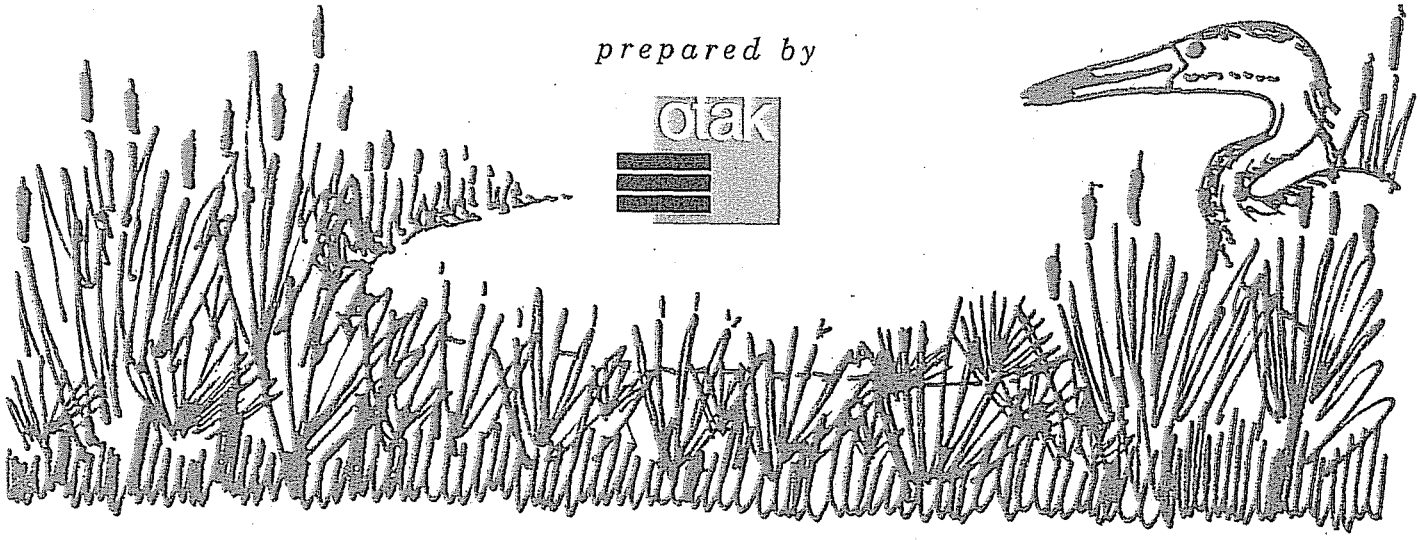
Local Wetland Inventory

for

City of St. Helens

APPROVED WETLANDS INVENTORY
Oregon Division of State Lands
Meets LWI standards
Date 5/28/99 Approved by Dan Field



prepared by

oak

CITY OF ST. HELENS, OREGON

LOCAL WETLAND INVENTORY

DECEMBER 21, 1998

Otak, Inc.
17355 SW Boones Ferry Rd.
Lake Oswego, OR 97035

Palsa, L.L.C.
522 SW 5th Avenue, Suite 1003
Portland, Oregon 97204

Table of Contents

Page

I. Introduction 1
A. Project Purpose & Need 1
B. Preparation of Local Wetland Inventory 1

II. Methods (LWI Development Process and Standards) 4
A. Review of Existing Data 4
B. Base Mapping 5
C. Field Verification 5
D. Final Maps 7

III. Study Area Conditions 8
A. Climate 8
B. Landforms. 8
C. Vegetation 9
D. Soil 10
E. Hydrology 12

IV. Study Area Summary 13
A. Dalton Lake 13
B. Frogmore Slough 13
C. Jackass Canyon 13
D. McNulty Creek 13
E. Milton Creek 14
F. Unnamed Creek A 14
G. Unnamed Creek B 14

V. Conclusion 16

VI. References 17

VII. List of Preparers 19

Appendices

Appendix A - Maps (Separately Bound)
Appendix B - Glossary of Terms & Scientific to Common Name Conversions
Appendix C - Wetland Number Conversion Chart
Appendix D - Wetland Summary Sheets
Appendix E – Desc. of Oregon Freshwater Wetland Assessment Methodology
Appendix F – OFWAM Results/Wetland Assessment Data Sheets
Appendix G - Wetland Data Sheets
Appendix H – Potentially Affected Tax Lots

I. Introduction

The City of St. Helens lies adjacent to the Columbia River, just within the easternmost boundary of Columbia County, Oregon. Located in an area of diverse natural resources, the citizens of St. Helens enjoy close proximity to the Columbia River, Scappose Bay, Sauvie Island, and the Oregon coast mountain range. In addition to these dominant natural features, numerous freshwater wetlands are found throughout the region, including areas located within the City of St. Helens' Urban Growth Boundary (UGB).

A. Project Purpose & Need

The presence of wetlands within the UGB creates both challenges and opportunities for the people of St. Helens. Wetland resources are protected by federal and state regulations, which are administered by the U.S. Army Corps of Engineers (COE) and the Oregon Division of State Lands (DSL), respectively (33 U.S.C. § 1344; OAR §§ 141-85-005 to 141-85-660). As regulated resources, impacts to wetlands must receive prior approval from the COE and DSL. In addition, as a condition of permit approval, unavoidable wetland impacts must be mitigated to off-set losses and to ensure compliance with the federal no net loss of wetlands rules (OAR §§ 141-85-101 to 141-85-180).

The City of St. Helens, in its efforts to effectively manage existing wetland resources and facilitate community development, commissioned preparation of this Local Wetland Inventory (LWI). In addition to the practical need for the LWI, the City of St. Helens initiated this study as the first step toward meeting Oregon Statewide Planning Goal #5, which requires that local governments identify and inventory natural resources within the areas under their jurisdiction.[1]

The goal of the LWI is to provide local planners and citizens with a general understanding of the wetland resources that exist within the UGB. This knowledge will allow users to identify where wetland resources are located; identify potential conflicts with development; and identify opportunities for resource enhancement for mitigation, recreational, educational, or habitat improvement purposes.

B. Preparation of the Local Wetland Inventory

The St. Helens LWI was prepared in two phases. The first phase was conducted in 1994-1995 and involved preliminary wetland mapping and data collection. The second phase, initiated in the spring of 1997, involved updating and finalizing the mapping and inventory data. The second phase also involved incorporation of the City's new digitized mapping of the UGB, which improved the accuracy of the final LWI product and made the information more useful to the public.

---

[1] This LWI has been prepared in accordance with the Oregon Division of State Lands (DSL) regulations (OAR 141-86-180 through 141-86-240).

1. *Scope of the LWI*

The defined study area for the City of St. Helens LWI includes all lands within the City's UGB (hereafter referred to as the "study area")(Figure 1). DSL's LWI regulations for a defined study area require that maps be prepared for all wetlands, including both natural and artificially constructed wetlands and waterbodies, greater than 0.5 acre in size (OAR § 141-86-210(8)). In addition, "wetlands greater than 0.5 acre" in size includes wetland mosaics[2] with a combined wetland/upland area that is greater than 0.5 acre, even if the area of the individual wetland is less than 0.5 acres (OAR 141-86-210(13)). Where possible, this LWI inventoried wetlands smaller than 0.5 acre; however, inclusion of smaller wetlands was not ubiquitous, and the LWI should not be used as a comprehensive inventory to wetlands less than 0.5 acres in size.

2. *Wetland Nomenclature*

DSL regulations require the use of distinctive identification codes for wetlands identified on the LWI maps (OAR 141-86-210(9)). For purposes of this LWI, each wetland area was assigned a unique location-based name and number. The wetlands were identified using the first letter (or the first two letters in the case of alphabetical duplication) found in the name of the watershed in which they occur, followed by a number. The wetlands were numbered in ascending order, starting with the wetland furthest up in the watershed, then proceeding downstream.[3]

3. *Classifying Wetlands*

All wetlands identified by the LWI must be classified by type using the U.S. Fish and Wildlife Service's *Classification of Wetlands and Deepwater Habitats of the United States* (the Cowardin system). The Cowardin wetland classification system is a method used for categorizing wetlands, based on their hydrologic characteristics, soils, and when relevant, the dominant plant community (Cowardin, 1979 and Appendix B).[4]

---

[2] A "wetland mosaic" is an area in which there are several small wetlands in close proximity to each other. For purposes of this LWI, when the area of a wetland mosaic is provided, both the entire area and the specific area of wetland within the mosaic are identified.

[3] This numbering method differs from the method used in Phase 1 of the LWI; however, it was selected to improve user satisfaction. A wetland number conversion chart has been provided so that any documentation prepared using the preliminary numbering system can be easily cross-referenced to the improved numbering protocol (Appendix C).

