APPROVED LOCAL WETLANDS INVENTORY
12/16/2011 AB
OREGON DEPARTMENT OF STATE LANDS

LOCAL WETLAND INVENTORY REPORT FOR JUNCTION CITY, OREGON

Prepared for:

CITY OF JUNCTION CITY
680 Greenwood Street
Junction City, Oregon 97448

Prepared by:

WINTERBROOK PLANNING
310 SW Fourth Ave., Suite 1100
Portland, Oregon 97204

August 2011

Local Wetland Inventory Report
Junction City, Oregon

Table of Contents

Introduction **1**

Summary of Findings **1**

Study Area Overview **2**

Landscape Setting 2
Climate 2
Topography 4
Hydrology 4
Geology 4
Soils 5
Vegetation 5

Inventory Methods **8**

Review of Existing Information 8
Field Inventory 9
Wetland Function and Condition Assessment *10*
Wetlands of Special Interest for Protection *11*
Locally Significant Wetland Criteria *11*
Mapping Procedures *12*

Public Involvement Process **12**

Public Outreach 12
Agency Coordination 13

Inventory Results **13**

Overview 13
Wetland Classes 14
Palustrine Forested Wetlands (PFO) *14*
Palustrine Emergent Wetlands (PEM) *14*
Palustrine Aquatic Bed Wetlands (PAB) *15*
Palustrine Unconsolidated Bottom Wetlands (PUB) *15*
Summary 15

Wetland Assessment Results **16**

Significant Wetlands Determination **17**

Next Steps **18**

Appendices

Appendix A. Definitions
Appendix B. Wetland Characterization Sheets
Appendix C. Field Data Forms
Appendix D. OFWAM Answer Sheets and Locally Significant Wetland Determination
Appendix E. Wetland Assessment Summary Sheets
Appendix F. GIS Data Log
Appendix G. DSL Wetland Determination Files
Appendix H. Technical Staff and Qualifications
Appendix I. References

Figures

Figure 1. Local Wetland Inventory Map

Introduction

The City of Junction City, through a grant from the Oregon Department of Land Conservation and Development, retained a consultant team led by Winterbrook Planning to conduct a Local Wetland Inventory (LWI) within the City's Urban Growth Boundary (UGB). The LWI and associated maps will inform local planning work and help guide future growth of the Junction City community.

This report provides a summary of LWI methods and findings, together with wetland inventory maps. Wetland data sheets, characterization and assessment forms, and other supporting documentation are contained in the appendices to this report.

Once approved by the Department of State Lands (DSL), the LWI replaces the National Wetlands Inventory (NWI) and is incorporated into the Statewide Wetlands Inventory. In Junction City, the LWI will fulfill the location and quantity information required for State Goal 5 inventories. A wetland quality assessment was also conducted concurrently with the LWI using the Oregon Freshwater Wetland Assessment Methodology (OFWAM) developed by DSL. Wetlands meeting the criteria for "Locally Significant Wetlands" will be analyzed further to determine appropriate local conservation measures.

Summary of Findings

The LWI was conducted in two phases: a planning phase in which existing wetland data and maps were collected, and a field inventory phase which included field assessments and a public outreach component. Winterbrook Planning (Winterbrook) completed Phase 1 between October 2008 and January 2009, and performed the wetland inventory field work and public involvement process between February and June 2009.

The LWI identifies a total of 14 wetlands within the study area (the City's UGB). Of these 14 wetlands, four were channels constructed or modified to address stormwater and flood management issues. Wetlands within Junction City range from one-half to 214 acres in size, with a combined area of 265.64 acres. In addition to these wetlands, the LWI identifies eight "probable wetlands" of less than one-half acre in size.

Winterbrook evaluated the wetlands to determine whether any met the criteria for Wetlands of Special Interest for Protection. None of the wetlands evaluated in this LWI met those criteria.

Winterbrook evaluated inventoried wetlands against the state's criteria for Locally Significant Wetlands (LSW) and found that 13 of the wetlands met the criteria. Three of the flood management channels qualified as LSWs based on their "hydrological control" function.

The total area of significant wetlands is 264.44 acres or 14.7 percent of the total land area within the Junction City UGB.

Study Area Overview

The study area for the LWI is coterminous with the City's UGB (see Figure 1). The general limits of the study follow 18th Street on the northern boundary, extend west to include the sanitary treatment facilities on the western part of Junction City, and extend south in a long corridor between Highway 99 and the Union Pacific Railroad tracks, terminating at Skinner Lane. The eastern boundary generally follows the city limits along Deal Street and Alder Street, extending east to Bergstrom Park at Dorsa Street.

Landscape Setting

Junction City lies near the southern end of the Willamette Valley. It is approximately 12 miles northeast of Eugene. The city lies between the Willamette River, two miles to the east, and the Long Tom River, three miles to the west. The dominant land use of the area outside Junction City's UGB is agricultural production. Residential, retail, institutional and light industrial uses are concentrated inside the UGB.

Climate

Weather patterns generally move west to east across the region, originating in the Pacific Ocean and crossing the Coast Range and enter the western portion of the Willamette River valley before reaching Junction City. The region's climate is tempered by the winds from the Pacific Ocean.

According to the Soil Survey of Lane County, the Junction City area is characterized by dry, warm summers and mild wet winters. The area receives approximately 42 inches of precipitation annually. Precipitation has a strongly seasonal pattern, with 90 percent falling between October and May. Snowfall is uncommon at Junction City, which lies near the valley floor. Chart 1 below compares actual precipitation during the water year of the site investigations with the long-term average by month. Site investigations occurred between February and June 2009. Note that June precipitation is through the June 2 site visit only.

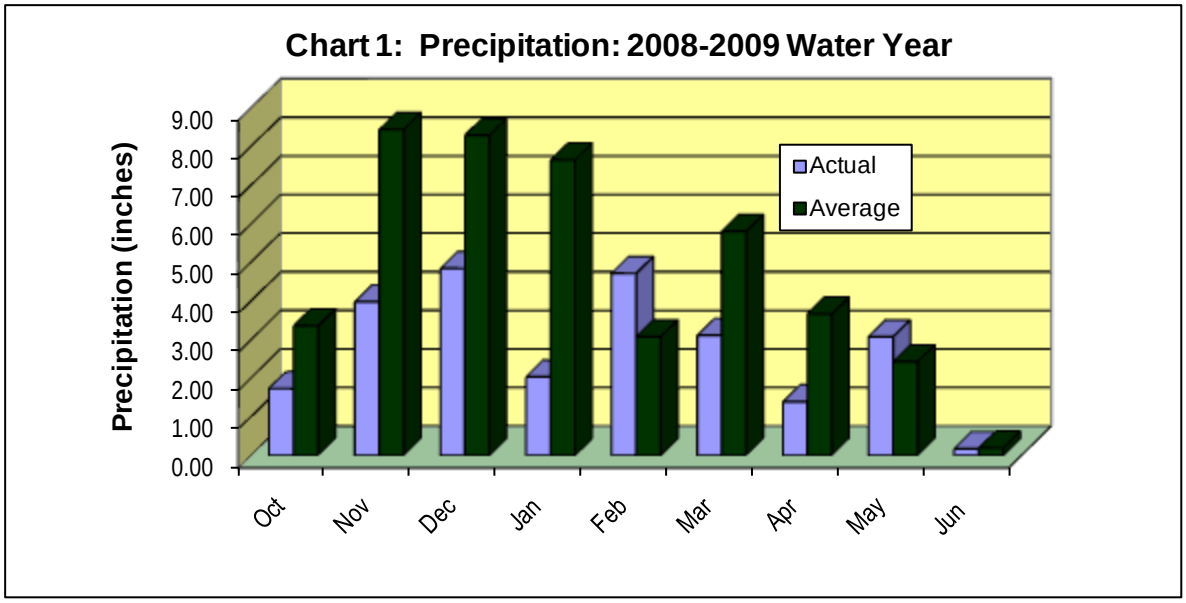
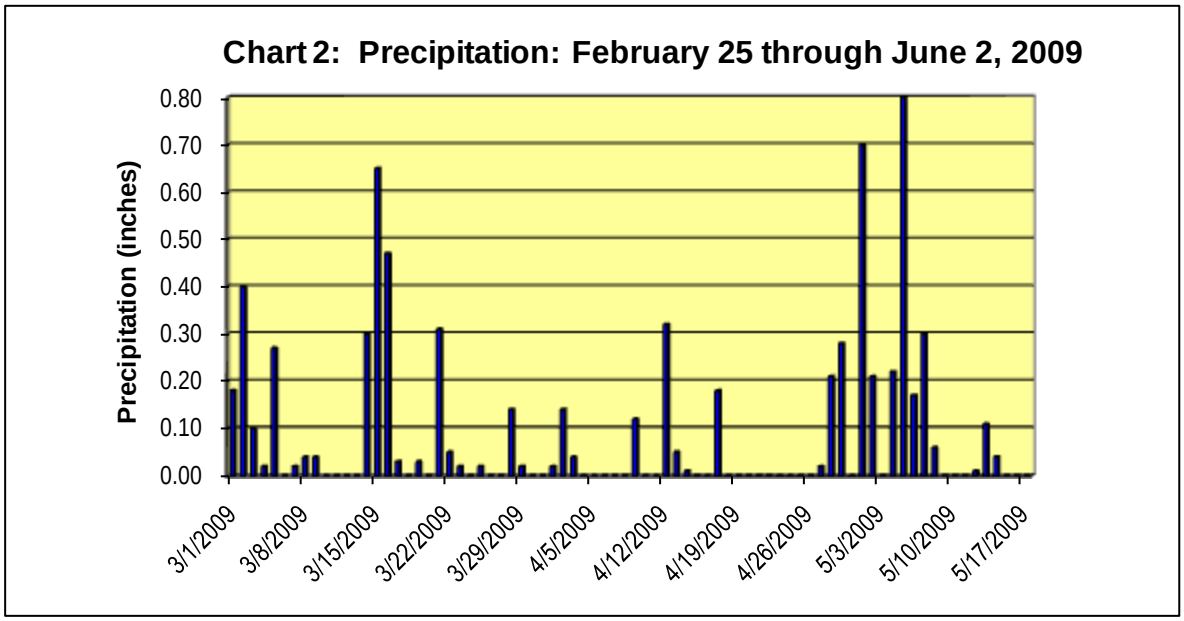


Chart 2 below shows the actual precipitation received in the study area for the two weeks preceding each of the data collection site visits. Rainfall was sporadic, with the bulk of the precipitation received coinciding with several storms that moved through the area.



Topography

The study area sits on the valley floor between the Willamette River and Long Tom River. Some slight dissection of the overall landform occurs at the different canals and along the banks of Flat Creek. Otherwise, the study area is nearly flat, sloping very gently from south to north. Elevations in the study area range from 321 feet to 357 feet (WGS84), with the highest elevations in the southern end of the study area and the lowest in the north.

Hydrology

The Flat Creek watershed (6th order Hydrologic Unit Code) covers the entire study area, and Flat Creek is the only named stream within the area. This stream drains to the Long Tom River outside the UGB to the north. Flat Creek is a perennial stream that also serves as an overflow channel of the Willamette River. Flat Creek has been channelized within the UGB. It makes a very short crossing through the UGB (700 linear feet) just south of the Prairie Road/Highway 99 intersection. The channel has heavy noxious weed cover, with reed canarygrass in the wetter portions and Himalayan blackberry above. Some remnant trees provide limited habitat and thermal cover. Primary sources of hydrology are overland flow, direct precipitation, and stormwater runoff.

The drainage network within the UGB comprises three main branches. These branches have been altered by development to constrain their lateral movement and, in some cases, to widen them and harden the beds and/or banks. These features receive most of the stormwater runoff from adjacent developed areas. Because of the altered nature of these features, they are described as the Eastern, Central, and Western Canals (a similar feature, Bergstrom Canal, crosses only a short section of the study area).

The widening of the natural drainageways through the UGB was accomplished to improve the capacity of the drainages to collect and convey floodwater. During periods of heavy rain or snowmelt, runoff can exceed the ability of the drainage system. Because there is so little topographic gradient in this area and soil permeability is constrained in some areas, water features do not drain quickly. Additionally, high water elevations in the Willamette River can also restrict outflow from the channels and contribute to increased residence time and potential for local flooding.

Hydrology of wetlands is primarily driven by flows in the canals. Greatest saturation and/or inundation occurs during the winter months when local runoff is at its peak and the potential for high flows downstream creating flow restrictions is highest. Due to the low gradient, canals and associated wetlands are slow to drain, with some areas of permanent or near-permanent standing or very slow-flowing water.

Geology

Junction City lies between the Coast Range, which is comprised mainly of marine sedimentary rock, and the Cascade Range, which was formed through volcanic processes. The region is characterized by a thick layer of alluvial material derived from the volcanic and sedimentary sources on either side. The two main sources of sediment are clay, silt, and sand associated

with historic flooding from glacial Lake Missoula. These floods deposited sediments as far south as Eugene. The second main source of sediment is alluvial materials from recent alluvial activity from the Willamette River and its tributaries.

Soils

Soils in the Junction City UGB generally fall into two groups: better drained soil series on terraces and more poorly draining material in stream and canal corridors. The Coberg, Conser, and Malabon series were the most commonly encountered soils along waterways. Table 1 below provides a summary of key features of the soils within the Junction City study area. These features include the slope drainage class, hydrologic group, and whether the soil is classified as hydric or has significant inclusions of hydric soil series.

Table 1. Soil Series in the Study Area

Soil series	Map unit	Slope	Drainage class	Hydric	Hydric Inclusions	Hydrologic Group
Bashaw clay	8	0-1%	Poorly drained	Yes	Awbrig, Conser, Courtney, Natroy	D
Chapman loam	24	0-3%	Well drained	No	Stream terraces	B
Coburg silty clay loam	31	0-3%	Moderately well drained	No	Conser	C
Coburg-Urban Land complex	32	0-3%	Moderately well drained	No	Conser	C
Conser silty clay loam	33	0-2%	Poorly drained	Yes	Awbrig, Bashaw	D
Malabon silty clay loam	75	0-3%	Well drained	No	--	C
Malabon—Urban Land complex	76	0-3%	Well drained	No	--	C
Oxley gravelly silt loam	100	0-3%	Somewhat poorly drained	No	Courtney	C
Oxley-Urban Land complex	101	0-3%	Somewhat poorly drained	No	Courtney	C
Salem gravelly silt loam	118	0-3%	Well drained	No	--	B

Vegetation

The UGB supports several distinct vegetation communities. The most common communities include developed/urban, agricultural, and wetland. The wetland community is further broken down by Cowardin classification, to palustrine emergent, palustrine forested, and palustrine unconsolidated bottom.

The majority of the UGB is developed or in an urban setting; consequently, vegetation communities have frequently been altered to facilitate development or as an unintended consequence of nearby activities. In many cases, areas adjacent to the canals and wetlands were filled in to expand pads for retail buildings or auxiliary structures. As a result, many trees and shrubs were removed and disturbed areas allowed to recolonize with invasive, non-native species such as Himalayan blackberry (*Rubus armeniacus*), reed canarygrass (*Phalaris arundinacea*), and turf grasses.

Large industrial properties in the southern part of the UGB support some of the largest and highest-value native plant communities. In particular, Wetland CC-04 on the LWI map is a large forested wetland complex with considerable vegetation community diversity (see Photo 1).

Photo 1. View of Wetland CC-04

Vegetation in areas of residential and institutional use (i.e., churches, schools) is more variable. In some areas, disturbance is nearly total, extending down into riparian zones and recontouring the dimensions of the preexisting wetland. Portions of the Bergstrom and western canals, for example, were channelized to a trapezoidal cross-section and lined with rock on the bottom and embankments. The vegetation in these areas is limited to those weedy annual species that can colonize the bare substrate following routine herbicide applications performed as part of the maintenance protocol. Photo 2 shows a typical view of these features in the wet season.

Photo 2. View of the Bergstrom Canal (looking south)

The edges of a large wetland near Highway 99 and Ivy Street (EC-01) were filled to expand the developable area above. In contrast, Wetland CC-01 near Laurel Elementary School retains its Oregon ash (*Fraxinus latifolia*) tree cover, possesses a buffer of undeveloped upland around it, and still supports some native herbaceous vegetation such as common camas (*Camassia quamash*) despite adjacent educational uses. Some reaches of the canal system also retain cover from adjacent uplands, such as the reach of the Central Canal near Rose Street shown in Photo 3.

Photo 3. Ash Canopy over reach of Central Canal

Most of the southern end of the project is used for agriculture; the routine cultivation, planting, and harvest of hay, wheat, and other commodity crops have largely eradicated native plant communities in these areas within the farmable portions of the properties. Some remnant areas are present along fencerows, utility lines, highway rights-of-way, and where stands of black cottonwood remain.

Wetlands are those areas with sufficiently prolonged surface hydrology or high water tables to exhibit hydric soil characteristics and support vegetation adapted to life in temporarily or permanently saturated soil. They are often found at the margins of aquatic sites such as ponds or the canals that cross the UGB, but can also be associated with depressional and other landforms.

Palustrine forested wetlands (PFO) are generally dominated by Oregon ash and black cottonwood (*Populus balsamifera* v. *trichocarpa*). A shrub stratum may or may not be present, but typical species include clustered rose (*Rosa pisocarpa*), poison oak (*Rhus toxicodendron*), and saplings of the above tree species. Species in the herbaceous stratum varied widely in cover and composition but included turf grasses, reed canarygrass, sedges (*Carex spp.*), common camas, and a variety of ornamental and invasive annual and perennial species. Palustrine emergent wetlands were commonly dominated by reed canarygrass and turf grasses but some retained vestigial native plant community components such as sedges, rushes (*Juncus spp.*) and bulrushes (*Scirpus spp.*).

Inventory Methods

The inventory of wetlands follows the guidelines and rules for conducting LWIs adopted by the DSL. New LWI rules were adopted in 2008 while this project was underway and inventory methods were adapted to comply with the updated rules.

Two levels of investigation were conducted for the inventory of wetlands: a review of existing information and a field inventory. Key elements of the inventory methodology are summarized in this section.

Review of Existing Information

Winterbrook reviewed existing literature, maps, and data sources to identify wetlands and site characteristics indicative of wetlands within the study area.

Key sources of information were:

- Oregon Department of State Lands (DSL), wetland determination files (all sites within Junction City UGB plus a one-mile buffer area);
- National Wetlands Inventory (NWI) data (U.S. Fish and Wildlife Service, 2008);
- Lane County Soil Survey data (U.S.D.A. Natural Resource Conservation Service, 2003);
- FEMA Floodplain maps;
- Color aerial photography (USDA, 2005; 0.5 meter resolution); and
- Color aerial photography (NAIP, Oregon DAS/GEO, Summer 2009; 1 meter resolution).

The City and County Geographic Information System (GIS) data layers served as the base for the preliminary wetland mapping. The DSL determination files were digitized in GIS and included on the preliminary mapping. This map includes the following items:

- DSL approved wetland determinations/delineations (with file numbers referenced)
- NWI wetlands
- Hydric soils
- Soils with hydric inclusions
- Other potential wetland areas

This map was used to create field maps covering the City. Other sources of data obtained from Junction City and Lane County are listed in the GIS Data Log (Appendix F). A list of previous delineations performed on Junction City area wetlands is provided in Appendix G.

On November 12, 2008, a meeting was held with DSL and City of Junction City representatives to review the preliminary wetland map, identify additional data sources, and discuss the field inventory schedule and methodology.

Field Inventory

Winterbrook conducted the field inventory in accordance with LWI standards established under OAR 141-86-180 through 240, as amended January 1, 2009. Wetland boundaries were identified using the COE Wetland Delineation Manual Technical Report Y-87-1 (Environmental Laboratory 1987) and the 2008 Regional Supplement. The 1987 manual defines wetlands as requiring indicators of hydric soils, a dominance of hydrophytic vegetation, and wetland hydrology.

Where property access was permitted, wetland boundaries were verified in the field. Location of sample points and mapping conventions followed state LWI standards and were not intended to define the limits of regulatory jurisdiction. Under state guidelines, LWI wetland boundaries are mapped at an accuracy of approximately 5 meters (16.4 feet). Additional on-site wetland investigation and boundary delineation may be needed to determine whether state or federal regulations apply to a particular development proposal.

Each inventoried wetland was assigned a unique identification code. The entire UGB is within the Flat Creek ("FC") basin and no other named streams or waterways are identified on City or USGS topographic maps. To aid in identifying the main waterways through Junction City, four "canals" were identified: East Canal ("EC"), Central Canal ("CC"), West Canal ("WC") and Bergstrom Canal ("BC"). This later feature is named for Bergstrom Park in which the canal is partially located. These features are trapezoidal channels excavated to provide stormwater and flood conveyance through the City. Wetlands are generally associated with these canal features or with the mainstem of Flat Creek. Thus, for example, wetland codes are referenced "FC-01" (wetland along Flat Creek) or "CC-01" (wetland along central canal), with the numbering beginning at the downstream end of the water feature.

For wetlands where access was granted, Winterbrook typically established between two and six sample plots at locations that best characterized the wetland. Soil pits were excavated up to a depth of 20 inches in selected locations. The soil profiles were examined for hydric soils and wetland hydrology field indicators. The percent cover of the dominant species of the plant community was estimated at each sampling location. General characteristics of each wetland were documented, including approximate wetland size, classification[1], soil type, hydrologic source, dominant plant species, field dates, field investigators, a summary of the wetland context, and other relevant data. The LWI map shows the location of wetlands and the individual sample plots. Wetland characteristics were recorded on individual summary sheets contained in Appendix B. Appendix C contains completed Wetland Determination Forms for wetlands sampled using the on-site method.[2]

Wetlands identified in DSL determination files[3] were visually verified where possible to determine whether wetlands were still present and of the same general size and configuration as when delineated. Owners did not grant access to these wetlands or were not available during

[1] This includes both Cowardin and hydrogeomorphic (HGM) classifications and subclassifications as defined in the revised LWI rules (also see Appendix A, Definitions).
[2] Data from certain off-site determinations is also included in this appendix.
[3] These files contain documentation on wetland investigations and concurrence letters from DSL validating the report findings.

field survey period, so no on-site verifications were completed. Where visual access was possible, wetland boundaries were visually confirmed based on vegetation and hydrology.

In cases where property access was denied, Winterbrook used off-site determination methods, including existing NWI and soil survey data and maps, interpretation of aerial photos, and off-site observation from nearby public rights-of-way or adjacent properties where access was granted. Areas exhibiting wetland indicators such as wetland hydrology or dominant hydrophytic vegetation were noted.

Wetland Function and Condition Assessment

Wetland quality was assessed using the Oregon Freshwater Wetland Assessment Methodology (OFWAM). The OFWAM evaluates the extent to which a wetland performs certain functions based on specific factors. It assesses the following ecological functions and values: wildlife habitat, fish habitat, water quality, hydrologic control, education, recreation, sensitivity to impact, enhancement potential, and aesthetic quality. As clarified in the revised LWI rules, only the first four functions (wildlife habitat, fish habitat, water quality and hydrologic control) have a direct bearing on the wetland significance criteria. In addition, where a wetland was located on public lands, education functions are also assessed to determine whether the wetland is significant as an educational resource.

Following is a summary of the key functions evaluated.

- *Wildlife habitat:* This function addresses the habitat diversity for species usually associated with wetlands, without emphasizing one particular species. A diverse plant community typically increases animal community diversity. The OFWAM assesses whether wetlands provide diverse habitat for wildlife, provide habitat for some wildlife species, or provide no habitat function.

- *Fish habitat:* This function addresses how a wetland contributes to fish habitat in streams, ponds or lakes associated with a wetland. The questions are suitable for both warm water and coldwater fish and no particular species are emphasized. Wetlands that support fish habitat include those with adjacent vegetation that provides shade, cover, and food sources. Under OFWAM, a wetland's fish habitat function can be assessed as intact, impacted or degraded, or lost or not present.

- *Water quality:* This function addresses the potential of a wetland to reduce the impacts of excess nutrients in stormwater runoff on downstream waters. A wetland can contribute to water quality by trapping sediment during periods of heavy rainfall, keeping it from entering adjacent downstream resources. It also traps nutrients such as nitrogen and phosphorus, helping to minimize algal blooms and subsequent oxygen deficiencies downstream. Under OFWAM, a wetland's water quality function can be assessed as intact, impacted or degraded, or lost or not present.

- *Hydrologic control:* This function addresses the effectiveness of a wetland in reducing downstream flood peaks and storing floodwaters. Wetlands can act as flood regulators, trapping water during periods of high precipitation or flooding, and then slowly releasing

the flow downstream. Under OFWAM, a wetland's hydrologic control function can be assessed as intact, impacted or degraded, or lost or not present.

- *Education:* This function addresses the suitability of a wetland to provide educational opportunity on land that is open or accessible to the public. Easily accessible wetlands with a diversity of plants and animals are useful in outdoor education. Under OFWAM, a wetland can have educational uses, have the potential to provide such uses, or may not be appropriate for such uses.

Winterbrook used a OFWAM field form to characterize wetlands and address specific functions that required field observation. Data collected in the field included wetland Cowardin classes, the presence and extent of vegetative cover and wetland hydrology, the character of adjacent water bodies, and other field data essential to the OFWAM assessment. The field evaluations were generally conducted from viewing areas near wetland sample plots, or from neighboring public lands where property access was not granted.

The OFWAM assessments were completed in the office using field data, aerial photographs, maps, and information gathered from public agencies such as:

- Oregon Department of Environmental Quality (DEQ);
- Oregon Department of Fish and Wildlife (ODFW);
- Oregon Department of Forestry (DOF);
- Oregon Natural Heritage Information Center (ORNHIC); and
- U.S. Fish and Wildlife Service (USFWS).

