.0
1. Lolium perenne	60	FAC	Column Totals:	0 (A) 0 (B)
2.			Prevalence Inde	$e_{X} = B/A = 0.0$
3.				
4			Hydrophytic Ve	egetation Indicators:
5				st for Hydrophytic Vegetation
6				ce Test is >50%
7.	<u> </u>			ce Index is ≤3.0¹
8.			data in Rema	gical Adaptations ¹ (Provide supporting arks or on a separate sheet)
9.				Non-Vascular Plants¹
10 11.				Hydrophytic Vegetation¹ (Explain)
11.	60	= Total Cover	1Indicators of hy	dric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)		_		ss disturbed or problematic.
1. NONE				
2			Hydrophytic	
	0	= Total Cover	Vegetation	
% Bare Ground in Herb Stratum			Present?	Yes x No
Remarks:				
Vegetation is problematic. Agricultural site	consisting of 50	0-80% Lolium perenne a	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 Matrix Redox Features Loc² Color (moist) % Color (moist) (inches) % Type¹ Texture Remarks 2 С 0-8 10YR3/2 98 10YR4/4 PL **GSiCL** 2%OR 100 **GrSiCL** 8-18 10YR2/2 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils³: Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and \Box Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) Д. Saturation (A3) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) \checkmark Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): X No Wetland Hydrology Present? Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn		Sampling Date:	8/16/17	
Applicant/Owner: Norman Steckley		State: OR S	Sampling Po	0.0.10		
Investigator(s): Allen Martin	Section, T	ownship, Range:	Section 10, T	12S, R02W		
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, c	convex, non	e): none	Slope	e (%): 0
Subregion (LRR): A	Lat: 44.5485	83 Long: -	-122.926069	Datum:	D_North_America	an_1983_HARN (SP, Int ft)
Soil Map Unit Name: Conser silty clay loam			NWI	classification:	upl	
Are climatic / hydrologic conditions on the site type			_			
Are Vegetation , Soil , or Hydrolo				nal Circumstance		
Are Vegetation x , Soil , or Hydrolo	gy 🔲 natur	ally problematic?	(If r	needed, explain a	iny answers in F	Remarks.)
SUMMARY OF FINDINGS - Attach sit	a man sho	wing sampling	noint loc	ations trans	ects impor	tant features etc
Hydrophytic Vegetation Present? Yes ×	No		point ioc	ationo, tranc		
	No	Is the Sampled A	Area within	a Wetland?	Yes X	No
	NU					
Remarks:						
VEGETATION – Use scientific names	of plants.					
	Absolute		dicator	Dominance Tes	st worksheet:	
Tree Stratum (Plot size: 30 ft)	% Cover	Species? S	Status	Number of Domi		1 (A)
1. None	0 0			That Are OBL, F Total Number of		1 (A)
2. 3.	0			Species Across		1 (B)
34	0			Percent of Domi		
				That Are OBL, F	ACW, or FAC:	100 (A/B)
	0	= Total Cover				
Sapling/Shrub Stratum (Plot size: 30 ft)				Prevalence Inde	ex worksheet:	
1. None	0			Total % Cover o	f: Multip	oly by:
2	0			OBL species	x 1=	0.0
3.				FACW species	x 2=	
4				FAC species	x 3=	
5	0	= Total Cover		FACU species	x 4=	0.0
Herb Stratum (Plot size: 6 ft)		= 10tal Covel		UPL species	x 5=	
1. Lolium perenne	60	FAC	С	Column Totals:	0 (A)	0 (B)
2.	-			Prevalence Inde	x = B/A =	0.0
3.						
4				Hydrophytic Ve	egetation Indica	ators:
5				1 - Rapid Te	st for Hydrophyt	ic Vegetation
6					ce Test is >50%	
7.					ce Index is ≤3.0	
9.				data in Rema	gicai Adaptatior arks or on a sep	ns ¹ (Provide supporting arate sheet)
10.					Non-Vascular Pl	· ·
11.				✓ Problematic	Hydrophytic Ve	getation¹ (Explain)
	60	= Total Cover		1Indicators of hy	dric soil and we	tland hydrology must
Woody Vine Stratum (Plot size: 12 ft)		_		be present, unle		
1. NONE						
2				Hydrophytic		
	0	= Total Cover		Vegetation		
% Bare Ground in Herb Stratum				Present?	Yes x	No
Remarks:						
Vegetation is problematic. Agricultural site	consisting of 50)-80% Lolium perenne	e and manage	d for monoculture		

SOIL Sampling Point: SP19 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) % Color (moist) % Loc² (inches) Type¹ Texture Remarks 5 С 0-7 10YR3/2 95 10YR4/4 PL **GSiCL** 5%OR 7-12 10YR2/2 100 **GrCL** 90 10 С GrC 12-20 10YR3/1 10YR5/4 M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils³: Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) \checkmark ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Saturation (A3) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Д. Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) \checkmark Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled Soils (C6) ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): X No Wetland Hydrology Present? Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn		Sampling Date:	8/16/17	
Applicant/Owner: Norman Steckley		State: OR S	Bampling Po	0.000		
Investigator(s): Allen Martin	Section, T	ownship, Range: S	Section 10, T1	2S, R02W		
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, c	convex, non	e): none	Slope	e (%): 0
Subregion (LRR): A	Lat: 44.5485	83 Long: -	122.926069	Datum:	D_North_America	an_1983_HARN (SP, Int ft)
Soil Map Unit Name: Coburg silty clay loam			NWI	classification:	upl	
Are climatic / hydrologic conditions on the site typ						
Are Vegetation , Soil , or Hydrolog		-		al Circumstance		
Are Vegetation $\underline{\times}$, Soil $\underline{\square}$, or Hydrolog	gy <u> </u>	ally problematic?	(If n	eeded, explain a	iny answers in F	Remarks.)
SUMMARY OF FINDINGS – Attach sit	a man sho	wina samnlina i	noint loc	atione trans	eacts impor	tant features etc
Hydrophytic Vegetation Present? Yes ×	No					
Hydric Soil Present? Yes	No ×	Is the Sampled A	Area within	a Wetland?	Yes	No _X
Wetland Hydrology Present? Yes	NO ×					
Plot located centrally in field	on north a	dge of challow	cvvola			
1 lot located centrally in field	on north C	age of shanow	swarc.			
VEGETATION – Use scientific names	of plants.					
T 0	Absolute		ulcatoi	Dominance Tes	st worksheet:	
<u>Tree Stratum</u> (Plot size: 30 ft)	% Cover	Species? S		Number of Domi That Are OBL, F		1 (A)
1. None	0 0			Total Number of	,	1 (A)
2. 3.	0			Species Across		1 (B)
34	0			Percent of Domi		
	-			That Are OBL, F	ACW, or FAC:	100 (A/B)
	0	= Total Cover				
Sapling/Shrub Stratum (Plot size: 30 ft)				Prevalence Inde	ex worksheet:	
1. None	0			Total % Cover o	f: Multip	oly by:
2	0			OBL species	x 1=	0.0
3	0			FACW species	x 2=	0.0
4.				FAC species	x ₃ =	0.0
5	0	- Total Cavan		FACU species	x 4=	0.0
Herb Stratum (Plot size: 6 ft)	-	= Total Cover		UPL species	x 5=	0.0
1. Lolium perenne	60	FAC	C	Column Totals:	0 (A)	0 (B)
2.				Prevalence Inde	ex = B/A =	0.0
3.						
4.				Hydrophytic Ve	getation Indica	ators:
5				1 - Rapid Tes	st for Hydrophyt	tic Vegetation
6				Z - Dominano	ce Test is >50%	1
7					ce Index is ≤3.0	
8	<u> </u>			4 - Morpholo	gical Adaptatior arks or on a sep	ns ¹ (Provide supporting
9.					Non-Vascular P	· · · · · · · · · · · · · · · · · · ·
10.				-		getation¹ (Explain)
11.	60	= Total Cover				tland hydrology must
Woody Vine Stratum (Plot size: 12 ft)				be present, unle		
1. NONE						
2.						
	0	= Total Cover		Hydrophytic Vegetation		
% Bare Ground in Herb Stratum				-	Yes x	No
Remarks:			•			
Vegetation is problematic. Agricultural site	consisting of 50	0-80% Lolium perenne	e and manage	d for monoculture	:	

SOIL Sampling Point: SP20 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) Color (moist) % Loc² Remarks (inches) Type¹ Texture 0-12 10YR3/2 **GrSiCL** С 5 **VGSiCL** 12-18 10YR3/2 95 10YR4/4 M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils³: Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and \Box Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Saturation (A3) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): No X Wetland Hydrology Present? Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt	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	e, convex, none): none Slope (%): 0
	Lat: 44.548583 Long:	-122.926069 Datum: D_North_American_1983_HARN (SP, Int ft)
Soil Map Unit Name: Courtney gravelly silty clay loa	am	NWI classification: upl
Are climatic / hydrologic conditions on the site typi		
	gy significantly disturbed?	
Are Vegetation x , Soil , or Hydrolog	gy <u> </u>	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach sit	e man showing sampling	g point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes x	No	
Hydric Soil Present? Yes ×	No Is the Sampled	d Area within a Wetland? Yes X No
Wetland Hydrology Present? Yes X	NO	
Plot located in shallow swale	near center of field	
Flot located ill shallow swale	near center of field.	
VEGETATION – Use scientific names	of plants.	
		Indicator Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft)	% Cover Species?	Status Number of Dominant Species
1. None	0 0	That Are OBL, FACW, or FAC: 1 (A)
2. 3.	0	Total Number of Dominant Species Across All Strata: 1 (B)
3	0	Percent of Dominant Species
T		That Are OBL, FACW, or FAC: 100 (A/B)
	0 = Total Cover	
Sapling/Shrub Stratum (Plot size: 30 ft)		Prevalence Index worksheet:
1. None	0	Total % Cover of: Multiply by:
2.		OBL species x 1 = 0.0
3.	0	FACW species x 2 = 0.0
4		FAC species $x_3 = 0.0$
5		FACU species x 4 = 0.0
	0 = Total Cover	UPL species $x_5 = 0.0$
Herb Stratum (Plot size: 6 ft)	60 J	Column Totals: 0 (A) 0 (B)
Lolium perenne 2.	00	Prevalence Index = B/A = 0.0
2		Trevalence index = B/A =
4.		Hydrophytic Vegetation Indicators:
5.		1 - Rapid Test for Hydrophytic Vegetation
6.		2 - Dominance Test is >50%
7.		3 - Prevalence Index is ≤3.01
8		4 - Morphological Adaptations¹ (Provide supporting
9		data ili Remarks oi on a separate sheet)
10		5 - Wetland Non-Vascular Plants ¹
11		Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size: 12 ft)	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 12 ft) 1. NONE		so procent, amose distance of prosidinate.
···		
2	0 = Total Cover	Hydrophytic
% Bare Ground in Herb Stratum		Vegetation Present? Yes × No
		