[4] The Cowardin classification breaks wetlands and deepwater habitats into the following five Systems:
1) Marine - Marine Systems are areas of open ocean overlying the continental shelf and coastline areas up to the high tide level; 2) Estuarine - Estuarine Systems consist of deepwater tidal habitats and adjacent tidal wetlands that have partly obstructed or sporadic access to ocean water and occasional dilution by freshwater runoff; 3) Riverine - Riverine Systems consist of all wetland and deepwater habitats contained within a channel containing water with ocean derived salts of less than 0.5%.; 4) Lacustrine - Lacustrine Systems are wetland or deepwater habitats of greater than 20 acres located in topographic depressions and damned river channels. Although this may include tidal areas, to be classified as Lacustrine, the salinity must less than 0.5%.; 5) Palustrine - Palustrine Systems include all nontidal wetlands dominated by trees, shrubs, persistent emergents, and emergent mosses or lichens in areas with salinity of less than 0.5%. Palustrine Systems also include wetlands lacking such vegetation that are less than 20 acres.

These Systems are divided into Subsystems, which break the wetlands and deepwater habitats down further by the type of submersion that exists. For Marine and Estuarine the subsystems consist of Subtidal and Intertidal, which refers to System being either continuously submerged or within the splash zone. The Riverine System has four Subsystems which refer to the gradient of the channel and the velocity of the flow of the water within that channel.

This LWI identified the following types of wetlands within the project area:

- Palustrine Forested Wetland;
- Palustrine Scrub/Shrub Wetland;
- Palustrine Emergent Wetland;
- Palustrine Rock Bottom Wetland;
- Lacustrine Littoral Wetland;
- Riverine Upper Perennial; and
- Riverine Intermittent.

These respective Subsystems are: *Tidal* (low gradient with fluctuating water velocity depending on tidal influences); *Lower Perennial* (low gradient and low water velocity); *Upper Perennial* (High gradient and high water velocity); and *Intermittant* (the channel contains flowing water for only part of the year). The Lacustrine System is divided into two Subsystems, Limnetic and Littoral, which describe deepwater habitat and wetland habitat respectively. The Palustrine System has no Subsystems.

The Subsystems are further divided by Classes, which classify wetlands and deepwater habitats by the composition of the earth under the submerged area, and when relevant by the dominant vegetation as well. The Classes are much the same for all of the Subsystems, consisting of various of the following: Rock Bottom; Unconsolidated Bottom; Aquatic Bed; Rocky Shore; Unconsolidated Shore, and Emergent Wetland. In addition, for Palustrine Systems and Estuarine Intertidal Systems there are the additional choices of Forested Wetland, Moss Lichen Wetland, and Scrub/Shrub Wetland.

II. Methods (LWI Development Process and Standards)

DSL's LWI regulations are very specific in describing the methodology to be used in preparing an LWI. The regulations carefully detail the information that must be provided by the LWI and the manner in which it must be gathered. This section of the LWI report describes how the information contained in this document was generated, pursuant to DSL regulations.

A. Review of Existing Data

The first task in development of an LWI is to review existing data on wetland resources within the project area. The LWI regulations require that specific sources of information be used in the development of every LWI (OAR 141-86-210(1)). The review of data from these resources provides the basis for the initial base mapping of the project area. Pursuant to DSL regulations, the following sources of information were utilized during preparation of the LWI:

1. Soil Survey and List of Hydric Soils

The *Soil Survey of Columbia County, Oregon* was examined to identify the soil types potentially present in the study area (USDA, 1986). This information was combined with the *Columbia County List of Hydric Soils* to locate areas where wetland soils might be present (USDA, 1989).

2. National Wetland Inventory

The St. Helens and Deer Island *National Wetland Inventory* (NWI) maps were examined to locate potential wetland areas. Although NWI maps are useful for providing preliminary information, they have limitations due to their minimum 2-acre resolution.

3. Soil Conservation Service Wetland Maps

The Soil Conservation Service provides information and mapping of soil and wetland conditions within agricultural areas. However, because the project area is comprised almost entirely of non-agricultural areas, the Soil Conservation Service wetland mapping was of limited use in preparation of this LWI.

4. Federal Emergency Management Agency Floodplain Maps

The relevant Federal Emergency Management Agency (FEMA) flood plain maps were examined to aid in identifying wetlands potentially influenced by Scappoose Bay and the Columbia River.

5. Other Local Wetland Inventories

Although no other LWIs have been prepared that would include portions of the project area, the City of St. Helens performed some initial mapping of open spaces and water resources during development of the City's Comprehensive Plan. This existing information was used to identify potential areas where wetlands may occur within the project area boundary.

6. *Resource Agencies*

Resource agencies, including the COE, DSL, the Oregon Department of Fish and Wildlife (ODFW), and the USFWS were consulted to obtain relevant information concerning potential wetland areas and habitat values within the project area.

7. *U.S. Army Corps of Engineers and Division of State Lands Files*

Determinations as to whether wetlands occur on a given property are frequently performed by the COE, DSL, and by private consultants. In addition, when a wetland impact permit application is submitted to the COE or DSL, the application is submitted with a wetland delineation report and associated mapping. As a result, both the COE and DSL have file records for a number of wetlands located within the City of St. Helens' UGB. These existing files were examined to locate previously identified wetlands within the study area.

8. *Aerial Photograph Interpretation*

The information collected regarding the potential presence of wetlands in the study area was overlaid on a 1"=400' scale aerial photograph of the study area (WAC, Inc., March, 1994). Two aerial photographs were then further examined to facilitate identification of wetland areas which may not have been identified by other means (March, 1994 and June, 1983).

9. *Supplemental Information*

In addition to the identified data sources, supplemental information regarding the presence of wetlands in the study area was collected. This included communication with property owners, examination of topographic maps, and personal knowledge based on previous field work within the project area.

B. *Base Mapping*

The information gathered during the review of existing data was used to generate a base map of the project area. The base map defined the seven hydrologic sub-basins that exist within the project area, as well as wetland areas, ponds, and lakes. In addition, by transferring the information listed above onto tax assessors maps, it was possible to add property boundaries and roads to the base map. The base maps were prepared at a scale of 1'=400'.

These base maps were then used to generate field maps, which contained the following: wetland and deepwater habitat information from the NWI; potential wetland areas from the City of St. Helens Comprehensive Planning efforts; areas identified as having hydric soils; wetland areas identified from aerial photographs; as well as all other areas identified as potential wetland sites.

C. *Field Verification*

The next stage in the LWI development process had a dual purpose; first, the base mapping previously generated was verified and enhanced and second, data on wetland connectivity and

functions was gathered. This data was collected to aid in wetland classification and preparation of a Functional Assessment, pursuant to the *Oregon Freshwater Wetland Assessment Methodology (OFWAM).*

1. *Verification of Base Mapping*

Based on the information gained from the base mapping, owners of property with suspected wetland areas were contacted and, where access permission was granted, the subject sites were examined by trained wetland ecologists. Where access permission was denied or access was not possible (ie., some wetlands along the edge of the Columbia River are only accessible by boat), wetland mapping was achieved through the interpretation of aerial photographs and topographic maps.

During the verification process, the field maps were used to create sketch maps that further refined the information available for the project. The identified sites were visited during the spring and summer of 1994 and in the summer of 1997. The availability of topographical data for the 1997 field verification enhanced the accuracy of these efforts.

2. *Wetland Data Gathering*

During the field verification process, data was collected in each wetland and at the wetland/upland boundary, in accordance with the methods described in the *1987 Corps of Engineers Wetland Delineation Manual* (1987 Manual). Data sheets prepared for each wetland are attached to this document as Appendix F. The 1987 Manual requires evidence of three parameters in order to identify an area as a wetland. Those parameters include: wetland hydrology; wetland soils; and wetland vegetation. Descriptions of each parameter and relevant criteria are presented below:

a. Vegetation

In order for an area to be classified as a wetland, a majority of the dominant plant species found on the site must be hydrophytes (plants adapted to life in saturated soil conditions). Plant species are categorized according to their likelihood of occurring in wetlands in the *National List of Plant Species That Occur in Wetlands: 1988 National Summary* and in the *1993 Supplement to the List of Plant Species That Occur in Wetlands: Northwest (Region 9).* The categories are: obligate (OBL); facultative wetland (FACW); facultative (FAC); facultative upland (FACU); and upland (UPL) (definitions provided in Appendix B). If greater than 50% of the dominant plant species are rated OBL, FAC, or FACW, the vegetation is considered to be hydrophytic.

b. Soils

The 1987 Manual defines wetland soil as soil that is "... saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation." Among the acceptable field evidence of wetland soils are gleying, soils with a chroma of 1, and soils with a chroma of 2 when accompanied by mottling (Manual, 1987). Chroma is the intensity of color and a low chroma indicates that the soil has

been subject to a lack of oxygen, which is frequently caused by water inundation. Mottles are recurring areas of soil that have a different color than the dominant soil color. In wetland soils, mottles are typically reddish in color, which indicates a fluctuating water table that allows the soil to be exposed to oxygen at certain times of the year, thus creating oxidation/reduction conditions.

c. Hydrology

In order for a site to have "wetland" hydrology, it must be inundated or saturated by water to the surface for at least 5% of the growing season (Manual, 1987). Areas that are inundated or saturated to the surface for 5 to 12.5% of the growing season *may* meet the requirement for wetland hydrology; however, areas that are inundated or saturated to the surface for over 12.5% of the growing season *always* have wetland hydrology (Manual, 1987).