The assessment result is a determination of whether a function is high (intact or diverse), moderate (impacted/degraded), or low (lost or not present). Factors such as size of wetland, biological diversity, presence of rare or sensitive species, and adjacent land uses are used in the rating system. These ratings are used in the evaluation of wetland significance as discussed below. For example, any wetland with a "diverse" wildlife habitat function, or an "intact" fish habitat, water quality or hydrologic control function meets a criterion for a "locally significant wetland."

Wetlands of Special Interest for Protection

The OFWAM also includes a set of questions to assess whether any wetlands within the study area should be considered Wetlands of Special Interest for Protection (WSIP). The questions address whether a wetland is in a management plan or is protected by regulatory rules and statutes. They address topics such as the presence of threatened, endangered and sensitive species or critical habitat, whether the wetland is considered rare or unique. An affirmative answer to any one of the ten questions will place the wetland into the WSIP category.

Locally Significant Wetland Criteria

Following completion of the LWI and the OFWAM functional assessment, all wetlands were evaluated against DSL's wetlands significance criteria (OAR 141-086-0350). In addition to a high rating for any of the four aforementioned functions (wildlife habitat, fish habitat, water quality and hydrologic control), the State's mandatory criteria include wetlands that:

- Are located within 1/4-mile of a “water quality limited stream” and have “intact” or “impacted or degraded” water quality function;
- Contain one or more rare plant communities;
- Are inhabited by any species listed by the federal government as threatened or endangered, or listed by the state as sensitive, threatened or endangered; or
- Have a direct surface water connection to a stream segment mapped by the ODFW as habitat for indigenous anadromous salmonids, and have “intact” or “impacted or degraded” fish habitat function.

The DSL rule includes two additional criteria used to determine the significance of wetlands at the discretion of the local government agency. These criteria are:

- The wetland represents a locally unique native plant community; and,
- The wetland is publicly owned and determined to "have educational uses" using OFWAM, and such use by a school or organization is documented for that site.

Mapping Procedures

Field maps were prepared using the latest available (2005) digital color ortho-photographs.[4] Information shown on the field maps included existing wetland data (including DSL wetland determinations and NWI wetlands), hydric soils, soils with hydric inclusions, streams, water bodies, property boundaries, and public rights-of-way. All data were geo-referenced with the aerial imagery and the City parcel data. Other aerial based maps were used to obtain more detailed information. For example, Google Earth and the Bird’s Eye View feature on Bing Maps provided high-resolution, recent aerial images that allowed evaluation of vegetation communities and, in some cases, observation of standing water or saturated soils.

Wetlands and sample plots were mapped on the field maps and selected GPS waypoints were taken at data plots and along wetland boundaries. Additional reference points were used to establish the location and perimeter of each wetland polygon. These references included property lines (e.g., survey corner markers), building lines, streets, utilities, streams, trees and other mapped physical features that could aid determination of location and distances on the ground. Wetland boundaries and sample plots were then digitized and registered with the base map in GIS.

Public Involvement Process

Public Outreach

Public involvement and outreach for the Junction City LWI began in October 2008. At an October 1, 2008 public meeting, Winterbrook presented information on the LWI process and schedule to the Junction City Citizen Comprehensive Planning Committee.

Letters notifying potentially affected landowners about the LWI process were sent March 6, 2009. The letters contained information regarding what data collection methods and how that

[4] Winterbrook later consulted 2009 aerial imagery, which first become available after the field work was completed.

information would be used; it also contained a right-of-entry request for landowners to complete if they were willing to allow the field team on their property. The notification letters also contained an invitation to an open house on March 25, 2009.

On March 25, 2009, an open house was held at the Junction City offices. The meeting was led by Kay Bork of the City of Junction City and Winterbrook Planning. Anna Buckley from DSL participated in both the meeting and the presentation. The open house provided information about the process, status, and preliminary findings for wetland resources. Questions and requests from landowners were answered and several property owners provided access permission forms at the meeting and made arrangements for site visits with the field team.

Beginning in March, Winterbrook began contacting property owners who allowed access to arrange site visits. Contacts and coordination with owners continued throughout the field inventory phase.

Agency Coordination

Coordination with DSL began in the Fall of 2008. A kickoff meeting was held at DSL offices with Janet Morlan and Anna Buckley on November 12, 2008. The City's Planning Director Kay Bork and Winterbrook's Tim Brooks attended the meeting. Winterbrook met subsequently with DSL staff and completed a review of all DSL files for the Junction City area. A Junction City field tour with Anna Buckley occurred on March 25, 2009. Ongoing phone and email communications between Winterbrook and DSL on project methodology, schedule and technical questions occurred between Fall 2008 and Fall 2009.

Other public agency contacts and coordination included Lane County's GIS Department and Junction City's Planning and Public Works Departments.

Inventory Results

Overview

This LWI provides maps and information about wetlands located within the Junction City UGB. The LWI serves as a planning tool for balancing the protection of wetland functions with other community needs.

A preliminary reconnaissance of the study area was completed in May, 2008. The wetland inventory field work was performed between February and June, 2009.

A total of 14 wetlands were identified within the City UGB, in addition to eight "probable wetlands" less than one-half acre in size. Of these 14 mapped wetlands, four were channels constructed or modified to address stormwater and flood management issues. Wetlands within the Junction City UGB range from one-half to 214 acres in size. The total area of wetlands within the City is 265.64 acres.

Winterbrook evaluated the wetlands to determine whether any meet the criteria for Wetlands of Special Interest for Protection. None of the wetlands evaluated in this LWI meets those criteria.

Wetlands were then evaluated against the state's wetland significance criteria and 13 of the wetlands were determined to be locally significant wetlands (LSW). Three of flood management channels qualified as LSWs based on their "hydrological control" function. Wetland BC did not qualify as locally significant.

Due to restricted access and visibility, none of the DSL-verified wetlands could be verified on site. One DSL wetland boundary (DET 99-0208, a segment of the "east canal" near EC-02) was adjusted from its mapped location to better reflect current aerial photo and parcel data showing the canal. Another area of wetlands (DET 90-0137, near FC-02) appears at least partially filled in recent aerial photographs, and its boundary was adjusted accordingly. A recent determination (DET 09-0516) provided by DSL was also digitized and integrated into the FC-02 boundary mapping.

Wetland Classes

Wetlands in Junction City fall into four primary (Cowardin) classifications: Palustrine Forested, Palustrine Emergent, Palustrine Aquatic Bed, and Palustrine Unconsolidated Bottom. These classifications are summarized below.

- *Palustrine Forested Wetlands (PFO)*

  Forested wetlands generally include wetlands or portions of wetlands with cover by woody species over 20 feet in height exceeding 30 percent. Forested wetlands are located primarily east of Highway 99S, and south of 1st Avenue.

  Forested wetlands in Junction City include a combination of deciduous species dominated by Oregon ash (*Fraxinus latifola*) and black cottonwood (*Populus trichocarpa* v. *balsamifera*). Other tree species include red alder (*Alnus rubra*) and Oregon white oak (*Quercus garryana*) near wetland edges. Understory vegetation includes snowberry (*Symphoricarpos albus)*, camas *(Camassia quamash)*, and reed canarygrass (*Phalaris arundinacea*).

  These wetland habitats generally provide high quality habitat for a wide variety of birds, mammals, amphibians and aquatic organisms. Structural and species diversity is generally high, though more limited in areas dominated by a reed canarygrass understory.

- *Palustrine Emergent Wetlands (PEM)*

  Emergent wetlands include marshes and shallow ponds dominated by grasses and other herbaceous plants. These resources generally have less than 30 percent cover by trees and/or shrubs and greater than 30 percent cover by grasses, grasslikes, and other herbaceous flora. This is the most common wetland type within the study area; 12 of the 14 LWI wetlands are either emergent or contain an emergent component. All of the canals are also classified as PEM with modifiers "C" for seasonally flooded and "x" for excavated.

Most emergent wetlands in Junction City are dominated by the invasive, non-native reed canarygrass. Other species include sedges, rushes, and both native and non-native grasses.

Small mammals and snakes are commonly found within this habitat type, which in turn attract northern harriers, red tail hawks, owls, and coyotes that feed upon them. Overall habitat value of this wetland type is low to moderate, depending of the extent of reed canarygrass infestation and the extent of channelization and maintenance (the canal system provides the lowest quality habitat, although it is a significant seasonal source of water).

- *Palustrine Aquatic Bed Wetlands (PAB)*

  Palustrine aquatic beds include wetlands and deepwater habitats dominated by plants growing mainly on or below the water surface in most years. These features are generally permanently flooded. Within the Junction City UGB, one wetland was mapped as PAB (CC-02).

- *Palustrine Unconsolidated Bottom Wetlands (PUB)*

  Palustrine Unconsolidated Bottom habitats generally include ponds and standing water habitats whose substrate is undetermined and whose plant cover does not exceed 30 percent. Open water areas provide important and necessary habitat for fish, aquatic invertebrates, water dependent mammals, waterfowl and shorebirds. In Junction City, two wetlands were identified with a significant open water component (EC-01 and CC-03).

Summary

Table 2 summarizes the distribution of wetlands by Cowardin classification within the UGB. It should also be noted that some wetlands contained a patchwork of classes; however, only distinct Cowardin classes of more than one-quarter acre were mapped.

Table 2. Wetland Cowardin Classifications

Cowardin Class	Area (acres)
PFO	14.03
PEM	249.62
PAB	0.73
PUB	1.26
Total	**265.64**

The hydrogeomorphic (HGM) classification for 10 of the City's wetlands was Riverine Flow-through (RFT). The total area of RFT wetlands is 23.89 acres. Wetlands CC-04, FC-01, FC-02 and a portion of FC-03 are classified as Flats. The total area of Flats is 240.54 acres. Wetland CC-01 is a Depressional Outfall (DO) wetland; it is the smallest wetland at 0.48 acres. The

remaining wetland (CC-02) is a Depressional Closed, Permanently Flooded (DCP) wetland; it is 0.73 acres in size.

Table 3 provides a summary of the classification and size of wetlands by watershed within the study area. The wetlands are mapped in Figure 1.

Table 3. Wetland Classification and Size

Sub-Watershed/Name	Wetland code	Cowardin Class	HGM Class	Area (acres)
Bergstrom Canal (BC)	BC	PEMCx	RFT	1.20
Central Canal (CC)	CC	PEMCx	RFT	3.82
	CC-01	PEMC, PFO1	DO	0.48
	CC-02	PABFx	DCP	0.73
	CC-03	PUBFh	RFT	0.52
	CC-04	PFO1, PEMC	RFT/Flats	14.45
East Canal (EC)	EC	PEMCx	RFT	3.38
	EC-01	PUB3G, PEMG	RFT	1.95
	EC-02	PEMC	RFT	0.87*
Flat Creek (FC)	FC-01	PEMf	Flats	213.76
	FC-02	PEM/PFOC	Flats	19.85
	FC-03	PEMCd	RFT/Flats	3.32
West Canal (WC)	WC	PEMCx	RFT	1.36
	WC-01	PEMC	RFT	0.76
TOTAL AREA				265.64

* Of this, only 0.06 acre is located within the study area. The "total area" figure includes only that portion of the wetland within the UGB.

Wetland Assessment Results

Winterbrook assessed wetland quality for each wetland unit using the Oregon Freshwater Wetland Assessment Methodology (OFWAM). As provided in the new LWI rules, only the four wetland functions (wildlife habitat, fish habitat, water quality, hydrologic control) need to be assessed, since they relate directly to the wetland significance criteria. In addition, where a wetland was located on public lands, education functions were assessed to determine whether the wetland was significant as an educational resource. Table 4 provides the results of the OFWAM assessments for the four key wetland functions.

Table 4. OFWAM Assessment Results

Wetland Code	Wildlife	Fish	Water Quality	Hydrologic Control
BC	Some	Impacted	Impacted	Impacted
CC	Some	Impacted	Impacted	Intact
CC-01*	Diverse	Impacted	Intact	Impacted
CC-02	Some	N/A	Impacted	Intact
CC-03	Some	Impacted	Impacted	Intact
CC-04	Diverse	Impacted	Intact	Intact

Wetland Code	Wildlife	Fish	Water Quality	Hydrologic Control
EC	Some	Impacted	Impacted	Intact
EC-01	Some	Impacted	Intact	Intact
EC-02	Some	Impacted	Intact	Intact
FC-01	Some	Impacted	Impacted	Intact
FC-02	Some	Impacted	Intact	Impacted
FC-03	Some	Impacted	Intact	Impacted
WC	Some	Impacted	Impacted	Intact
WC-01	Some	Impacted	Intact	Impacted

* This wetland also has educational uses.

Table 5 summarizes the relative distribution of assessments for each function, with the percentage of total wetlands ranking high in each category. Most of the significant wetlands provided high hydrologic control function, six provided high water quality function and two provided high wildlife habitat function.

Table 5. Wetland Assessment Results for Key Wetland Functions

Function	High	Moderate	Low	N/A	% Wetlands Assessed High
Wildlife habitat	2	12	0		14%
Fish habitat	0	13	0	1	0%
Water quality	7	7	0		50%
Hydrologic control	9	5	0		64%

Significant Wetlands Determination

Following completion of the wetland inventory and functional assessment, Winterbrook evaluated all wetlands against DSL's wetlands significance criteria.

To be considered for significance, wetlands must not meet any of the following exclusions:

- Wetlands artificially created entirely from upland that are:
  1. Created for the purpose of controlling, storing, or maintaining stormwater; or
  2. Active surface mining or active log ponds; or
  3. Ditches without a free and open connection to natural waters of the state and which do not contain food or game fish; or
  4. Less than one acre in size and created unintentionally as the result of:
     a. Irrigation water overflow or leakage; or
     b. Construction activity not related to compensatory mitigation for permitted wetland impacts; or
  5. Of any size and created for the purpose of wastewater treatment, cranberry production, farm or stock watering, settling of sediment, cooling industrial water, or as a golf course hazard.

- Wetlands or portions of wetlands that are contaminated by hazardous substances, materials or wastes as per the following conditions:
    1. The wetland is documented as contaminated on either the U.S. Environmental Protection Agency's (EPA) National Priority List, or the Department of Environmental Quality's (DEQ) Inventory of Hazardous Substance Sites.
    2. Only the portion of the wetland affected by such hazardous substances or wastes shall be excluded from the LSW analysis. Affected portions shall be delineated in consultation with EPA and DEQ, and shall include areas potentially disturbed by clean-up activities.
    3. Contaminated wetlands that have subsequently been removed from the NPL or DEQ Inventory following clean-up shall be re-evaluated under the LSW criteria at the next periodic review.

Wetlands not meeting any of the exclusions above must meet one or more of the following mandatory criteria to be deemed LSWs:

1. Wetland provides a diverse wildlife habitat, intact fish habitat, intact water quality function, or intact hydrologic control function;
2. Wetland is located within 1/4-mile of a “water quality limited stream” and has “intact” or “impacted or degraded” water quality function;
3. Wetland contains one or more rare plant communities;
4. Wetland is inhabited by any species listed by the federal government as threatened or endangered, or listed by the state as sensitive, threatened or endangered; or
5. Wetland has a surface water connection to a stream that is habitat for indigenous anadromous salmonids and has “intact” or “impacted or degraded” fish habitat function.

In addition to the mandatory criteria, wetlands meeting either of the following optional criteria were also determined to be locally significant wetlands in Junction City. These criteria are:

1. Wetland represents a locally unique native plant community; or
2. Wetland is publicly owned and has educational uses.

As shown in Table 6, none of the inventoried wetlands met the exclusions identified above. Of the 14 wetlands, a total of 13 met one or more of the above criteria and were determined to be significant. Wetland BC did not qualify as significant. Wetland CC-01 met the optional significance criterion related to educational uses.

Next Steps

Following approval of the Junction City LWI by DSL, a notice of the approved inventory will be sent to affected landowners. The City will adopt the LWI and adopt or amend its local wetland protection program consistent with the Goal 5 administrative rule. Junction City’s wetland planning process is planned to be completed in 2011-2012.

Table 6. OFWAM Wetland Assessment and LSW Results

			Mandatory Criteria								*Optional Criteria*		Locally Signifi-cant Wetland?
			OFWAM Thresholds (diverse wildlife habitat, intact fish habitat, intact water quality or intact hydrologic control function)				¼ Mile of WQL Stream	Rare Plant Community	Listed Species	Directly Connects to Salmon Habitat	Local Unique Native Plant Community	Public With Educational Use	
Wetland Code	**Acres**	**Exclu-sion?**	**Wildlife**	**Fish**	**Water Quality**	**Hydrologic Control**							
BC	1.20	No					No	No	N/D	No	No	No	No
CC	3.82	No				Intact	No	No	N/D	No	No	No	Yes
CC-01	0.48	No	Diverse		Intact		No	No	N/D	No	No	Yes	Yes
CC-02	0.73	No				Intact	No	No	N/D	No	No	No	Yes
CC-03	0.52	No				Intact	No	No	N/D	No	No	No	Yes
CC-04	14.45	No	Diverse		Intact	Intact	No	No	N/D	No	No	No	Yes
EC	3.38	No				Intact	No	No	N/D	No	No	No	Yes
EC-01	1.95	No			Intact	Intact	No	No	N/D	No	No	No	Yes
EC-02	0.87*	No			Intact	Intact	No	No	N/D	No	No	No	Yes
FC-01	213.76	No				Intact	Yes	No	N/D	No	No	No	Yes
FC-02	19.85	No			Intact		No	No	N/D	No	No	No	Yes
FC-03	3.32	No			Intact		Yes	No	N/D	No	No	No	Yes
WC	1.36	No				Intact	No	No	N/D	No	No	No	Yes
WC-01	0.76	No			Intact		No	No	N/D	No	No	No	Yes

* Total area of wetland; area within UGB is 0.06 acre.
WQL: Water quality limited (per DEQ)
N/D: None Detected (based on incidental observation during inventory; a formal sensitive species survey was not completed for this project).

Appendix A. Definitions

Basin – a topographical entity within which all the surface water draining to a single point falls; some of the surface water may have come from groundwater fed by geological strata outside the basin.

Cowardin Class or **subclass** – the wetland classification according to the U.S. Fish and Wildlife Service's *Classification of Wetlands and Deepwater Habitats of the United States*, Cowardin et al., 1979.

Emergent – a plant that grows rooted in shallow water, the bulk of which emerges from the water and stands vertically. Usually applied to non-woody vegetation.

Emergent Wetland – a subclass of palustrine system (see Cowardin Class above), a wetland characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens.

Enhancement – an improvement in the functions and values of an existing wetland, forest, or other natural resource.

Exotic species – -plants that are not indigenous to the Pacific Northwest (see invasive species).

Field Verification – to walk over and/or visually check an area, for example, to make a wetland determination and map wetlands (this may or may not include collecting sample plot data).

Fish habitat – those areas upon which fish depend in order to meet their requirements for spawning, rearing, food supply, and migration.

Floodplain – river valley apart from the river channel which is inundated only in a flood event, attenuating the flood discharge. The 100-year floodplain shows the flood with a 100-year recurrence interval.

Forested Wetland – a subclass of palustrine system (see Cowardin Class above), a wetland characterized by woody vegetation that is six meters (20 feet) tall or taller.

Geographic Information System (GIS) – a system of hardware, software and data storage that allows for the analysis and display of information that has been geographically referenced.

Global Positioning System (**GPS**) – is a navigation satellite system transmitting signals that allow GPS receivers to determine the receiver's location, speed and direction. Its primary use for the Junction City inventory is to provide accurate field position data for use in GIS (see above) to verify the location of natural features such as landslide areas, wetlands and streams.

Goal 5 – Statewide Planning Goal (OAR Chapter 660, Division 23) intended to protect natural resources and conserve scenic and historic areas and open spaces.

Goal 5 Inventory – a survey, map, or description of one or more resource sites that is prepared by a local government, state or federal agency, private citizen, or other organization and that includes information about the resource values and features associated with such sites.

Growing season – the portion of the year when soil temperatures are above biologic zero at 50 cm (19.7").

Herbaceous – with the characteristics of an herb; a plant with no persistent woody stem above ground.

Hydric soil – a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part.

Hydrogeomorphic (HGM) or **subclass** means the hydrogeomorphic classification of the wetland based upon its landscape position and hydrology characteristics, according to the HGM classification developed by the Department of State Lands.

Hydrologic Soil Group – The hydrologic soil group refers to the infiltration potential of the soil after prolonged wetting. There are four groups, generally described as follows:

- Group A Soils: High infiltration (low runoff). Sand, loamy sand, or sandy loam.
- Group B Soils: Moderate infiltration (moderate runoff). Silt loam or loam.
- Group C Soils: Low infiltration (moderate to high runoff). Sandy clay loam.
- Group D Soils: Very low infiltration (high runoff). Clay loam, silty clay loam, sandy clay, silty clay, or clay.

Hydrology – The properties, distribution, and circulation of water.

Hydrophyte – Any plant growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content.

Hydrophytic vegetation – See hydrophyte.

Invasive species – Those species which become established easily in disturbed conditions, reproduce readily, and often establish monocultures. Most invasive plants are non-native species. Examples of common invasive species in Junction City are: Himalayan blackberry and reed canarygrass.

Indicator – The soil, vegetation, and hydrology characteristics or other field evidence that indicate that wetlands are present.

Indigenous Anadromous Salmonids – Chum, sockeye, Chinook and Coho salmon, and steelhead and cutthroat trout that are members of the family Salmonidae and are listed as sensitive, threatened or endangered by a state or federal authority.

Local Wetlands Inventory (LWI) – A collection of maps and information about wetlands throughout a local community that provides a planning tool for balancing the protection of wetland functions with other community needs. LWIs satisfy the requirements for wetland

inventories under Statewide Planning Goal 5. Once approved, LWIs become part of the Statewide Wetlands Inventory. Mapped LWI wetland boundaries are generally accurate to within 5 meters, but may be less in areas that could not be field verified. A wetland boundary delineation may be needed to determine whether regulations apply to a development proposal.

Locally Significant Wetlands (LSW) – Those wetland sites that provide functions or exhibit characteristics that are pertinent to community planning decisions made at a local scale, for example, within a UGB. These wetland sites shall be identified by local governments according to the criteria and procedures in sections 141-086-0340 and 141-086-0350.

Native Plant Community – A recognized assemblage of plant species indigenous to Oregon. All such wetland plant communities are listed in the Classification and Catalog of Native Wetland Plant Communities in Oregon (Oregon Natural Heritage Information Center).

Offsite Determination – A wetland determination conducted without field verification using NWI maps, soils maps, and aerial photographs.

Ordinary high-water mark – The line on the shore established by the fluctuations of water and indicated by physical characteristics such as: a clear, natural line impressed on the bank; changes in the character of soil or vegetation; shelving; or the presence of a line of litter or debris.

Oregon Freshwater Wetland Assessment Methodology (OFWAM) – The method adopted by the State to evaluate and rate the relative quality of a wetland by measuring its condition and its capacity to perform certain functions, including wildlife habitat, fish habitat, water quality, and hydrologic control. The results of the OFWAM rating is used as a basis for determination of wetland significance.

OFWAM Evaluation Descriptor – a summary statement describing whether the wetland is (1) intact, (2) impacted or degraded, or (3) function is lost or not present.

Other Waters – means waters of the state other than wetlands, such as streams and non-vegetated ponds.

Probable Wetland (PW) – an area noted during the course of LWI development that appears to meet wetland criteria but is less than one half of an acre in size or is small and of undetermined size, and is mapped as a point rather than a polygon on the LWI maps.

Rare Plant Community – Relictual, uncommon or unique in Oregon, determined by number of occurrences and threats following national heritage program criteria (i.e., rarity ranking of G1-G3 or S1-S3).

Reach – A length of channel with uniform characteristics.

Restoration – Restoration is the process of repairing damage to the diversity and dynamics of ecosystems. Ecological restoration is the process of returning an ecosystem as closely as possible to predisturbance conditions and functions.

Sample Plot – A specific area on the ground where soils, vegetation and hydrology data are recorded on a field data form in order to make a wetland determination.

Scrub-shrub Wetland – A subclass of palustrine system (see Cowardin Class above), areas dominated by woody vegetation less than 6 meters (20 feet) tall. The species include tree shrubs, young trees, and trees or shrubs that are stunted because of environmental conditions.

Significance Determination – The determination of significance of a Goal 5 resource is based on:

(a) The quality, quantity, and location information;
(b) Supplemental or superseding significance criteria set out in OAR 660-023-0090 through 660-023-0230; and
(c) Any additional criteria adopted by the local government, provided these criteria do not conflict with the requirements of OAR 660-023-0090 through 660-023-0230.

Soil Map Unit – A conceptual group of one to many delineations identified by the same name in a soil survey that represent similar landscape areas comprised of either: (1) the same kind of component soil, plus inclusions, or (2) two or more kinds of component soils, plus inclusions, or (3) component soils and miscellaneous area, plus inclusions, or (4) two or more kinds of component soils that may or may not occur together in various delineations but all have similar, special use and management, plus inclusions, or (5) a miscellaneous area and included soils.

Statewide Wetlands Inventory (SWI) – an inventory that contains at minimum the location, type (e.g. classification) and approximate extent of wetlands in the State of Oregon. This inventory is continually revised as additional information is received or obtained by DSL.

Stream – A watercourse created by natural processes, or one that would be in a natural state if it were not for human-caused alterations. Stream includes a channelized or relocated stream.

Top of Bank – Has the same meaning as "bankfull stage" defined in OAR 141-085-0010(2). The stage or elevation at which water overflows the natural banks of streams or other waters of this state and begins to inundate the upland. In the absence of physical evidence, the two-year recurrence interval flood elevation may be used to approximate the bankfull stage.