Remarks:		I
Vegetation is problematic. Agricultural site	consisting of 50-80% Lalium parar	nne and managed for monoculture
resemble is problematic. Agricultural site	consisting of 50-0070 Londin perci	me 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 Matrix Redox Features Color (moist) % Color (moist) % Loc² (inches) Type¹ Texture Remarks 5 С 0-8 10YR3/2 95 10YR4/4 PL/M **GrSiCL** 3%OR 8-16 10YR2/2 100 **GrSiCL** 15 С 16-24 10YR3/2 85 10YR5/4 M **GrCL** ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils³: Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) \checkmark ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Saturation (A3) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) П Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) \checkmark Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled Soils (C6) ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): X No Wetland Hydrology Present? Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt Applicant/Owner: Norman Steckley	City/County: Lebanon/Linn State: OR Sampling	Sampling Date: 8/16/17 Point: SP22
Investigator(s): Allen Martin		, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, r	
	Lat: 44.548583 Long: -122.92600	
Soil Map Unit Name: Courtney gravelly silty clay loa		WI classification: upl
Are climatic / hydrologic conditions on the site typic	cal for this time of year? Yes 🗾 No	(If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrolog	y significantly disturbed? Are "No	ormal Circumstances" present? Yes x No
Are Vegetation \underline{x} , Soil $\underline{\boxed{Z}}$, or Hydrolog	y naturally problematic? (If needed, explain any answers in Remarks.)
OURANA DV OF FINIDINGO Attack alt		
	No Rowling sampling point i	ocations, transects, important features, etc.
Hvdric Soil Present? Yes ×		nin a Wetland? Yes x No
Wetland Hydrology Present? Yes ×	No	
Remarks:	0.5.1.1	
Plot located in shallow swale	near center of field.	
VEGETATION – Use scientific names	of plants.	
Troo Stratum (Plot size: 30 ft	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30 ft) 1. None	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2	0	Total Number of Dominant
3.	0	Species Across All Strata: 1 (B)
4.	0	Percent of Dominant Species That Are ORL FACW or FAC: 100
		That Are OBL, FACW, or FAC: 100 (A/B)
	0 = Total Cover	
Sapling/Shrub Stratum (Plot size: 30 ft)		Prevalence Index worksheet:
1. None	0	Total % Cover of: Multiply by:
2.	0	OBL species x 1 = 0.0
3.	0	FACW species $x_2 = 0.0$
4 5.	0	FAC species $x_3 = 0.0$
5	0 = Total Cover	FACU species x 4 = 0.0
Herb Stratum (Plot size: 6 ft)		UPL species $x_5 = 0.0$
1. Lolium perenne	60 FAC	Column Totals: 0 (A) 0 (B)
2.		Prevalence Index = B/A = 0.0
3		
4		Hydrophytic Vegetation Indicators:
5		1 - Rapid Test for Hydrophytic Vegetation
6		☑ 2 - Dominance Test is >50%
7.		3 - Prevalence Index is ≤3.0¹
9.		4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
10.		5 - Wetland Non-Vascular Plants ¹
11.		Problematic Hydrophytic Vegetation¹ (Explain)
	60 = Total Cover	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)		be present, unless disturbed or problematic.
1. NONE		
2		Hydrophytic
	0 = Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum	<u></u>	Present? Yes x No
Remarks:		
Vegetation is problematic. Agricultural site	consisting of 50-80% Lolium perenne and man	aged for monoculture

SOIL Sampling Point: SP22 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) % Color (moist) % Loc² (inches) Type¹ Texture Remarks 0-4 10YR3/2 **GrSiCL** 5 С 4-11 10YR3/2 GrC 95 10YR4/4 M 5 С 11-14 10YR3/1 95 10YR4/4 GrC M С GrC 14-20 10YR4/1 80 7.5YR5/6 M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils³: ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) \checkmark ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) Д. Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8)

□ No □ Depth (inches):

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

Depth (inches):

Depth (inches):

□ No

☐ No

Yes

Remarks:

Field Observations: Surface Water Present?

Water Table Present? Saturation Present?

(includes capillary fringe)

Yes X No

Wetland Hydrology Present?

Project/Site: Burkhartt Applicant/Owner: Norman Steckley	City/County: Lebanon/Linn State: OR Sa	Sampling Date: 8/16/17 mpling Point: SP23
Investigator(s): Allen Martin		ction 10, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, co	
•		22.926069 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 typic	cal for this time of year? Yes	No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrolog	y significantly disturbed?	Are "Normal Circumstances" present? Yes x No
Are Vegetation x , Soil Z , or Hydrolog	y naturally problematic?	(If needed, explain any answers in Remarks.)
CUMMA ADV OF FINIDINGS. Attack at		ciut la actiona duamanda immendant focturas etc.
	No Rowing sampling p	oint locations, transects, important features, etc.
Hydric Soil Present? Yes		ea within a Wetland? Yes No _x
Wetland Hydrology Present? Yes X	No	
Remarks:	·	
VEGETATION – Use scientific names	of plants.	
Tree Stratum (Plot size: 30 ft)		cator Dominance Test worksheet:
1. None	% Cover Species? Sta	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2.	0	Total Number of Dominant
3.	0	Species Across All Strata: 1 (B)
4.	0	Percent of Dominant Species That Are OBL FACW or FAC: 100 (A/D)
		That Are OBL, FACW, or FAC: 100 (A/B)
	0 = Total Cover	
Sapling/Shrub Stratum (Plot size: 30 ft)		Prevalence Index worksheet:
1. None	0	Total % Cover of: Multiply by:
2.	0	OBL species x 1= 0.0
3.	0	FACW species x 2= 0.0
4 5.	0	FAC species x 3 = 0.0
J	0 = Total Cover	FACU species x 4 = 0.0
Herb Stratum (Plot size: 6 ft)		UPL species $x_5 = 0.0$
1. Lolium perenne	60 FAC	Column Totals: 0 (A) 0 (B)
2.		Prevalence Index = B/A = 0.0
3.		
4.		Hydrophytic Vegetation Indicators:
5		1 - Rapid Test for Hydrophytic Vegetation
6		2 - Dominance Test is >50%
7.		3 - Prevalence Index is ≤3.0¹
8.		4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
9		5 - Wetland Non-Vascular Plants ¹
10. 11.		Problematic Hydrophytic Vegetation ¹ (Explain)
···	60 = Total Cover	¹Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)		be present, unless disturbed or problematic.
1. NONE		
2.		Hadarah dia
	0 = Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum		Present? Yes x No
Remarks:		
Vegetation is problematic. Agricultural site	consisting of 50-80% Lolium perenne a	nd 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 Matrix Redox Features Color (moist) % Color (moist) % Loc² (inches) Type¹ Texture Remarks 0-6 10YR3/2 **GrSiCL** 5 С M/PL 6-8 10YR3/2 **GrSiCL** 95 10YR4/4 2%OR **GrCL** 8-12 10YR2/2 100 С GrC 13-22 10YR3/1 85 10YR5/4 15 M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and \Box Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) П Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) \checkmark Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No Depth (inches): □ No Depth (inches): Wetland Hydrology Present? Yes X No Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn		Sampling Date:	8/16/17	
Applicant/Owner: Norman Steckley		State: OR S	Sampling Poi	0.00		
Investigator(s): Allen Martin	Section, T	ownship, Range:	Section 10, T1	2S, R02W		
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, c	convex, none	e): none	Slope	e (%): 0
Subregion (LRR): A	Lat: 44.54858	B3 Long: -	122.926069	Datum:	D_North_America	an_1983_HARN (SP, Int ft)
Soil Map Unit Name: Coburg silty clay loam			NWI	classification:	upl	
Are climatic / hydrologic conditions on the site type						
Are Vegetation , Soil , or Hydrolo		-		al Circumstance		
Are Vegetation x , Soil , or Hydrolo	gy 🔲 natur	ally problematic?	(If n	eeded, explain a	iny answers in F	Remarks.)
SUMMARY OF FINDINGS - Attach sit	te man sho	wing sampling	noint loc	ations trans	ects impor	tant features etc
Hydrophytic Vegetation Present? Yes ×	No		point iou	ationo, trano		
Hydric Soil Present? Yes	No ×	Is the Sampled A	Area within a	a Wetland?	Yes	No _x
Wetland Hydrology Present? Yes	NO ×					
Remarks:						
VEGETATION – Use scientific names	of plants.					
	Absolute		dicator	Dominance Tes	t worksheet:	
Tree Stratum (Plot size: 30 ft)	% Cover	Species? S		Number of Domi		4 (4)
1. None	0 0			That Are OBL, F		1 (A)
2. 3.	0			Total Number of Species Across		1 (B)
3	0			Percent of Domi	nant Species	` ,
T	-			That Are OBL, F	ACW, or FAC:	100 (A/B)
	0	= Total Cover				
Sapling/Shrub Stratum (Plot size: 30 ft)		_		Prevalence Inde	ex worksheet:	
1. None	0			Total % Cover of	f: Multip	oly by:
2	0			OBL species	x 1=	0.0
3	0			FACW species	x 2=	0.0
4				FAC species	x 3=	0.0
5	0	T + + 0		FACU species	x 4=	0.0
Lloub Chrotium (Diet sine) 6 ft	-	= Total Cover		UPL species	x 5=	0.0
Herb Stratum (Plot size: 6 ft) 1. Lolium perenne	60	FAC		Column Totals:	0 (A)	0 (B)
2.				Prevalence Inde	x = B/A =	0.0
3.						
4.				Hydrophytic Ve	getation Indica	ators:
5.				1 - Rapid Tes	st for Hydrophyt	ic Vegetation
6				2 - Dominano	ce Test is >50%	
7	_				ce Index is ≤3.0°	
8	_			4 - Morpholog	gical Adaptatior arks or on a sep	ns ¹ (Provide supporting
9.					Non-Vascular Pl	
10.				_		getation¹ (Explain)
11.	60	= Total Cover		 -		tland hydrology must
Woody Vine Stratum (Plot size: 12 ft)				be present, unle		
1. NONE						
2.	-					
	0	= Total Cover		Hydrophytic Vegetation		
% Bare Ground in Herb Stratum				-	Yes x	No
Remarks:			l			
Vegetation is problematic. Agricultural site	consisting of 50	0-80% Lolium perenne	and managed	d for monoculture		