D. Final Maps

The final LWI maps were created by entering the information from the on-site and off-site mapping into the City's computerized base map AutoCad files. Combining these sources of information resulted in final maps that include not only verified wetland information, but also property boundaries, watershed boundaries, roads, watercourses, and the project area boundary. The final maps have a geographical reference to the Public Land Survey, and a title block containing all of the requisite information. The individual maps were created at a 1"=100' scale, while the composite map was created at a 1"=800' scale (Appendix A). Guidance provided by the Oregon Freshwater Assessment Methodology (OFWAM) (Appendix D) was used to determine when an area should be mapped as an individual wetland or as multiple wetlands (Roth et al, 1996).

III. Study Area Conditions

A. Climate

The City of St. Helens experiences moderate temperature fluctuations. The warmest temperatures generally occur in July and August, with highs averaging in the 80s (degrees Fahrenheit). The coolest temperatures generally occur during December and January, with daily lows averaging in the low 30s (degrees Fahrenheit) (www.ocs.orst.edu).

The average annual precipitation in St. Helens is approximately 41 inches (www.ocs.orst.edu). Most of the rainfall occurs from October through May. On average, only 6.2 inches of rain falls during the months of June through September . The growing season generally lasts from mid-March through October.

B. Landforms

There are three distinct landforms within the study area:

1. Columbia River Floodplain

On the southeastern side of the study area, the dominant features are the floodplain of the Columbia River and Scappoose Bay. This area is generally flat and the soils have developed predominantly from alluvial (flood borne) material that was deposited in the floodplain (USDA, 1986). The lower lying portions of this area are still subject inundation by the Columbia River (USDA, 1986).

2. Rock Outcrops

Most of downtown St. Helens has been built either on rock outcrops or on areas with very shallow soils. The rock outcrops are made up of basalt, a type of volcanic rock which was exposed approximately 13,000 to 15,500 years ago when huge floods scoured the area (ORR, 1992). The floods were the result of ice dam formation in present day Missoula, Montana. Subsequent melting of the ice dams sent enormous volumes of water rushing down the Columbia River which, in St. Helens and other locations, scoured away loose material from the terraces adjacent to the river, leaving the underlying bedrock exposed.

Over time, a couple of drainageways have developed in the rocky outcrops characterizing the project area. The streams in these drainageways are fed by groundwater that discharges from fractures in the rocks and by surface water runoff.

3. Terraces

The western portion of the study area consists of a series of terraces and rolling hills above the Columbia River. Sediment was deposited on the terraces by the flooding Columbia River during the last ice age (USDA, 1986). Some of the material found on the rolling hills is older, wind blown sediment (USDA, 1986). Two major streams, McNulty Creek and Milton Creek, flow

through the terrace area. These streams, which begin in steep areas located outside of the project boundary, collect significant amounts of water from numerous small drainageways and swales on the terraces.

C. *Vegetation*

The floodplain, rocky outcrop, and terrace areas of the project site are characterized by distinct vegetation communities:

1. *Columbia River Floodplain*

The native vegetation in this area typically consists of mixed Oregon ash (*Fraxinus latifolia*), black cottonwood (*Populus trichocarpa*), and Pacific willow (*Salix lasiandra*) woodlands. In some of the higher elevation, stands of Oregon oak (*Quercus garryana*) are also present.

2. *Rock Outcrops*

The native vegetation on the rock outcrops consists primarily of Oregon oak trees, tall Oregon-grape (*Berberis aquilinum*), snowberry (*Symphoricarpos albus*), mosses, and ferns (Polypodiaceae).

3. *Terraces*

The native vegetation on the upland portions of the terraces consists of mixed Oregon oak and Douglas fir (*Pseudotsuga menziesii*) woodlands. The native vegetation in the drainageways and swales on the terraces consists primarily of Oregon ash trees, with slough sedge (*Carex obnupta*) as a ground cover.

D. *Soil*

Fourteen soil types have been mapped in the Columbia County Soil Survey as occurring within the study area (Figure 2). Most of the City of St. Helens is mapped as a complex of basalt rock outcrops and shallow xerumbrept soils. The area adjacent to the Columbia River is mapped as Sauvie silt loam. A variety of soils are mapped as occurring on the terraces to the west of St. Helens. The following are descriptions of each of the soil types mapped as occurring in the study area:

1. *Aloha Silt Loam (1A)*

Aloha silt loam is a deep, somewhat poorly drained soil that formed in alluvium on broad terraces. In areas that are not cultivated, the vegetation is Douglas fir, Oregon oak, common snowberry, tall Oregon-grape, willow, trailing blackberry (*Rubus ursinus*), rose (*Rosa* sp.), grasses and forbs. The surface layer of this soil is typically 7 inches thick and consists of dark brown (7.5YR 3/2) silt loam. The subsoil is typically mottled dark brown (7.5YR ¾) and dark yellowish brown (10YR 4/4) silt loam and loam.

2. *Aloha Variant Silt Loam (2)*

Aloha Variant is a deep, somewhat poorly drained soil that formed in alluvium on broad terraces. In areas that are not cultivated, the vegetation is Oregon oak, common snowberry, tall Oregon-grape, western hazel (Corylus cornuta), trailing blackberry, rose, grasses and forbs. The surface layer is typically 15 inches thick and consists of dark brown and brown (7.5YR 3/2 and 4/4) silt loam. The upper portion of the subsoil is brown (7.5YR 4/4)or yellowish brown (10YR 5/4) mottled silty clay loam.

3. *Cascade Silt Loam (10)*

Cascade silt loam is a moderately deep, somewhat poorly drained soil that formed in silty material on broad ridgetops and side slopes of low hills. In areas that are not cultivated, the vegetation is Douglas fir, western red cedar (*Thuja plicata*), red alder (*Alnus rubra*), grand fir (*Abies grandis*), western hemlock (*Tsuga heterophylla*), bigleaf maple (*Acer macrophyllym*), salal (*Gaultheria shallon*), and vine maple (*Acer circinatum*). The surface layer of the soil is typically 15 inches thick and consists of dark brown (7.5YR 3/2) silt loam. The upper portion of the subsoil consists of dark brown (7.5YR ¾) silt loam.

4. *Cornelius Silt Loam (14)*

Cornelius silt loam is a moderately deep, moderately well drained soil that formed in silty material on convex ridge tops and side slopes of low hills. In areas not cultivated, the vegetation consists of Douglas fir, Oregon oak, western red cedar, bigleaf maple, western hazel, Oregon-grape, and snowberry. The surface layer of the soil is typically very dark grayish brown and dark brown (10YR 3/2 & 3/3) silt loam. The upper portion of the subsoil consists of brown (10YR 4/3) silt loam.

5. *Dayton Silt Loam (16)*

Dayton silt loam is a deep poorly drained soil that formed in old alluvium on terraces. The native vegetation is Oregon ash, willow, snowberry, rose, grasses, and forbs. Dayton is listed as a hydric (wetland) soil. The surface layer of the soil is typically 12 inches thick and consists of mottled dark grayish brown (10YR 4/2) silt loam. The upper portion of the subsoil consists of dark grayish brown (10YR 4/2) clay.

6. *Dowde Silt Loam (19)*

Dowde silt loam is a deep well drained soil that formed in colluvium derived from igneous material on active side slopes of mountains. The native vegetation includes Douglas fir, western red cedar, western hemlock, red alder, vine maple, Oregon-grape, salal, and swordfern (*Polystichum munitum*). The surface layer is typically 5 inches thick and consists of dark reddish brown (5YR 3/3) silt loam. The upper portion of the subsoil is reddish brown (5YR 4/3) silt loam.

7. *Latourell Silt Loam (27)*

Latourell silt loam is a deep well drained soil that formed in alluvium on broad valley terraces. The native vegetation is Oregon oak, Douglas fir, bigleaf maple, western hazel, snowberry, grasses, and forbs. The surface layer of the soil is typically 9 inches thick and consists of dark brown (10YR 3/3) silt loam. The upper portion of the subsoil consists of dark brown and brown (7.5YR ¾ & 4/4) silt loam.