Visually Confirm or **Visual Confirmation** – to walk over and/or visually check an area to make a wetland determination and map wetlands and other waters.

Wetland – an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wetland Assessment or **Functional Assessment** – An evaluation and rating of the relative quality of a wetland by measuring its condition and its capacity to perform certain functions.

Wetland Boundary – A line marked on a map that identifies the approximate wetland/non-wetland boundary.

Wetland Condition – The integrity of a wetland's physical and biological structure, which determines the wetland's ability to perform specific functions, as well as its resilience and enhancement opportunities.

Wetland Delineation Manual or **1987 Manual** – Provides technical guidelines and methods to determine whether an area is a wetland for purposes of Section 404 of the Federal Clean Water Act. The objective of the Act is to maintain and restore the chemical, physical, and biological integrity of the waters of the United States.

Wetland Determination – A decision that a site may, does, is unlikely to, or does not contain wetlands. A determination does not include the precise location or boundaries of any wetlands determined to be present.

Wetland Function – Characteristic action or behavior associated with a wetland that contributes to a larger ecological condition such as wildlife habitat, fish habitat, water quality, and/or flood control.

Wetland Hydrology – The total of all wetness characteristics in areas that are inundated or have saturated soils for a sufficient duration to support hydrophytic vegetation.

Wetland Indicator Status – Categories of plant species based upon the estimated probabilities (expressed as a frequency of occurrence) of a species occurring in a wetland or non-wetland. Wetland indicator status (WIS) includes the following:

- Obligate (OBL): species that almost always occur in wetlands under natural conditions (estimated probability >99%).
- Facultative wetland (FACW): species that usually occur in wetlands (estimated probability 67 to 99%), but are occasionally found in non-wetlands.
- Facultative (FAC): Species that are equally likely to occur in wetlands or non-wetlands (estimated probability 34 to 66%).
- Facultative upland (FACU): species that usually occur in non-wetlands (estimated probability 67 to 99%), but are occasionally found in wetlands.
- Upland (UPL): species that almost always occur in non-wetlands under normal conditions (estimated probability >99%).
- Not listed (NL): species that are not listed and are presumed to be upland species.
- No indicator status (NI): species that have not yet been evaluated.

A (+) or (-) following the WIS signifies a greater or lesser likelihood of being found in wetland condition.

Wetland Mosaic – A complex of several wetlands that are interspersed between areas of non-wetland each less than one half of an acre in size, making them difficult to map.

Wildlife Habitat – An area upon which wildlife depend in order to meet their requirements for food, water, shelter, and reproduction.

Appendix B. Wetland Characterization Sheets

Junction City Local Wetland Inventory

Watershed Summary Sheet

WATERSHED IDENTIFICATION

Flat Creek

CHARACTERISTIC	DESCRIPTION
Physical characteristics of the watershed	Flat Creek watershed covers the entire study area. Flat Creek is a perennial stream that also serves as an overflow channel of the Willamette River. It drains to the Long Tom River outside the UGB to the north. The watershed is nearly flat, sloping very gently from south to north. Some slight dissection of the overall landform occurs at the excavated canals and along the banks of Flat Creek. Within the study area there are three main canal branches, referred to here as the Eastern, Central, and Western Canals.
Land uses within the watershed	The dominant land use within the watershed is agricultural production. Residential, retail, institutional and light industrial uses are concentrated inside the Junction City UGB.
Water quality	While there are no state-listed "water-quality limited" streams in the watershed, there is evidence of degraded water quality caused by urban runoff, stormwater discharges, and herbicide use along the canals. The limited tree canopy cover near waterbodies results in high water temperatures and low dissolved oxygen levels in the summer. Nevertheless, half the wetlands in the study area were found to have intact water quality conditions.
Biological characteristics of the watershed	The widespread agricultural crop production in the watershed (and urbanized land within the city) leaves relatively few unmanaged or semi-natural areas with any biological diversity. There are some pockets of forested habitat – such as wetland CC-04 and areas to the east of the city - that provide diverse wildlife habitat and retain significant native plant components.

NARRATIVE SUMMARY OF WATERSHED DESCRIPTION

The Flat Creek watershed is an actively farmed landscape surrounding the Junction City urban area. These conditions limit available habitat for wildlife and degrade water quality conditions. Wetlands in the Junction City urban area provide valuable hydrologic control functions, and several also serve to protect water quality. Both habitat and water quality functions could be improved through establishment of greater vegetated buffers around the wetlands and transition to more integrated pest management practices (e.g., reduction in herbicide use and vegetation clearing in and adjacent to wetlands). Planting of native trees and shrubs along wetlands and streams combined with invasive species management, will improve wetland functions and conditions, and the overall health of the watershed.

Junction City Local Wetland Inventory

Wetland Characterization Sheet

GENERAL INFORMATION

Wetland Code:	BC (Bergstrom Canal)	Method:	Onsite
Wetland Size:	1.20 acres	Field Date:	3/11/09, 4/21/09
Cowardin Class:	PEMCx	Data Plot #s:	1, 2
HGM Class:	RFT	Investigators:	ACS, TB

LOCATION

Street/landmark: Bergstrom Park; north of River Road (E 1st Ave.), east of Dorsa St.

Legal description: Lots 300, 400, 3400, 15s04w3244

Sub-basin code: Bergstrom Canal

WETLAND CHARACTERISTICS

Description: The "Bergstrom Canal" flows down the eastern edge of Bergstrom Park. The park is located at the north end of Dorsa Street, at the eastern boundary of the study area. The park grounds are managed up to the edge of the canal. It is a soil-bottomed trapezoidal channel approximately 20 feet wide at the bottom. Much of the canal is unvegetated for a significant portion of the year due to routine spraying. Reed canarygrass and weedy grasses and forbs dominate the channel in most areas, with the latter dominating in areas that dry out quicker. Tree cover is limited.

Soils: Coberg silty clay loam, Conser silty clay loam, Malabon silty clay loam

Hydrologic Source: canal flow, direct precipitation, local runoff

Dominant Vegetation:

Trees	Shrubs	Vines/Herbs
		Phalaris arundinacea (reed canarygrass) *Alopecurus pratensis* (meadow foxtail)

Potential Enhancement Opportunities: Current functions are low. Conveyance and flood storage functions are maximized and vegetation is routinely sprayed. Opportunities include the following:

- elimination of noxious weeds
- where space exists, plant native trees and shrubs to moderate water temperature, add structural and food source diversity, and improve aquatic habitat
- treat stormwater prior to discharge
- avoid spraying areas of native vegetation

Junction City Local Wetland Inventory

Wetland Characterization Sheet

GENERAL INFORMATION

Wetland Code:	CC (Central Canal)	Method:	Onsite
Wetland Size:	3.82 acres	Field Date(s):	3/12, 4/21, 6/2/09
Cowardin Class:	PEMCx	Data Plot #s:	12, 13; 22, 23, 31, 38-40
HGM Class:	RFT	Investigators:	ACS, TB

LOCATION

Street/landmark: West of Hwy. 99S near Bryant Rd., north to 2nd Ave., west to Timothy St., then north near Spruce, Oak and Rose St. to 18th Ave.

Legal description: multiple lots within 16s04w0522, 15s04w3233, 15s04w3144, 15s04w3143, 15s04w3142, 15s04w3141, 15s04w3114, and 15s04w3111

Sub-basin code: Central Canal

WETLAND CHARACTERISTICS

Description: The "central canal" is a trapezoidal channel for much of its length. The canal flows northwest from Highway 99S near Bryant Road, through commercial, residential and institutional areas, until it leaves the northern study limits at 18th Street and Rose Ave. The substrate is generally soil with little gravel, and much of the canal is unvegetated for a significant portion of the year due to routine spraying. Vegetation is limited to pasture grasses and reed canarygrass in most areas. Occasional tree groves provide limited habitat and thermal cover; the most notable is an Oregon ash grove south of 10th Avenue along Rose Street.

Soils: Coberg silty clay loam, Conser silty clay loam

Hydrologic Source: canal flow, direct precipitation, local runoff

Dominant Vegetation:

Trees	Shrubs	Vines/Herbs
		Phalaris arundinacea (reed canarygrass) *Alopecurus pratensis* (meadow foxtail) *Polygonum amphibium* (water smartweed) *Alisma plantago-aquatica* (water plantain)

Potential Enhancement Opportunities: Current functions are low. Conveyance and flood storage functions are maximized and vegetation is routinely sprayed. Opportunities include:

- modify vegetation management approach to improve water quality/habitat functions
- eliminate noxious weeds and replace with native emergent species
- where space exists, plant native trees, shrubs to provide thermal cover, add structural diversity, and improve habitat
- treat stormwater prior to discharge

Junction City Local Wetland Inventory

Wetland Characterization Sheet

GENERAL INFORMATION

Wetland Code:	CC-01	Method:	Onsite
Wetland Size:	0.48 acre	Field Date(s):	3/12/2009
Cowardin Class:	PEMC/PFO1	Data Plot #s:	10, 11
HGM Class:	DO	Investigators:	ACS, TB

LOCATION

Street/landmark: Laurel Elementary School, Nyssa St. north of 12th Ave.

Legal/tax map: Lots 5900, 6000, 15s04w3111

Sub-basin code: Central Canal

WETLAND CHARACTERISTICS

Description: This is a flat-bottomed oblong feature that runs east-west along the southern edge of school property. The feature is fed by stormwater discharge and precipitation, and has a piped outlet to an arm of the Central Canal. It is lined by a row of mature Oregon ash that are rooted near the outer extent of the wetland boundary on the north side. The low areas are dominated by meadow foxtail, bluegrasses and bentgrasses. Subdominant components include reed canarygrass, curly dock, and common camas. No shrubs are present and Himalayan blackberry cover and that of other noxious species is low.

Soils: Malabon silty clay loam

Hydrologic Source: direct precipitation

Dominant Vegetation:

Trees	Shrubs	Vines/Herbs
Fraxinus latifolia (Oregon ash)		*Alopecurus pratensis* (meadow foxtail) *Agrostis sp.* (bentgrass) *Poa sp.* (bluegrass)

Potential Enhancement Opportunities: Enhancement opportunities would require school cooperation and some method of limiting access to wetlands (by people and pets). Opportunities include the following:

- supplemental planting of native trees, shrubs, groundcover
- treatment of runoff prior to discharge to the swale if necessary
- preservation of headwater hydrology sources
- elimination of noxious weeds

Junction City Local Wetland Inventory

Wetland Characterization Sheet

GENERAL INFORMATION

Wetland Code:	CC-02	Method:	Offsite
Wetland Size:	0.73 acre	Field Date(s):	3/12/2009
Cowardin Class:	PABFx	Data Plot #s:	14, 15
HGM Class:	DCP	Investigators:	ACS, TB

LOCATION

Street/landmark: At the edge of a mobile home park east of Pitney Lane

Legal description: Lot 900, 16s04w0600

Sub-basin code: Central Canal

WETLAND CHARACTERISTICS

Description: This feature is an excavated depression. Black cottonwood and willow line the edge of the pond, particularly on the southwest side. Herbaceous vegetation includes reed canarygrass and meadow foxtail in roughly equal proportions, mostly at the margins. Approximately 30 percent of the feature is open water. No connection to other water bodies is apparent, although stream maps indicate that a Flat Creek tributary once passed adjacent to this feature.

Soils: Malabon silty clay loam

Hydrologic Source: stormwater, direct precipitation

Dominant Vegetation:

Trees	Shrubs	Vines/Herbs
Populus balsamifera (black cottonwood)	*Populus balsamifera* (black cottonwood) *Salix sp.* (willow)	*Alopecurus pratensis* (meadow foxtail) *Phalaris arundinacea* (reed canarygrass)

Potential Enhancement Opportunities: Current land use is stormwater-related. Minimal upland area for expansion of the feature is available due to adjacent residential uses. Opportunities include the following:

- elimination of noxious weeds and replace with native emergent and/or aquatic vegetation
- supplemental planting of native trees, shrubs, groundcover
- treatment of stormwater runoff prior to discharge if necessary

Junction City Local Wetland Inventory

Wetland Characterization Sheet

GENERAL INFORMATION

Wetland Code:	CC-03	Method:	Offsite
Wetland Size:	0.52 acre	Field Date:	3/11/2009
Cowardin Class:	PUBFh	Data Plot #s:	8, 9
HGM Class:	RFT	Investigators:	ACS, TB

LOCATION

Street/landmark: 3rd Ave./Maple St., south of Seventh Day Adventist church

Legal description: Lots 8000, 8201, 8202, 8300, 8600, 8700, 16s04w3233

Sub-basin code: Central Canal

WETLAND CHARACTERISTICS

Description: This feature is a more natural reach of the central canal, with a distinct plant community and hydrology. Oregon ash and black cottonwood comprise an overstory along the edges, with willow species forming an understory shrub component. Reed canarygrass is the sole dominant in the herbaceous layer. This site likely remains ponded much or all of the year.

Adjacent uplands are vegetated with Oregon oak over an understory of meadow foxtail, tall fescue, reed canarygrass, and other weedy grasses and forbs.

Soils: Coberg/Conser silty clay loam

Hydrologic Source: canal flow, stormwater, direct precipitation

Dominant Vegetation:

Trees	Shrubs	Vines/Herbs
Populus balsamifera (black cottonwood) *Fraxinus latifolia* (Oregon ash)	*Salix sp.* (willow)	*Phalaris arundinacea* (reed canarygrass)

Potential Enhancement Opportunities: Current functions are lowered due to cover by noxious species and degraded water quality. Minimal upland area for expansion of the feature is available due to adjacent uses. Opportunities include the following:

- elimination of noxious weeds and replacement with native emergent/aquatic species
- supplemental planting of native trees, shrubs, groundcover
- improving stormwater treatment upstream

Junction City Local Wetland Inventory

Wetland Characterization Sheet

GENERAL INFORMATION

Wetland Code:	CC-04	Method:	Onsite
Wetland Size:	14.45 acres	Field Date(s):	3/25, 4/21, 6/2/2009
Cowardin Class:	PFO1/PEMC	Data Plot #s:	16-21; 26-30
HGM Class:	RFT/Flats	Investigators:	ACS, TB

LOCATION

Street/landmark: East of Highway 99S, south of 1st Ave., includes Weyerhaeuser/Hunton properties

Legal description: Lots 100, 200, 307, 309, 310, 600, 900, 16s04w0500 and Lot 100, 16s04w0522. Also includes Southern Pacific Railroad, P&W and 99S rights-of-way.

Sub-basin code: Central Canal

WETLAND CHARACTERISTICS

Description: This feature is a complex of large forested wetlands, sloughs and canals, and adjacent riparian wetlands. It is one of the largest wetland complexes inside the City's UGB, providing diverse wildlife habitat, intact water quality and hydrologic control functions. In the forest areas, black cottonwood and Oregon ash are dominant tree species. Shrubs are generally more drought-tolerant species such as common snowberry and poison oak. The herb layer is composed of reed canarygrass, poison hemlock, common camas, and pasture grasses.

Soils: Coberg and Conser silty clay loams

Hydrologic Source: stream flow, direct precipitation, runoff from adjacent vacant land

Dominant Vegetation:

Trees	Shrubs	Vines/Herbs
Populus trichocarpa (black cottonwood) *Fraxinus latifolia* (Oregon ash)	*Symphoricarpos albus* (common snowberry) *Oemleria cerasiformis* (Indian plum) *Rhus diversiloba* (poison oak)	*Phalaris arundinacea* (reed canarygrass) *Camassia quamash* (common camas) *Conium maculatum* (poison hemlock)

Potential Enhancement Opportunities: Current functions are high due to heavy tree and native species cover and interspersion of habitat types. There is some cover by noxious species including Himalayan blackberry. Opportunities include the following:

- elimination of noxious weeds and replacement with native emergent vegetation
- replanting these areas (generally edges) with native trees, shrubs, groundcover
- treatment of runoff entering this area from adjacent developed areas

Junction City Local Wetland Inventory

Wetland Characterization Sheet

GENERAL INFORMATION

Wetland Code:	EC (Eastern canal)	Method:	Onsite
Wetland Size:	3.38 acres	Field Date(s)	3/12, 4/21, 6/2/2009
Cowardin Class:	PEMCx	Data Plot #s:	35,36, 41-43
HGM Class:	RFT	Investigators:	TB, ACS

LOCATION

Street/landmark: East of Hwy. 99 flowing north, crossing Hwy 99 0.1 mile south of the 99W/99E split

Legal description: multiple lots in 15s04w3213, 15s04w3221, 15s04w3224, 15s04w3220, 15s04w3224

Sub-basin code: Eastern Canal

WETLAND CHARACTERISTICS

Description: The "Eastern Canal" is a trapezoidal channel for much of its length. Substrate is variable; generally graveled or rocked in industrial/commercial areas, more earthy in residential areas. Much of the canal is unvegetated for a significant portion of the year due to routine spraying. Development abuts the top of bank along much of the canal and vegetation is limited to reed canarygrass and weedy grasses and forbs in most areas. Some occasional tree groves provide some habitat and thermal cover.

Soils: Coberg silty clay loam, Conser silty clay loam

Hydrologic Source: canal flow, direct precipitation, local runoff

Dominant Vegetation:

Trees	Shrubs	Vines/Herbs
		Phalaris arundinacea (reed canarygrass) *Alopecurus pratensis* (meadow foxtail) *Bidens cernuua* (nodding beggertick) *Alisma plantago-aquaticia* (water plantain)

Potential Enhancement Opportunities: Current functions are low. Conveyance and flood storage functions are maximized and vegetation is routinely sprayed. Opportunities include the following:

- elimination of noxious weeds and replanting with native emergent/herbaceous species
- where space exists, plant native trees, shrubs, protect water temperature, add structural and food source diversity, and improve aquatic habitat
- treat stormwater prior to discharge
- avoid spraying areas of native vegetation

Junction City Local Wetland Inventory

Wetland Characterization Sheet

GENERAL INFORMATION

Wetland Code:	EC-01	Method:	Onsite
Wetland Size:	1.95 acres	Field Date:	3/11/09
Cowardin Class:	PUB3G/PEMG	Data Plot #s:	4, 5
HGM Class:	RFT	Investigators:	ACS, TB

LOCATION

Street/landmark: Between W 14th Ave. and W 17th Ave., at Hwy 99 (Ivy Street)

Legal description: Lots 900, 1000, 15s04w3222; Lots 700, 1800, 1900, 2000, 2100, 2200, 2800, 15s04w3221; Lot 4900, 15s04w3224

Sub-basin code: Eastern Canal

WETLAND CHARACTERISTICS

Description: This feature is near the Highway 99 bridge near Ivy Street. Water appears to be several feet deep much or all of the year. Reed canarygrass is prevalent near the margins, particularly on the south and east sides. Aquatic vegetation is also present, such as water starwort. The north side borders residential backyards with a fringe of mature Douglas fir. Other adjacent uses are commercial, including a window business which stores inventory in and adjacent to the wetlands.

Soils: Conser silty clay loam

Hydrologic Source: canal flow, direct precipitation

Dominant Vegetation:

Trees	Shrubs	Vines/Herbs
		Phalaris arundinacea (reed canarygrass) *Callitriche stellata* (water starwort)

Potential Enhancement Opportunities: Some functions are low due to adjacent residential, transportation, and commercial uses. Cover by noxious species is heavy in places. Opportunities include the following:

- elimination of noxious weeds and replacement with native emergent/aquatic species
- supplemental planting of native trees, shrubs
- treatment of stormwater runoff prior to discharge
- removal of windows and other materials stored in west end of wetland

Junction City Local Wetland Inventory

Wetland Characterization Sheet

GENERAL INFORMATION

Wetland Code:	EC-02	Method:	Offsite
Wetland Size:	0.87 acre (0.06 ac. in UGB)	Field Date:	3/11/09
Cowardin Class:	PEMC	Data Plot #s:	6, 7
HGM Class:	RFT	Investigators:	TB, ACS

LOCATION

Street/landmark: Across from 280 Deal St.

Legal description: Lots 900, 1200, 15s04w3213

Sub-basin code: Eastern Canal

WETLAND CHARACTERISTICS

Description: This wetland is on an undeveloped vacant site with a swale entering from the south and curving to the west. The local topography slopes gradually up to the north and east. Reed canarygrass is the sole dominant species. Mature Douglas fir are present about 100' to the northern swale edge. The majority of this wetland lies outside the UGB (0.06 acre of wetland extends south into the UGB).

Soils: Conser silty clay loam

Hydrologic Source: canal flow, direct precipitation, local runoff

Dominant Vegetation:

Trees	Shrubs	Vines/Herbs
		Phalaris arundinacea (reed canarygrass)

Potential Enhancement Opportunities: Functions at this site are degraded by low diversity across species and strata. Opportunities include the following:

- elimination of noxious weeds and replanting with native emergent, herbaceous species
- supplemental planting of native trees, shrubs
- treatment of stormwater runoff prior to discharge
- some possibility of expanding wetland areas or creating additional flood storage

Junction City Local Wetland Inventory

Wetland Characterization Sheet

GENERAL INFORMATION

Wetland Code:	FC-01	Method:	Offsite
Wetland Size:	213.76 acres	Field Date:	3/11/09
Cowardin Class:	PEMf	Data Plot #s:	DSL WD data
HGM Class:	Flats	Investigators:	ACS, TB

LOCATION

Street/landmark: North of High Pass Road, in area around treatment ponds

Legal description: Lots 701, 900, 1000, 15s05w36; lot 4203 15s04w31; lot 200 16s04w20; lot 1700 16s04w17

Sub-basin code: Flat Creek

WETLAND CHARACTERISTICS

Description: Large farmed wetland area in the western part of town bisected by Flat Creek. This unit has been the subject of several DSL-reviewed delineations (e.g., WD 06-0682, 04-0250, 98-0239), which form the basis for the current mapping. Based on review of these files and discussions with DSL, a large block of land bordering the treatment ponds (generally to the north) is assumed to be wetland. Other parts of the wetland boundary follow approved delineations.

The farmed wetland unit contains a mix of a grass seed, grain and vegetable crops.

Soils: Awbrig silty clay loam, Bashaw clay, Coberg silty clay loam, Conser silty clay loam, Malabon silty clay loam, Salem gravelly silt loam

Hydrologic Source: streamflow, direct precipitation, limited local runoff

Dominant Vegetation:

Trees	Shrubs	Vines/Herbs
		grass seed, grain and vegetable crops

Potential Enhancement Opportunities: Current farm use limits options within wetlands. Flat Creek and adjoining wetlands would benefit from buffering from the farm use and the establishment of a native tree/shrub component along the stream corridor.

Junction City Local Wetland Inventory

Wetland Characterization Sheet

GENERAL INFORMATION

Wetland Code:	FC-02	Method:	Offsite
Wetland Size:	19.85 acres	Field Date:	4/21/09
Cowardin Class:	PEMf/PFOC	Data Plot #:	44
HGM Class:	Flats	Investigators:	ACS, TB

LOCATION

Street/landmark: North and south of Milliron Rd., east of Hwy 99

Legal description: Lot 1700 16s041700; Lot 200 16s04w2000

Sub-basin code: Flat Creek

WETLAND CHARACTERISTICS

Description: This wetland comprises a complex of agricultural fields, industrial land, and the utility easement that runs parallel along the east side of Highway 99. These features are connected by culverts. The agricultural areas south of Milliron Road are dominated by grasses. A tributary to Flat Creek passes through the wetland from southeast to northwest. North of Milliron Road is a black cottonwood grove with rose, reed canarygrass and common camas. The utility corridor is dominated almost exclusively by reed canarygrass transitioning to meadow foxtail, tall fescue, and other pasture grasses as topography rises slowly to the north. Similar conditions exist in the utility corridor south of Milliron Road but the extent of wetland was unclear; this area was mapped as a Probable Wetland (PW). FC-02 includes DSL #WD 03-390 and remaining part of #WD 90-0137 (much of this delineated wetland has been filled). The area south of this wetland was approved for development; per DSL's guidance, a note was added to the LWI map.

Soils: Awbrig silty clay loam, Coberg silty clay loam, Conser silty clay loam

Hydrologic Source: direct precipitation, local runoff, roadway runoff

Dominant Vegetation:

Trees	Shrubs	Vines/Herbs
Populus balsamifera (black cottonwood)	*Rosa sp.* (rose)	*Phalaris arundinacea* (reed canarygrass) *Rubus armeniacus* (Himalayan blackberry) *Festucua arundinacea* (tall fescue) *Camassia quamash* (common camas)

Potential Enhancement Opportunities: Current functions are variable due to adjacent transportation and agricultural uses. Water quality functions are high, while wildlife habitat values in the utility corridor and agricultural areas are low. Cover by noxious species is heavy in places. Opportunities include the following:

- elimination of noxious weeds and replanting with native emergent vegetation
- supplemental planting of vegetation where it won't interfere with utilities
- treatment of stormwater runoff prior to discharge

Junction City Local Wetland Inventory

Wetland Characterization Sheet

GENERAL INFORMATION

Wetland Code:	FC-03	Method:	Offsite
Wetland Size:	3.3 acres	Field Date:	4/21/09
Cowardin Class:	PEMCd; PUBx	Data Plot #:	DSL WD data
HGM Class:	RFT; Flats	Investigators:	TB, ACS

LOCATION

Street/landmark: East of Hwy 99, west of UPRR tracks

Legal description: Lot 201, T16S, R4W, Section 17

Sub-basin code: Flat Creek

WETLAND CHARACTERISTICS

Description: This feature comprises three wetlands that drain to Flat Creek and which are documented in Det. #WD 01-0343 and 90-0137. One lies in a farmed area just north of FC-02; one is a ditch that passes through an industrial area, and the last is a small remnant feature that lacks a connection to other wetlands or streams. The wetlands are dominated by grasses, primarily annual ryegrass. The northerly wetland has been ditched in the past to channelize flow and create drainage. This wetland is RFT; the other features are Flats.