SOIL Sampling Point: SP24 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) % Color (moist) % Loc² Remarks (inches) Type¹ Texture 2 С 0-10 10YR2/2 98 10YR4/4 M **GrSiCL** 10YR2/2 100 **GrCL** 10-18 90 10 С **GrCL** 18-22 10YR2/2 10YR5/4 M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and 卫 Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) Д. Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7)

Project/Site: Burkhartt	City/County:	Lebanon/Linn		Sampling Date:	8/16/17	
Applicant/Owner: Norman Steckley		State: OR S	Bampling Po	0.00		
Investigator(s): Allen Martin	Section, T	ownship, Range: S	Section 10, T1	2S, R02W		
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, c	convex, non	e): none	Slope	e (%): 0
Subregion (LRR): A	Lat: 44.5485	83 Long: -	122.926069	Datum:	D_North_Americ	an_1983_HARN (SP, Int ft)
Soil Map Unit Name: Coburg silty clay loam			NWI	classification:	upl	
Are climatic / hydrologic conditions on the site typ						
Are Vegetation , Soil , or Hydrolog				al Circumstance		
Are Vegetation x , Soil , or Hydrolog	gy 🔲 natui	ally problematic?	(If n	eeded, explain a	iny answers in f	Remarks.)
SUMMARY OF FINDINGS – Attach sit	a man sho	wing sampling	noint loc	ations trans	acts impor	tant features etc
Hydrophytic Vegetation Present? Yes x	No		point ioo	ationo, tranc		
Hydric Soil Present? Yes ×	No	Is the Sampled A	rea within	a Wetland?	Yes x	No
Wetland Hydrology Present? Yes x	NU					
Remarks:						
VEGETATION – Use scientific names	of plants.					
	Absolute		ulcatoi	Dominance Tes	st worksheet:	
Tree Stratum (Plot size: 30 ft)	% Cover	Species? S		Number of Domi		1 (A)
1. None	0			That Are OBL, F		1 (A)
2. 3.	0			Total Number of Species Across		1 (B)
3	0			Percent of Domi	nant Species	` ,
т.	-			That Are OBL, F	ACW, or FAC:	100 (A/B)
	0	= Total Cover				
Sapling/Shrub Stratum (Plot size: 30 ft)				Prevalence Ind	ex worksheet:	
1. None	0			Total % Cover o	f: Multip	oly by:
2	0			OBL species	x 1=	0.0
3	0			FACW species	x 2=	0.0
4.				FAC species	x 3=	0.0
5	0	- Total Causes		FACU species	x 4=	0.0
Herb Stratum (Plot size: 6 ft)	-	= Total Cover		UPL species	x 5=	0.0
1. Lolium perenne	60	FAC	3	Column Totals:	0 (A)	0 (B)
2.	-			Prevalence Inde	ex = B/A =	0.0
3.						
4.				Hydrophytic Ve	egetation Indic	ators:
5				1 - Rapid Te	st for Hydrophy	tic Vegetation
6				Z 2 - Dominan	ce Test is >50%	1
7.					ce Index is ≤3.0	
8.	-			4 - Morpholo	gical Adaptatior arks or on a sep	ns ¹ (Provide supporting
9.					Non-Vascular P	
10. 11.				_		getation¹ (Explain)
11.	60	= Total Cover				tland hydrology must
Woody Vine Stratum (Plot size: 12 ft)				be present, unle		
1. NONE						
2.						
	0	= Total Cover		Hydrophytic Vegetation		
% Bare Ground in Herb Stratum				-	Yes x	No
Remarks:						
Vegetation is problematic. Agricultural site	consisting of 50	0-80% Lolium perenne	and manage	d for monoculture		

SOIL Sampling Point: SP25 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) % Color (moist) Loc² (inches) % Type¹ Texture Remarks 5 С 0-8 10YR3/2 95 10YR4/4 M **GrSiCL** 2%OR С 5 8-14 10YR2/2 95 10YR3/4 **GrSiCL** M 14-22 80 20 С 10YR4/1 10YR5/4 M **GrCL** ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) \square ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) П Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) \checkmark Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? Yes X No Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn	Sampling Date: 8/16/17
Applicant/Owner: Norman Steckley	,	State: OR Sampling	
Investigator(s): Allen Martin	Section, To	ownship, Range: Section 1	0, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Loc	cal relief (concave, convex,	none): none Slope (%): 0
Subregion (LRR): A	Lat: 44.54858	Long: -122.9260	D_North_American_1983_HARN (SP, Int ft)
Soil Map Unit Name: Conser silty clay loam			IWI classification: upl
Are climatic / hydrologic conditions on the site type			
Are Vegetation , Soil , or Hydrold		-	lormal Circumstances" present? Yes x No
Are Vegetation x , Soil Z , or Hydrold	gy 🔲 natura	ally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach si	te man shov	ving sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes ×	No		
Hydric Soil Present? Yes ×		Is the Sampled Area wit	hin a Wetland? Yes × No
Wetland Hydrology Present? Yes ×	NO		
Plot located on north end of	field on sou	thern wetland hound	dary
That rocated on north cha of	ficia off sou	mem wenana bound	iai y.
VEGETATION – Use scientific names	of plants.		
	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft)	% Cover	Species? Status	Number of Dominant Species
1. None	0		That Are OBL, FACW, or FAC: 1 (A)
2.	0		Total Number of Dominant Species Across All Strata: 1 (B)
3	0		Percent of Dominant Species
T	- :		That Are OBL, FACW, or FAC: 100 (A/B)
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30 ft)		<u></u>	Prevalence Index worksheet:
1. None	0		Total % Cover of: Multiply by:
2			OBL species x 1 =0.0
3			FACW species x 2 = 0.0
4			FAC species $x_3 = 0.0$
5	0	- Total Cause	FACU species x ₄ =0.0
Herb Stratum (Plot size: 6 ft)	-	_ = Total Cover	UPL species x ₅ =0.0
1 Lolium perenne	60	FAC	Column Totals: 0 (A) 0 (B)
2.			Prevalence Index = B/A = 0.0
3.			<u> </u>
4.			Hydrophytic Vegetation Indicators:
5			1 - Rapid Test for Hydrophytic Vegetation
6			2 - Dominance Test is >50%
7	_		3 - Prevalence Index is ≤3.0 ¹
8.			4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
9.			5 - Wetland Non-Vascular Plants ¹
10 11.			Problematic Hydrophytic Vegetation¹ (Explain)
11	60	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)			be present, unless disturbed or problematic.
1. NONE]
2.			I the description
	0	= Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum			Present? Yes x No
Remarks:			
Vegetation is problematic. Agricultural sit	e consisting of 50-	-80% Lolium perenne and man	naged for monoculture