8. *McBee Silt Loam (31)*

McBee silt loam is a deep moderately well drained soil that formed in silty alluvium on high floodplains. The native vegetation is Douglas fir, black cottonwood, Oregon ash, willow, grasses, and forbs. The surface layer of this soil is typically 26 inches thick and consists of very dark grayish brown and dark brown (10YR 3/2 & 3/3) silt loam.

9. *Quafeno Loam (39)*

Quafeno is a deep moderately well drained soil that formed in silty alluvium on terraces. The native vegetation is Douglas fir, Oregon oak, tall Oregon-grape, snowberry, rose, grasses, and forbs. The surface layer of the soil is typically 11 inches thick and consists of dark brown (10YR 3/3) loam. The upper portion of the subsoil is brown (10YR 4/3) silt loam.

10. *Quatama Silt Loam (40)*

Quatama silt loam is a deep moderately well drained soil that formed in silty alluvium on broad terraces. The native vegetation is Douglas fir, Oregon oak, snowberry, tall Oregon-grape, rose, grasses, and forbs. The surface layer of the soil is typically 4 inches thick and consists of dark brown (10YR 3/3) silt loam. The upper portion of the subsoil is dark brown and dark yellowish brown (10YR 3/3 & 4/3) silt loam.

11. *Rock Outcrops-Xerumbrepts Complex (45)*

This soil mapping unit is on rock based terraces where the slope is 0 to 10 percent. Approximately 50 percent of this mapping unit consists of rock outcrops, which are characterized as exposed areas of basalt. Mosses and lichens grow on the rock outcrops. The remainder of this mapping unit consists of xerumbrepts and inclusions of other soil types. Xerumbrepts are shallow well drained soils that formed in alluvium. The depth to bedrock ranges from 10 to 20 inches. There is no typical profile for this soil.

12. *Sauvie Silt Loam (46)*

Sauvie silt loam is a deep, poorly drained soil that formed in silty alluvium on floodplains of the Columbia River. The native vegetation is black cottonwood, Oregon oak, Oregon ash, snowberry, rose, grasses, and forbs. Sauvie silt loam is a hydric (wetland) soil. The surface layer is typically 10 inches thick and consists of very dark grayish brown (10YR 3/2) silt loam. The subsoil is very dark gray (10YR 3/1) mottled silty clay loam.

13. *Wollent Silt Loam (68)*

Wollent is a deep poorly drained soil that formed in silty alluvium on minor drainageways and swales of valley terraces. The native vegetation is typically Oregon oak, willow, Oregon ash, snowberry, rose, grasses, and forbs. Wollent silt loam is a hydric (wetland) soil. The surface layer of this soil is typically 10 inches thick and consists of very dark grayish brown (10YR 3/2) silt loam. The subsoil is grayish brown (10YR 5/2) mottled silt loam.

14. *Xerochrepts (70)*

Xerochrepts are deep somewhat poorly drained soils that formed in colluvium and alluvium on long narrow escarpments along creeks. The native vegetation on this soil type is Douglas fir, Oregon oak, bigleaf maple, western hazel, snowberry, trailing blackberry, rose, forbs, and grasses. There is no typical profile for this mapping unit.

E. Hydrology

The hydrology of the study area is heavily influenced by three factors, including; the Columbia River; the shallow depth to bedrock; and the eastern flank of the Oregon coast mountain range.

1. *Columbia River*

In the southeastern portion of the study area, fluctuations in the water level of the Columbia River and Scappoose Bay directly determine the water table elevations in adjacent areas. Some portions of the Columbia River floodplain are subject to yearly flooding, while others are only subject to flooding during high water years.

2. *Shallow Depth to Bedrock*

In the downtown portion of the City of St. Helens, the shallow depth to bedrock heavily influences the hydrology. In some areas of impermeable bedrock, water is perched on the ground surface during the wet season (winter and spring). These areas tend to dry up rapidly once the rains have ended. In areas of more permeable bedrock, the rainwater infiltrates and this water is then discharged from fissures into other areas. The areas where groundwater is discharged tend to be flooded for significant portions of the year and some are flooded for the entire year.

3. *Eastern Flank of Oregon Coast Range*

In the western portion of the study area, the hydrology is heavily influenced by the hills that lie to the west of the study area. Water collects in these hills and runs off to form the two major streams that flow through town (McNulty Creek and Milton Creek). In addition, precipitation that falls on these hills percolates into the soil and raises the groundwater table elevation, which has resulted in the formation of numerous seeps in the western portion of the study area.

IV. Study Area Summary

The City of St. Helens' UGB includes approximately 4,700 acres, of which approximately 443 acres are wetland. There are seven distinct watersheds within the study area. Each watershed ultimately flows into either the Columbia River or Scappoose Bay. The only exception is the Frogmore Slough watershed, which terminates in the City of St. Helens' sewage treatment lagoon (Appendix A). A summary of wetland types found in each watershed is provided in Table 1; Table 2 provides a summary of the wetland area and classification for each wetland within the study area. Brief descriptions of each watershed are provided below:

A. Dalton Lake

The Dalton Lake watershed, located in the northwestern portion of the UGB, contains perhaps the most interesting wetlands, from a scientific standpoint, of any of the watersheds in the study area. They are interesting because they have formed in areas where there is little or no soil. Some of these wetlands are inundated for most of the year, because of groundwater discharge from fissures in the bedrock. Others are inundated for only a short period in the spring, because they receive most of their water from overland runoff and direct precipitation.

B. Frogmore Slough

This watershed, located in the eastern portion of the UGB, contains a small wetland associated with the stream that flows into the City of St. Helens' sewage lagoon, the sewage lagoon, and a wetland along the bank of the Columbia River. Frogmore Slough itself no longer exists, as it was excavated to form the City's sewage lagoon in the 1970s.

C. Jackass Canyon

Jackass Canyon, located between Dalton Lake and Frogmore Slough, contains only a few small wetlands and they are primarily confined to the bottom of the canyon. The wetland areas are limited by the steep bedrock side slopes which surround the canyon and by the development that has occurred around the canyon. Most of the wetlands in this watershed have been disturbed by human activities, including sewer line and road construction, and historic grazing practices.

D. McNulty Creek

The McNulty Creek watershed, which forms a band running from the northwest corner of the UGB to Scappoose Bay in the south, is the largest watershed in the study area. McNulty Creek contains the greatest number of wetlands and the largest area of wetlands of any of the seven watersheds. There are a number of isolated wetlands, which have formed primarily in the relatively flat terraces found in this portion of the study area, located in the western portion of this watershed. The McNulty Creek watershed also contains the largest area of forested wetlands of any of the watersheds. This is primarily the result of wetland MC-25 which contains over 47 acres of forested wetland.

E. Milton Creek

While Milton Creek, which is located just west of McNulty Creek in the southern part of the UGB, is the largest stream in the study area, its watershed contains a relatively small number of wetlands and most of those wetlands are adjacent to Scappoose Bay. The northern and western portions of the Milton Creek watershed consist of a rather hilly area, which is not conducive to the development of wetlands because of the rapid water runoff. Bedrock is very close to the surface in the southern and eastern portions of the Milton Creek watershed.

F. Unnamed Creek A

The Unnamed Creek A watershed is located in the southwestern corner of the UGB. The main wetland in this small watershed is located at the mouth of the creek. A trail system, which provides educational and recreational opportunities, has been built through this wetland.

G. Unnamed Creek B

This small watershed, located between Milton Creek and Unnamed Creek A, contains a relatively large area of wetland, solely because it includes a couple of large wetlands adjacent to Scappoose Bay. These large wetlands are present primarily because of the bay and the associated high water table, and thus are not heavily influenced by Unnamed Creek B.

Table 1. Summary of Wetland Classes by Watershed

	Wetland Classification *							
Watershed	**PFO**	**PSS**	**PEM**	**PRB**	**L2**	**R3**	**R4**	**Total Acreage**
Dalton Lake	27.0	19.9	15.6	4.1	0	0	<0.1	**66.7**
Frogmore Slough	3.2	1.5	3.3	0	38.4	0	0	**46.3**
Jackass Canyon	6.1	0.6	0.2	0	0	0	0	**6.9**
McNulty Creek	73.7	3.8	86.5	0	0	14.6	0	**178.5**
Milton Creek	28.2	0	21.2	0	0	30.4	0	**79.8**
Unnamed Creek A	3.4	0	4.7	0	0	0	0	**8.1**
Unnamed Creek B	21.9	0.3	34.2	0	0	0	0	**56.4**
Total Acreage	**163.5**	**26.1**	**165.7**	**4.1**	**38.4**	**45.0**	**<0.1**	**~442.7**

PFO=PALUSTRINE FORESTED WETLAND;
PSS=PALUSTRINE SCRUB/SHRUB WETLAND;
PEM=PALUSTRINE EMERGENT WETLAND;
PRB=PALUSTRINE ROCK BOTTOM WETLAND;
L2=LACUSTRINE LITTORAL WETLAND;
R3=RIVERINE UPPER PERENNIAL; and
R4=RIVERINE INTERMITTENT.