Soils: Coberg silty clay loam, Conser silty clay loam, Malabon silty clay loam

Hydrologic Source: direct precipitation, local runoff, stream flow

Dominant Vegetation:

Trees	Shrubs	Vines/Herbs
		Lolium multiflorum (annual ryegrass) *Juncus bufonius* (toad rush) *Poa annua* (annual bluegrass)

Potential Enhancement Opportunities: Current functions are low due to adjacent agricultural uses. Enhancement opportunities include the following:

- elimination of noxious weeds and replanting with native emergent vegetation
- supplemental planting of tree and shrub vegetation to add structure, limit heat gain
- supplemental planting of dense herbaceous vegetation in adjacent uplands to create a filter strip to intercept pollutants and eroded material carried by sheet flow

Junction City Local Wetland Inventory

Wetland Characterization Sheet

GENERAL INFORMATION

Wetland Code:	WC (western canal)	Method:	Offsite
Wetland Size:	1.36 acres	Field Date(s):	4/21/09
Cowardin Class:	PEMCx	Data Plot #s:	33, 34, 37
HGM Class:	RFT	Investigators:	TB, ACS

LOCATION

Street/landmark: East of Oaklea Dr., parallel to Oaklea to northern study area boundary

Legal description: Lots 200, 500, 600, 700, 800, 15s04w3121

Sub-basin code: Western Canal

WETLAND CHARACTERISTICS

Description: The western canal is a trapezoidal channel for much of its length, becoming softer and less angular near its headwater. Substrate varies from soil to ¾" gravel, and much of the canal is unvegetated for a significant portion of the year due to routine spraying. Residential development abuts the top of bank along much of the canal and vegetation is limited to pasture grasses and reed canarygrass in most areas.

Soils: Coberg silty clay loam, Conser silty clay loam

Hydrologic Source: canal flow, direct precipitation, local runoff

Dominant Vegetation:

Trees	Shrubs	Vines/Herbs
		Phalaris arundinacea (reed canarygrass) *Alopecurus pratensis* (meadow foxtail) *Polygonum amphibium* (water smartweed) *Hypochaeris radicata* (spotted cat's ear)

Potential Enhancement Opportunities: Current functions are low. Conveyance and flood storage functions are maximized and vegetation is routinely sprayed.
Opportunities include the following:

- elimination of noxious weeds
- where space exists, plant native trees, shrubs, protect water temperature, add structural and food source diversity, and improve fish habitat
- treat stormwater prior to discharge
- cease spraying areas of native vegetation, if necessary

Junction City Local Wetland Inventory

Wetland Characterization Sheet

GENERAL INFORMATION

Wetland Code:	WC-01	Method:	Onsite
Wetland Size:	0.76 acre	Field Date(s):	4/21/09
Cowardin Class:	PEMC	Data Plot #s:	24, 25
HGM Class:	RFT	Investigators:	TB, ACS

LOCATION

Street/landmark: 94505 Oaklea Dr.

Legal description: Lots 200, 500, 600, 700, 800, 15s04w3121

Basin/sub-basin code: Western Canal

WETLAND CHARACTERISTICS

Description: This wetland lies in an area of low-density residential land used for hobby farms. Dominant vegetation comprises pasture grasses and weedy forbs with a fringe of hydrophytic trees. Wetland edges are affected by mowing, gardening, and ornamental plantings.

Soils: Coberg silty clay loam, Conser silty clay loam

Hydrologic Source: canal flow, direct precipitation, local runoff

Dominant Vegetation:

Trees	Shrubs	Vines/Herbs
Populus balsamifera (black cottonwood)		*Poa sp.* (bluegrass) *Pseudoroegneria repens* (quackgrass) *Trifolium repens* (white clover) *Festuca arundinacea* (tall fescue)

Potential Enhancement Opportunities: Current functions are moderate to low. Water quality functions are intact, but plant community is simple and affected by noxious species invasion. Opportunities include the following:

- elimination of noxious weeds and replanting with native emergent vegetation
- supplemental planting of native trees, shrubs, groundcover to protect water temperature, add structural and food source diversity, and improve fish habitat

Appendix C. Field Data Forms

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/11/2009	
Applicant/Owner: Bergstrom Park	State: OR	Sampling Point: 1	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace above canal	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒	No ☐
Hydric Soil Present?	Yes ☐	No ☒
Wetland Hydrology Present?	Yes ☒	No ☐

Is the Sampled Area within a Wetland? Yes ☐ No ☒

Remarks: Bergstrom Canal, in Bergstrom Park.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Alopecurus pratensis	70	☒	FACW
2. Poa sp.	40	☒	FAC
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	11 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. Rubus armeniacus	10	☒	FACU
2.		☐	
	10 = Total Cover		

% Bare Ground in Herb Stratum: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:
Sprayed

SOIL

Sampling Point: 1

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10"	10YR 3/2	100					silt loam	well drained
10-20"	10YR 3/1+	100					silt loam	slight color change, but not 1 chroma no redox

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

Soil between 10 and 20 inches is very loose subangular blocky texture that falls apart as water drains out. Water table likely drops quickly as water level in adjacent canal drops.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☒ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☒ No ☐ Depth (inches): 15

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 8

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

Plot taken at OHWL (vegetation transition, small debris removed). Water surface is 1' foot from plot.1

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/11/2009	
Applicant/Owner: Bergstrom Park	State: OR	Sampling Point: 2	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: Bergstrom Canal, in Bergstrom Park

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Alopecurus pratensis	30	☒	FACW
2. Poa sp.	30	☒	FAC
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	60 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:
Sprayed

SOIL

Sampling Point: 2

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6"	10YR 3/2	100					silt loam	friable
6-20"	10YR 3/1	100					silt loam	very loose, friable, almost granular

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☒ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☒ **No** ☐

Remarks:

Hydric soil criteria definition in Field Indicators of the US glossary:

Conser silty clay loam is poorly drained with a water table at a depth of 1.0 foot or less during the growing season with permeability less than 6.0 in/hour in any layer within a depth of 20 inches. Moreover, Conser silty clay loam is frequently ponded for long or very long duration during the growing season. Removal of fine debris indicates water reaches this elevation.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☒ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☒ No ☐ Depth (inches): 7"

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 4"

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:

Plot taken at OHWL (vegetation transition, small debris removed). Water surface is 1' foot from plot.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/11/2009	
Applicant/Owner: Country Coach site	State: OR	Sampling Point: 3	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Coberg/Conser silty clay loams	NWI Classification: PEMC		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: Wooded area between Country Coach and the western end of Elm Street.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Festuca arundinacea	75	☒	FAC-
2.		☐	
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	75 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 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)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: 3

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20"	10YR 3/2						silt loam	friable

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☐ **No** ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ **No** ☒

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

Remarks:

Soil evenly moist throughout

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/11/2009	
Applicant/Owner:	State: OR	Sampling Point: 4	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): canal bank	Local relief (concave, convex, none) none	Slope (%) 10%	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: Between W 14th Avenue and W 17th Avenue, at Highway 99 (Ivy Street) EC-01

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	100	☒	FACW
2.		☐	
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 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)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: 4

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20"	10YR 2.5/1						silt loam	minor small gravel, some glass

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☒ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☒ **No** ☐

Remarks:

Water table at 6 inches satsifies Hydric Soil Criterion 2B3 - water table at less than or equal to 1 foot from the surface during the growing season, if permeability is less than 6 inches per hour in any layer within 20 inches. Observation of surface inundation may also satisfy Criterion 3 as well.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☒ Surface Water (A1)
- ☒ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☒ No ☐ Depth (inches): 6 inches

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): surface

Wetland Hydrology Present? Yes ☒ **No** ☐

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

Remarks:

Plot taken 1 foot from edge of water

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/11/2009	
Applicant/Owner:	State: OR	Sampling Point: 5	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): slope above canal	Local relief (concave, convex, none) none	Slope (%) 10%	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒	No ☐
Hydric Soil Present?	Yes ☐	No ☒
Wetland Hydrology Present?	Yes ☐	No ☒

Is the Sampled Area within a Wetland? Yes ☐ No ☒

Remarks: Between W 14th Avenue and W 17th Avenue, at Highway 99 (Ivy Street)

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pseudotsuga menziesii	10	☐	FACU
2. Salix babylonica	50	☒	FACW
3.		☐	
4.		☐	
	60 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	10	☒	FACW
2. Poa annua	T	☐	FAC
3. Cardamine oligosperma	T	☐	FAC
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	10 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 90

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals			

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

Managed landscape area. Douglas fir dominant elsewhere at same elevation.

SOIL

Sampling Point: 5

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20"	10YR 3/2						silt loam	friable, no redox

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☐ **No** ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ **No** ☒

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

Remarks:

Plot taken about 2 feet above and 5 feet from Plot 4

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/12/2009	
Applicant/Owner:	State: OR	Sampling Point: 6	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): swale bottom	Local relief (concave, convex, none) concave	Slope (%) 3%	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: OFFSITE - E of Deal Street, between E 10th and 11th Avenues. EC-O2

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	100	☐	FACW
2.		☐	
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 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)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: 6

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☒ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☒ **No** ☐

Remarks:

OFFSITE - mapped hydric

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☒ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): surface

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:

Plot at edge of surface water. Visible surface saturation. Presume water table above 12 inches based on proximity to flowing water, vegetation, topo.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/12/2009	
Applicant/Owner:	State: OR	Sampling Point: 7	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: OFFSITE - E of Deal Street, between E 10th and 11th Avenues. EC-02

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	10	☐	FACW
2. Festuca arundinacea	60	☒	FAC-
3. Alopecurus pratensis	30	☒	FACW
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

Percent cover is approximate - vegetation is young

SOIL

Sampling Point: 7

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☒ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☒ **No** ☐

Remarks:

OFFSITE - mapped hydric

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (inches):_____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☐ **No** ☒

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

Remarks:

Plot taken above upper extent of flowing water. Likely drained by adjacent lower area.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/12/2009	
Applicant/Owner: 3rd/Kalmia	State: OR	Sampling Point: 8	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: PUBFh		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒	No ☐
Hydric Soil Present?	Yes ☒	No ☐
Wetland Hydrology Present?	Yes ☒	No ☐

Is the Sampled Area within a Wetland? Yes ☒ No ☐

Remarks: OFFSITE - plots taken near church, behind utility building on 3rd Avenue. CC-03

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus latifolia	75	☒	FACW
2. Populus balsamifera v. trichocarpa	10	☐	FAC
3.		☐	
4.		☐	
	85 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1. Salix sp.	20	☒	FAC-OBL
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	20 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	90	☒	FACW
2.		☐	
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	90 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 10

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)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: 8

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☒ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☒ **No** ☐

Remarks:

OFFSITE - mapped hydric soil

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☒ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☒ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches):_____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:

Ponded, likely drains slowly during growing season

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/12/2009	
Applicant/Owner: 3rd/Maple	State: OR	Sampling Point: 9	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒	No ☐
Hydric Soil Present?	Yes ☐	No ☒
Wetland Hydrology Present?	Yes ☐	No ☒

Is the Sampled Area within a Wetland? Yes ☐ No ☒

Remarks: OFFSITE - CC-03

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus garryana	70	☒	NL
2.		☐	
3.		☐	
4.		☐	
	70 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	= Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Festuca arundinacea	30	☒	FAC
2. Alopecurus pratensis	30	☒	FACW
3. Phalaris arundinacea	10	☐	FACW
4. Unidentified grass	10	☐	FAC
5. Misc small annuals	15	☐	FAC
6. Cardamine oligosperma	5	☐	FAC
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals			

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: 9

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☒ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☒ **No** ☐

Remarks:

OFFSITE - Mapped hydric soil

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☐ **No** ☒

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

Remarks:

Plot about 4 feet above OHWL, about 5' away. High water table and/or saturation unlikely based on topographic position.

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

Project/Site: Junction City LWI | City/County: Lane | Sampling Date: 3/12/2009
Applicant/Owner: Laurel Elementary School | State: OR | Sampling Point: 10
Investigator(s): TB/ACS | Section, Township, Range: _____
Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none) none | Slope (%) minimal
Subregion (LRR): Western Mtns, Valleys, and Coast | Lat: _____ Long: _____ | Datum: _____
Soil Map Unit Name: Malabon silty clay loam | NWI Classification: N/A
Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐
Wetland Hydrology Present? Yes ☒ No ☐

Is the Sampled Area within a Wetland? Yes ☒ No ☐

Remarks: Laurel Elementary School grounds CC-01

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus latifolia	60	☒	FACW
2. _____	_____	☐	_____
3. _____	_____	☐	_____
4. _____	_____	☐	_____
	60 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1. _____	_____	☐	_____
2. _____	_____	☐	_____
3. _____	_____	☐	_____
4. _____	_____	☐	_____
5. _____	_____	☐	_____
	_____ = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Poa sp.	40	☒	FAC
2. Agrostis sp.	25	☒	FAC
3. Alopecurus pratensis	20	☒	FACW
4. Phalaris arundinacea	10	☐	FACW
5. Rumex crispus	5	☐	FAC+
6. _____	_____	☐	_____
7. _____	_____	☐	_____
8. _____	_____	☐	_____
9. _____	_____	☐	_____
10. _____	_____	☐	_____
11. _____	_____	☐	_____
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. _____	_____	☐	_____
2. _____	_____	☐	_____
	0 = Total Cover		

% Bare Ground in Herb Stratum: 10

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	_____	x 2 =	_____
FAC species	_____	x 3 =	_____
FACU species	_____	x 4 =	_____
UPL species	_____	x 5 =	_____
Column Totals	_____		_____

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
☒ Dominance Test is >50%
☐ Prevalence Index is ≤3.0[1]
☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
☐ Wetland Non-Vascular Plants[1]
☐ Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: 10

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8"	10YR 3/2	100					si cl lo	
8-20"	10YR 3/2	77	7.5YR 4/6	15	C	M	si cl lo	

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☒ **No** ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☒ No ☐ Depth (inches): 20

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 12

Wetland Hydrology Present? Yes ☒ **No** ☐

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

Remarks:

Plot just inside wetland boundary.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/12/2009	
Applicant/Owner: Laurel Elementary School	State: OR	Sampling Point: 11	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Malabon silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒	No ☐
Hydric Soil Present?	Yes ☐	No ☒
Wetland Hydrology Present?	Yes ☐	No ☒

Is the Sampled Area within a Wetland? Yes ☐ No ☒

Remarks: Laurel Elementary School grounds CC-01

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus latifolia	70	☒	FACW
2.		☐	
3.		☐	
4.		☐	
	70 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Poa sp.	50	☒	FAC
2. Unidentifed grass	20	☒	FAC
3. Alopecurus pratensis	10	☐	FACW
4. Allium sp.	5	☐	FAC
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	85 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 100 - open water

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)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: 11

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14"	10YR 3/2	100					si cl lo	
14-20"	10YR 3/2	77	7.5YR 4/6	20	C	M	si cl lo	
			7.5YR 5/6	3	C	M	si cl lo	

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☐ **No** ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ **No** ☒

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

Remarks:

Barely moist at 20 inches.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/12/2009	
Applicant/Owner:	State: OR	Sampling Point: 12	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Malabon-Urban Land complex	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: OFFSITE - south end of Rose Street, south of 10th Avenue Part of CC

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus latifolia	70	☒	FACW
2.		☐	
3.		☐	
4.		☐	
	70 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	0 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 100 - open water

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)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

Plot taken at base of ash tree at the OHWL, based on debris lines, lines on rocks downstream, vegetation transition in herb layer. Below OHWL, this feature is unvegetated at this location.

SOIL

Sampling Point: 12

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☒ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☐ **No** ☐

Remarks:

OFFSITE - presume soil exhibits hydric soil indicators in the top 12 inches based on position below OHWL.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☒ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☒ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☒ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): earlier in season

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:

Some ash trees rooted at or below OHWL of canal flowing through ash grove. Canal and lower bank below OHWL are minimally vegetated.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/12/2009	
Applicant/Owner:	State: OR	Sampling Point: 13	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Malabon-Urban Land complex	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: OFFSITE - south end of Rose Street, south of 10th Avenue Part of CC

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus latifolia	70	☒	FACW
2.		☐	
3.		☐	
4.		☐	
	70 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	25 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	60	☒	FACW
2. Montia sibirica	20	☒	FAC
3. Galium aparine	20	☒	FACU
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. Rubus armeniacus	T	☐	FACU
2.		☐	
	T = Total Cover		

% Bare Ground in Herb Stratum: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: 13

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☐ **No** ☒

Remarks:

OFFSITE - Ground surface obscured, but soil not mapped hydric and geomorphic position suggests this plot is above the influence of water in the CC.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☐ **No** ☒

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

Remarks:

Plot taken above OHWL - no evidence of saturation, ponding, or flow. Likely not saturated in top 12" during growing season.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/12/2009	
Applicant/Owner:	State: OR	Sampling Point: 14	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): pond edge	Local relief (concave, convex, none) concave	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Malabon silty clay loam	NWI Classification: PABFx		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: OFFSITE - Pitney Lane mobile home park CC-02

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus balsamifera v. trichocarpa	50	☒	FACU
2.		☐	
3.		☐	
4.		☐	
	50 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1. Salix sp.	20	☒	FAC-OBL
2. Populus balsamifera v. trichocarpa	5	☒	FAC
3.		☐	
4.		☐	
5.		☐	
	25 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	30	☒	FACW
2. Alopecurus pratensis	40	☒	FACW
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	70 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. Rubus armeniacus	30	☒	FACU
2.		☐	
	30 = Total Cover		

% Bare Ground in Herb Stratum: 30 - open water

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

Community on west edge of pond.

SOIL

Sampling Point: 14

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☒ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☒ **No** ☐

Remarks:

OFFSITE - Ground surface obscured, no soils sampled. Hydric soil assumed based on NWI mapping, observation of extent of inundation.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches):_____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:

Plot taken at edge of pond, several inches below OHWL. Hydrology source is stormwater. Cannot determine whether this feature is hydrologically isolated from stream/canal system, but no other wetlands, streams or water features appear connected in aerial photography.

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

Project/Site: Junction City LWI | City/County: Lane | Sampling Date: 3/12/2009
Applicant/Owner: _____ | State: OR | Sampling Point: 15
Investigator(s): TB/ACS | Section, Township, Range: _____
Landform (hillslope, terrace, etc.): terrace above pond | Local relief (concave, convex, none) none | Slope (%) minimal
Subregion (LRR): Western Mtns, Valleys, and Coast | Lat: _____ Long: _____ | Datum: _____
Soil Map Unit Name: Malabon silty clay loam | NWI Classification: PABFx
Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒
Wetland Hydrology Present? Yes ☐ No ☒

Is the Sampled Area within a Wetland? Yes ☐ No ☒

Remarks: OFFSITE - Pitney Lane mobile home park CC-02

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	☐	_____
2. _____	_____	☐	_____
3. _____	_____	☐	_____
4. _____	_____	☐	_____
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1. _____	_____	☐	_____
2. _____	_____	☐	_____
3. _____	_____	☐	_____
4. _____	_____	☐	_____
5. _____	_____	☐	_____
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. _____	_____	☐	_____
2. _____	_____	☐	_____
3. _____	_____	☐	_____
4. _____	_____	☐	_____
5. _____	_____	☐	_____
6. _____	_____	☐	_____
7. _____	_____	☐	_____
8. _____	_____	☐	_____
9. _____	_____	☐	_____
10. _____	_____	☐	_____
11. _____	_____	☐	_____
	_____ = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. Rubus armeniacus	100	☒	FACU
2. _____	_____	☐	_____
	100 = Total Cover		

% Bare Ground in Herb Stratum: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	_____	x 2 =	_____
FAC species	_____	x 3 =	_____
FACU species	100	x 4 =	400
UPL species	_____	x 5 =	_____
Column Totals	100		400

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

☐ Dominance Test is >50%
☐ Prevalence Index is ≤3.0[1]
☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
☐ Wetland Non-Vascular Plants[1]
☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks:
Community on west edge of pond.

SOIL

Sampling Point: 15

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☐ **No** ☒

Remarks:

OFFSITE - Ground surface obscured, no soils sampled. Geomorphic position suggests soils not influenced by nearby standing water.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☐ **No** ☒

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

Remarks:

Plot taken 3 feet from above open water - unlikely to stay saturated.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/25/2009	
Applicant/Owner: Weyerhaeuser	State: OR	Sampling Point: 16	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: Part of CC-04 complex

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus latifolia	30	☒	FACW
2.		☐	
3.		☐	
4.		☐	
	90 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1. Oemleria cerasiformis	5	☐	FACU
2. Rhus diversiloba	20	☒	FACU
3. Symphoricarpos albus	20	☒	FACU
4. Crataegus douglasii	T	☐	FAC
5.		☐	
	45 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	10	☐	FACW
2. Camassia quamash	80	☒	FACW
3. Ranunculus repens	30	☒	FACW
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	120 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. Rubus armeniacus	T	☐	FACU
2.		☐	
	T = Total Cover		

% Bare Ground in Herb Stratum: 10

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

Plot taken in narrow riparian fringe between open water and drier tree/shrub community.

SOIL

Sampling Point: 16

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5"	10YR 3/1+	100					silt loam	
5-8	10YR 3/1+	98	7.5YR 5/6	2	C	M	silt loam	
8-20"	10YR 3/1+	80	7.5YR 5/6	20	C	M	sil cl lo	

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☒ **No** ☐

Remarks:

Texture becomes finer with increasing depth.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☒ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☒ No ☐ Depth (inches): 14"

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 8"

Wetland Hydrology Present? Yes ☒ **No** ☐

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

Remarks:

Plot taken 3 feet from edge of open water. Water flows very slowly to north.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/25/2009	
Applicant/Owner: Weyerhaeuser	State: OR	Sampling Point: 17	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): depression	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☐ No ☒	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: Western edge of wetland is railroad embankment fill and/or hardened bank. Part of CC-04 complex.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus garryana	90	☒	NL
2.		☐	
3.		☐	
4.		☐	
	90 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1. Oemleria cerasiformis	15	☒	FACU
2. Rhus diversiloba	25	☒	FACU
3. Amelanchier alnifolia	20	☒	FACU
4. Crataegus douglasii	5	☐	FAC
5. Symphorcarpos albus	5	☐	FACU
	70 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Dactylus glomerata	60	☒	FACU
2. Camassia quamash	10	☐	FACU
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	70 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. Rubus armeniacus	25	☒	FACU
2.		☐	
	25 = Total Cover		

% Bare Ground in Herb Stratum: 30

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	155	x 4 =	620
UPL species	90	x 5 =	450
Column Totals	250		1085

Prevalence Index = B/A = 4.34

Hydrophytic Vegetation Indicators:

- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks:

SOIL

Sampling Point: 17

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/2	100					silt loam	

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☐ **No** ☒

Remarks:

Root refusal at 16 inches.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ **No** ☒

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

Remarks:

Soil is moist only at 16 inches.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/25/2009	
Applicant/Owner:	State: OR	Sampling Point: 18	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): depression	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser / Salem	NWI Classification: Mapped, no class given		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: Part of CC-04 wetland complex

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1. Populus balsamifera v. trichocarpa	90	☒	FAC
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	90 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	90	☒	FACW
2. Conium maculatum	T	☐	FAC+
3. Galium aparine	T	☐	FACU
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	90 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. Rubus armeniacus	T	☒	FACU
2.		☐	
	T = Total Cover		

% Bare Ground in Herb Stratum: 10

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

Cottonwood trees present elsewhere in community.