SOIL Sampling Point: SP26 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features % Color (moist) Color (moist) % Loc² (inches) Type¹ Texture Remarks 100 0-7 10YR3/2 SiCL 7-10 5 С 10YR3/2 M/PL SiCL 95 10YR4/4 2% OR 5 С 10-19 10YR3/2 95 10YR4/4 CL M 20-25 25 С С 10YR3/1 75 10YR4/4 M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) \square ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): Type: CL **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) П Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) \checkmark Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? Yes X No Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn	,	Sampling Date:	8/16/17	
Applicant/Owner: Norman Steckley		State: OR S	Sampling Poi	0.00		
Investigator(s): Allen Martin	Section, T	ownship, Range:	Section 10, T1	2S, R02W		
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, c	convex, none	e): none	Slope	e (%): 0
Subregion (LRR): A	Lat: 44.5485	B3 Long: -	122.926069	Datum:	D_North_America	an_1983_HARN (SP, Int ft)
Soil Map Unit Name: Conser silty clay loam			NWI	classification:	upl	
Are climatic / hydrologic conditions on the site type						
Are Vegetation , Soil , or Hydrolo		-		al Circumstance		
Are Vegetation x , Soil , or Hydrolog	gy <u> </u>	ally problematic?	(If n	eeded, explain a	iny answers in F	Remarks.)
SUMMARY OF FINDINGS – Attach sit	to man sho	wing sampling	noint loc	ations trans	acts impor	tant foatures etc
Hydrophytic Vegetation Present? Yes ×	No		point iou	ationo, tranc		
Hydric Soil Present? Yes	No ×	Is the Sampled A	Area within a	a Wetland?	Yes	No _x
Wetland Hydrology Present? Yes	NO x					
Remarks:						
VEGETATION – Use scientific names	of plants.					
	Absolute		ulcatoi	Dominance Tes	t worksheet:	
Tree Stratum (Plot size: 30 ft)	% Cover	Species? S		Number of Domi		1 (A)
1. None	0 0			That Are OBL, F		1 (A)
2. 3.	0			Total Number of Species Across		1 (B)
3	0			Percent of Domi	nant Species	` ,
т.	_			That Are OBL, F	ACW, or FAC:	100 (A/B)
	0	= Total Cover				
Sapling/Shrub Stratum (Plot size: 30 ft)				Prevalence Inde	ex worksheet:	
1. None	0			Total % Cover o	f: Multip	oly by:
2				OBL species	x 1=	0.0
3	0			FACW species	x 2=	0.0
4.				FAC species	x 3=	0.0
5	0	- Total Caver		FACU species	x 4=	0.0
Herb Stratum (Plot size: 6 ft)	-	= Total Cover		UPL species	x 5=	0.0
1. Lolium perenne	60	FAC	C	Column Totals:	0 (A)	0 (B)
2.				Prevalence Inde	x = B/A =	0.0
3.						
4.				Hydrophytic Ve	getation Indica	ators:
5				1 - Rapid Tes	st for Hydrophyt	ic Vegetation
6	_				ce Test is >50%	
7.	_				ce Index is ≤3.0°	
8.	-			4 - Morpholo	gical Adaptatior arks or on a sep	ns ¹ (Provide supporting arate sheet)
9					Non-Vascular Pl	· ·
10 11.				_		getation¹ (Explain)
11.	60	= Total Cover				tland hydrology must
Woody Vine Stratum (Plot size: 12 ft)	-			be present, unle		
1. NONE						
2.				Harden o la dia		
	0	= Total Cover		Hydrophytic Vegetation		
% Bare Ground in Herb Stratum				-	Yes x	No
Remarks:						
Vegetation is problematic. Agricultural site	consisting of 50	0-80% Lolium perenne	e and managed	d for monoculture		

SOIL Sampling Point: SP27 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features % Color (moist) Color (moist) Loc² (inches) % Type¹ Texture Remarks 100 0-10 10YR3/2 SiCL 100 10-24 10YR2/2 SiCL/CL ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and \Box Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) Д. Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? No X Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt Applicant/Owner: Norman Steckley	City/County: Lebanon/Linn State: OR Samp	Sampling Date: 8/16/17 ling Point: SP28
Investigator(s): Allen Martin		n 10, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, conve	
		26069 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 typic	cal for this time of year? Yes	
Are Vegetation , Soil , or Hydrolog		e "Normal Circumstances" present? Yes x No
Are Vegetation x , Soil , or Hydrolog	y naturally problematic?	(If needed, explain any answers in Remarks.)
		nt locations, transects, important features, etc.
	No Is the Sampled Area	within a Wetland? Yes X No
	No	
Remarks:		
VEGETATION – Use scientific names	of plants.	
	Absolute Dominant Indicat	
Tree Stratum (Plot size: 30 ft)	% Cover Species? Status	Trained of Bollmant oposios
1. None	0	That Are OBL, FACW, or FAC: 1 (A)
2.	0	Total Number of Dominant Species Across All Strata: 1 (B)
3.	0	Percent of Dominant Species
4.		That Are OBL, FACW, or FAC: 100 (A/B)
	0 = Total Cover	
Sapling/Shrub Stratum (Plot size: 30 ft)		Prevalence Index worksheet:
1. None	0	Total % Cover of: Multiply by:
2.	0	OBL species x 1 = 0.0
3.	0	FACW species x 2 = 0.0
4	0	FAC species x 3 = 0.0
5	0	FACU species x 4 =0.0
	0 = Total Cover	UPL species $x_5 = 0.0$
Herb Stratum (Plot size: 6 ft)	60 FAC	Column Totals: 0 (A) 0 (B)
1. Lolium perenne	60 FAC	Prevalence Index = B/A = 0.0
2.		Prevalence Index = B/A = 0.0
3 4.		Hydrophytic Vegetation Indicators:
4 5.		1 - Rapid Test for Hydrophytic Vegetation
6.		✓ 2 - Dominance Test is >50%
7.		3 - Prevalence Index is ≤3.0¹
8.		4 - Morphological Adaptations ¹ (Provide supporting
9.		data in Remarks or on a separate sheet)
10		5 - Wetland Non-Vascular Plants ¹
11		Problematic Hydrophytic Vegetation¹ (Explain)
	60 = Total Cover	¹Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)		be present, unless disturbed or problematic.
1. NONE		
2	0 = Total Cover	Hydrophytic
% Bare Ground in Herb Stratum	⁰ = Total Cover	Vegetation Present? Yes × No
70 Date Ground in Field Stratum		Present? Yes x No
Remarks:		
Tomano.		
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 Matrix Redox Features Color (moist) % Color (moist) % Loc² (inches) Type¹ Texture Remarks 100 0-5 10YR3/2 SiCL 5 С 5-10 10YR3/2 M/PL SiCL 95 10YR4/4 2%OR 10-22 90 10 С 10YR2/2 10YR5/3 CL M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) \square ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): Type: CL **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) П Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) \checkmark Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? Yes X No Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn	Sampling Date: 8/16/17
Applicant/Owner: Norman Steckley		State: OR Sa	ampling Point: SP29
Investigator(s): Allen Martin	Section, T	ownship, Range: Se	ection 10, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, co	onvex, none): none Slope (%): 0
Subregion (LRR): A	Lat: 44.54858	B3 Long: -1	22.926069 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 typ			
Are Vegetation , Soil , or Hydrolog			Are "Normal Circumstances" present? Yes x No
Are Vegetation x , Soil v , or Hydrolog	gy 🔲 natur	ally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach sit	e map sho	wing sampling p	point locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes x	No		·
Hydric Soil Present? Yes Wetland Hydrology Present? Yes ×	No ×	Is the Sampled Ar	rea within a Wetland? Yes No _x
Remarks:			
Plot located on southern bour	ndary of no	orth depression i	in upland.
			w _F
VECETATION Line opiontific names	of plants		
VEGETATION – Use scientific names	•	Danis and Ind	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft)	Absolute % Cover		licator Dominance Test worksneet: tatus Number of Dominant Species
1. None	0		That Are OBL, FACW, or FAC: 1 (A)
2.			Total Number of Dominant
3.	0		Species Across All Strata: 1 (B)
4	0		Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
	0	Tatal Oansa	
Sapling/Shrub Stratum (Plot size: 30 ft)	0	= Total Cover	Prevalence Index worksheet:
4 None	0		Total % Cover of: Multiply by:
2.	-		OBL species x 1 = 0.0
3.			FACW species x 2 = 0.0
4.	_		FAC species $x_3 = 0.0$
5	•		FACU species x 4 = 0.0
	0	_ = Total Cover	UPL species $x_5 = 0.0$
Herb Stratum (Plot size: 6 ft)	60	FAC	Column Totals: 0 (A) 0 (B)
 Lolium perenne Lolium perenne 	. 60	V PAC	Prevalence Index = B/A = 0.0
2			Trevalence mack = B/A =
4.			Hydrophytic Vegetation Indicators:
5.			☐ 1 - Rapid Test for Hydrophytic Vegetation
6			2 - Dominance Test is >50%
7			☐ 3 - Prevalence Index is ≤3.01
8			4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
9.			5 - Wetland Non-Vascular Plants ¹
10 11.			Problematic Hydrophytic Vegetation ¹ (Explain)
11.	60	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)		_	be present, unless disturbed or problematic.
1. NONE			
2			Hydrophytic
	0	= Total Cover	Vegetation
% Bare Ground in Herb Stratum			Present? Yes x No
Remarks:			
Vegetation is problematic. Agricultural site	consisting of 50	0-80% Lolium perenne a	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 Redox Features (inches) Color (moist) % Color (moist) % Loc² Remarks Type¹ Texture 100 0-9 10YR3/2 SiCL 5 С 10YR2/2 M/PL SiCL 9-12.5 95 10YR4/4 90 10 С 12.5-20 10YR2/2 10YR5/3 CL M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and \Box Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): Type: CL **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) Д. Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? No X Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Burkhartt Applicant/Owner: Norman Steckley	City/County: Lebanon/Linn State: OR Sampling	Sampling Date: 8/16/17 Point: SP30
Investigator(s): Allen Martin		, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, r	
	Lat: 44.548583 Long: -122.92606	
Soil Map Unit Name: Conser silty clay loam		WI classification: upl
Are climatic / hydrologic conditions on the site typic		
Are Vegetation , Soil , or Hydrolog		ormal Circumstances" present? Yes × No
Are Vegetation × , Soil , or Hydrolog		If needed, explain any answers in Remarks.)
<u> </u>	, <u>—</u> , ,	
	e map showing sampling point l	ocations, transects, important features, etc.
	No	
	No x Is the Sampled Area with	in a Wetland? Yes No _x
	<u> </u>	
Remarks: Plot located in upland on sout	th end of broad depression that	extends to north end of study area.
Flot located in upland on sour	in end of broad depression that	extends to norm end of study area.
VEGETATION – Use scientific names	of plants.	
Troe Stratum (Diet size: 30 ft	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30 ft) 1. None	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
··· 	0	Total Number of Dominant
2		Species Across All Strata: 1 (B)
3	0	Percent of Dominant Species
		That Are OBL, FACW, or FAC: 100 (A/B)
	0 = Total Cover	
Sapling/Shrub Stratum (Plot size: 30 ft)		Prevalence Index worksheet:
1 None	0	Total % Cover of: Multiply by:
2.	0	OBL species x 1 = 0.0
3.	0	FACW species x 2 = 0.0
4.		FAC species $x_3 = 0.0$
5.	0	FACU species x 4 = 0.0
	0 = Total Cover	UPL species $x_5 = 0.0$
Herb Stratum (Plot size: 6 ft)		X 5
1. Lolium perenne	60 FAC	Column Totals: 0 (A) 0 (B)
2.		Prevalence Index = B/A = 0.0
3		
4		Hydrophytic Vegetation Indicators:
5		☐ 1 - Rapid Test for Hydrophytic Vegetation
6		☑ 2 - Dominance Test is >50%
7		☐ 3 - Prevalence Index is ≤3.0 ¹
8		4 - Morphological Adaptations¹ (Provide supporting
9		data in Remarks of on a separate sheet)
10		5 - Wetland Non-Vascular Plants ¹
11		Problematic Hydrophytic Vegetation¹ (Explain)
	60 = Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 12 ft)		be present, unless disturbed or problematic.
1. NONE		
2	0 = Total Cover	Hydrophytic
O/ David October dia Harl Otantura	0 = Total Cover	Vegetation
% Bare Ground in Herb Stratum	<u> </u>	Present? Yes x No
Remarks:		
Vegetation is problematic. Agricultural site	consisting of 50-80% Lolium perenne and man	aged for monoculture