Table 2 –Local Wetland Inventory Data Summary

Wetland	Approx. Acres	Classification*	Wetland	Approx. Acres	Classification*
D-01	0.6	PEM	MC-11	1.2	PEM
D-02	3.4	PFO	MC-12	10.5	R3
D-03	0.8	PSS	MC-13	0.6	PFO
D-04	0.3	PSS	MC-14	1.2	PEM
D-05	0.1	PSS	MC-15	0.8	PEM
D-06	2.2	PSS	MC-16	1.5	PEM
D-07	0.6	PEM	MC-17	2.5	PEM
D-08	1.0	PSS	MC-18	0.5	PEM
D-09	2.3	PEM	MC-19	2.8	PEM
D-10	2.9	PRB	MC-20	2.1	PFO
D-11	2.3	PFO/PRB	MC-21	1.5	PFO
D-12	0.2	PFO	MC-22	2.4	PFO
D-13	0.5	PFO	MC-23	2.7	PEM
D-14	<0.1	R4	MC-24	2.9	PEM
D-15	0.6	PFO	MC-25a	17.9	PFO
D-16	36.3	PFO/PSS/PEM	MC-25b	26.3	PFO
D-17	5.4	PFO	MC-25c	3.0	PFO
D-18	1.4	PFO	MC-25d	61.6	PEM
D-19	0.5	PSS	MC-26	1.2	PEM
D-20	0.6	PFO	MI-01	29.5	R3
D-21	1.0	PFO	MI-02	0.8	R3
D-22	0.6	PFO	MI-03	2.7	PEM
F-01	0.2	PSS	MI-04	0.2	PFO
F-02	1.3	PSS	MI-05	4.0	PFO
F-03	38.4	L2	MI-06	0.1	PFO
F-04	6.5	PFO/EM	MI-07	16.0	PEM
J-01	0.4	PSS	MI-08	2.5	PFO
J-02	0.2	PEM	MI-09	0.1	PFO
J-03	4.7	PFO	MI-10	16.5	PFO
J-04	0.3	PSS	MI-11	0.4	PFO
J-05	0.8	PFO	MI-12	0.6	PFO
J-06	0.5	PFO	MI-13	0.7	PEM
MC-01	2.3	PFO	MI-14	1.9	PEM
MC-02	2.5	PEM	MI-15	3.7	PFO
MC-03a	3.8	PSS	UA-01	4.7	PEM
MC-03b	0.7	PFO	UA-02	3.4	PFO
MC-04	1.2	PEM	UB-01	1.4	PEM
MC-05	0.8	PFO	UB-02	0.9	PFO
MC-06	0.1	PEM	UB-03	0.3	PSS
MC-07	0.2	PEM	UB-04	2.5	PEM
MC-08	3.3	PEM	UB-05a	11.6	PFO
MC-09	4.1	R3	UB-05b	30.3	PEM
MC-10	0.4	PEM	UB-06	9.4	PFO

* PFO=PALUSTRINE FORESTED WETLAND; PSS=PALUSTRINE SCRUB/SHRUB WETLAND; PEM=PALUSTRINE EMERGENT WETLAND; PRB=PALUSTRINE ROCK BOTTOM WETLAND; L2=LACUSTRINE LITTORAL WETLAND; R3=RIVERINE UPPER PERENNIAL; R4=RIVERINE INTERMITTENT.

V. Conclusion

Once this LWI and the accompanying Functional Assessment have received approval from DSL, the next phase of the wetland planning process will involve identification of locally significant wetlands (OAR §§ 141-86-300 to 141-86-350). Locally significant wetlands are "those wetland sites that exhibit characteristics that are pertinent to community planning decisions made at a local scale...". The identification of locally significant wetlands will complete the Goal #5 wetland inventory process for the City of St. Helens.

This will not; however, signal the end of the utility of the LWI. The LWI will continue to play an important role in the City of St. Helens' planning process for years to come. It will provide a useful tool for guiding and assisting development within the St. Helens UGB. It will assist the City in identifying areas where development needs and natural resources values are likely to come in conflict, and it will help to identify potential resolutions to those conflicts. The LWI will also help local citizens and property owners to make decisions regarding their properties, by providing them with information in the early stages of project planning, rather than after project development has begun and significant financial investments have been made.

VI. 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. Publication FWS/OBS-79/31.

David Smith & Assoc. 1983. *Orthophoto Map*

Environmental Laboratory. 1987. *Corps of Engineers Wetland Delineation Manual.* U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS. Technical Report Y-87-1.

Hitchcock, C. Leo & Arthur Cronquist. 1973. *Flora of the Pacific Northwest.* University of Washington Press. Seattle, Washington.

National Wetland Inventory. 1989. *National Wetland Inventory Map - Deer Island, Oreg.-Wash. Quad.*

National Wetland Inventory. 1988. *National Wetland Inventory Map - St Helens, Oreg.-Wash. Quad.*

Oregon Administrative Rules. 1994. *Local Wetland Inventory (LWI) Standards and Guidelines.* OAR 141-86-180 through 141-86-240

Orr, Elizabeth et al., 1992. *Geology of Oregon, 4th Ed.* Kendall/Hunt Publishing. Dubuque, Iowa

Pojar, Jim & Andy MacKinnon. 1994. *Plants of the Pacific Northwest Coast.* Lone Pine Publishing. Redmond, Washington

Reed, P.B., Jr. 1988. *National List of Plant Species That Occur in Wetlands: Northwest (Region 9).* U.S. Fish and Wildlife Service Biological Report 88(26.9).

Reed, P.B., Jr. 1993. *1993 Northwest Supplement (Region 9) National List of Plant Species That Occur in Wetlands.* Supplement to U.S. Fish and Wildlife Service Biological Report 88(26.9).

Roth, Emily et. al. 1996. *Oregon Freshwater Assessment Methodology (OFWAM).* Oregon Division of State Lands.

Reed, P.B., Jr. 1988. *National List of Plant Species That Occur in Wetlands: Northwest (Region 9).* U.S. Fish and Wildlife Service Biological Report 88(26.9).

U.S.D.A. Soil Conservation Service. 1986. *Soil Survey of Columbia County, Oregon*

U.S.D.A. Soil Conservation Service. 1989. *Hydric Soils of Columbia County, Oregon.*

U.S.D.A. Soil Conservation Service., 1994. *National Food Security Act Manual 3rd Ed.* March 1994.

U.S.G.S. 1990. *St. Helens, OR-WA*

www.ocs.orst.edu/pub_ftp/climate_data/mme/mme7466.html

WAC, Inc. *1994 Air Photo.*

VII. List of Preparers

City of St. Helens

Mr. Brian Little
City of St. Helens, City Administrator

Mr. Warren "Skip" Baker
City of St. Helens, Planning Director

Otak, Inc.

Mr. Don Hanson
Principal In Charge
Landscape Architecture and Land Use Planning

Mr. John Lee
Wetland Specialist
Registered Landscape Architect, Oregon & California

PALSA, L.L.C.

Michelle Wilson (Manager)
Natural Resource Specialist
BS Environmental, Population and Organismic Biology, Graduate Studies, Limnology

Andrew Solomon
Wetland Ecologist
MS Environmental Science

Kevin Halsey
Regulatory Specialist
JD - Lewis and Clark College, Northwestern School of Law, Environmental Law Certificate.

Jason Smith
Stream Ecologist
BS Fisheries Biology

Appendix A

(LWI MAPS) – Separately Bound

Appendix B
(Glossary of Terms)

Appendix B. Glossary of Terms & Abbreviations

Alluvium - Sediment deposited by the movement of water.

Clay - Particles with a diameter of less than 0.002 mm.

Colluvium - Sediment deposited by gravitational movement downhill.

Cowardin Wetland Classification - This wetland classification system was developed in the late 1970s in order to categorize wetlands based on their plant community, hydrology, soil. The following classifications were used during the LWI:

PFO - Palustrine Forested Wetland
PSS - Palustrine Scrub/Shrub Wetland
PEM - Palustrine Emergent Wetland
PRB- Palustrine Rock Bottom Wetland
L2 - Lacustrine Littoral Wetland
R3 - Riverine Upper Perennial
R4 - Riverine Intermittent

Emergents - Erect, rooted, non-woody plants that can tolerate flooding but that cannot tolerate being submerged for extended periods (ex. cattails, reeds, and bulrushes)

Emergent Wetland - A wetland in which emergent vegetation provides the dominant cover.