SOIL

Sampling Point: 18

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20"	10YR 3/2	90	10YR 3/1	5	D	M	silt loam	
			7.5YR 3/4	5	C	M	silt loam	

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☒ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☒ **No** ☐

Remarks:

Hydric soil criteria definition in Field Indicators of the US glossary:

Conser silty clay loam is poorly drained with a water table at a depth of 1.0 foot or less during the growing season with permeability less than 6.0 in/hour in any layer within a depth of 20 inches. Moreover, Conser silty clay loam is frequently ponded for long or very long duration during the growing season. Observation of water table at the surface corroborates this finding.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☒ Surface Water (A1)
- ☒ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): surface

Water Table Present? Yes ☒ No ☐ Depth (inches): surface

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): surface

Wetland Hydrology Present? Yes ☒ **No** ☐

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

Remarks:

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

Project/Site: Junction City LWI | City/County: Lane | Sampling Date: 3/25/2009
Applicant/Owner: Weyerhaeuser | State: OR | Sampling Point: 19
Investigator(s): TB/ACS | Section, Township, Range: ____
Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none) none | Slope (%) minimal
Subregion (LRR): Western Mtns, Valleys, and Coast | Lat: ____ Long: ____ Datum: ____
Soil Map Unit Name: Conser silty clay loam | NWI Classification: N/A
Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒
Wetland Hydrology Present? Yes ☐ No ☒

Is the Sampled Area within a Wetland? Yes ☐ No ☒

Remarks: Part of the CC-04 wetland complex

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Taraxacum officinale	30	☒	FACU
2. Hypchaeris radicata	25	☒	FACU
3. Conium maculatum	15	☐	FAC+
4. Phalaris arundincea	15	☐	FACW
5. Poa annua	T	☐	FAC
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	85 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. Rubus armeniacus	T	☒	FACU
2.		☐	
	T = Total Cover		

% Bare Ground in Herb Stratum: 20

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	15	x 3 =	45
FACU species	55	x 4 =	220
UPL species		x 5 =	
Column Totals	85		295

Prevalence Index = B/A = 3.47

Hydrophytic Vegetation Indicators:

☐ Dominance Test is >50%
☐ Prevalence Index is ≤3.0[1]
☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
☐ Wetland Non-Vascular Plants[1]
☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks:

SOIL

Sampling Point: 19

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10"	10YR 3/2	95	7.5YR 5/4	5	C	M	silt loam	

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☐ **No** ☒

Remarks:

Rock refusal at 10" - fill material. Hydric soil likely relict based on landscape position. Plot taken at the Conser silty clay loam/Salem gravelly silt loam map unit interface.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ **No** ☒

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

Remarks:

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/25/2009	
Applicant/Owner: Weyerhaeuser @ Possom Flats	State: OR	Sampling Point: 20	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: OFFSITE -- Hydrologically connected to Plots 16-19. Part of the CC-04 wetland complex. Plot viewed from Possum Flat Road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus latifolia	90	☒	FACW
2.		☐	
3.		☐	
4.		☐	
	90 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundincea	30	☒	FACW
2. Conium maculatum	5	☐	FAC+
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	35 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. Rubus armeniacus	15	☒	FACU
2.		☐	
	15 = Total Cover		

% Bare Ground in Herb Stratum: 65

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals			

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: 20

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☒ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☒ **No** ☐

Remarks:

OFFSITE - no soils sampled but the site is inundated.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 1 to 10"

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? Yes ☒ **No** ☐

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

Remarks:

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 3/25/2009	
Applicant/Owner:	State: OR	Sampling Point: 21	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Malabon silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: OFFSITE -- Hydrologically connected to Plots 16-19. West of Weyerhaeuser. Part of CC-04 complex

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus latifolia	80	☒	FACW
2. Populus balsamifera v. trichocarpa	30	☒	FAC
3.		☐	
4.		☐	
	110 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundincea	90	☒	FACW
2. Conium maculatum	2	☐	FAC+
3. Dipsacus fullonum	T	☐	FAC+
4. Rumex crispus	T	☐	FAC+
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	92 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. Rubus armeniacus	15	☒	FACU
2.		☐	
	15 = Total Cover		

% Bare Ground in Herb Stratum: 10

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

☒ Dominance Test is >50%

☐ Prevalence Index is ≤3.0[1]

☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

☐ Wetland Non-Vascular Plants[1]

☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

Epilobium ciliatum emerging in ponded areas.

SOIL

Sampling Point: 21

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☒ **No** ☐

Remarks:

OFFSITE - no soil sampling. However, based on geomorphic position and presence of standing water, we assume soils have developed hydric soil indicators in the upper part.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 1 to 12"

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:

Based on landform and relation to open water features, unponded areas likely saturated in top 12 inches for extended periods.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 4/21/2009	
Applicant/Owner: LDS church	State: OR	Sampling Point: 22	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Malabon silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: Trapezoidal swale typical of those elsewhere in study area. Veg cover varies from total to minimal. Part of CC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Glyceria sp.	70	☒	OBL
2. Phalaris arundinacea	15	☐	FACW
3. Callitriche stellata	5	☐	OBL
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	90 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 10

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)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals			

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: 22

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7"	10YR 4/2	80	10YR 4/6	20	C	M	silt loam	
7-20"	10YR 4/2	40	10YR 4/6	60	C	M	silt loam	

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☒ **No** ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☒ Surface Water (A1)
- ☒ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 0

Water Table Present? Yes ☒ No ☐ Depth (inches): 3

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): surface

Wetland Hydrology Present? Yes ☒ **No** ☐

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

Remarks:

Hydrology driven by canal. Soil is drier in the bottom of the pit despite saturation in upper horizons. Plot taken at edge of standing water.

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

Project/Site: Junction City LWI | City/County: Lane | Sampling Date: 4/21/2009
Applicant/Owner: LDS church | State: OR | Sampling Point: 23
Investigator(s): TB/ACS | Section, Township, Range: _____
Landform (hillslope, terrace, etc.): canal slope | Local relief (concave, convex, none) none | Slope (%) minimal
Subregion (LRR): Western Mtns, Valleys, and Coast | Lat: _____ Long: _____ | Datum: _____
Soil Map Unit Name: Malabon silty clay loam | NWI Classification: N/A
Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒
Wetland Hydrology Present? Yes ☐ No ☒

Is the Sampled Area within a Wetland? Yes ☐ No ☒

Remarks: Plot taken on slope above canal. Part of CC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus sp.	40	☒	FACU
2.		☐	
3.		☐	
4.		☐	
	40 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Lawn grasses (Poa, agrostis)	90	☒	FAC
2. Pseudoroegneria repens	5	☐	FAC-
3. Taraxacum officinale	5	☐	FAC
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	100	x 3 =	300
FACU species	40	x 4 =	160
UPL species		x 5 =	
Column Totals	140		460

Prevalence Index = B/A = 3.29

Hydrophytic Vegetation Indicators:

☐ Dominance Test is >50%
☐ Prevalence Index is ≤3.0[1]
☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
☐ Wetland Non-Vascular Plants[1]
☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks:

SOIL

Sampling Point: 23

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20"	10YR 4/3	100					silt loam	friable

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☐ **No** ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☐ **No** ☒

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

Remarks:

Plot on slope above swale, about 18 inches above and 5 feet over from Plot 22.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 4/21/2009	
Applicant/Owner: 94505 Oaklea	State: OR	Sampling Point: 24	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Bashaw clay	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: Map unit WC-01

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Poa sp.	30	☒	FAC
2. Pseudoroegneria repens	30	☒	FAC-
3. Trifolium repens	20	☒	FAC
4. Festuca sp.	10	☐	FAC-
5. Plantago lanceolata	10	☐	FACU+
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 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)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals			

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: 24

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20"	10YR 3/1	100					si cl lo	

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☒ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☒ **No** ☐

Remarks:

Saturation and water table are likely higher earlier in the year, which would satisfy hydric soil Critera 2B3 - "water table at less than or equal to 1 foot from the surface during the growing season, if permeability is less than 6 inches per hour in any layer within 20 inches".

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☒ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☒ No ☐ Depth (inches): 20"

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 13"

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:

Saturation and water table are likely higher earlier in the year.

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

Project/Site: Junction City LWI | City/County: Lane | Sampling Date: 4/21/2009
Applicant/Owner: 94505 Oaklea | State: OR | Sampling Point: 25
Investigator(s): TB/ACS | Section, Township, Range: _____
Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none) none | Slope (%) minimal
Subregion (LRR): Western Mtns, Valleys, and Coast | Lat: _____ Long: _____ Datum: _____
Soil Map Unit Name: Bashaw clay | NWI Classification: N/A
Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present? Yes ☐ No ☒
Hydric Soil Present? Yes ☒ No ☐
Wetland Hydrology Present? Yes ☐ No ☒

Is the Sampled Area within a Wetland? Yes ☐ No ☒

Remarks: WC-01

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus balsamifera v. trichocarpa	20	☒	FAC
2.		☐	
3.		☐	
4.		☐	
	20 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Taraxacum officinale	30	☒	FACU
2. Hypochaeris radicata	25	☒	FACU
3. Trifolium repens	35	☒	FAC
4. Festuca sp.	15	☐	FAC
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	105 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	70	x 3 =	210
FACU species	55	x 4 =	220
UPL species	0	x 5 =	0
Column Totals	125		430

Prevalence Index = B/A = 3.44

Hydrophytic Vegetation Indicators:

☐ Dominance Test is >50%
☐ Prevalence Index is ≤3.0[1]
☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
☐ Wetland Non-Vascular Plants[1]
☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks:

SOIL

Sampling Point: 25

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20"	10YR 3/1	100					si cl lo	

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☒ **No** ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 16"

Wetland Hydrology Present? Yes ☐ **No** ☒

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

Remarks:

Saturation is present in the soil pit, but based upon the date of the investigation, it likely does not extend above 12 inches for an extended period during the growing season.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 4/21/2009	
Applicant/Owner: Weyerhaeuser	State: OR	Sampling Point: 26	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒	No ☐
Hydric Soil Present?	Yes ☐	No ☒
Wetland Hydrology Present?	Yes ☐	No ☒

Is the Sampled Area within a Wetland? Yes ☐ No ☒

Remarks: Part of CC-04. Plot taken upstream of the confluence of two small tributaries, on the eastern bank of the western tributary.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus latifola	90	☒	FACW
2.		☐	
3.		☐	
4.		☐	
	90 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1. Oemleria cerasiformis	15	☒	FACU
2. Crataegus monogyna	20	☒	FAC
3. Symphoricarpos albus	30	☒	FACU
4. Fraxinus latifolia	10	☐	FACW
5.		☐	
	75 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Camassia quamash	50	☒	FACW
2. Tellima grandiflora	T	☐	FACU
3. Galium aparine	T	☐	FACU
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	50 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. Hedera helix	30	☒	NL
2. Rubus ursinus	25	☒	FACU
	55 = Total Cover		

% Bare Ground in Herb Stratum: 50

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 43% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	150	x 2 =	300
FAC species	20	x 3 =	60
FACU species	45	x 4 =	180
UPL species	0	x 5 =	0
Column Totals	215		540

Prevalence Index = B/A = 2.51

Hydrophytic Vegetation Indicators:

- ☐ Dominance Test is >50%
- ☒ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

Also in community: Rubus armeniacus, Prunus avium, Rhus diversiloba, Conium maculatum.

SOIL

Sampling Point: 26

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20"	10YR 3/2	100					silt loam	friable

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☐ **No** ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ **No** ☒

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

Remarks:

Moist only at 20 inches.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 4/21/2009	
Applicant/Owner: Weyerhaeuser	State: OR	Sampling Point: 27	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: Part of CC-04. Plot taken upstream of the confluence of two small tributaries, on the eastern bank of the western tributary.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus latifola	85	☒	FACW
2.		☐	
3.		☐	
4.		☐	
	85 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	90	☒	FACW
2.		☐	
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	90 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 10

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

Community in bottom of swale. Rosa pisocarpa also in community.

SOIL

Sampling Point: 27

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4"	10YR 3/1	100					si cl lo	
4-20"	10YR 3/1	90	7.5YR 5/6	10	C	M	si cl lo	

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☒ **No** ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☒ Surface Water (A1)
- ☒ High Water Table (A2)
- ☒ Saturation (A3)
- ☒ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☒ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☒ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): earlier in year

Water Table Present? Yes ☒ No ☐ Depth (inches): 8"

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 3"

Wetland Hydrology Present? Yes ☒ **No** ☐

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

Remarks:

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 4/21/2009	
Applicant/Owner: Weyerhaeuser	State: OR	Sampling Point: 28	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒	No ☐
Hydric Soil Present?	Yes ☐	No ☒
Wetland Hydrology Present?	Yes ☐	No ☒

Is the Sampled Area within a Wetland? Yes ☐ No ☒

Remarks: Plot taken in low spot between Weyerhaeuser's northern site and tracks to the east. Most of this area is wooded; this plot was taken in a gap between groves. Part of CC-04.`

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1. Fraxinus latifolia	15	☒	FACW
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	15 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	100	☒	FACW
2.		☐	
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. Rubus armeniacus	5	☒	FACU
2. Rubus ursinus	5	☒	FACU
	10 = Total Cover		

% Bare Ground in Herb Stratum: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	115	x 2 =	230
FAC species		x 3 =	
FACU species	10	x 4 =	40
UPL species		x 5 =	
Column Totals	125		270

Prevalence Index = B/A = 2.16

Hydrophytic Vegetation Indicators:

- ☐ Dominance Test is >50%
- ☒ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

Mature ash trees, black cottonwood also present in community. Higher areas dominated by Himalayan blackberry, meadow foxtail in addition.

SOIL

Sampling Point: 28

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4"	10YR 2/2	100					si cl lo	friable
4-20"	10YR 2/2	80	10YR 3/2	20	C	M	si cl lo	friable, clayier with depth
								redox are common, med, faint

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

Weak redox activity. Redox fades in and out below 4". Difficult to discern.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

No evidence of standing water or indirect hydrology indicators.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 4/21/2009	
Applicant/Owner: Weyerhaeuser	State: OR	Sampling Point: 29	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: Part of CC-04. Plot taken on the easterly tributary on the western side.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Alopecurus pratensis	60	☒	FACW
2. Agrostis sp.	25	☒	FAC
3. Carex sp.	10	☐	FAC-OBL
4. Juncus patens	5	☐	FACW
5. Taraxacum officinale	T	☐	FACU
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals			

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: 29

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20"	10YR 2/2	95	10YR3/2	5	C	M	sandy loam	Redox common, med, very faint

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☒ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☒ **No** ☐

Remarks:

Redox is present but faint. Dark parent material may be obscuring redox activity somewhat.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☒ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☒ No ☐ Depth (inches): 11"

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 4"

Wetland Hydrology Present? Yes ☒ **No** ☐

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

Remarks:

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 4/21/2009	
Applicant/Owner:	State: OR	Sampling Point: 30	
Investigator(s): ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☐ No ☒	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: Part of CC-04. Plot taken on the easterly tributary on the western side.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Festuca arundinacea	65	☒	FAC-
2. Plantago lanceolata	20	☒	FACU+
3. Vicia sativa.	5	☐	NL
4. Geranium molle	5	☐	NL
5. Taraxacum officinale	5	☐	FACU
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. Rubus armeniacus	5	☒	FACU
2.		☐	
	5 = Total Cover		

% Bare Ground in Herb Stratum: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	65	x 3 =	195
FACU species	30	x 4 =	120
UPL species	10	x 5 =	50
Column Totals	105		365

Prevalence Index = B/A = 3.48

Hydrophytic Vegetation Indicators:

- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks:

Terrace below firepond. About 2 feet higher than Plot 29.

SOIL

Sampling Point: 30

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8"	10YR 3/2	100					silt loam	Fill material: rocky, no redox
8-20"	10YR 3/2	98	10YR 3/2+	<2%	C	M	siilt loam	redox is few, med, nearly indiscernable

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☐ **No** ☒

Remarks:

Redox is not sufficient to meet hydric soil indicator criteria.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☐ **No** ☒

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

Remarks:

Moist only through 20 inches.

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

Project/Site: Junction City LWI | City/County: Lane | Sampling Date: 6/2/2009
Applicant/Owner: _____ | State: OR | Sampling Point: 31
Investigator(s): ACS | Section, Township, Range: _____
Landform (hillslope, terrace, etc.): canal bottom | Local relief (concave, convex, none) none | Slope (%) minimal
Subregion (LRR): Western Mtns, Valleys, and Coast | Lat: _____ Long: _____ | Datum: _____
Soil Map Unit Name: Coburg - Urban Land complex | NWI Classification: N/A
Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐
Wetland Hydrology Present? Yes ☒ No ☐

Is the Sampled Area within a Wetland? **Yes** ☒ **No** ☐

Remarks: OFFSITE -- CC canal plot between CC-03 and CC-04. Viewed where canal crosses under 1st Avenue just west of Ivy Street.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	☐	_____
2. _____	_____	☐	_____
3. _____	_____	☐	_____
4. _____	_____	☐	_____
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1. Rosa sp.	30	☒	FAC
2. _____	_____	☐	_____
3. _____	_____	☐	_____
4. _____	_____	☐	_____
5. _____	_____	☐	_____
	30 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	100	☒	FACW
2. _____	_____	☐	_____
3. _____	_____	☐	_____
4. _____	_____	☐	_____
5. _____	_____	☐	_____
6. _____	_____	☐	_____
7. _____	_____	☐	_____
8. _____	_____	☐	_____
9. _____	_____	☐	_____
10. _____	_____	☐	_____
11. _____	_____	☐	_____
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. _____	_____	☐	_____
2. _____	_____	☐	_____
	0 = Total Cover		

% Bare Ground in Herb Stratum: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	_____	x 2 =	_____
FAC species	_____	x 3 =	_____
FACU species	_____	x 4 =	_____
UPL species	_____	x 5 =	_____
Column Totals	_____		_____

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

☒ Dominance Test is >50%
☐ Prevalence Index is ≤3.0[1]
☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
☐ Wetland Non-Vascular Plants[1]
☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☒ **No** ☐

Remarks:
Canal bottom community.

SOIL

Sampling Point: 31

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☒ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☒ **No** ☐

Remarks:

OFFSITE - no soil sampling. Surface obscured by heavy Phalaris cover. Presumed hydric based on landform and presence of indicators of hydrology earlier in the year.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☒ Sediment Deposits (B2)
- ☒ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☒ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:

Evidence of standing water earlier in the year - sediment crusts on leaves.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 4/21/2009	
Applicant/Owner:	State: OR	Sampling Point: 32	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Coberg silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☐ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: OFFSITE -- limited visibility into site; cover estimated. Noted as Probable Wetland (PW). Viewed from Highway 99 near Prairie Road intersection.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1. Populus balsamifera v. trichocarpa	50	☒	FAC
2. Salix sp.	10	☐	FAC
3.		☐	
4.		☐	
5.		☐	
	60 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	75	☒	FACW
2. Dipsacus fullonum	25	☒	FAC+
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 80

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)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: 32

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☒ **No** ☐

Remarks:

Offsite - mapped as having hydric inclusions. Presumed hydric based on hydrophytic vegetation and aerial photography showing inundation.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☒ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? Yes ☒ **No** ☐

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

Remarks:

Shown as ponded on aerial photographs.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 4/21/2009	
Applicant/Owner:	State: OR	Sampling Point: 33	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): canal bottom	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☒ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒	No ☐
Hydric Soil Present?	Yes ☒	No ☐
Wetland Hydrology Present?	Yes ☒	No ☐

Is the Sampled Area within a Wetland? **Yes** ☒ **No** ☐

Remarks: OFFSITE -- 10th Street, west of 1836. Part of WC.

Trapezoidal ditch: natural drainage reshaped during development. Receives stormwater runoff and runoff from Plot 34 during high flow.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1. Salix sp. (planted)	T	☐	OBL
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	T = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Poa annua	20	☒	FAC
2.		☐	
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	20 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 80

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)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals			

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☒ **No** ☐

Remarks:

Vegetation sprayed.

SOIL

Sampling Point: 33

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☒ **No** ☐

Remarks:

OFFSITE - mapped hydric

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☒ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (inches):_____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:

Dry today, dry on previous site visit. Would receive runoff from south of 10th Street during high flow and designed to increase stormwater storage function.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 6/2/2009	
Applicant/Owner:	State: OR	Sampling Point: 34	
Investigator(s): TB/ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): canal bottom	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: OFFSITE -- 10th St @ Oaklea. Plot taken above Plot 33. Part of WC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1. Salix sp. (planted)	T	☐	FAC-OBL
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	T = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	100	☒	FACW
2.		☐	
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 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)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals			

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: 34

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☒ **No** ☐

Remarks:

OFFSITE - mapped hydric, and observed standing water indicate that soils likely exhibit hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 2" (prior visit)

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:

Observed standing or slowly flowing water at previous visit. Dry today.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 6/2/2009	
Applicant/Owner:	State: OR	Sampling Point: 35	
Investigator(s): ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): canal bottom	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Malabon silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: OFFSITE -- Magnolia St. canal. Viewed from Magnolia Street crossing. Part of EC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Alisma plantago-aquatica	20	☒	OBL
2. Veronica sp.	30	☒	OBL
3. Alopecurus geniculatus	5	☐	OBL
4. Bidens cernua	T	☐	FACW+
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	55 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 45

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

Canal bottom community. Actual cover in this reach is about 40%, with bare ground varying from 20 to 50 percent depending on location.

SOIL

Sampling Point: 35

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0	10YR 2/1-3/1							surface color

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☒ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☒ **No** ☐

Remarks:

Offsite - Observation of inundation between 3 and 10 inches deep satsifies Hydric Soil Criterion 3, and possibly 2B3 as well.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 3", max 10"

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:

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

Project/Site: Junction City LWI | City/County: Lane | Sampling Date: 6/2/2009
Applicant/Owner: Magnolia Street ROW | State: OR | Sampling Point: 36
Investigator(s): ACS | Section, Township, Range: ____
Landform (hillslope, terrace, etc.): terrace above canal | Local relief (concave, convex, none) none | Slope (%) minimal
Subregion (LRR): Western Mtns, Valleys, and Coast | Lat: 44.13722 N | Long: 123.12505 W | Datum: ____
Soil Map Unit Name: Malabon silty clay loam | NWI Classification: N/A
Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒
Wetland Hydrology Present? Yes ☐ No ☒

Is the Sampled Area within a Wetland? Yes ☐ No ☒

Remarks: OFFSITE. Viewed from Magnolia Street Crossing. Part of EC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. ____	____	☐	____
2. ____	____	☐	____
3. ____	____	☐	____
4. ____	____	☐	____
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1. ____	____	☐	____
2. ____	____	☐	____
3. ____	____	☐	____
4. ____	____	☐	____
5. ____	____	☐	____
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Dactylus glomerata	20	☒	FACU
2. Agrostis alba	20	☒	FAC
3. Hypochaeris radicata	30	☒	FACU
4. Alopecurus pratensis	10	☐	FACW
5. Festuca arundinacea	10	☐	FAC-
6. Trifolium pratense	T	☐	FACU
7. ____	____	☐	____
8. Misc other grasses	10	☐	FAC
9. ____	____	☐	____
10. ____	____	☐	____
11. ____	____	☐	____
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. ____	____	☐	____
2. ____	____	☐	____
	0 = Total Cover		

% Bare Ground in Herb Stratum: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	60
FAC species	40	x 3 =	120
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column Totals	100		380

Prevalence Index = B/A = 3.8

Hydrophytic Vegetation Indicators:

☐ Dominance Test is >50%
☐ Prevalence Index is ≤3.0[1]
☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
☐ Wetland Non-Vascular Plants[1]
☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks:

SOIL

Sampling Point: 36

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ☐ **No** ☒

Remarks:

Top of canal - no exposed soil but vegetation and geomorphic position do not suggest soil is hydric.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☐ **No** ☒

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

Remarks:

Plot taken about 8 feet above bottom of canal. Unlikely to receive much overland flow or water table support.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 6/2/2009	
Applicant/Owner:	State: OR	Sampling Point: 37	
Investigator(s): ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): canal bottom	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: PFOC		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: OFFSITE --13th Street west of Unity Street. Part of WC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Callitriche stellata	50	☒	OBL
2. Agrostis stolonifera	15	☐	FAC
3. Polygonum amphibium	25	☒	OBL
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	90 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 10

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

Canal bottom community. Actual cover in this reach is about 50%, with bare ground varying from 10 to 90 percent depending on location. Uplands are landscaped down to the OHWL.

SOIL

Sampling Point: 37

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☒ **No** ☐

Remarks:

OFFSITE - mapped hydric, vegetation is strongly hydrophytic and evidence of surface water suggests soil has developed hydric indicators.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☒ Sediment Deposits (B2)
- ☒ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☒ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (inches):____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:

Evidence of standing water earlier in the year - sediment crusts on leaves.

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

Project/Site: Junction City LWI | City/County: Lane | Sampling Date: 6/2/2009
Applicant/Owner: _____ | State: OR | Sampling Point: 38
Investigator(s): ACS | Section, Township, Range: _____
Landform (hillslope, terrace, etc.): canal bottom | Local relief (concave, convex, none) none | Slope (%) minimal
Subregion (LRR): Western Mtns, Valleys, and Coast | Lat: _____ Long: _____ | Datum: _____
Soil Map Unit Name: Coburg silty clay loam | NWI Classification: N/A
Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐
Wetland Hydrology Present? Yes ☒ No ☐

Is the Sampled Area within a Wetland? **Yes** ☒ **No** ☐

Remarks: OFFSITE --Oak St north of 10th Street. Part of CC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	☐	_____
2. _____	_____	☐	_____
3. _____	_____	☐	_____
4. _____	_____	☐	_____
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1. _____	_____	☐	_____
2. _____	_____	☐	_____
3. _____	_____	☐	_____
4. _____	_____	☐	_____
5. _____	_____	☐	_____
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Callitriche stellata	20	☒	OBL
2. Glyceria elata	50	☒	OBL
3. Alopecurus geniculatus	10	☐	OBL
4. _____	_____	☐	_____
5. _____	_____	☐	_____
6. _____	_____	☐	_____
7. _____	_____	☐	_____
8. _____	_____	☐	_____
9. _____	_____	☐	_____
10. _____	_____	☐	_____
11. _____	_____	☐	_____
	80 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. _____	_____	☐	_____
2. _____	_____	☐	_____
	0 = Total Cover		

% Bare Ground in Herb Stratum: 20

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	_____	x 2 =	_____
FAC species	_____	x 3 =	_____
FACU species	_____	x 4 =	_____
UPL species	_____	x 5 =	_____
Column Totals	_____		_____

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

☒ Dominance Test is >50%
☐ Prevalence Index is ≤3.0[1]
☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
☐ Wetland Non-Vascular Plants[1]
☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☒ **No** ☐

Remarks:

Canal bottom community. Actual cover in this reach is about 50%, with bare ground varying from 10 to 90 percent depending on location. Uplands are landscaped down to the OHWL.

SOIL

Sampling Point: 38

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☒ **No** ☐

Remarks:

OFFSITE - not mapped hydric, but vegetation is strongly water-dependent and evidence of standing water was observed.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☒ Sediment Deposits (B2)
- ☒ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☒ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (inches):____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:

Evidence of standing water earlier in the year - sediment crusts on leaves.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 6/2/2009	
Applicant/Owner: Park - CC between CC-01 and CC-02	State: OR	Sampling Point: 39	
Investigator(s): ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): canal bottom	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat: 44.12974 N	Long: 123.12918 W	Datum:
Soil Map Unit Name: Conser silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒	No ☐
Hydric Soil Present?	Yes ☒	No ☐
Wetland Hydrology Present?	Yes ☒	No ☐

Is the Sampled Area within a Wetland? Yes ☒ No ☐

Remarks: Southwest corner of park at Timothy Street.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Callitriche stellata	40	☒	OBL
2. Polygonum sp.	5	☐	OBL
3. Alopecurus geniculatus	5	☐	OBL
4. Epilobium ciliatum	5	☐	FACW
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	55 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 45

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)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals			

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

Cover in the bottom of the canal varies from 5 to 70% in this reach. Vegetation tends to be patchy in character. Alisma plantago-aquatica (OBL) also patchily dominant in this reach.