SOIL Sampling Point: SP30 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Loc² Color (moist) % Color (moist) % Texture Remarks (inches) Type¹ 0-4 100 SiCL 10YR3/2 4-9 2 С PL10YR3/2 98 10YR4/4 SiCL 1%OR 9-12 100 SiCL 10YR2/2 12-22 10YR3/2 80 10YR5/4 20 С CL M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils³: Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Red Parent Material (TF2) Stripped Matrix (S6) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): Type: CL **Hydric Soil Present?** Depth (inches): begins 12"bg

Depth (money).	
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply) Surface Water (A1)	□ 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9)
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes Depth (inches): Saturation Present? Yes Depth (inches): Vincludes capillary fringe) Yes Depth (inches):	Netland Hydrology Present? Yes No X
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspection	ons), if available:
Remarks:	

Are Vegetation x , Soil , or Hydrolo SUMMARY OF FINDINGS – Attach si Hydrophytic Vegetation Present? Yes x Hydric Soil Present? Yes x Wetland Hydrology Present? Yes x Remarks:	Local relief (concave, convex, r Lat: 44.548583 Long: -122.9260 Noical for this time of year? Yes gy naturally problematic? Are "Noical for this time of year? Yes Noical for this time of year? Noical for this time of year?	none): none Slope (%): 0 none Slope (%): 0 D_North_American_1983_HARN (SP, Int ft) WI classification: upl (If no, explain in Remarks.) ormal Circumstances" present? Yes x No (If needed, explain any answers in Remarks.) ocations, transects, important features, etc. nin a Wetland? Yes x No
VEGETATION – Use scientific names	of plants.	
Tree Stratum (Plot size: 30 ft) 1. None 2.	Absolute Dominant Species? Status O Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: 30 ft) 1. None 2. 3. 4. 5.	0 0	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = 0.0 FACW species x 2 = 0.0 FAC species x 3 = 0.0 FACU species x 4 = 0.0 UPL species x 5 = 0.0
Herb Stratum (Plot size: 6 ft) 1. Lolium perenne 2. 3.	60 FAC	Column Totals: 0 (A) 0 (B) Prevalence Index = B/A = 0.0 Hydrophytic Vegetation Indicators:
4.		1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size: 12 ft) 1. NONE 2. Was Bare Ground in Herb Stratum	60 = Total Cover 0 = Total Cover	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes × No
Remarks: Vegetation is problematic. Agricultural site	e consisting of 50-80% Lolium perenne and man	aged for monoculture

SOIL Sampling Point: SP31 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features (inches) Color (moist) % Color (moist) Loc² % Type¹ Texture Remarks 2 С 0-5 10YR3/2 98 10YR4/4 M SiCL 5 С 5-10 10YR3/2 10YR4/4 M/PL SiCL 95 2%OR 10-14 С SiCL 10YR3/2 90 10YR5/3 10 M 14-22 С 10YR3/2 10YR5/3 10 M CL ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils³: ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) \checkmark ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) П Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) \checkmark Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) П Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? ☐ No Depth (inches): □ No Depth (inches): Wetland Hydrology Present? Yes X No Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn	Sampling Date: 8/16/17
Applicant/Owner: Norman Steckley		State: OR Sampling	
Investigator(s): Allen Martin	Section, T	ownship, Range: Section 10	D, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, convex,	none): none Slope (%): 0
Subregion (LRR): A	Lat: 44.5485	B3 Long: -122.9260	D_North_American_1983_HARN (SP, Int ft)
Soil Map Unit Name: Conser silty clay loam		N	WI classification: upl
Are climatic / hydrologic conditions on the site typ			
Are Vegetation , Soil , or Hydrolog			ormal Circumstances" present? Yes x No
Are Vegetation x , Soil , or Hydrolog	gy 🔲 natur	ally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach sit	e man sho	wing sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes ×	No		
Hydric Soil Present? Yes	No x	Is the Sampled Area with	nin a Wetland? Yes No _x
Wetland Hydrology Present? Yes	NO x		
Remarks: Plot designed to located east	edge of bro	oad denression on no	rth end of study area
1 for designed to focated east	cuge of ore	bad depression on no	Till Clid of Study area.
VEGETATION – Use scientific names	of plants.		
	Absolute		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft)	% Cover	Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
1. None	0		That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant
2.	0		Species Across All Strata: 1 (B)
3	0		Percent of Dominant Species
	-		That Are OBL, FACW, or FAC: 100 (A/B)
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30 ft)			Prevalence Index worksheet:
1. None	0		Total % Cover of: Multiply by:
2			OBL species x 1=0.0
3			FACW species x 2=0.0
4	0		FAC species $x_3 = 0.0$
5	0	= Total Cover	FACU species x 4 = 0.0
Herb Stratum (Plot size: 6 ft)		_ = Total Cover	UPL species $x_5 = 0.0$
1 Lolium perenne	60	FAC	Column Totals: 0 (A) 0 (B)
2.			Prevalence Index = B/A = 0.0
3.			
4.			Hydrophytic Vegetation Indicators:
5			☐ 1 - Rapid Test for Hydrophytic Vegetation
6			2 - Dominance Test is >50%
7			☐ 3 - Prevalence Index is ≤3.01
8			4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
9			5 - Wetland Non-Vascular Plants¹
10. 11.			Problematic Hydrophytic Vegetation¹ (Explain)
···	60	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)	-	_	be present, unless disturbed or problematic.
1. NONE			
2			Hydrophytic
	0	_ = Total Cover	Vegetation
% Bare Ground in Herb Stratum			Present? Yes x No
Remarks:			
Vegetation is problematic. Agricultural site	consisting of 50	0-80% Lolium perenne and mar	naged for monoculture

SOIL Sampling Point: SP32 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features % (inches) Color (moist) Color (moist) % Loc² Type¹ Texture Remarks 0-6 10YR3/2 100 SiCL CL PL 6-8 10YR3/2 10YR4/4 SiCL 99 1%OR SiCL 8-17 10YR3/2 100 17-24 10YR2/2 100 CL ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils³: ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and 卫 Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) П Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? ☐ No Depth (inches): □ No Depth (inches): Wetland Hydrology Present? No X Water Table Present? Saturation Present? Depth (inches): ☐ No (includes capillary fringe) Yes Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Less than 2%OR