Facultative Species (FAC) - Plants that are equally likely to occur in wetlands (estimated probability of occurrence between 34% and 67%) and non-wetlands.

Facultative Upland Species(FACU) - Plant that usually occurs in non-wetlands (estimated probability of occurrence between 67% and 99%), but are occasionally found in wetland areas.

Facultative Wetland Species (FACW) - Plants that usually occur (an estimated probability of occurrence between 67% and 99%) in wetlands, but are occasionally found in non-wetland areas.

Forested Wetland - A wetland in which plants taller than 20 feet provide the dominant cover.

Growing Season - The growing season is generally defined as the portion of the year during which the soil temperature at 19.7 inches below the ground surface is above biologic zero (5 degrees C).

Intermittent Stream - A stream that, under average conditions, dries up a some time of the year due a natural lack of water.

Lacustrine - Open water areas greater than 20 acres in size or more than 6.6 feet deep.

Littoral - All Lacustrine wetlands less than 6.6 feet deep.

Loam - Loam is a soil material that consists of 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Moderately Well Drained Soil - Moderately well drained soils are wet close enough to the surface or long enough that planting or harvesting operations or yields of some field crops are adversely affected unless artificial drainage is provided.

Obligate Wetland Species (OBL) - Plant that occurs almost always (estimated probability of occurrence >99%) in wetlands under natural conditions.

Palustrine Wetlands - All non-tidal wetlands dominated by trees, shrubs, and persistent emergent herbaceous plants. Includes wetlands lacking vegetation but smaller than 20 acres and less than 6.6 feet deep.

Perennial Stream - A stream that flows year round.

Poorly Drained Soil - Poorly drained soil commonly are so wet at or near the surface during a considerable part of the year that field crops cannot be grown under natural conditions.

Riparian - Of, or relating to, the banks of a natural watercourse

Sand - Particles between 0.05 and 2.0 mm in diameter.

Scrub/Shrub Wetland - A wetland in which shrubs and woody plants less than 20 feet tall provide the dominant cover.

Silt - Particles between 0.002 and 0.05 mm in diameter.

Silt Loam - Silt loam is a soil material that consists of 50 percent or more silt particles and 12 to 27 percent clay particles, or 50 to 80 percent silt particles and less than 12 percent clay.

Silty Clay Loam - Silty clay loam is a soil material that consists of 27 to 40 percent clay particles and 20 percent or less sand particles.

Subsoil - The subsoil is the portion of the soil below the surface layer.

Somewhat Poorly Drained Soil - Soils that are classified as somewhat poorly drained are wet close enough to the surface or long enough that planting or harvesting operations or crop growth is markedly restricted unless artificial drainage is provided.

Surface Layer - The surface layer of soil is defined as the portion of the soil typically moved during plowing of the soil or an equivalent depth of soil in uncultivated areas. It typically ranges from 4 to 10 inches in depth from the ground surface.

Upland Species(UPL) - Plants that occurs almost always (estimated probability of occurrence >99%) in non-wetlands under natural conditions.

Watershed - The area drained by a river or stream.

Well Drained Soils - These soils have intermediate water holding capacity. They retain optimum amounts of moisture, but they are not wet close enough to the surface or long enough during the growing season to adversely affect crop yields.

Wetland - Those areas that are inundated or saturated by surface of groundwater at a frequency or duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wetland Enhancement - The alteration or management of a wetland to improve certain functions.

Wetland Functions - A characteristic action or behavior associated with a wetland that contributes to a larger ecological condition such as wildlife habitat or water quality.

Appendix B. Scientific Name to Common Name Conversion Chart

Scientific Name	Common Name	Wetland Indicator Status*	Layer
Acer macrophyllum	Big-leaf maple	FacU	Overstory
Agrostis alba	bentgrass	Fac	Ground Cover
Agrostis tenuis	Bentgrass	Fac	Ground Cover
Alisma plantago-aquatica	Water-plantain	Obl	Ground Cover
Alnus rubra	Red alder	Fac	Overstory
Alopecurus pratensis	Meadow foxtail	FacW	Ground Cover
Amelanchier alnifolia	Pacific serviceberry	FacU	Overstory
Athyrium filix-femina	Lady fern	Fac	Ground Cover
Camassia quamash	Common camas	FacW	Ground Cover
Carex obnupta	Slough sedge	Obl	Ground Cover
Cirsium vulgare	Bull thistle	FacU	Ground Cover
Cornus stolonifera	Red-osier dogwood	FacW	Understory
Corylus cornuta	Hazelnut	FacU	Understory
Crataegus monogyna	Common hawthorn	FacU+	Overstory
Cytisus scoparius	Scotch broom	NL	Understory
Deschampsia cespitosa	Tufted hairgrass	FacW	Ground Cover
Eleocharis palustris	Common spikerush	Obl	Ground Cover
Eleocharis sp.	Spikerush species	FacW-Obl	Ground Cover
Equisetum sp.	Horsetail species	Fac-Obl	Ground Cover
Festuca rubra	Red fescue	Fac+	Ground Cover
Festuca spp.	Fescue species	?	Ground Cover
Fraxinus latifolia	Oregon ash	FacW	Overstory
Geum macrophyllum	Large-leaved avens	FacW-	Ground Cover
Holcus lanatus	Velevt-grass	Fac	Ground Cover
Hydrophyllum tenuipes	Pacific waterleaf	NL(Fac)	Ground Cover
Juncus effusus	Soft rush	FacW	Ground Cover
Ludwigia palustris	Marsh seedbox	Obl	Ground Cover
Montia sp.	Montia species	?	Ground Cover
Myosotis sp.	Forget-me-not species	?	Ground Cover
Myriophyllum hippuroides	Western water-millfoil	Obl	Ground Cover
Nuphar polysepalum	Yellow pond-lilly, spatterdock	Obl	Ground Cover
Oemleria cerasiformis	Indian-plum/Oso-berry	FacU	Understory
Oenanthe sarmentosa	Pacific water-parsley	Obl	Ground Cover
Phalaris arundinacea	Reed canarygrass	FacW	Ground Cover
Physocarpos capitatus	Pacific ninebark	FacW-	Understory
Polystichum munitum	Swordfern	FacU	Ground Cover
Popoulus trichocarpa	Black cottonwood	Fac	Overstory
Pseudotsuga menziesii	Douglas fir	FacU	Overstory
Pteridium aquilinum	Bracken fern	FacU	Ground Cover
Quercus garryana	Oregon oak	NL	Overstory

Scientific Name	Common Name	Wetland Indicator Status*	Layer
Ranunculus repens	Creeping buttercup	FacW	Ground Cover
Rhamnus purshiana	Cascara	Fac-	Overstory
Rosa gymnocarpa	Baldhip rose	FacU	Understory
Rosa sp.	Rose species	FacU-Fac	Understory
Rubus discolor	Himalayan blackberry	FacU	Understory
Rubus spectabilis	Salmonberry	Fac+	Understory
Rubus ursinus	Trailing blackberry	FacU	Understory
Rumex crispus	Curly dock	Fac+	Ground Cover
Rumex sp.	Dock species	?	Ground Cover
Sagitaria latifolia	Wapato	Obl	Ground Cover
Salix lasiandra	Pacific willow	FacW+	Overstory
Salix sp.	Willow species	?	Understory
Sambucus caerula	Blue elderberry	FacU	Understory
Sambucus racemosa	Red elderberry	FacU	Understory
Sambucus sp.	Elderberry species	FacU	Understory
Scirpus acutus	Hardstem bulrush	Obl	Ground Cover
Solanum dulcamara	Deadly nightshade	Fac+	Ground Cover
Spiraea douglasii	Spiraea	FacW	Understory
Symphoricarpos albus	Snowberry	FacU	Understory
Thuja plicata	Western red cedar	Fac	Overstory
Typha latifolia	Cattail	Obl	Ground Cover
Urtica dioica	Stinging nettle	Fac+	Ground Cover
Veronica anagalis-aquatica	Water speedwell	Obl	Ground Cover
Veronica sp.	Brooklime species	?	Ground Cover

* See Glossary for definitions; ? Indicates that status could not be determined.