SOIL

Sampling Point: 39

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4"	10YR 3/1	100	--				si cl lo	no redox in surface horizon
4-6"	10YR 3/1	98	10YR 3/2	2	C	M	si cl lo	few medium faint redox
6-20"	10YR 3/1	95	10YR 4/3	5	C	M	si cl lo	common medium to coarse redox

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☒ **No** ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☒ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (inches):_____

Water Table Present? Yes ☒ No ☐ Depth (inches): 4"

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): surface

Wetland Hydrology Present? Yes ☒ **No** ☐

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

Remarks:

Plot taken 1' from edge of standing water, and 1' below the elevation of heavy cover of FAC and FACU grasses (OHWL).

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

Project/Site: Junction City LWI | City/County: Lane | Sampling Date: 6/2/2009

Applicant/Owner: Park - CC between CC-01 and CC-02 | State: OR | Sampling Point: 40

Investigator(s): ACS | Section, Township, Range: _____

Landform (hillslope, terrace, etc.): canal sideslope | Local relief (concave, convex, none) none | Slope (%) minimal

Subregion (LRR): Western Mtns, Valleys, and Coast | Lat: 44.12974 N | Long: 123.12918 W | Datum: _____

Soil Map Unit Name: Conser silty clay loam | NWI Classification: N/A

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present? Yes ☐ No ☒

Hydric Soil Present? Yes ☐ No ☒

Wetland Hydrology Present? Yes ☐ No ☒

Is the Sampled Area within a Wetland? Yes ☐ No ☒

Remarks: Southwest corner of park at Timothy Street.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Festuca arundinacea	50	☒	FAC-
2. Bromus carinatus	30	☒	NL
3. Cirsium arvense	10	☐	FACU
4. Agrostis gigantea	10	☐	NI
5. Sitanion hystrix	5	☐	FACU-
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	105 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	
FAC species	50	x 3 =	150
FACU species	15	x 4 =	60
UPL species	40	x 5 =	200
Column Totals	105		410

Prevalence Index = B/A = 3.9

Hydrophytic Vegetation Indicators:

☐ Dominance Test is >50%

☐ Prevalence Index is ≤3.0[1]

☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

☐ Wetland Non-Vascular Plants[1]

☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks:

Canal slope community

SOIL

Sampling Point: 40

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14"	10YR 2/2	99	10YR 3/2	1	C	M	si cl lo	very few medium distinct redox
14-20"	10YR 2/2	97	10YR 4/2	3	C	M	si cl lo	few medium distinct redox

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):_____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

Plot taken 5' from edge of standing water, and 18" above OHWL as identified by change to more xeric plant community and heavy cover.

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

Project/Site: Junction City LWI | City/County: Lane | Sampling Date: 6/2/2009
Applicant/Owner: Northeast corner of Elm and 6th Street | State: OR | Sampling Point: 41
Investigator(s): ACS | Section, Township, Range: _____
Landform (hillslope, terrace, etc.): canal bottom | Local relief (concave, convex, none) none | Slope (%) minimal
Subregion (LRR): Western Mtns, Valleys, and Coast | Lat: 44.220 | Long: -123.200 | Datum: _____
Soil Map Unit Name: Conser silty clay loam | NWI Classification: N/A
Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐
Wetland Hydrology Present? Yes ☒ No ☐

Is the Sampled Area within a Wetland? Yes ☒ No ☐

Remarks: OFFSITE -- EC canal plot between EC-02 and EC-03

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Polygonum amphibium	50	☒	OBL
2. Assorted annuals (see below)	20	☐	FAC
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	70 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 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)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals			

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
☒ Dominance Test is >50%
☐ Prevalence Index is ≤3.0[1]
☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
☐ Wetland Non-Vascular Plants[1]
☐ Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:
Canal bottom community. Annuals young, but Conyza canadensis (FACU), Rumex crispus (FAC+), Bidens cernua (FACW+) identified.

SOIL

Sampling Point: 41

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☒ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☒ **No** ☐

Remarks:

OFFSITE - mapped hydric. Canal is inundated at other times of the year and thus satisfies Hydric Soil Criterion 3.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☒ Sediment Deposits (B2)
- ☒ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (inches):_____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:

Canal was dry on date plot was recorded.

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

Project/Site: Junction City LWI | City/County: Lane | Sampling Date: 6/2/2009
Applicant/Owner: _____ | State: OR | Sampling Point: 42
Investigator(s): ACS | Section, Township, Range: _____
Landform (hillslope, terrace, etc.): canal bottom | Local relief (concave, convex, none) none | Slope (%) minimal
Subregion (LRR): Western Mtns, Valleys, and Coast | Lat: 44.215 | Long: -123.205 | Datum: _____
Soil Map Unit Name: Conser/Malabon Urban Land interface | NWI Classification: N/A
Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐
Wetland Hydrology Present? Yes ☒ No ☐

Is the Sampled Area within a Wetland? Yes ☒ No ☐

Remarks: OFFSITE -- CC canal plot between EC-01 and EC-02.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	☐	_____
2. _____	_____	☐	_____
3. _____	_____	☐	_____
4. _____	_____	☐	_____
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1. _____	_____	☐	_____
2. _____	_____	☐	_____
3. _____	_____	☐	_____
4. _____	_____	☐	_____
5. _____	_____	☐	_____
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	100	☒	FACW
2. _____	_____	☐	_____
3. _____	_____	☐	_____
4. _____	_____	☐	_____
5. _____	_____	☐	_____
6. _____	_____	☐	_____
7. _____	_____	☐	_____
8. _____	_____	☐	_____
9. _____	_____	☐	_____
10. _____	_____	☐	_____
11. _____	_____	☐	_____
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1. _____	_____	☐	_____
2. _____	_____	☐	_____
	0 = Total Cover		

% Bare Ground in Herb Stratum: 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)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	_____	x 2 =	_____
FAC species	_____	x 3 =	_____
FACU species	_____	x 4 =	_____
UPL species	_____	x 5 =	_____
Column Totals	_____		_____

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

☒ Dominance Test is >50%
☐ Prevalence Index is ≤3.0[1]
☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
☐ Wetland Non-Vascular Plants[1]
☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:
Canal bottom community.

SOIL

Sampling Point: 42

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? Yes ☒ **No** ☐

Remarks:

OFFSITE - Surface obscured by heavy Phalaris cover and standing water; consequently soil has likely developed hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 1-6 inches

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? Yes ☒ **No** ☐

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

Remarks:

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 6/2/2009	
Applicant/Owner:	State: OR	Sampling Point: 43	
Investigator(s): ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): canal bottom	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat: 44.212	Long: -123.204	Datum:
Soil Map Unit Name:	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: OFFSITE -- canal plot between CC-03 and CC-04, immediately west of Highway 99.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	100	☒	FACW
2.		☐	
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 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)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

Canal bottom community.

SOIL

Sampling Point: 43

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☐ **No** ☐

Remarks:

OFFSITE - no soil sampling. Surface obscured by heavy Phalaris cover. Based on cover of Phalaris and evidence of standing water earlier in the year, soils at this location have likely developed hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☒ Sediment Deposits (B2)
- ☒ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☒ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☐ Depth (inches):____

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:

Evidence of standing water earlier in the year - sediment crusts on leaves.

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

Project/Site: Junction City LWI	City/County: Lane	Sampling Date: 6/2/2009	
Applicant/Owner:	State: OR	Sampling Point: 44	
Investigator(s): ACS	Section, Township, Range:		
Landform (hillslope, terrace, etc.): swale	Local relief (concave, convex, none) none	Slope (%) minimal	
Subregion (LRR): Western Mtns, Valleys, and Coast	Lat:	Long:	Datum:
Soil Map Unit Name: Coberg silty clay loam	NWI Classification: N/A		

Are climatic/hydrologic site conditions typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks")

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

Hydrophytic Vegetation Present?	Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: OFFSITE - SE and NE corners of Milliron Rd. and Hwy 99. Part of FC-02.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 15' r)	Absolute % Cover	Dominant Species?	Indicator Status
1.		☐	
2.		☐	
3.		☐	
4.		☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)			
1. Rosa spp	FACW	☒	10
2.		☐	
3.		☐	
4.		☐	
5.		☐	
	10 = Total Cover		
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	50	☒	FACW
2. Scirpus microcarpus	15	☒	OBL
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
	65 = Total Cover		
Woody Vine Stratum (Plot size: 15' r)			
1.		☐	
2.		☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum: 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)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals			

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

Visual cover in interior of parcel in the NW corner of Milliron Road and Highway 99.

SOIL

Sampling Point: 44

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

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

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

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

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

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: --

Depth (inches): _____

Hydric Soil Present? **Yes** ☒ **No** ☐

Remarks:

OFFSITE - Coberg silty clay loam mapped, but has Conser silty clay loam (hydric) inclusions and standing water.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☒ Drift Deposits (B3)
- ☒ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 1"

Water Table Present? Yes ☐ No ☐ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:

Shallow standing water in patches; debris lines and sediment crusts show extent of inundation.

Appendix D. OFWAM Answer Sheets and Locally Significant Wetland Determination

Junction City Wetlands Inventory
Wetland Assessment Answer Sheet and LSW Determination

GENERAL INFORMATION

Wetland Code: BC	**Field date:** 3/11/09; 4/21/09
Wetland Class: PEMCx	**Investigators:** ACS, TB
Method: ☒ on-site ☐ off-site	**Observation point:** Data Plots

FUNCTION AND CONDITION ASSESSMENT ANSWERS

OFWAM Question	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Education
1	C	C	A	A	A
2	B	C	A	A	A
3	C	C	C	B	B
4	B	A	B	C	A
5	A	C	A	B	A
6	A	C	C	A	B
7	A			B	
8	C				
9	B				
Descriptor	some	impacted	impacted	impacted	educational

LOCALLY SIGNIFICANT WETLAND (LSW) DETERMINATION

Exclusions. Wetland is not locally significant if one of the following conditions applies:	**Yes**	**No**
1. Wetland is artificially created entirely from upland AND is either: a) created for the purpose of controlling, storing, or maintaining stormwater; b) used for active surface mining or active log ponds; c) a ditch without free and open connection to natural waters of the state and no food or game fish; d) less than one acre in size and created unintentionally from irrigation or construction; or e) created for the purpose of wastewater treatment, cranberry production, farm or stock watering, settling of sediment, cooling industrial water, or as a golf course hazard.	☐	☒
2. Wetland or portion thereof is contaminated by hazardous substances, materials or wastes per 141-086.	☐	☒
Exclusion criteria met?	☐	☒
LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland provides "diverse" wildlife habitat.	☐	☒
2. Wetland provides "intact" fish habitat.	☐	☒
3. Wetland provides "intact" water quality function.	☐	☒
4. Wetland provides "intact" hydrologic control function.	☐	☒
5. Wetland is less than ¼ mile from a DEQ water quality limited water body (303 (d) list) and the wetland's water quality function is described as "intact" or "impacted or degraded."	☐	☒
6. Wetland contains one or more rare plant communities.	☐	☒
7. Wetland is inhabited by any species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered.	☐	☒
8. Wetland has a direct surface water connection to a stream segment mapped by ODFW as habitat for indigenous anadromous salmonids, and has "intact" or "impacted or degraded" fish habitat function.	☐	☒
LSW criteria met?	☐	☒
Optional LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland represents a locally unique native plant community AND provides: a) "diverse habitat" or "habitat for some wildlife species"; b) "intact" or "impacted or degraded" fish habitat; c) "intact" or "impacted or degraded" water quality; or d) "intact" or "impacted or degraded" hydrologic control.	☐	☒
2. Wetland is publicly owned and has "educational uses" and such use is documented for that site.	☐	☒
Optional LSW criteria met?	☐	☒

Determination: Wetland is not locally significant

Junction City Wetlands Inventory
Wetland Assessment Answer Sheet and LSW Determination

GENERAL INFORMATION

Wetland Code: CC	**Field date:** 3/11/09; 4/21/09, 6/2/09
Wetland Class: PEMCx	**Investigators:** ACS, TB
Method: ☒ on-site ☐ off-site	**Observation point:** Data Plots

FUNCTION AND CONDITION ASSESSMENT ANSWERS

OFWAM Question	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Education
1	B	C	A	A	A
2	B	C	A	A	B
3	C	C	C	B	B
4	A	A	B	B	B
5	A	C	A	B	A
6	A	C	C	A	B
7	A			A	
8	C				
9	C				
Descriptor	some	impacted	impacted	intact	potential

LOCALLY SIGNIFICANT WETLAND (LSW) DETERMINATION

Exclusions. Wetland is not locally significant if one of the following conditions applies:	**Yes**	**No**
1. Wetland is artificially created entirely from upland AND is either: a) created for the purpose of controlling, storing, or maintaining stormwater; b) used for active surface mining or active log ponds; c) a ditch without free and open connection to natural waters of the state and no food or game fish; d) less than one acre in size and created unintentionally from irrigation or construction; or e) created for the purpose of wastewater treatment, cranberry production, farm or stock watering, settling of sediment, cooling industrial water, or as a golf course hazard.	☐	☒
2. Wetland or portion thereof is contaminated by hazardous substances, materials or wastes per 141-086.	☐	☒
Exclusion criteria met?	☐	☒
LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland provides "diverse" wildlife habitat.	☐	☒
2. Wetland provides "intact" fish habitat.	☐	☒
3. Wetland provides "intact" water quality function.	☐	☒
4. Wetland provides "intact" hydrologic control function.	☒	☐
5. Wetland is less than ¼ mile from a DEQ water quality limited water body (303 (d) list) and the wetland's water quality function is described as "intact" or "impacted or degraded."	☐	☒
6. Wetland contains one or more rare plant communities.	☐	☒
7. Wetland is inhabited by any species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered.	☐	☒
8. Wetland has a direct surface water connection to a stream segment mapped by ODFW as habitat for indigenous anadromous salmonids, and has "intact" or "impacted or degraded" fish habitat function.	☐	☒
LSW criteria met?	☒	☐
Optional LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland represents a locally unique native plant community AND provides: a) "diverse habitat" or "habitat for some wildlife species"; b) "intact" or "impacted or degraded" fish habitat; c) "intact" or "impacted or degraded" water quality; or d) "intact" or "impacted or degraded" hydrologic control.	☐	☒
2. Wetland is publicly owned and has "educational uses" and such use is documented for that site.	☐	☒
Optional LSW criteria met?	☒	☐
Determination: Wetland is locally significant		

Junction City Wetlands Inventory
Wetland Assessment Answer Sheet and LSW Determination

GENERAL INFORMATION

Wetland Code: CC-01
Field date: 3/12/09
Wetland Class: PEMC, PFO1
Investigators: ACS, TB
Method: ☒ on-site ☐ off-site
Observation point: Data Plots

FUNCTION AND CONDITION ASSESSMENT ANSWERS

OFWAM Question	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Education
1	A	C	A	A	A
2	B	C	A	A	A
3	C	C	A	C	B
4	-	A	B	C	B
5	A	A	C	B	B
6	A	C	C	C	B
7	A			A	
8	A				
9	B				
Descriptor	diverse	impacted	intact	impacted	educational

LOCALLY SIGNIFICANT WETLAND (LSW) DETERMINATION

Exclusions. Wetland is not locally significant if one of the following conditions applies:	**Yes**	**No**
1. Wetland is artificially created entirely from upland AND is either: a) created for the purpose of controlling, storing, or maintaining stormwater; b) used for active surface mining or active log ponds; c) a ditch without free and open connection to natural waters of the state and no food or game fish; d) less than one acre in size and created unintentionally from irrigation or construction; or e) created for the purpose of wastewater treatment, cranberry production, farm or stock watering, settling of sediment, cooling industrial water, or as a golf course hazard.	☐	☒
2. Wetland or portion thereof is contaminated by hazardous substances, materials or wastes per 141-086.	☐	☒
Exclusion criteria met?	☐	☒
LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland provides "diverse" wildlife habitat.	☒	☐
2. Wetland provides "intact" fish habitat.	☐	☒
3. Wetland provides "intact" water quality function.	☒	☐
4. Wetland provides "intact" hydrologic control function.	☐	☒
5. Wetland is less than ¼ mile from a DEQ water quality limited water body (303 (d) list) and the wetland's water quality function is described as "intact" or "impacted or degraded."	☐	☒
6. Wetland contains one or more rare plant communities.	☐	☒
7. Wetland is inhabited by any species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered.	☐	☒
8. Wetland has a direct surface water connection to a stream segment mapped by ODFW as habitat for indigenous anadromous salmonids, and has "intact" or "impacted or degraded" fish habitat function.	☐	☒
LSW criteria met?	☒	☐
Optional LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland represents a locally unique native plant community AND provides: a) "diverse habitat" or "habitat for some wildlife species"; b) "intact" or "impacted or degraded" fish habitat; c) "intact" or "impacted or degraded" water quality; or d) "intact" or "impacted or degraded" hydrologic control.	☐	☒
2. Wetland is publicly owned and has "educational uses" and such use is documented for that site.	☒	☐
Optional LSW criteria met?	☒	☐

Determination: Wetland is locally significant

Junction City Wetlands Inventory
Wetland Assessment Answer Sheet and LSW Determination

GENERAL INFORMATION

Wetland Code: CC-02	**Field date:** 3/12/09
Wetland Class: PABFx	**Investigators:** ACS, TB
Method: ☐ on-site ☒ off-site	**Observation point:** Road

FUNCTION AND CONDITION ASSESSMENT ANSWERS

OFWAM Question	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Education
1	A		A	A	
2	B		A	A	
3	C		C	B	
4	B		B	A	
5	B		A	B	
6	B		C	A	
7	A			B	
8	C				
9	B				
Descriptor	some	n/a	impacted	intact	not approp.

LOCALLY SIGNIFICANT WETLAND (LSW) DETERMINATION

Exclusions. Wetland is not locally significant if one of the following conditions applies:	**Yes**	**No**
1. Wetland is artificially created entirely from upland AND is either: a) created for the purpose of controlling, storing, or maintaining stormwater; b) used for active surface mining or active log ponds; c) a ditch without free and open connection to natural waters of the state and no food or game fish; d) less than one acre in size and created unintentionally from irrigation or construction; or e) created for the purpose of wastewater treatment, cranberry production, farm or stock watering, settling of sediment, cooling industrial water, or as a golf course hazard.	☐	☒
2. Wetland or portion thereof is contaminated by hazardous substances, materials or wastes per 141-086.	☐	☒
Exclusion criteria met?	☐	☒
LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland provides "diverse" wildlife habitat.	☐	☒
2. Wetland provides "intact" fish habitat.	☐	☒
3. Wetland provides "intact" water quality function.	☐	☒
4. Wetland provides "intact" hydrologic control function.	☒	☐
5. Wetland is less than ¼ mile from a DEQ water quality limited water body (303 (d) list) and the wetland's water quality function is described as "intact" or "impacted or degraded."	☐	☒
6. Wetland contains one or more rare plant communities.	☐	☒
7. Wetland is inhabited by any species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered.	☐	☒
8. Wetland has a direct surface water connection to a stream segment mapped by ODFW as habitat for indigenous anadromous salmonids, and has "intact" or "impacted or degraded" fish habitat function.	☐	☒
LSW criteria met?	☒	☐
Optional LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland represents a locally unique native plant community AND provides: a) "diverse habitat" or "habitat for some wildlife species"; b) "intact" or "impacted or degraded" fish habitat; c) "intact" or "impacted or degraded" water quality; or d) "intact" or "impacted or degraded" hydrologic control.	☐	☒
2. Wetland is publicly owned and has "educational uses" and such use is documented for that site.	☐	☒
Optional LSW criteria met?	☐	☒
Determination: Wetland is locally significant		

Junction City Wetlands Inventory
Wetland Assessment Answer Sheet and LSW Determination

GENERAL INFORMATION

Wetland Code: CC-03
Wetland Class: PUBFh
Method: ☐ on-site ☒ off-site
Field date: 3/11/09
Investigators: ACS, TB
Observation point: 3rd and Maple

FUNCTION AND CONDITION ASSESSMENT ANSWERS

OFWAM Question	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Education
1	A	C	A	A	
2	B	B	A	A	
3	C	C	C	B	
4	C	A	B	C	
5	A	C	A	B	
6	A	C	C	A	
7	A			A	
8	C				
9	C				
Descriptor	some	impacted	impacted	intact	not approp.

LOCALLY SIGNIFICANT WETLAND (LSW) DETERMINATION

Exclusions. Wetland is not locally significant if one of the following conditions applies:	**Yes**	**No**
1. Wetland is artificially created entirely from upland AND is either: a) created for the purpose of controlling, storing, or maintaining stormwater; b) used for active surface mining or active log ponds; c) a ditch without free and open connection to natural waters of the state and no food or game fish; d) less than one acre in size and created unintentionally from irrigation or construction; or e) created for the purpose of wastewater treatment, cranberry production, farm or stock watering, settling of sediment, cooling industrial water, or as a golf course hazard.	☐	☒
2. Wetland or portion thereof is contaminated by hazardous substances, materials or wastes per 141-086.	☐	☒
Exclusion criteria met?	☐	☒
LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland provides "diverse" wildlife habitat.	☐	☒
2. Wetland provides "intact" fish habitat.	☐	☒
3. Wetland provides "intact" water quality function.	☐	☒
4. Wetland provides "intact" hydrologic control function.	☒	☐
5. Wetland is less than ¼ mile from a DEQ water quality limited water body (303 (d) list) and the wetland's water quality function is described as "intact" or "impacted or degraded."	☐	☒
6. Wetland contains one or more rare plant communities.	☐	☒
7. Wetland is inhabited by any species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered.	☐	☒
8. Wetland has a direct surface water connection to a stream segment mapped by ODFW as habitat for indigenous anadromous salmonids, and has "intact" or "impacted or degraded" fish habitat function.	☐	☒
LSW criteria met?	☒	☐
Optional LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland represents a locally unique native plant community AND provides: a) "diverse habitat" or "habitat for some wildlife species"; b) "intact" or "impacted or degraded" fish habitat; c) "intact" or "impacted or degraded" water quality; or d) "intact" or "impacted or degraded" hydrologic control.	☐	☒
2. Wetland is publicly owned and has "educational uses" and such use is documented for that site.	☐	☒
Optional LSW criteria met?	☐	☒
Determination: Wetland is locally significant		

Junction City Wetlands Inventory
Wetland Assessment Answer Sheet and LSW Determination

GENERAL INFORMATION

Wetland Code: CC-04
Wetland Class: PFO1, PEMC
Method: ☒ on-site ☐ off-site
Field date: 3/25/09, 4/21/09, 6/2/09
Investigators: ACS, TB
Observation point: Data Plots

FUNCTION AND CONDITION ASSESSMENT ANSWERS

OFWAM Question	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Education
1	A	B	A	A	
2	A	B	A	A	
3	A	B	A	A	
4	B	A	A	B	
5	A	C	A	A	
6	A	C	C	A	
7	A			B	
8	C				
9	B				
Descriptor	diverse	impacted	intact	intact	not approp.