Project/Site: Burkhartt	City/County:	Lebanon/Linn	Sampling Date: 8/16/17
Applicant/Owner: Norman Steckley			ampling Point: SP33
Investigator(s): Allen Martin	Section, T	ownship, Range: Se	ection 10, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, co	onvex, none): none Slope (%): 0
Subregion (LRR): A	Lat: 44.5485	83 Long: -12	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 typ			
Are Vegetation , Soil , or Hydrolo		-	Are "Normal Circumstances" present? Yes x No
Are Vegetation \underline{x} , Soil $\underline{\square}$, or Hydrological	gy 🔲 natu	ally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach sit	te man sho	wing sampling p	oint locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes x	No		
Hydric Soil Present? Yes ×	No	Is the Sampled Ar	ea within a Wetland? Yes <u>×</u> No
Wetland Hydrology Present? Yes x	NU		
Plot located inside broad low	_lving area	on north end of	f ctudy area
1 lot located filside broad low	-iyilig alca	i on north cha o	i study area
VEGETATION – Use scientific names	of plants.		
Tree Ottobare (Diet siese 20 ft	Absolute		icator Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft) 1. None	% Cove	Species? St	atus Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
•			Total Number of Dominant
3.	0		Species Across All Strata: 1 (B)
4.	0		Percent of Dominant Species
			That Are OBL, FACW, or FAC: 100 (A/B)
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30 ft)			Prevalence Index worksheet:
1. None			Total % Cover of: Multiply by:
2.			OBL species x 1= 0.0
3.	_		FACW species x 2= 0.0
45.			FAC species x 3 = 0.0
5	0	= Total Cover	FACU species x 4 = 0.0
Herb Stratum (Plot size: 6 ft)			UPL species $x_5 = 0.0$
1. Lolium perenne	60	FAC	Column Totals: 0 (A) 0 (B)
2			Prevalence Index = B/A = 0.0
3	_		
4.	_		Hydrophytic Vegetation Indicators:
5			1 - Rapid Test for Hydrophytic Vegetation
6			2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹
0			4 - Morphological Adaptations ¹ (Provide supporting
9.			data in Remarks or on a separate sheet)
10.			5 - Wetland Non-Vascular Plants ¹
11.			Problematic Hydrophytic Vegetation¹ (Explain)
	60	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)			be present, unless disturbed or problematic.
1. NONE			
2	0		Hydrophytic
0/ Dave Created in Harb Streeture	0	= Total Cover	Vegetation
% Bare Ground in Herb Stratum			Present? Yes x No
Remarks:			
romano.			
		2004 7 1	
Vegetation is problematic. Agricultural site	consisting of 5)-80% Lolium perenne a	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 Matrix Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 0-3 10YR3/2 M SiCL 5 С 3-10 10YR3/2 M/PL 95 10YR4/4 SiCL 2%OR 10-14 5 С 10YR2/2 95 10YR4/4 SiCL M 14-22 20 С 10YR3/2 80 10YR5/4 M SiCL ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) \checkmark ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) П Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) \checkmark Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) П Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? ☐ No Depth (inches): □ No Depth (inches): Wetland Hydrology Present? Yes X No Water Table Present? Saturation Present? Depth (inches): ☐ No (includes capillary fringe) Yes Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Applicant/Owner: Norman Steckley Investigator(s): Allen Martin Landform (hillslope, terrace, etc.): terrace Subregion (LRR): A Soil Map Unit Name: Conser silty clay loam Are climatic / hydrologic conditions on the site typic Are Vegetation , Soil , or Hydrologic Are Vegetation , Soil , or Hydrologic , or Hydrologic , or Hydrologic , Soil , or Hydrologic , or	Local relief (concave, convex, r Lat: 44.548583 Long: -122.9260 N cal for this time of year? Yes Z No y significantly disturbed? Are "No y naturally problematic? (0, T12S, R02W none): none Slope (%): 0 Datum: D_North_American_1983_HARN (SP, Int ft) WI classification: upl
Hydric Soil Present? Yes	No No x Is the Sampled Area with	nin a Wetland? Yes No _x
	ow-lying area on east side of stu	ıdy area at north end.
VEGETATION – Use scientific names	of plants.	
Tree Stratum (Plot size: 30 ft)) 1. None 2. 3. 4.	Absolute Dominant Indicator <u>% Cover Species? Status</u> 0	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: 30 ft) 1. None 2. 3. 5. Herb Stratum (Plot size: 6 ft)	0	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = 0.0 FACW species x 2 = 0.0 FAC species x 3 = 0.0 FACU species x 4 = 0.0 UPL species x 5 = 0.0 Column Totals: 0 (A) 0 (B)
 Lolium perenne 3. 	60 FAC	Prevalence Index = B/A = 0.0
4.		Hydrophytic Vegetation Indicators: □ 1 - Rapid Test for Hydrophytic Vegetation □ 2 - Dominance Test is >50% □ 3 - Prevalence Index is ≤3.0¹ □ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) □ 5 - Wetland Non-Vascular Plants¹ □ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft) 1. NONE 2. Stratum (Plot size: 12 ft) 8 Bare Ground in Herb Stratum	0 = Total Cover	be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes x No
Remarks: Vegetation is problematic. Agricultural site	consisting of 50-80% Lolium perenne and man	aged for monoculture

SOIL Sampling Point: SP34 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Depth Color (moist) % Color (moist) % Loc² (inches) Type¹ Texture Remarks 100 0-13 10YR2/2 **GrSiCL** 5 С 10YR3/2 SiCL 13-16 95 10YR5/4 M 20 С M **GrSiCL** 16-20 10YR4/2 80 10YR5/4 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and 卫 Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) П Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? No X Water Table Present? Saturation Present? Depth (inches): ☐ No (includes capillary fringe) Yes Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn	Sampling Date: 8/16/17
Applicant/Owner: Norman Steckley			ampling Point: SP35
Investigator(s): Allen Martin	Section, T	ownship, Range: Se	ection 10, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, co	onvex, none): none Slope (%): 0
Subregion (LRR): A	Lat: 44.5485	83 Long: -1	22.926069 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 typ			
Are Vegetation , Soil , or Hydrolo			Are "Normal Circumstances" present? Yes x No
Are Vegetation \underline{x} , Soil $\underline{\square}$, or Hydrological	gy 🔲 natu	ally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach sit	e man sho	wing sampling r	point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes x	No		·
Hydric Soil Present? Yes × Wetland Hydrology Present? Yes × ×	No	Is the Sampled Ar	rea within a Wetland? Yes × No
	NO		
Plot lies within depression at	north end	of study area	
1 lot lies within depression at	morui ciiu	of study area.	
VEGETATION – Use scientific names	of plants.		T
Tree Ottobare (Diet siese 20 ft	Absolute		dicator Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft) 1. None	% Cove	Species? St	tatus Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
•			Total Number of Dominant
3.	0		Species Across All Strata: 1 (B)
4.	0		Percent of Dominant Species
			That Are OBL, FACW, or FAC: 100 (A/B)
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30 ft)			Prevalence Index worksheet:
1. None			Total % Cover of: Multiply by:
2.			OBL species x 1 = 0.0
3.	_		FACW species x 2 = 0.0
45.			FAC species x 3 = 0.0
5	0	= Total Cover	FACU species x 4 = 0.0
Herb Stratum (Plot size: 6 ft)	-		UPL species $x_5 = 0.0$
1. Lolium perenne	60	FAC	Column Totals: 0 (A) 0 (B)
2.	<u> </u>		Prevalence Index = B/A = 0.0
3	_		
4.	<u> </u>		Hydrophytic Vegetation Indicators:
5	· —		1 - Rapid Test for Hydrophytic Vegetation
6			2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹
0			4 - Morphological Adaptations ¹ (Provide supporting
9.			data in Remarks or on a separate sheet)
10.			5 - Wetland Non-Vascular Plants ¹
11.			Problematic Hydrophytic Vegetation¹ (Explain)
	60	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)			be present, unless disturbed or problematic.
1. NONE			
2	0	Title	Hydrophytic
0/ Dave Created in Heath Chreatene	0	= Total Cover	Vegetation
% Bare Ground in Herb Stratum			Present? Yes x No No
Remarks:			
romano.			
) 000/ Y 1	
Vegetation is problematic. Agricultural site	consisting of 5	0-80% 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 Matrix Redox Features Color (moist) % Color (moist) % Loc² (inches) Type¹ Texture Remarks 0-6 10YR2/2 **GrSiCL** 5 С 6-10 10YR2/2 95 M/PL **GrSiCL** 2%OR 10YR4/4 10-22 80 20 С 10YR4/2 7.5YR5/6 **GrCL** M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) \checkmark ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) П Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) \checkmark Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? ☐ No Depth (inches): □ No Depth (inches): Wetland Hydrology Present? Yes X No Water Table Present? Saturation Present? Depth (inches): ☐ No (includes capillary fringe) Yes Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn	Sampling Date: 8/16/17
Applicant/Owner: Norman Steckley			mpling Point: SP36
Investigator(s): Allen Martin	Section, T	ownship, Range: See	ction 10, T12S, R02W
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, co	nvex, none): none Slope (%): 0
Subregion (LRR): A	Lat: 44.5485	83 Long: -12	22.926069 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 typ			
Are Vegetation , Soil , or Hydrolo		-	Are "Normal Circumstances" present? Yes x No
Are Vegetation x , Soil , or Hydrolog	gy 🔲 natu	ally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach sit	to man sho	wing sampling p	oint locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes ×	No		onit locations, transcets, important reatures, etc.
Hydric Soil Present? Yes ×	No	Is the Sampled Are	ea within a Wetland? Yes <u>x</u> No
Wetland Hydrology Present? Yes x	NO		
Remarks:	danraggia		
Plot on east edge of northern	depression	1.	
VEGETATION – Use scientific names	of plants.		
	Absolute		cator Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft)	% Cover	Species? Sta	Number of Dominant Species
1. None	0		That Are OBL, FACW, or FAC: 1 (A)
2. 3.	0		Total Number of Dominant Species Across All Strata: 1 (B)
3	0		Percent of Dominant Species
T	-		That Are OBL, FACW, or FAC: 100 (A/B)
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30 ft)		_	Prevalence Index worksheet:
1. None	0		Total % Cover of: Multiply by:
2			OBL species x 1=0.0
3	0		FACW species x 2 = 0.0
4			FAC species x 3 =0.0
5	0	T 1 1 0	FACU species x 4 =0.0
Lloub Chrotums (Diet sine) 6 ft	0	= Total Cover	UPL species x 5 =0.0
Herb Stratum (Plot size: 6 ft) 1. Lolium perenne	60	FAC	Column Totals: 0 (A) 0 (B)
2.			Prevalence Index = B/A = 0.0
3.			
4.			Hydrophytic Vegetation Indicators:
5.			1 - Rapid Test for Hydrophytic Vegetation
6			2 - Dominance Test is >50%
7	_		3 - Prevalence Index is ≤3.0¹
8	_		4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
9.			5 - Wetland Non-Vascular Plants ¹
10.			Problematic Hydrophytic Vegetation¹ (Explain)
11.	60	= Total Cover	¹Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 12 ft)			be present, unless disturbed or problematic.
1. NONE			
2.			
	0	= Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum			Present? Yes x No
Remarks:			
Vegetation is problematic. Agricultural site	consisting of 5	0-80% Lolium perenne a	nd 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 Matrix Redox Features Color (moist) Color (moist) % Loc² Remarks (inches) Type¹ Texture 0-12 10YR2/2 **GrSiCL** 15 С **GrCL** 12-24 10YR4/2 85 10YR5/4 M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and \Box Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? Yes X No Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn		Sampling Date:	8/16/17	
Applicant/Owner: Norman Steckley		State: OR S	Bampling Po	0.00		
Investigator(s): Allen Martin	Section, T	ownship, Range:	Section 10, T1	2S, R02W		
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, c	convex, none	e): none	Slope	e (%): 0
Subregion (LRR): A	Lat: 44.5485	B3 Long: -	122.926069	Datum:	D_North_America	an_1983_HARN (SP, Int ft)
Soil Map Unit Name: Conser silty clay loam			NWI	classification:	upl	
Are climatic / hydrologic conditions on the site type						
Are Vegetation , Soil , or Hydrolo		-		al Circumstance		
Are Vegetation x , Soil , or Hydrolog	gy <u> </u>	ally problematic?	(If n	eeded, explain a	iny answers in F	Remarks.)
SUMMARY OF FINDINGS – Attach sit	e man sho	wing sampling	noint loc	ations trans	ects impor	tant features etc
Hydrophytic Vegetation Present? Yes ×	No		point ioo	ationo, tranc		
Hydric Soil Present? Yes	No ×	Is the Sampled A	Area within	a Wetland?	Yes	No _x
Wetland Hydrology Present? Yes	NO x					
Remarks:						
VEGETATION – Use scientific names	of plants.					
	Absolute		dicator	Dominance Tes	t worksheet:	
Tree Stratum (Plot size: 30 ft)	% Cover	Species? S		Number of Domi		1 (A)
1. None	0 0			That Are OBL, F Total Number of		1 (A)
2. 3.	0			Species Across		1 (B)
3	0			Percent of Domi		
	-			That Are OBL, F	ACW, or FAC:	100 (A/B)
	0	= Total Cover				
Sapling/Shrub Stratum (Plot size: 30 ft)				Prevalence Inde	ex worksheet:	
1. None	0			Total % Cover o	f: Multip	oly by:
2				OBL species	x 1=	0.0
3.				FACW species	x 2=	
4.	0			FAC species	x 3=	0.0
5.	0	= Total Cover		FACU species	x 4=	0.0
Herb Stratum (Plot size: 6 ft)	-	_ = Total Cover		UPL species	x 5=	0.0
1. Lolium perenne	60	FAC	C	Column Totals:	0 (A)	0 (B)
2.	-			Prevalence Inde	x = B/A =	0.0
3.						
4.				Hydrophytic Ve	getation Indica	ators:
5				1 - Rapid Tes	st for Hydrophyt	ic Vegetation
6	<u> </u>			Z - Dominano	ce Test is >50%	
7.	<u> </u>				ce Index is ≤3.0°	
8				4 - Morpholo	gical Adaptatior arks or on a sep	is ¹ (Provide supporting
9			== 7		Non-Vascular Pl	· ·
10 11.				-		getation¹ (Explain)
11.	60	= Total Cover				tland hydrology must
Woody Vine Stratum (Plot size: 12 ft)				be present, unle		
1. NONE						
2.						
	0	= Total Cover		Hydrophytic Vegetation		
% Bare Ground in Herb Stratum				-	Yes x	No
Remarks:						
Vegetation is problematic. Agricultural site	consisting of 50	0-80% Lolium perenne	e and manage	d for monoculture		