Appendix C

(Wetland Number Conversion Chart)

Appendix C. Wetland Number Conversion Chart

Previous Wetland Number	New Number
1	Lumped with 2, 106 and 4 into D-16
2	Lumped with 1, 106 and 4 into new number D-16
3	D-17
4	Lumped with 2, 106 and 1 into new number D-16
5	D-15
6	D-14
7	Lumped with 8 into D-13
8	Lumped with 7 into D-13
9	D-11
10	D-10
11	Split into J-5 and J-6
11a	J-6
12	Lumped with 13 and 14 into J-3
13	Lumped with 12 and 14 J-3
14	Lumped with 12 and 13 into J-3
15	D-6
16	D-5
17	J-2
18	Deleted - does not exist
19	J-4
20	F-1
21	F-2
22	Lumped with 23 into MI-15
23	Lumped with 23 into new number MI-15
24	Deleted - does not exist
25	F-3
26	Deleted - does not exist
27	MI-14
28	MI-13
29	Lumped with 30, 36 and 37 into MI-7
30	Lumped with 29, 36 and 37 into MI-7
31	Deleted - does not exist
32	MI-12
33	MI-11
34	Lumped with 35 into MI-10
35	Lumped with 34 into MI-10
36	Lumped with 29, 30 and 37 into MI-7
37	Lumped with 29, 30 and 36 into MI-7
38	MI-8
39	MI-5
40	MI-4
40a	MI-6
41	MI-22

42	MI-23
Previous Wetland Number	**New Number**
43	Deleted - does not exist
44	MC-25
44a	MC-25a
44b	MC-25b
44c	MC-25c
44d	MC-25d
45	Lumped with 46, 48, and 50 into MC-25d
46	Lumped with 45, 48, and 50 into MC-25d
47	Deleted - does not exist
48	Lumped with 45, 46, and 50 into MC-25d
49	MC-25b
50	Lumped with 45, 46, and 48 into MC-25d
51	MC-26
52	Lumped with 53 and 54a into MC-25a
52a	Lumped with 54, 61 and parts of 63 into UB-5a
53	Lumped with 54a and 52 into MC-25a
54	Lumped with 52a, 61 and parts of 63 into UB-5a
54a	Lumped with 53 and 52 into MC-25a
55	MC-19
56	Lumped with 58 in UB-2
57	UB-3
58	Lumped with 56 in UB-2
58a	UB-4
59	Lumped with 60 in UB-1
60	Lumped with 59 in UB-1
61	Lumped with 52a, 54 and parts of 63 into UB-5a
62	UB-6
63	Spit into UB-5a & UB-5B
64	Deleted - does not exist
65	Lumped into UB-5b
66	UA-2
67	Lumped with 68 in MC-16
68	Lumped with 67 in MC-16
69	MC-14
70	MC-15
71	MC-17
72	Lumped with 74 in MC-13
73	MC-18
74	Lumped with 72 in MC-13
75	MC-11
76	MC-12
76a	MC-9
77	Lumped with 78 in MC-8
78	Lumped with 77 in MC-8
79	MC-6

80	MC-7
80a	MC-5
Previous Wetland Number	**New Number**
81	Deleted - does not exist
82	Lumped with 85 and 84 in MC-3
83	MC-1
83a	MC-1
84	Lumped with 82 and 85 in MC-3
85	Lumped with 82 and 84 in MC-3
86	Lumped with 87 in MC-4
87	Lumped with 86 in MC-4
88	J-1
89	MI-1
90	Deleted - does not exist
91	Lumped with 92, 94 and 93 into D-2
92	Lumped with 93, 94 and 91 into D-2
93	Lumped with 92, 94 and 91 into D-2
94	Lumped with 91, 92, and 93 into D-2
95	Lumped with 96 into D-8
96	Lumped with 95 into D-8
97	D-7
98	D-4
99	D-3
100	MC-20
101	MC-21
102	UA-1
103	Deleted - does not exist
104	MC-24
105	Deleted - does not exist
106	Lumped with 1, 2 and 4 into D-16
107	D-18
108	Deleted - does not exist
109	MI-9
110	D-12
111	D-20
112	Deleted - redundant numbering
113	D-21
114	D-22
115	Deleted - does not exist
116	Deleted - does not exist
117	MC-2
118	MC-10
119	MI-3
120	D-9
121	MI-2
122	D-1
123	D-19

124 F-4

Dalton Lake

WETLAND SUMMARY SHEET

Date of Verification: 10/97

Wetland Code # D-1
Data Sheets: 2

LOCATION: D-1 is located south of Sunset Place and east of Sunset Boulevard.

LEGAL: T.4N, R.1W, S4

DESCRIPTION: This is a small wetland located in a shallow drainageway. The edges of the drainageway clearly define the boundaries of the wetland. It is dominated by slough sedge, spiraea, and scattered Oregon ash saplings and is located between an existing development and a development that is currently under construction. The source of the water in this wetland appears to be groundwater seepage and overland runoff. At the eastern end of the wetland, there is an area where the soil is apparently more permeable. At this point, the water in the wetland disappears and the wetland ends. The water from this wetland probably resurfaces in wetland D-2.

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 0.6 acres

SOIL:

SERIES: Rock Outcrops/Xerumbrepts SUBORDER: Rock Outcrops/Xerumbrepts

DESCRIPTION: Very dark gray (10YR 3/1) silt loam with reddish brown (5YR 4/4) mottles.

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
	Fraxinus latifolia	*Carex obnupta*
	Spiraea douglasii	

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
414	102,103

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 5-27-94 (Rev. 7/97)

Wetland Code # D-2
Data Sheets: 4

LOCATION: D-2 is located south of Pittsburg Road and just west of Columbia River Highway and the hospital.

LEGAL: T.4N, R.1W, S.4

DESCRIPTION: This wetland area consists of an Oregon ash dominated forest with varying amounts of inundation and soil saturation. Deeper inundation occurs near Pittsburg Road where there is some spiraea and cattails. No culvert was identified that connects this wetland to wetland D-8; however, given the amount of water that accumulates in this area, there must be a culvert that is buried in the vegetation in this area or else Pittsburg Road would be frequently overtopped.

CLASSIFICATION: Palustrine forested (PFO)

WETLAND SIZE: 3.4 acres

SOIL:

SERIES: Rock Outcrops/Xerumbrepts SUBORDER: Rock Outcrops/Xerumbrepts

DESCRIPTION: Very dark grayish brown (10YR 3/2) silt loam with reddish brown (5YR 4/4) mottles.

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Amalanchier alnifolia*	*Juncus effusus*
Salix lasiandra	*Spiraea douglasii*	*Geum macrophyllum*
		Aleopecurus pratensis
		Typha latifolia

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
414 22	405

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 5-5-94 (Rev. 7/97)

Wetland Code # D-3
Data Sheets: 1

LOCATION: D-3 is located adjacent to the Columbia River Highway and south of Pittsburg Road.

LEGAL: T.4N, R.1W, S.4

DESCRIPTION: This wetland is an isolated pond adjacent to the Columbia River Highway dominated by cattails and spiraea. The boundary of this wetland is clearly defined by an abrupt rise in elevation on all sides. Some of this pond may have been filled as a result of an ODOT highway improvement project.

CLASSIFICATION: Palustrine Scrub/Shrub (PSS)

WETLAND SIZE: 0.8 acres

SOIL:

SERIES: Rock Outcrops/Xerumbrepts SUBORDER: Rock Outcrops/Xerumbrepts

DESCRIPTION: No soil data - Inundated.

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Spiraea douglasii*	*Typha latifolia* *Phalaris arundinacea*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: NOT APPROPRIATE
Recreation: NOT APPROPRIATE
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
414 22	300

COMMENTS: See the ODOT wetland delineation for the Columbia River Highway improvement project for a delineation of this site.

WETLAND SUMMARY SHEET

Date of Verification: 5-5-94 (Rev. 7/97)

Wetland Code # D-4
Data Sheets: 2

LOCATION: D-4 is located adjacent to the Columbia River Highway and south of Pittsburg Road.

LEGAL: T.4N, R.1W, S.4

DESCRIPTION: This wetland is an isolated pond adjacent to the Columbia River Highway dominated by cattails and spiraea. The boundary of this wetland is clearly defined by an abrupt rise in elevation on all sides. Some of this pond may have been filled as a result of an ODOT highway improvement project.

CLASSIFICATION: Palustrine Scrub/Shrub (PSS)

WETLAND SIZE: 0.3 acres

SOIL:

SERIES: Rock Outcrops/Xerumbrepts SUBORDER: Rock Outcrops/Xerumbrepts

DESCRIPTION: No soil data - Inundated

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
	Salix lasiandra	*Typha latifolia*
	Spiraea douglasii	
	Rubus discolor	

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: NOT APPROPRIATE
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
414 22	200

COMMENTS: See the ODOT wetland delineation for the Columbia River Highway improvement project for a delineation of this site.

WETLAND SUMMARY SHEET

Date of Verification: 4-29-94 (Rev. 8/97)

Wetland Code # D-5
Data Sheets: 1

LOCATION: D-5 is located south of Wyeth Street and west of 17th Street, along the edge of a railroad bed.

LEGAL: T.4N, R.1W, S.4

DESCRIPTION: D-5 was filled during a recent road widening project. Only a remnant of the wetland exists along the toe of the railroad fill.