LOCALLY SIGNIFICANT WETLAND (LSW) DETERMINATION

Exclusions. Wetland is not locally significant if one of the following conditions applies:	**Yes**	**No**
1. Wetland is artificially created entirely from upland AND is either: a) created for the purpose of controlling, storing, or maintaining stormwater; b) used for active surface mining or active log ponds; c) a ditch without free and open connection to natural waters of the state and no food or game fish; d) less than one acre in size and created unintentionally from irrigation or construction; or e) created for the purpose of wastewater treatment, cranberry production, farm or stock watering, settling of sediment, cooling industrial water, or as a golf course hazard.	☐	☒
2. Wetland or portion thereof is contaminated by hazardous substances, materials or wastes per 141-086.	☐	☒
Exclusion criteria met?	☐	☒
LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland provides "diverse" wildlife habitat.	☒	☐
2. Wetland provides "intact" fish habitat.	☐	☒
3. Wetland provides "intact" water quality function.	☒	☐
4. Wetland provides "intact" hydrologic control function.	☒	☐
5. Wetland is less than ¼ mile from a DEQ water quality limited water body (303 (d) list) and the wetland's water quality function is described as "intact" or "impacted or degraded."	☐	☒
6. Wetland contains one or more rare plant communities.	☐	☒
7. Wetland is inhabited by any species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered.	☐	☒
8. Wetland has a direct surface water connection to a stream segment mapped by ODFW as habitat for indigenous anadromous salmonids, and has "intact" or "impacted or degraded" fish habitat function.	☐	☒
LSW criteria met?	☒	☐
Optional LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland represents a locally unique native plant community AND provides: a) "diverse habitat" or "habitat for some wildlife species"; b) "intact" or "impacted or degraded" fish habitat; c) "intact" or "impacted or degraded" water quality; or d) "intact" or "impacted or degraded" hydrologic control.	☐	☒
2. Wetland is publicly owned and has "educational uses" and such use is documented for that site.	☐	☒
Optional LSW criteria met?	☐	☒
Determination: Wetland is locally significant		

Junction City Wetlands Inventory
Wetland Assessment Answer Sheet and LSW Determination

GENERAL INFORMATION

Wetland Code: EC | **Field date:** 3/12/09, 4/21/09, 6/2/09
Wetland Class: PEMCx | **Investigators:** ACS, TB
Method: ☒ on-site ☐ off-site | **Observation point:** data plots

FUNCTION AND CONDITION ASSESSMENT ANSWERS

OFWAM Question	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Education
1	B	C	A	A	
2	B	C	A	A	
3	C	C	C	B	
4	A	A	B	B	
5	A	C	A	B	
6	A	C	C	A	
7	A			A	
8	C				
9	C				
Descriptor	some	impacted	impacted	intact	NA

LOCALLY SIGNIFICANT WETLAND (LSW) DETERMINATION

Exclusions. Wetland is not locally significant if one of the following conditions applies:	**Yes**	**No**
1. Wetland is artificially created entirely from upland AND is 001 2. either: a) created for the purpose of controlling, storing, or maintaining stormwater; b) used for active surface mining or active log ponds; c) a ditch without free and open connection to natural waters of the state and no food or game fish; d) less than one acre in size and created unintentionally from irrigation or construction; or e) created for the purpose of wastewater treatment, cranberry production, farm or stock watering, settling of sediment, cooling industrial water, or as a golf course hazard.	☐	☒
2. Wetland or portion thereof is contaminated by hazardous substances, materials or wastes per 141-086.	☐	☒
Exclusion criteria met?	☐	☒
LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland provides "diverse" wildlife habitat.	☐	☒
2. Wetland provides "intact" fish habitat.	☐	☒
3. Wetland provides "intact" water quality function.	☐	☒
4. Wetland provides "intact" hydrologic control function.	☒	☐
5. Wetland is less than ¼ mile from a DEQ water quality limited water body (303 (d) list) and the wetland's water quality function is described as "intact" or "impacted or degraded."	☐	☒
6. Wetland contains one or more rare plant communities.	☐	☒
7. Wetland is inhabited by any species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered.	☐	☒
8. Wetland has a direct surface water connection to a stream segment mapped by ODFW as habitat for indigenous anadromous salmonids, and has "intact" or "impacted or degraded" fish habitat function.	☐	☒
LSW criteria met?	☒	☐
Optional LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland represents a locally unique native plant community AND provides: a) "diverse habitat" or "habitat for some wildlife species"; b) "intact" or "impacted or degraded" fish habitat; c) "intact" or "impacted or degraded" water quality; or d) "intact" or "impacted or degraded" hydrologic control.	☐	☒
2. Wetland is publicly owned and has "educational uses" and such use is documented for that site.	☐	☒
Optional LSW criteria met?	☐	☒

Determination: Wetland is locally significant

Junction City Wetlands Inventory
Wetland Assessment Answer Sheet and LSW Determination

GENERAL INFORMATION

Wetland Code: EC-01 | **Field date:** 3/11/09
Wetland Class: PUB3G, PEMG | **Investigators:** ACS, TB
Method: ☒ on-site ☐ off-site | **Observation point:** Data Plots

FUNCTION AND CONDITION ASSESSMENT ANSWERS

OFWAM Question	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Education
1	A	C	A	A	
2	B	B	A	A	
3	C	C	A	B	
4	A	A	B	C	
5	A	C	A	B	
6	A	B	C	A	
7	A			A	
8	C				
9	B				
Descriptor	some	impacted	intact	intact	not approp.

LOCALLY SIGNIFICANT WETLAND (LSW) DETERMINATION

Exclusions. Wetland is not locally significant if one of the following conditions applies:	**Yes**	**No**
1. Wetland is artificially created entirely from upland AND is either: a) created for the purpose of controlling, storing, or maintaining stormwater; b) used for active surface mining or active log ponds; c) a ditch without free and open connection to natural waters of the state and no food or game fish; d) less than one acre in size and created unintentionally from irrigation or construction; or e) created for the purpose of wastewater treatment, cranberry production, farm or stock watering, settling of sediment, cooling industrial water, or as a golf course hazard.	☐	☒
2. Wetland or portion thereof is contaminated by hazardous substances, materials or wastes per 141-086.	☐	☒
Exclusion criteria met?	☐	☒
LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland provides "diverse" wildlife habitat.	☐	☒
2. Wetland provides "intact" fish habitat.	☐	☒
3. Wetland provides "intact" water quality function.	☒	☐
4. Wetland provides "intact" hydrologic control function.	☒	☐
5. Wetland is less than ¼ mile from a DEQ water quality limited water body (303 (d) list) and the wetland's water quality function is described as "intact" or "impacted or degraded."	☐	☒
6. Wetland contains one or more rare plant communities.	☐	☒
7. Wetland is inhabited by any species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered.	☐	☒
8. Wetland has a direct surface water connection to a stream segment mapped by ODFW as habitat for indigenous anadromous salmonids, and has "intact" or "impacted or degraded" fish habitat function.	☐	☒
LSW criteria met?	☒	☐
Optional LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland represents a locally unique native plant community AND provides: a) "diverse habitat" or "habitat for some wildlife species"; b) "intact" or "impacted or degraded" fish habitat; c) "intact" or "impacted or degraded" water quality; or d) "intact" or "impacted or degraded" hydrologic control.	☐	☒
2. Wetland is publicly owned and has "educational uses" and such use is documented for that site.	☐	☒
Optional LSW criteria met?	☐	☒
Determination: Wetland is locally significant		

Junction City Wetlands Inventory
Wetland Assessment Answer Sheet and LSW Determination

GENERAL INFORMATION

Wetland Code: EC-02	**Field date:** 3/11/09
Wetland Class: PEMC	**Investigators:** ACS, TB
Method: ☐ on-site ☒ off-site	**Observation point:** Deal Street

FUNCTION AND CONDITION ASSESSMENT ANSWERS

OFWAM Question	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Education
1	C	C	A	A	
2	B	B	A	A	
3	C	C	A	B	
4	-	A	B	C	
5	A	C	A	B	
6	A	C	C	A	
7	A			A	
8	C				
9	C				
Descriptor	some	impacted	intact	intact	not approp.

LOCALLY SIGNIFICANT WETLAND (LSW) DETERMINATION

Exclusions. Wetland is not locally significant if one of the following conditions applies:	**Yes**	**No**
1. Wetland is artificially created entirely from upland AND is either: a) created for the purpose of controlling, storing, or maintaining stormwater; b) used for active surface mining or active log ponds; c) a ditch without free and open connection to natural waters of the state and no food or game fish; d) less than one acre in size and created unintentionally from irrigation or construction; or e) created for the purpose of wastewater treatment, cranberry production, farm or stock watering, settling of sediment, cooling industrial water, or as a golf course hazard.	☐	☒
2. Wetland or portion thereof is contaminated by hazardous substances, materials or wastes per 141-086.	☐	☒
Exclusion criteria met?	☐	☒
LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland provides "diverse" wildlife habitat.	☐	☒
2. Wetland provides "intact" fish habitat.	☐	☒
3. Wetland provides "intact" water quality function.	☒	☐
4. Wetland provides "intact" hydrologic control function.	☒	☐
5. Wetland is less than ¼ mile from a DEQ water quality limited water body (303 (d) list) and the wetland's water quality function is described as "intact" or "impacted or degraded."	☐	☒
6. Wetland contains one or more rare plant communities.	☐	☒
7. Wetland is inhabited by any species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered.	☐	☒
8. Wetland has a direct surface water connection to a stream segment mapped by ODFW as habitat for indigenous anadromous salmonids, and has "intact" or "impacted or degraded" fish habitat function.	☐	☒
LSW criteria met?	☒	☐
Optional LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland represents a locally unique native plant community AND provides: a) "diverse habitat" or "habitat for some wildlife species"; b) "intact" or "impacted or degraded" fish habitat; c) "intact" or "impacted or degraded" water quality; or d) "intact" or "impacted or degraded" hydrologic control.	☐	☒
2. Wetland is publicly owned and has "educational uses" and such use is documented for that site.	☐	☒
Optional LSW criteria met?	☐	☒
Determination: Wetland is locally significant		

Junction City Wetlands Inventory
Wetland Assessment Answer Sheet and LSW Determination

GENERAL INFORMATION

Wetland Code: FC-01 | **Field date:** 3/11/09
Wetland Class: PEMf | **Investigators:** ACS, TB
Method: ☐ on-site ☒ off-site | **Observation point:** Oaklea Drive

FUNCTION AND CONDITION ASSESSMENT ANSWERS

OFWAM Question	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Education
1	C	C	C	A	
2	C	B	A	A	
3	C	C	A	A	
4	A	C	A	C	
5	A	B	B	C	
6	A	B	A	B	
7	C			A	
8	B				
9	C				
Descriptor	some	impacted	impacted	intact	not approp.

LOCALLY SIGNIFICANT WETLAND (LSW) DETERMINATION

Exclusions. Wetland is not locally significant if one of the following conditions applies:	**Yes**	**No**
1. Wetland is artificially created entirely from upland AND is either: a) created for the purpose of controlling, storing, or maintaining stormwater; b) used for active surface mining or active log ponds; c) a ditch without free and open connection to natural waters of the state and no food or game fish; d) less than one acre in size and created unintentionally from irrigation or construction; or e) created for the purpose of wastewater treatment, cranberry production, farm or stock watering, settling of sediment, cooling industrial water, or as a golf course hazard.	☐	☒
2. Wetland or portion thereof is contaminated by hazardous substances, materials or wastes per 141-086.	☐	☒
Exclusion criteria met?	☐	☒
LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland provides "diverse" wildlife habitat.	☐	☒
2. Wetland provides "intact" fish habitat.	☐	☒
3. Wetland provides "intact" water quality function.	☐	☒
4. Wetland provides "intact" hydrologic control function.	☒	☐
5. Wetland is less than ¼ mile from a DEQ water quality limited water body (303 (d) list) and the wetland's water quality function is described as "intact" or "impacted or degraded."	☐	☒
6. Wetland contains one or more rare plant communities.	☐	☒
7. Wetland is inhabited by any species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered.	☐	☒
8. Wetland has a direct surface water connection to a stream segment mapped by ODFW as habitat for indigenous anadromous salmonids, and has "intact" or "impacted or degraded" fish habitat function.	☐	☒
LSW criteria met?	☒	☐
Optional LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland represents a locally unique native plant community AND provides: a) "diverse habitat" or "habitat for some wildlife species"; b) "intact" or "impacted or degraded" fish habitat; c) "intact" or "impacted or degraded" water quality; or d) "intact" or "impacted or degraded" hydrologic control.	☐	☒
2. Wetland is publicly owned and has "educational uses" and such use is documented for that site.	☐	☒
Optional LSW criteria met?	☐	☒

Determination: Wetland is locally significant

Junction City Wetlands Inventory
Wetland Assessment Answer Sheet and LSW Determination

GENERAL INFORMATION

Wetland Code: FC-02 | **Field date:** 4/21/09
Wetland Class: PEM, PFO | **Investigators:** ACS, TB
Method: ☐ on-site ☒ off-site | **Observation point:** Milliron Street

FUNCTION AND CONDITION ASSESSMENT ANSWERS

OFWAM Question	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Education
1	A	C	B	A	
2	C	C	A	A	
3	C	C	A	A	
4	-	A	A	C	
5	A	B	B	C	
6	A	C	B	B	
7	A			B	
8	B				
9	C				
Descriptor	some	impacted	intact	impacted	not approp.

LOCALLY SIGNIFICANT WETLAND (LSW) DETERMINATION

Exclusions. Wetland is not locally significant if one of the following conditions applies:	**Yes**	**No**
1. Wetland is artificially created entirely from upland AND is either: a) created for the purpose of controlling, storing, or maintaining stormwater; b) used for active surface mining or active log ponds; c) a ditch without free and open connection to natural waters of the state and no food or game fish; d) less than one acre in size and created unintentionally from irrigation or construction; or e) created for the purpose of wastewater treatment, cranberry production, farm or stock watering, settling of sediment, cooling industrial water, or as a golf course hazard.	☐	☒
2. Wetland or portion thereof is contaminated by hazardous substances, materials or wastes per 141-086.	☐	☒
Exclusion criteria met?	☐	☒
LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland provides "diverse" wildlife habitat.	☐	☒
2. Wetland provides "intact" fish habitat.	☐	☒
3. Wetland provides "intact" water quality function.	☒	☐
4. Wetland provides "intact" hydrologic control function.	☐	☒
5. Wetland is less than ¼ mile from a DEQ water quality limited water body (303 (d) list) and the wetland's water quality function is described as "intact" or "impacted or degraded."	☐	☒
6. Wetland contains one or more rare plant communities.	☐	☒
7. Wetland is inhabited by any species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered.	☐	☒
8. Wetland has a direct surface water connection to a stream segment mapped by ODFW as habitat for indigenous anadromous salmonids, and has "intact" or "impacted or degraded" fish habitat function.	☐	☒
LSW criteria met?	☒	☐
Optional LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland represents a locally unique native plant community AND provides: a) "diverse habitat" or "habitat for some wildlife species"; b) "intact" or "impacted or degraded" fish habitat; c) "intact" or "impacted or degraded" water quality; or d) "intact" or "impacted or degraded" hydrologic control.	☐	☒
2. Wetland is publicly owned and has "educational uses" and such use is documented for that site.	☐	☒
Optional LSW criteria met?	☐	☒

Determination: Wetland is locally significant

Junction City Wetlands Inventory
Wetland Assessment Answer Sheet and LSW Determination

GENERAL INFORMATION

Wetland Code: FC-03 | **Field date:** 4/21/09
Wetland Class: PEMCd | **Investigators:** ACS, TB
Method: ☐ on-site ☒ off-site | **Observation point:** Aerial photo

FUNCTION AND CONDITION ASSESSMENT ANSWERS

OFWAM Question	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Education
1	A	C	B	A	
2	B	B	A	A	
3	C	C	A	B	
4	C	A	B	B	
5	A	B	B	B	
6	A	C	B	B	
7	A			B	
8	B				
9	C				
Descriptor	some	impacted	intact	impacted	not approp.

LOCALLY SIGNIFICANT WETLAND (LSW) DETERMINATION

Exclusions. Wetland is not locally significant if one of the following conditions applies:	**Yes**	**No**
1. Wetland is artificially created entirely from upland AND is either: a) created for the purpose of controlling, storing, or maintaining stormwater; b) used for active surface mining or active log ponds; c) a ditch without free and open connection to natural waters of the state and no food or game fish; d) less than one acre in size and created unintentionally from irrigation or construction; or e) created for the purpose of wastewater treatment, cranberry production, farm or stock watering, settling of sediment, cooling industrial water, or as a golf course hazard.	☐	☒
2. Wetland or portion thereof is contaminated by hazardous substances, materials or wastes per 141-086.	☐	☒
Exclusion criteria met?	☐	☒
LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland provides "diverse" wildlife habitat.	☐	☒
2. Wetland provides "intact" fish habitat.	☐	☒
3. Wetland provides "intact" water quality function.	☒	☐
4. Wetland provides "intact" hydrologic control function.	☐	☒
5. Wetland is less than ¼ mile from a DEQ water quality limited water body (303 (d) list) and the wetland's water quality function is described as "intact" or "impacted or degraded."	☐	☒
6. Wetland contains one or more rare plant communities.	☐	☒
7. Wetland is inhabited by any species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered.	☐	☒
8. Wetland has a direct surface water connection to a stream segment mapped by ODFW as habitat for indigenous anadromous salmonids, and has "intact" or "impacted or degraded" fish habitat function.	☐	☒
LSW criteria met?	☒	☒
Optional LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland represents a locally unique native plant community AND provides: a) "diverse habitat" or "habitat for some wildlife species"; b) "intact" or "impacted or degraded" fish habitat; c) "intact" or "impacted or degraded" water quality; or d) "intact" or "impacted or degraded" hydrologic control.	☐	☒
2. Wetland is publicly owned and has "educational uses" and such use is documented for that site.	☐	☒
Optional LSW criteria met?	☐	☒
Determination: Wetland is locally significant		

Junction City Wetlands Inventory
Wetland Assessment Answer Sheet and LSW Determination

GENERAL INFORMATION

Wetland Code: WC	**Field date:** 4/21/09
Wetland Class: PEMCx	**Investigators:** ACS, TB
Method: ☒ on-site ☐ off-site	**Observation point:** Data Plots

FUNCTION AND CONDITION ASSESSMENT ANSWERS

OFWAM Question	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Education
1	B	C	A	A	A
2	B	C	A	A	A
3	C	C	C	B	B
4	C	A	B	B	C
5	A	C	A	B	C
6	A	C	C	A	B
7	A			A	
8	C				
9	C				
Descriptor	some	impacted	impacted	intact	potential

LOCALLY SIGNIFICANT WETLAND (LSW) DETERMINATION

Exclusions. Wetland is not locally significant if one of the following conditions applies:	**Yes**	**No**
1. Wetland is artificially created entirely from upland AND is either: a) created for the purpose of controlling, storing, or maintaining stormwater; b) used for active surface mining or active log ponds; c) a ditch without free and open connection to natural waters of the state and no food or game fish; d) less than one acre in size and created unintentionally from irrigation or construction; or e) created for the purpose of wastewater treatment, cranberry production, farm or stock watering, settling of sediment, cooling industrial water, or as a golf course hazard.	☐	☒
2. Wetland or portion thereof is contaminated by hazardous substances, materials or wastes per 141-086.	☐	☒
Exclusion criteria met?	☐	☒
LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland provides "diverse" wildlife habitat.	☐	☒
2. Wetland provides "intact" fish habitat.	☐	☒
3. Wetland provides "intact" water quality function.	☐	☒
4. Wetland provides "intact" hydrologic control function.	☒	☐
5. Wetland is less than ¼ mile from a DEQ water quality limited water body (303 (d) list) and the wetland's water quality function is described as "intact" or "impacted or degraded."	☐	☒
6. Wetland contains one or more rare plant communities.	☐	☒
7. Wetland is inhabited by any species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered.	☐	☒
8. Wetland has a direct surface water connection to a stream segment mapped by ODFW as habitat for indigenous anadromous salmonids, and has "intact" or "impacted or degraded" fish habitat function.	☐	☒
LSW criteria met?	☒	☐
Optional LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland represents a locally unique native plant community AND provides: a) "diverse habitat" or "habitat for some wildlife species"; b) "intact" or "impacted or degraded" fish habitat; c) "intact" or "impacted or degraded" water quality; or d) "intact" or "impacted or degraded" hydrologic control.	☐	☒
2. Wetland is publicly owned and has "educational uses" and such use is documented for that site.	☐	☒
Optional LSW criteria met?	☐	☒
Determination: Wetland is locally significant		

Junction City Wetlands Inventory
Wetland Assessment Answer Sheet and LSW Determination

GENERAL INFORMATION

Wetland Code: WC-01
Field date: 4/21/09
Wetland Class: PEM
Investigators: ACS, TB
Method: ☒ on-site ☐ off-site
Observation point: Data Plots

FUNCTION AND CONDITION ASSESSMENT ANSWERS

OFWAM Question	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Education
1	B	C	A	A	
2	B	B	A	A	
3	C	C	A	B	
4	-	A	B	B	
5	A	C	A	B	
6	A	C	B	B	
7	A			A	
8	C				
9	B				
Descriptor	some	impacted	intact	impacted	not approp.

LOCALLY SIGNIFICANT WETLAND (LSW) DETERMINATION

Exclusions. Wetland is not locally significant if one of the following conditions applies:	**Yes**	**No**
1. Wetland is artificially created entirely from upland AND is either: a) created for the purpose of controlling, storing, or maintaining stormwater; b) used for active surface mining or active log ponds; c) a ditch without free and open connection to natural waters of the state and no food or game fish; d) less than one acre in size and created unintentionally from irrigation or construction; or e) created for the purpose of wastewater treatment, cranberry production, farm or stock watering, settling of sediment, cooling industrial water, or as a golf course hazard.	☐	☒
2. Wetland or portion thereof is contaminated by hazardous substances, materials or wastes per 141-086.	☐	☒
Exclusion criteria met?	☐	☒
LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland provides "diverse" wildlife habitat.	☐	☒
2. Wetland provides "intact" fish habitat.	☐	☒
3. Wetland provides "intact" water quality function.	☒	☐
4. Wetland provides "intact" hydrologic control function.	☐	☒
5. Wetland is less than ¼ mile from a DEQ water quality limited water body (303 (d) list) and the wetland's water quality function is described as "intact" or "impacted or degraded."	☐	☒
6. Wetland contains one or more rare plant communities.	☐	☒
7. Wetland is inhabited by any species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered.	☐	☒
8. Wetland has a direct surface water connection to a stream segment mapped by ODFW as habitat for indigenous anadromous salmonids, and has "intact" or "impacted or degraded" fish habitat function.	☐	☒
LSW criteria met?	☒	☐
Optional LSW Criteria. Wetland is locally significant if it meets one or more of the following criteria:		
1. Wetland represents a locally unique native plant community AND provides: a) "diverse habitat" or "habitat for some wildlife species"; b) "intact" or "impacted or degraded" fish habitat; c) "intact" or "impacted or degraded" water quality; or d) "intact" or "impacted or degraded" hydrologic control.	☐	☒
2. Wetland is publicly owned and has "educational uses" and such use is documented for that site.	☐	☒
Optional LSW criteria met?	☐	☒
Determination: Wetland is locally significant		

Appendix E. Wetland Assessment Summary Sheets

Junction City Wetlands Inventory

OFWAM Functions and Conditions Summary Sheet

Wetland Assessment Unit: BC

Wildlife Habitat:	**Provides habitat for some wildlife species**	
Rationale:	One Cowardin class with <5 species	Surface water connection to other wetland
	Dominated by emergent vegetation and ponding	No adjacent Water Quality limited streams
	Low interspersion	Adjacent land is primarily developed uses
	Between 0.5 and 1 acre of open water	Wetland buffer is between 10 and 40%
	Surface water connection to water body	
Fish Habitat:	**Impacted or degraded**	
Rationale:	Less than 50% of stream is shaded	No adjacent Water Quality Limited streams
	Stream banks are extensively modified	Adjacent land use is primarily developed uses
	<10% of stream has instream structures	No fish present in stream
Water Quality:	**Impacted or degraded**	
Rationale:	Primary water source is surface flow	Wetland is 0.5 to 5 acres, or <0.5 and connected
	Wetland floods or ponds	Adjacent land use is primarily developed uses
	Low wetland vegetation cover	No adjacent Water Quality Limited streams
Hydrologic Control:	**Impacted or degraded**	
Rationale:	Wetland is within 100 year floodplain	Dominated by emergent vegetation and ponding
	Wetland floods or ponds	Development downslope of wetland
	Wetland is 0.5 to 5 acres, or <0.5 and connected	Agriculture upslope of wetland
	Water has unrestricted flow out of wetland	
Education:	**Has educational uses**	
Rationale:	Wetland is open to the public	Public access to other habitats exist
	No visible hazards to public	Maintained public access point exists
	No intact fish or wildlife, but both functions not lost	Wetland is not limited mobility accessible

Junction City Wetlands Inventory

OFWAM Functions and Conditions Summary Sheet

Wetland Assessment Unit: CC

Wildlife Habitat:	**Provides habitat for some wildlife species**	
Rationale:	One Cowardin class with >5 species	Surface water connection to other wetland
	Dominated by emergent vegetation and ponding	No adjacent Water Quality limited streams
	Low interspersion	Adjacent land is primarily developed uses
	More than 1 acre of open water	Wetland buffer is less than 10%
	Surface water connection to water body	
Fish Habitat:	**Impacted or degraded**	
Rationale:	Less than 50% of stream is shaded	No adjacent Water Quality Limited streams
	Stream banks are extensively modified	Adjacent land use is primarily developed uses
	<10% of stream has instream structures	No fish present in stream
Water Quality:	**Impacted or degraded**	
Rationale:	Primary water source is surface flow	Wetland is 0.5 to 5 acres, or <0.5 and connected
	Wetland floods or ponds	Adjacent land use is primarily developed uses
	Low wetland vegetation cover	No adjacent Water Quality Limited streams
Hydrologic Control:	**Intact**	
Rationale:	Wetland is within 100 year floodplain	Dominated by emergent vegetation and ponding
	Wetland floods or ponds	Development downslope of wetland
	Wetland is 0.5 to 5 acres, or <0.5 and connected	Urban uses upslope of wetland
	Wetland has minor flow restrictions	
Education:	**Potential for education uses**	
Rationale:	Wetland is open to the public	Other habitats can be observed not accessed
	One or two visible hazards to public	Maintained public access point exists
	No intact fish or wildlife, but both functions not lost	Wetland is not limited mobility accessible

Junction City Wetlands Inventory

OFWAM Functions and Conditions Summary Sheet

Wetland Assessment Unit: CC-01

Wildlife Habitat:	**Provides diverse habitat for wildlife**	
Rationale:	More than one Cowardin class	Surface water connection to other wetland
	Dominated by emergent vegetation and ponding	No adjacent Water Quality limited streams
	Low interspersion	Adjacent land is primarily open space
	No unvegetated open water	Wetland buffer is between 10 and 40%
	Surface water connection to water body	
Fish Habitat:	**Impacted or degraded**	
Rationale:	Less than 50% of stream is shaded	No adjacent Water Quality Limited streams
	Stream banks are extensively modified	Adjacent land is primarily open space
	<10% of stream has instream structures	No fish present in stream
Water Quality:	**Intact**	
Rationale:	Primary water source is surface flow	Wetland is 0.5 to 5 acres, or <0.5 and connected
	Wetland floods or ponds	Adjacent land is primarily open space
	High wetland vegetation cover	No adjacent Water Quality Limited streams
Hydrologic Control:	**Impacted or degraded**	
Rationale:	Wetland is within 100 year floodplain	Dominated by emergent vegetation and ponding
	Wetland floods or ponds	Open space downslope of wetland
	Wetland is less than 0.5 acre and not connected	Urban uses upslope of wetland
	Water has unrestricted flow out of wetland	
Education:	**Has educational uses**	
Rationale:	Wetland is open to the public	Other habitats can be observed not accessed
	No visible hazards to public	Unmaintained public access point exists
	No intact fish or wildlife, but both functions not lost	Wetland is not limited mobility accessible