SOIL Sampling Point: SP37 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 100 0-9 10YR3/2 **GrSiCL** 9-16 10YR2/2 100 **GrSiCL** 20 С 16-20 10YR3/2 80 10YR4/4 M GrC ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and 卫 Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) П Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? No X Water Table Present? Saturation Present? Depth (inches): Yes ☐ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Project/Site: Burkhartt	City/County:	Lebanon/Linn	Sampling Date: 8/16/17		
Applicant/Owner: Norman Steckley		State: OR Sar	npling Point: SP38		
Investigator(s): Allen Martin	Section, T	ownship, Range: Sec	tion 10, T12S, R02W		
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (concave, cor	nvex, none): none Slope (%): 0		
Subregion (LRR): A	Lat: 44.5485	83 Long: -12	2.926069 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 typ					
Are Vegetation , Soil , or Hydrolo		-	Are "Normal Circumstances" present? Yes x No		
Are Vegetation x , Soil d , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach sit	te map sho	wing sampling po	oint locations, transects, important features, etc.		
Hydrophytic Vegetation Present? Yes x	No		·		
Hydric Soil Present? Yes Wetland Hydrology Present? Yes	No ×	Is the Sampled Are	a within a Wetland? Yes No _x		
Remarks:	<u></u>				
Plot near north end of wetlan	d defining	east edge of wet	land		
	<i>G</i>				
VEGETATION – Use scientific names	of plants				
VEGETATION – Use scientific fiames	Absolute	Dominant Indic	Dominance Test worksheet:		
Tree Stratum (Plot size: 30 ft)	% Cover		atol		
1. None	0		That Are OBL, FACW, or FAC: 1 (A)		
2.			Total Number of Dominant		
3			Species Across All Strata: 1 (B) Percent of Dominant Species		
4	0		That Are OBL, FACW, or FAC: 100 (A/B)		
	0	- Total Caver			
Sapling/Shrub Stratum (Plot size: 30 ft)	-	= Total Cover	Prevalence Index worksheet:		
4 None	0		Total % Cover of: Multiply by:		
2. Notice	-		OBL species x 1 = 0.0		
3.			FACW species x 2 = 0.0		
4.			FAC species $x_3 = 0.0$		
5			FACU species x 4 = 0.0		
	0	= Total Cover	UPL species $x_5 = 0.0$		
Herb Stratum (Plot size: 6 ft)	60	FAC	Column Totals: 0 (A) 0 (B)		
Lolium perenne 2.	60	y FAC	Prevalence Index = B/A = 0.0		
2			Trevalence index = B/A = 0.0		
4.			Hydrophytic Vegetation Indicators:		
5.			1 - Rapid Test for Hydrophytic Vegetation		
6.			2 - Dominance Test is >50%		
7			☐ 3 - Prevalence Index is ≤3.01		
8			4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)		
9.			5 - Wetland Non-Vascular Plants ¹		
10 11.			Problematic Hydrophytic Vegetation¹ (Explain)		
11.	60	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must		
Woody Vine Stratum (Plot size: 12 ft)			be present, unless disturbed or problematic.		
1. NONE					
2.			Hydrophytic		
	0	= Total Cover	Hydrophytic Vegetation		
% Bare Ground in Herb Stratum			Present? Yes x No		
Remarks:					
Vegetation is problematic. Agricultural site	consisting of 50	0-80% Lolium perenne ar	nd managed for monoculture		