Junction City Wetland Inventory

OFWAM Functions and Conditions Summary Sheet

Wetland Assessment Unit: CC-02

Wildlife Habitat:	**Provides habitat for some wildlife species**	
Rationale:	More than one Cowardin class	No surface connection, but wetlands w/in 3 miles
	Dominated by emergent vegetation and ponding	No adjacent Water Quality limited streams
	Low interspersion	Adjacent land is primarily developed uses
	Between 0.5 and 1 acre of open water	Wetland buffer is between 10 and 40%
	No surface connection, but waterbody w/in 1 mile	
Fish Habitat:	**N/A**	
Rationale:	No connected river, stream, pond or lake	No connected river, stream, pond or lake
	No connected river, stream, pond or lake	No connected river, stream, pond or lake
	No connected river, stream, pond or lake	No connected river, stream, pond or lake
Water Quality:	**Impacted or degraded**	
Rationale:	Primary water source is surface flow	Wetland is 0.5 to 5 acres, or <0.5 and connected
	Wetland floods or ponds	Adjacent land use is primarily developed uses
	Low wetland vegetation cover	No adjacent Water Quality Limited streams
Hydrologic Control:	**Impacted or degraded**	
Rationale:	Wetland is within 100 year floodplain	Dominated by emergent vegetation and ponding
	Wetland floods or ponds	Development downslope of wetland
	Wetland is 0.5 to 5 acres, or <0.5 and connected	Agriculture upslope of wetland
	Wetland has minor flow restrictions	
Education:	**Not appropriate for educational uses**	

Junction City Wetlands Inventory

OFWAM Functions and Conditions Summary Sheet

Wetland Assessment Unit: CC-03

Wildlife Habitat:	**Provides habitat for some wildlife species**	
Rationale:	More than one Cowardin class	Surface water connection to other wetland
	Dominated by emergent vegetation and ponding	No adjacent Water Quality limited streams
	Low interspersion	Adjacent land is primarily developed uses
	Less than 0.5 acre of open water	Wetland buffer is less than 10%
	Surface water connection to water body	
Fish Habitat:	**Impacted or degraded**	
Rationale:	Less than 50% of stream is shaded	No adjacent Water Quality Limited streams
	Only portions of stream are modified	Adjacent land use is primarily developed uses
	<10% of stream has instream structures	No fish present in stream
Water Quality:	**Impacted or degraded**	
Rationale:	Primary water source is surface flow	Wetland is 0.5 to 5 acres, or <0.5 and connected
	Wetland floods or ponds	Adjacent land use is primarily developed uses
	Low wetland vegetation cover	No adjacent Water Quality Limited streams
Hydrologic Control:	**Intact**	
Rationale:	Wetland is within 100 year floodplain	Dominated by emergent vegetation and ponding
	Wetland floods or ponds	Development downslope of wetland
	Wetland is 0.5 to 5 acres, or <0.5 and connected	Urban uses upslope of wetland
	Water has unrestricted flow out of wetland	
Education:	**Not appropriate for educational uses**	

Junction City Wetlands Inventory

OFWAM Functions and Conditions Summary Sheet

Wetland Assessment Unit: CC-04

Wildlife Habitat:	**Provides diverse habitat for wildlife**	
Rationale:	More than one Cowardin class	Surface water connection to other wetland
	Dominated by woody vegetation	No adjacent Water Quality limited streams
	High interspersion	Adjacent land is primarily developed uses
	Between 0.5 and 1 acre of open water	Wetland buffer is between 10 and 40%
	Surface water connection to water body	
Fish Habitat:	**Impacted or degraded**	
Rationale:	Between 50% and 75% of stream is shaded	No adjacent Water Quality Limited streams
	Only portions of stream are modified	Adjacent land use is primarily developed uses
	10% to 25% of stream has instream structures	No fish present in stream
Water Quality:	**Intact**	
Rationale:	Primary water source is surface flow	Wetland is more than 5 acres
	Wetland floods or ponds	Adjacent land use is primarily developed uses
	High wetland vegetation cover	No adjacent Water Quality Limited streams
Hydrologic Control:	**Intact**	
Rationale:	Wetland is within 100 year floodplain	Dominated by woody vegetation
	Wetland floods or ponds	Development downslope of wetland
	Wetland is more than 5 acres	Agriculture upslope of wetland
	Wetland has minor flow restrictions	
Education:	**Not appropriate for educational uses**	

Junction City LWI

OFWAM Functions and Conditions Summary Sheet

Wetland Assessment Unit: EC

Wildlife Habitat:	**Provides habitat for some wildlife species**	
Rationale:	One Cowardin class with >5 species	Surface water connection to other wetland
	Dominated by emergent vegetation and ponding	No adjacent Water Quality limited streams
	Low interspersion	Adjacent land is primarily developed uses
	More than 1 acre of open water	Wetland buffer is less than 10%
	Surface water connection to water body	
Fish Habitat:	**Impacted or degraded**	
Rationale:	Less than 50% of stream is shaded	No adjacent Water Quality Limited streams
	Stream banks are extensively modified	Adjacent land use is primarily developed uses
	<10% of stream has instream structures	No fish present in stream
Water Quality:	**Impacted or degraded**	
Rationale:	Primary water source is surface flow	Wetland is 0.5 to 5 acres, or <0.5 and connected
	Wetland floods or ponds	Adjacent land use is primarily developed uses
	Low wetland vegetation cover	No adjacent Water Quality Limited streams
Hydrologic Control:	**Intact**	
Rationale:	Wetland is within 100 year floodplain	Dominated by emergent vegetation and ponding
	Wetland floods or ponds	Development downslope of wetland
	Wetland is 0.5 to 5 acres, or <0.5 and connected	Urban uses upslope of wetland
	Wetland has minor flow restrictions	
Education:	**Not appropriate for educational uses**	

Junction City LWI

OFWAM Functions and Conditions Summary Sheet

Wetland Assessment Unit: EC-01

Wildlife Habitat:	**Provides habitat for some wildlife species**	
Rationale:	More than one Cowardin class	Surface water connection to other wetland
	ominated by emergent vegetation and pondi	No adjacent Water Quality limited streams
	Low interspersion	Adjacent land is primarily developed uses
	More than 1 acre of open water	Wetland buffer is between 10 and 40%
	Surface water connection to water body	
Fish Habitat:	**Impacted or degraded**	
Rationale:	Less than 50% of stream is shaded	No adjacent Water Quality Limited streams
	Only portions of stream are modified	Adjacent land use is primarily developed uses
	<10% of stream has instream structures	Some non-salmonid fish species present in strean
Water Quality:	**Intact**	
Rationale:	Primary water source is surface flow	Wetland is 0.5 to 5 acres, or <0.5 and connected
	Wetland floods or ponds	Adjacent land use is primarily developed uses
	Low wetland vegetation cover	No adjacent Water Quality Limited streams
Hydrologic Control:	**Intact**	
Rationale:	Wetland is within 100 year floodplain	Dominated by emergent vegetation and ponding
	Wetland floods or ponds	Development downslope of wetland
	Wetland is 0.5 to 5 acres, or <0.5 and connect	Urban uses upslope of wetland
	Water has unrestricted flow out of wetland	
Education:	**Not appropriate for educational uses**	

Junction City LWI

OFWAM Functions and Conditions Summary Sheet

Wetland Assessment Unit: EC-02

Wildlife Habitat:	**Provides habitat for some wildlife species**	
Rationale:	One Cowardin class with <5 species	Surface water connection to other wetland
	Dominated by emergent vegetation and ponding	No adjacent Water Quality limited streams
	Low interspersion	Adjacent land is primarily developed uses
	No unvegetated open water	Wetland buffer is less than 10%
	Surface water connection to water body	
Fish Habitat:	**Impacted or degraded**	
Rationale:	Less than 50% of stream is shaded	No adjacent Water Quality Limited streams
	Only portions of stream are modified	Adjacent land use is primarily developed uses
	<10% of stream has instream structures	No fish present in stream
Water Quality:	**Intact**	
Rationale:	Primary water source is surface flow	Wetland is 0.5 to 5 acres, or <0.5 and connected
	Wetland floods or ponds	Adjacent land use is primarily developed uses
	High wetland vegetation cover	No adjacent Water Quality Limited streams
Hydrologic Control:	**Intact**	
Rationale:	Wetland is within 100 year floodplain	Dominated by emergent vegetation and ponding
	Wetland floods or ponds	Development downslope of wetland
	Wetland is 0.5 to 5 acres, or <0.5 and connected	Urban uses upslope of wetland
	Water has unrestricted flow out of wetland	
Education:	**Not appropriate for educational uses**	

Junction City Wetlands Inventory

OFWAM Functions and Conditions Summary Sheet

Wetland Assessment Unit: FC-01

Wildlife Habitat:	**Provides habitat for some wildlife species**	
Rationale:	One Cowardin class with <5 species	Surface water connection to other wetland
	Dominated by emergent vegetation	One or more Water Quality limited streams
	Low interspersion	Adjacent land is primarily agriculture
	No unvegetated open water	Wetland buffer is less than 10%
	Surface water connection to water body	
Fish Habitat:	**Impacted or degraded**	
Rationale:	Less than 50% of stream is shaded	One or more adjacent Water Quality limited streams
	Only portions of stream are modified	Adjacent land use is primarily agriculture
	<10% of stream has instream structures	Some non-salmonid fish species present in stream
Water Quality:	**Impacted or degraded**	
Rationale:	Primary water source is groundwater	Wetland is more than 5 acres
	Wetland floods or ponds	Adjacent land use is primarily agriculture
	High wetland vegetation cover	One or more adjacent Water Quality limited streams
Hydrologic Control:	**Intact**	
Rationale:	Wetland is within 100 year floodplain	Dominated by emergent vegetation
	Wetland floods or ponds	Agriculture downslope of wetland
	Wetland is more than 5 acres	Urban uses upslope of wetland
	Water has unrestricted flow out of wetland	
Education:	**Not appropriate for educational uses**	

Junction City LWI

OFWAM Functions and Conditions Summary Sheet

Wetland Assessment Unit: FC-02

Wildlife Habitat:	**Provides habitat for some wildlife species**	
Rationale:	More than one Cowardin class	Surface water connection to other wetland
	Dominated by emergent vegetation	No adjacent Water Quality limited streams
	Low interspersion	Adjacent land is primarily agriculture
	No unvegetated open water	Wetland buffer is less than 10%
	Surface water connection to water body	
Fish Habitat:	**Impacted or degraded**	
Rationale:	Less than 50% of stream is shaded	No adjacent Water Quality Limited streams
	Stream banks are extensively modified	Adjacent land use is primarily agriculture
	<10% of stream has instream structures	No fish present in stream
Water Quality:	**Intact**	
Rationale:	Precipitation or sheet flow	Wetland is more than 5 acres
	Wetland floods or ponds	Adjacent land use is primarily agriculture
	High wetland vegetation cover	One or more moderate Water Quality streams
Hydrologic Control:	**Impacted or degraded**	
Rationale:	Wetland is within 100 year floodplain	Dominated by emergent vegetation
	Wetland floods or ponds	Agriculture downslope of wetland
	Wetland is more than 5 acres	Agriculture upslope of wetland
	Water has unrestricted flow out of wetland	
Education:	**Not appropriate for educational uses**	

Junction City LWI

OFWAM Functions and Conditions Summary Sheet

Wetland Assessment Unit: FC-03

Wildlife Habitat:	**Provides habitat for some wildlife species**	
Rationale:	More than one Cowardin class	Surface water connection to other wetland
	Dominated by emergent vegetation and ponding	No adjacent Water Quality limited streams
	Low interspersion	Adjacent land is primarily agriculture
	Less than 0.5 acre of open water	Wetland buffer is less than 10%
	Surface water connection to water body	
Fish Habitat:	**Impacted or degraded**	
Rationale:	Less than 50% of stream is shaded	No adjacent Water Quality Limited streams
	Only portions of stream are modified	Adjacent land use is primarily agriculture
	<10% of stream has instream structures	No fish present in stream
Water Quality:	**Intact**	
Rationale:	Primary water source is precipitation	Wetland is 0.5 to 5 acres, or <0.5 and connected
	Wetland floods or ponds	Adjacent land use is primarily agriculture
	High wetland vegetation cover	One or more moderate Water Quality streams
Hydrologic Control:	**Impacted or degraded**	
Rationale:	Wetland is within 100 year floodplain	Dominated by emergent vegetation and ponding
	Wetland floods or ponds	Agriculture downslope of wetland
	Wetland is 0.5 to 5 acres, or <0.5 and connected	Agriculture upslope of wetland
	Wetland has minor flow restrictions	
Education:	**Not appropriate for educational uses**	

Junction City LWI

OFWAM Functions and Conditions Summary Sheet

Wetland Assessment Unit: WC

Wildlife Habitat:	**Provides habitat for some wildlife species**	
Rationale:	One Cowardin class with >5 species	Surface water connection to other wetland
	Dominated by emergent vegetation and ponding	No adjacent Water Quality limited streams
	Low interspersion	Adjacent land is primarily developed uses
	Less than 0.5 acre of open water	Wetland buffer is less than 10%
	Surface water connection to water body	
Fish Habitat:	**Impacted or degraded**	
Rationale:	Less than 50% of stream is shaded	No adjacent Water Quality Limited streams
	Stream banks are extensively modified	Adjacent land use is primarily developed uses
	<10% of stream has instream structures	No fish present in stream
Water Quality:	**Impacted or degraded**	
Rationale:	Primary water source is surface flow	Wetland is 0.5 to 5 acres, or <0.5 and connected
	Wetland floods or ponds	Adjacent land use is primarily developed uses
	Low wetland vegetation cover	No adjacent Water Quality Limited streams
Hydrologic Control:	**Intact**	
Rationale:	Wetland is within 100 year floodplain	Dominated by emergent vegetation and ponding
	Wetland floods or ponds	Development downslope of wetland
	Wetland is 0.5 to 5 acres, or <0.5 and connected	Urban uses upslope of wetland
	Wetland has minor flow restrictions	
Education:	**Potential for education uses**	
Rationale:	Wetland is open to the public	No access or observation potential
	No visible hazards to public	No access point to wetland exists
	No intact fish or wildlife, but both functions not lost	Wetland is not limited mobility accessible

Junction City LWI

OFWAM Functions and Conditions Summary Sheet

Wetland Assessment Unit: WC-01

Wildlife Habitat:	**Provides habitat for some wildlife species**	
Rationale:	One Cowardin class with >5 species	Surface water connection to other wetland
	Dominated by emergent vegetation and ponding	No adjacent Water Quality limited streams
	Low interspersion	Adjacent land is primarily developed uses
	No unvegetated open water	Wetland buffer is between 10 and 40%
	Surface water connection to water body	
Fish Habitat:	**Impacted or degraded**	
Rationale:	Less than 50% of stream is shaded	No adjacent Water Quality Limited streams
	Only portions of stream are modified	Adjacent land use is primarily developed uses
	<10% of stream has instream structures	No fish present in stream
Water Quality:	**Intact**	
Rationale:	Primary water source is surface flow	Wetland is 0.5 to 5 acres, or <0.5 and connected
	Wetland floods or ponds	Adjacent land use is primarily developed uses
	High wetland vegetation cover	One or more moderate Water Quality streams
Hydrologic Control:	**Impacted or degraded**	
Rationale:	Wetland is within 100 year floodplain	Dominated by emergent vegetation and ponding
	Wetland floods or ponds	Agriculture downslope of wetland
	Wetland is 0.5 to 5 acres, or <0.5 and connected	Urban uses upslope of wetland
	Wetland has minor flow restrictions	
Education:	**Not appropriate for educational uses**	

Appendix F. GIS Data Log

Junction City Local Wetland Inventory

GIS Data Log

GIS Data	Source/Date	Shapefile Type	Description
Aerial Photo (Color)	USDA Summer 2009	Extracted Imagery	Compressed County Mosaics (CCM) from the Summer 2009 NAIP (National Agriculture Imagery Program) flights. The Oregon Department of Administrative Services' Geospatial Enterprise Office (GEO) and Oregon State University collaborate to provide this data – one-meter resolution. Reprojected to Oregon Lambert projection by Randy Sounhein, GIS Coordinator, Department of State Lands. ftp://159.121.106.159/imagery/CCM2009/
Aerial Photo (Color)	USDA June 5, 2007	Extracted Imagery	2005 0.5 meter orthoimagery - A 9:1 compressed WGS84 mosaic derived from half-meter resolution color Digital Orthophoto Quadrangles (DOQ) of the entire state of Oregon from the summer of 2005 for multiple state agencies in Oregon.
City Limits	No Metadata – obtained from Junction City	Polygon	Likely obtained from: http://spatialdata.oregonexplorer.info/GPT9/catalog/search/search.page
UGB	No Metadata – obtained from Junction City	Polygon	Likely obtained from: http://spatialdata.oregonexplorer.info/GPT9/catalog/search/search.page
100- and 500- year floodplains	FEMA	Polygon	Q3 Flood data taken from FIRMS
Streams	Obtained from Junction City – no metadata provided	Line	
Lakes	Obtained from Junction City – no metadata provided	Polygon	
Roads	Obtained from Junction City – no metadata provided	Line	
Right-of-Way	Obtained from Junction City – no metadata provided	Polygon	
Tax Lots	Obtained from Junction City – no metadata provided	Polygon	
Zoning	Obtained from Junction City – no metadata provided	Polygon	
Comprehensive Plan Designation	Obtained from Junction City – no metadata provided	Polygon	
Select Waterbodies	OR BLM (Sept. 26, 2005)	Polygon	Extracted from Pacific North West Hydrography Framework: Sounds, bays, lakes, ponds, wetlands, reservoirs, inundation areas.
Soils	NRCS	Polygon	
Highways	Obtained from Lane County – no metadata - provided	Line	Likely obtained from: http://spatialdata.oregonexplorer.info/GPT9/catalog/search/search.page
Railroads	Obtained from Lane County – no metadata - provided	Line	Likely obtained from: http://spatialdata.oregonexplorer.info/GPT9/catalog/search/search.page
Signed Routes	ODOT	Line	Provides location of routes and cross-reference to ODOT highway numbers file, includes all applicable jurisdictions of roadways to give a complete picture of roadways in Oregon.
Hydrologic Unit Code (6th Field)	BLM/ USDA/NRCS	Polygon	http://navigator.state.or.us/sdl/data/shapefile/k24/hydro_units_6th.zip
Public Land Survey System	BLM	Polygon	http://www.geocommunicator.gov/blmMap/MapLSIS.jsp

Appendix G. DSL Wetland Determination Files

Junction City Local Wetland Inventory

DSL Wetland Determination Files

DSL Number	Decision Date	Legal (TRS/TL)	Location	Study Area	Wetland	Other Features	Size	Farmed	Decription
06-0682	12/28/2008	T15S R5W S36 TL 702 and east portion of 700	Hwy 99	NA	es	NA	53 ac	NA	Wastewater Treatment Lagoon Expansion
04-0250	4/6/2005	T15S R4W W31, TL 2400, 2500	Oaklea Drive N of High Pass Road	NA	es	NA	NA	NA	Temporary determination
04-0254	7/28/2004	T15S R4W S31 and 5W S36, TL 1800	Oaklea Drive N of High Pass Road	63 ac	es	1 ditch and 1 creek	20.89 ac	NA	3 wetlands, Tietzel Site Old 98-0220
03-0390	8/7/2003	T16S R04W S20 TL 100	4 mi S of Junction City on S side of Milliron Road between Hwy 99 railroad tracks	38 ac	es	1 ditch	5.67 ac	es	Booth Industrial Park
02-0613	12/31/2002	T15S R4W S32 TLs 8300 8400 2300 4400 4500 6700 6800 8000 T16S R4W S5 TLs 309, 101, 300, 4314	River Road at Hwy 99	2.2 ac	es	1 ditch	0.11 ac	NA	Only the ROW in each lot was investigated
01-0343	11/26/2001	T16S R4W S17 TL 201 504	E of Hwy 99 at Milliorn Rd, W of RR tracks	NA	es	ditches	1.42 ac	es	44.4 cy was removed for ditch
99-0278	1/25/2000	T15S R4W S32 TL 100 900	3 mi S of Harrisburg on River Road	200 ac	es	irrigation channel	50.06	es	Prior converted cropland
99-0208	7/6/1999	T15S R4W S32BD	9th Ave between Deal St Birch St	0.25 ac	es	6-ft wide creek	0.01 ac	No	Public ROW, trib to Flat Creek
98-0239	6/15/1998	T15S R5W S36 TL 500 T15S R4W S31 TLs 2400 2500	W side of Oaklea Drive, 0.9 m W of Hwy 99	263 ac	es	No	3.8 ac	es	Oklea Rd/Lemon Farm, adjacent to sewage ponds
97-0314	8/26/1997	T15S R4W S19, 29, 30, 32	Oaklea Drive - Junction 58/Pacific Hwy (99W) 1.5 mi section	1.5 mi.	es	open water/drainage	4.65 ac	No	11 wetlands (PF, PEM), chanelized segment of tributary to flat creek runs parallel to E side
90-0137	12/27/1990	T16S R4W S17 TLs 900, 1700, 1800	3 mi S of Junction City NE of intersection of 99E Milliron Rd	50 ac	es	ditches/swales	6.7 ac	es	Only wetland is bottom of ditches

Appendix H. Technical Staff and Qualifications

Tim Brooks, ASLA: Principal Environmental Planner
Project Role: Project Manager
Project Responsibilities: Wetland inventory, assessment; agency coordination

Tim has more than 20 years of experience managing State Goal 5 natural resource inventory and planning projects for local communities in Oregon. Tim managed wetland inventories for the cities of Albany, Corvallis, Damascus, Gresham, Newberg, Portland, Prineville, West Linn and Woodburn. In addition to project management, Tim has completed field investigations, wetland delineations and assessments, sensitive species surveys, and wildlife habitat assessments for both public and private clients throughout Oregon and Washington. For more that 12 years, Tim prepared inventories and developed conservation plans for wetland, stream and habitat resources for the City of Portland. Tim completed the DSL/Corps/USFWS Interagency Wetland Delineation Course in 1993. Beginning in 1995, Tim worked under the guidance of Andy Castelle and other professional wetland scientists, and has completed specialized courses in wetland vegetation and ecology.

Anita Cate Smyth, PWS: Wetland Scientist
Project Role: Senior Wetland Scientist
Project Responsibilities: Wetland determinations and assessments

Anita is a Professional Wetland Scientist with 15 years of experience in natural resource inventories, with emphasis on wetland delineation and permitting. She holds Professional Master's Degree in Environmental Sciences from Oregon State University. She spent two years at Clackamas County's Department of Transportation and Development, Engineering Section as a program manager and a resource for wetland and other environmental expertise. During her nine years at a multidisciplinary civil engineering firm, she expanded that technical and project management expertise through execution of numerous wetland mitigation site design projects, natural resource inventories, and riparian and wetland functional assessments as stand-alone projects and as part of Joint Permit Applications for specific actions. Prior to joining Winterbrook Planning, Anita formed Westbrook Science & Design, LLC, a woman-owned business focused on using her experience and talent on behalf of public and private clients in Oregon and Idaho.

Christine Robertson, AICP, LEED AP: Associate Planner
Project Role: GIS Technician
Project Responsibilities: Mapping

Christine has over five years of environmental planning and GIS experience. She holds a Master of Community Planning from the University of Cincinnati, where she received her GIS training. For her graduate thesis, she performed a green-roof build-out analysis for the university and quantified the resultant reduction in stormwater runoff, using GIS and Technical Release 55 (TR-55). During her professional career she has performed numerous GIS-based analyses including: buildable lands analyses, urban growth boundary expansion analyses and various environmental / social impact assessments.

Appendix I. References

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe, 1979. *Classification of wetlands and deepwater habitats of the United States*, U.S. Fish and Wildlife Service, Office of Biological Services, FWS/OBS-79/31. 103 pp.

Environmental Laboratory, 1987. *Corps of Engineers Wetlands Delineation Manual (Technical Report Y-87-1),* (U.S. Army Corps of Engineers).

Environmental Laboratory, 2008. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region. Technical Report ERDC/EL TR-08-13. U.S. Army Corps of Engineers Engineer Research and Development Center.

Federal Register, 1982. *Title 33: Navigation and Navigable Waters, Chapter 11, Regulatory Programs of the Corps of Engineers*, Vol. 47, No. 138, p3l810, US Government Printing Office, Washington, D.C.

Land Conservation and Development Commission, 1996. *Statewide Planning Goal 5. Amended Administrative Rules OAR 660, DIV 23*.

Oregon Department of Environmental Quality, 2007. *DEQ's 2004/2006 303(d) List of Water Quality Limited Waterbodies* (http://www.deq.state.or.us/wq/assessment/rpt0406/search.asp).

Oregon Department of State Lands, 2001. *Guidebook for Hydrogeomorphic (HGM)-based Assessment of Oregon Wetland and Riparian Sites I. Willamette Valley Ecoregion Riverine Impounding and Slope/Flats Subclasses.*

Oregon Department of State Lands, 2009 (amended). *Local Wetlands Inventory (LWI) Standards and Guidelines*. Oregon Administrative Rules (OAR) 141-086-0180 through 141-086-0240.

Patching, William. 1987. *Soil Survey of Lane County Area, Oregon*. U.S.D.A. Soil Conservation Service.

U.S.D.A., Natural Resource Conservation Service. 2009. *Hydric Soils List for Lane County Area*. (ftp://ftp-fc.sc.egov.usda.gov/MO1/hydric_pdf/oregon/OR637_hydric.pdf).