SOIL Sampling Point: SP38 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Matrix Redox Features Depth Color (moist) % Color (moist) % Loc² (inches) Type¹ Texture Remarks 0-10 10YR2/2 **GrSiCL** 5 С 10YR2/2 **GrSiCL** 10-17 95 10YR4/4 M 17-20 80 15 С 10YR4/2 10YR5/6 **GrSiCL** M 17-20 5 С **GrSiCL** 10YR2/2 M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils³: ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and 卫 Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) Д. Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? No X Water Table Present? Saturation Present? Depth (inches): ☐ No (includes capillary fringe) Yes Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Applicant/Owner: Norman Steckley Investigator(s): Allen Martin Landform (hillslope, terrace, etc.): terrace	City/County: Lebanon/Linn State: OR Sampling Section, Township, Range: Section 10 Local relief (concave, convex, r Lat: 44.548583 Long: -122.92606	, T12S, R02W none):none Slope (%):0			
Soil Map Unit Name: Conser silty clay loam	N	WI classification: upl			
Are climatic / hydrologic conditions on the site typic	cal for this time of year? Yes 🔽 No 📗	(If no, explain in Remarks.)			
Are Vegetation , Soil , or Hydrolog	y significantly disturbed? Are "No	ormal Circumstances" present? Yes x No			
Are Vegetation x , Soil , or Hydrolog	y 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? Hydric Soil Present? Wetland Hydrology Present? Yes No Is the Sampled Area within a Wetland? Yes No No No No No No No No No N					
Remarks:					
Plot defines upland boundary at northeast corner of northern wetland.					
VEGETATION – Use scientific names	of plants.				
T 01 1 (D) 1 : 20 f	Absolute Dominant Indicator	Dominance Test worksheet:			
<u>Tree Stratum</u> (Plot size: 30 ft) 1. None	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)			
· ·	0	Total Number of Dominant			
2. 3.		Species Across All Strata: 1 (B)			
4	0	Percent of Dominant Species			
		That Are OBL, FACW, or FAC: 100 (A/B)			
	0 = Total Cover				
Sapling/Shrub Stratum (Plot size: 30 ft)		Prevalence Index worksheet:			
1. None	0	Total % Cover of: Multiply by:			
2.	0	OBL species x 1 = 0.0			
3	0	FACW species x 2 = 0.0			
4	0	FAC species x ₃ =0.0			
5	0	FACU species x 4 = 0.0			
	0 = Total Cover	UPL species $x_5 = 0.0$			
Herb Stratum (Plot size: 6 ft)		Column Totals: 0 (A) 0 (B)			
1. Lolium perenne	60 FAC	Drawalana ladau D/A			
2.		Prevalence Index = B/A = 0.0			
3		Hydrophytic Vegetation Indicators:			
4 5.					
		☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50%			
		3 - Prevalence Index is ≤3.0¹			
7. 8.		4 - Morphological Adaptations (Provide supporting			
9.		data in Remarks or on a separate sheet)			
10.		□ 5 - Wetland Non-Vascular Plants¹			
11.		☑ Problematic Hydrophytic Vegetation¹ (Explain)			
Woody Vine Stratum (Plot size: 12 ft)	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
1. NONE					
2		Hydrophytio			
% Bare Ground in Herb Stratum	= Total Cover	Hydrophytic Vegetation Present? Yes × No			
Remarks:		1			
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 Matrix Redox Features (inches) Color (moist) % Color (moist) % Loc² Remarks Type¹ Texture 100 0-8 10YR2/2 SiCL 2 С 8-12 10YR2/2 SiCL 98 10YR4/4 M 20 С M **GrCL** 12-24 10YR4/2 80 10YR5/4 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and 卫 Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation (A3) Д. Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) П Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) ☐ FAC-Neutral Test (D5) Soils (C6) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? Yes X No Water Table Present? Saturation Present? Depth (inches): ☐ No (includes capillary fringe) Yes Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Applicant/Owner: Norman Steckley Investigator(s): Allen Martin Landform (hillslope, terrace, etc.): terrace Subregion (LRR): A Soil Map Unit Name: Conburg silty clay loam Are climatic / hydrologic conditions on the site typic Are Vegetation , Soil , or Hydrolog Are Vegetation × , Soil , or Hydrolog SUMMARY OF FINDINGS – Attach site Hydrophytic Vegetation Present? Yes × Hydric Soil Present? Yes × Wetland Hydrology Present? Yes × Remarks:	Local relief (concave, convex, rate Lat: 44.548583 Long: -122.92600 Coal for this time of year? Yes Z No Sy significantly disturbed? Are "No Yy naturally problematic? (example Mo No Is the Sampled Area with No Is the Sampled Area with	none): none Slope (%): 0 69 Datum: D_North_American_1983_HARN (SP, Int ft) WI classification: upl (If no, explain in Remarks.) ormal Circumstances" present? Yes x No (If needed, explain any answers in Remarks.) ocations, transects, important features, etc. nin a Wetland? Yes x No			
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.				
Tree Stratum (Plot size: 30 ft) 1. None 2. 3	Absolute Dominant Indicator <u>% Cover Species? Status</u> 0	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A) Total Number of Dominant Species Across All Strata: 3 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)			
Sapling/Shrub Stratum (Plot size: 30 ft)) 1. None 2. 3. 4. 5 Herb Stratum (Plot size: 6 ft) 1. Lolium perenne	0 = Total Cover 0	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = 0.0 FACW species x 2 = 0.0 FAC species x 3 = 0.0 FACU species x 4 = 0.0 UPL species x 5 = 0.0 Column Totals: 0 (A) 0 (B)			
2. Phalaris arundinaceus	20 FACW	Prevalence Index = B/A = 0.0			
3. Rubus armeniacus 4. 5. 6. 7. 8. 9. 10. 11. Woody Vine Stratum (Plot size: 12 ft) 1. NONE 2. % Bare Ground in Herb Stratum		Hydrophytic Vegetation Indicators: □ 1 - Rapid Test for Hydrophytic Vegetation □ 2 - Dominance Test is >50% □ 3 - Prevalence Index is ≤3.0¹ □ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) □ 5 - Wetland Non-Vascular Plants¹ □ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes x No			
Remarks:		1			
	consisting of 50-80% Lolium perenne and man	aged for monoculture			

SOIL Sampling Point: SP40 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) % Color (moist) % Loc² (inches) Type¹ Texture Remarks 2 С PL 0-8 10YR3/2 98 10YR 4/4 SiCL 2% OR С 10YR 4/4 5 8-24 10YR2/2 95 SiCL/CL ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) ☐ Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) \square ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic Restrictive Layer (if present): **Hydric Soil Present?** Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) MLRA 1, 2, 4A, and 4B) 4A, and 4B) High Water Table (A2) Drainage Patterns (B10) Salt Crust (B11) \Box Saturation (A3) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) П Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Sediment Deposits (B2) \checkmark Roots (C3) Geomorphic Position (D2) □ Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled ☐ Algal Mat or Crust (B4) Soils (C6) ☐ FAC-Neutral Test (D5) \Box Stunted or Stressed Plants (D1) Raised Ant Mounds (D6) (LRR A) Iron Deposits (B5) (LRR A) Surface Soil Cracks (B6) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8) **Field Observations:** Surface Water Present? □ No □ Depth (inches): □ No Depth (inches): Wetland Hydrology Present? Yes X No Water Table Present? Saturation Present? Depth (inches): ☐ No (includes capillary fringe) Yes 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. 12th 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 Burkhart 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

Cowardin, Lewis M. et al., 1979, Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service, Washington, DC, 131 pp.

Environmental Laboratory, 1987, Corps of Engineers wetlands delineation manual, Technical Report Y-87-1: Vicksburg, MS: U.S. Army Engineer Waterways Experiment Station (online). (http://el.erdc.usace.army.mil/wetlands/pdfs/wlman87.pdf)

GretagMacbeth, 2016 production, Revised Washable Edition Munsell® Soil Color Charts: Grand Rapids, Michigan.

Linn County, Oregon GIS Maps (online). http://www.co.Linn.or.us/index.php?content=gis

National Weather Service Forecast Office, Portland, Oregon Preliminary Monthly Data (online). http://www.weather.gov/climate/index.php?wfo=pqr

Oregon Climate Service, Oregon State University College of Oceanic and Atmospheric Sciences - OSU College of Agricultural Sciences Albany Farm Unit (online). http://agsci.oregonstate.edu/farmunit/weather

Oregon Department of State Lands, Division 90 Administrative Rules for Wetland Delineation Report Requirements for Jurisdictional Determinations for the Purpose of Regulating Fill and Removal within Waters of the State, January 2011.

Oregon Department of State Lands, Wetlands Removal/Fill Forms & Publications (online). http://www.oregon.gov/DSL/PERMITS/forms.shtml

Oregon Explorer Natural Resources Digital Library (online). http://oregonexplorer.info/

Oregon Geospatial Enterprise Office (GEO) (online). http://spatialdata.oregonexplorer.info/GPT9/catalog/main/home.page

Oregon Imagery Explorer(online). http://oregonexplorer.info/imagery

Reed, P. B., Jr., 1988, National list of plant species that occur in wetlands: 1988 national summary, Biological Report 88(24). Washington, DC: U.S. Fish and Wildlife Service (online). http://www.usace.army.mil/CECW/Documents/cecwo/reg/plants/list88.pdf)

Reed, P. B., Jr. 1993, 1993 supplement to the list of vascular species that occur in wetlands: Northwest (Region 9), Supplement to Biological Report 88(26.9). Washington, DC: U.S. Fish and Wildlife Service.

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC.

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.

StreamNet GIS Data (downloaded March 2014). Metadata for Pacific Northwest Generalized Fish Distribution, All Species Combined (2012): StreamNet (January 2012). URL: http://www.streamnet.org/online-data/GISData.html

http://www.streamnet.org/gisdata/map_data_biological/FishDist_MSHv3_January2012/GenFishDist_January2012.zip

United States Army Corps of Engineers, 2008, Regional supplement to the Corps of Engineers wetland delineation manual: Western Mountains, Valleys, and Coast Region (Version 2.0): ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS. U. S. Army Engineer Research and Development Center (online).

(http://www.usace.army.mil/CECW/Documents/cecwo/reg/west_mt_finalsupp.pdf)

United States Army Corps of Engineers. Portland District Regulatory Program (online). http://www.nwp.usace.army.mil/regulatory/home.asp

United States Army Corps of Engineers. Regulatory Guidance Letters (online). http://www.usace.army.mil/CECW/Pages/rglsindx.aspx

United States Department of Agriculture, Natural Resources Conservation Service, 2010, Field Indicators of Hydric Soils in the United States, Version 7.0: L.M. Vasilas, G.W. Hurt, and C.V. Noble (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils (online). (http://soils.usda.gov/use/hydric/)

United States Department of Agriculture, Natural Resources Conservation Service, Hydric Soil Lists for Oregon Soil Survey Areas (online). http://www.or.nrcs.usda.gov/technical/soil/hydric.html

United States Department of Agriculture, Natural Resources Conservation Service, Oregon Soil Survey Data (online). http://www.or.nrcs.usda.gov/pnw_soil/or_data.html

United States Department of Agriculture, Natural Resources Conservation Service, WETS Table Documentation (online). http://www.wcc.nrcs.usda.gov/climate/wets_doc.html

United States Department of Agriculture, Natural Resources Conservation Service, Climate Information - Wetlands Retrieval for Oregon (online). http://www.wcc.nrcs.usda.gov/cgibin/getwetco.pl?state=or

United States Fish & Wildlife Service National Wetlands Inventory (online). http://www.fws.gov/wetlands/

Vepraskas, M. J., 1992, Redoximorphic features for identifying aquic conditions, Technical Bulletin 301: Raleigh, NC: North Carolina Agricultural Research Service, North Carolina State University.

Vepraskas, M. J., and S. W. Sprecher, 1997, Aquic conditions and hydric soils: The problem soils. Special Publication Number 50: Madison, WI: Soil Science Society of America.