CLASSIFICATION: Palustrine Scrub/shrub (PSS)

WETLAND SIZE: 0.1 acres

SOIL:

SERIES: Rock Outcrop/Xerumbrepts SUBORDER: Rock Outcrop/Xerumbrepts

DESCRIPTION: No soil data - Inundated

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Salix lasiandra*	

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality:IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: NOT APPROPRIATE
Recreation: NONE
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
414 21	1700

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 4-29-94 (Rev. 7/97)

Wetland Code # D-6
Data Sheets: 2

LOCATION: D-6 is located east of 15th Street and just north of the junior high school

LEGAL: T.4N, R.1W, S.4

DESCRIPTION: This wetland is in a large depression located adjacent to the lawn of the junior high school. There is a dense area of shrubs around the edge of the wetland while the middle of the wetland is dominated by cattails. Because of its location, this wetland provides a good opportunity for wetland education. The wetland boundary is clearly defined by the edge of the depression. Himalayan blackberry is rapidly taking over portions of the wetland fringe.

CLASSIFICATION: Palustrine Scrub/shrub (PSS)

WETLAND SIZE: 2.2 acres

SOIL:

SERIES: Rock Outcrop/Xerumbrepts SUBORDER: Rock Outcrop/Xerumbrepts

DESCRIPTION: Very dark grayish brown and very dark gray (10YR 3/2-3/1) silt loam with common yellowish brown (10YR5/6) mottles.

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa	*Rubus discolor* *Spiraea douglasii* *Salix lasiandra*	*Typha latifolia*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality:INTACT
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: PROVIDES
Recreation: PROVIDES
Aesthetic Qual.: PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
414 21	100
414 12	3400

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 4-24-94 (Rev. 7/97)

Wetland Code # D-7
Data Sheets: 1

LOCATION: D-7 is located south of Pittsburg Road, east of the hospital access road, and west of the Columbia River Highway

LEGAL: T.4N, R.1W, S.4

DESCRIPTION: D-7 is a small pond with a fringe of Oregon ash dominated woodland. This wetland probably has a connection to wetland D-8 although no culverts were located at the time of the field work. The boundary of this wetland is clearly defined by the edge of the depression in which the pond occurs.

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 0.6 acres

SOIL:

SERIES: Rock Outcrops/Xerumbrepts SUBORDER: Rock Outcrops/Xerumbrepts

DESCRIPTION: No soil data collected - Inundated

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Amalanchier alnifolia* *Spiraea douglasii*	

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: NOT PRESENT
Hydrologic Control: INTACT
Enhancement Potential: MODERATE
Education: NOT APPROPRIATE
Recreation: NOT APPROPRIATE
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
414 22	401,402,403

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 4-24-94 (Rev. 8/97)

Wetland Code # D-8
Data Sheets: 2

LOCATION: D-8 is located just north of Pittsburg Road and west of Highway 30.

LEGAL: T.5N, R.1W, S.33

DESCRIPTION: This wetland consists of three small distinct depressions dominated primarily by Oregon ash trees. The water in these depressions evidently comes from the wetlands located to the south of Pittsburg Road (wetlands D-2 & D-7) although no culverts were located during the field work. During high water, the water from D-8 flows north down a drainage that leads towards wetland D-9 and, ultimately, Dalton Lake. The boundary of these wetlands is defined by the edges of the depressions in which they occur.

CLASSIFICATION: Palustrine shrub-scrub (PSS)

WETLAND SIZE: 1.0 acres

SOIL:

SERIES: Rock Outcrops/Xerumbrepts SUBORDER: Rock Outcrops/Xerumbrepts

DESCRIPTION: 6 inches of very dark gray (10YR 3/1) silt loam over bedrock.

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Symphoricarpos albus*	*Juncus patens* *Carex obnupta*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
5133	401,400

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 8/23/97

Wetland Code # D-9
Data Sheets: 0 - Offsite determination

LOCATION: D-9 is located north of Pittsburg Road and west of the Columbia River Highway.

LEGAL: T.5N, R.1W, S33 .

DESCRIPTION:
This wetland begins in a heavily disturbed field as an emergent wetland, which appears to be dominated by soft rush and assorted weeds except in a couple of channels where cattails are dominant. The water in this wetland flows north where it appears to enter a forested area dominated by Oregon ash. A channel appears to have been dug that transports the water from this wetland, north towards the Columbia River Highway. It is unknown where the water in this channel goes once it reaches the highway, although it probably ends up in Dalton Lake.

CLASSIFICATION: Palustrine Emergent (PEM)/ Palustrine Forested (PFO)

WETLAND SIZE: 2.3 acres

SOIL:

SERIES: Rock Outcrops/Xerumbrepts SUBORDER: Rock Outcrops/Xerumbrepts

DESCRIPTION: No soil data

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia		*Juncus effusus* *Typha latifolia* *Agrostis sp. (alba/tenuis)*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: NOT APPROPRIATE
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

Not sig.

AFFECTED TAXLOTS:

TAXMAP	LOTS
5133	400
5133 34	700,800,900,1000,1100,1300

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 5-5-94 (Rev. 8/97)

Wetland Code #D-10
Data sheets: 2

LOCATION: D-10 is located east of the Columbia River Highway, northwest of 6th Street and Forest Park, and north of 8th Street

LEGAL: T.5N, R.1W, S.33

DESCRIPTION: This wetland consists of a large open water area with a forested fringe. The source of water in the wetland is a small stream that enters from the southern end and, presumably, groundwater discharge. The water from this wetland probably enters wetland D-11 through shallow subsurface flow. The boundary of this wetland is defined by the elevation of inundation on the surrounding steep rocky slopes.

CLASSIFICATION: Palustrine Rock Bottom (PRB)

WETLAND SIZE: 2.9 acres

SOIL:

SERIES: Rock Outcrops/Xerumbrepts SUBORDER: Rock Outcrops/Xerumbrepts

DESCRIPTION: No soil data collected - Inundated.

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Forested Fringe		
Fraxinus latifolia	*Salix lasiandra*	*Carex obnupta*
Alnus rubra	*Fraxinus latifolia*	

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: DIVERSE
Fish Habitat: INTACT
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: NOT APPROPRIATE
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
5133 41	1400,1404,1403,1405,1000

COMMENTS: A large population of bullfrogs (*Rana catesbeiana*) and a pair of mallards (*Anas platyrhynchus*) were observed using the pond.

WETLAND SUMMARY SHEET

Date of Verification: 5-5-94 (Rev. 8/97)

Wetland Code #D-11
Data sheets: 2

LOCATION: D-11 is located northwest of 6th Street and Park Drive, and east of a manufactured housing area.

LEGAL: T.5N, R.1W, S.33

DESCRIPTION: The northern end of this wetland is forested and is seasonally inundated to a depth of several feet. There is only a very thin layer of organic soil over bedrock in this wetland. The upper end of this wetland consists of open water wetland. Water overflows from the open water portion of the wetland into the forested wetland during high water through a narrow rocky channel. The edge of the wetland is defined by the height that seasonal inundation reaches on the steep rocky side slopes that surround the wetland.

CLASSIFICATION: Palustrine Forested/Rock Bottom (PFO/PRB)

WETLAND SIZE: 2.3 acres

SOIL:

SERIES: Rock Outcrops/Xerumbrepts SUBORDER: Rock Outcrops/Xerumbrepts

DESCRIPTION: Very dark brown (10YR 2/2) and black (10YR 2/1) muck with bedrock present just 2" below ground surface.

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Salix lasiandra*	*Carex obnupta*
Alnus rubra	*Fraxinus latifolia*	*Bidens frondosa*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: DIVERSE
Fish Habitat: INTACT
Water Quality:INTACT
Hydrologic Control: INTACT
Enhancement Potential: MODERATE
Education: NOT APPROPRIATE
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
5133 1	700
5133 41	200,1000

COMMENTS: The open water portion of this wetland has a large population of bullfrogs (*Rana catesbeiana*)

WETLAND SUMMARY SHEET

Date of Verification: 5/5/94 (Rev. 7/97)

Wetland Code # D-12
Data Sheets: 1

LOCATION: D-12 is located west of North 6th Street and north of Lemont St.

LEGAL: T.5 N, R.1 W, S33

DESCRIPTION: This wetland is a small depression adjacent to North 6th Street. It is dominated by Oregon ash trees. The boundary of this wetland is clearly defined by the edge of the depression. The water from this wetland is culverted during high water periods under 6th Street and ultimately flows into wetland D-11.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 0.2 acres

SOIL:

SERIES: Rock outcrops/ Xerumbrepts SUBORDER: Rock outcrops/ Xerumbrepts

DESCRIPTION: No soil data - Inundated

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia		

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: MODERATE
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
5133 41	100

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 5-26-94 (Rev. 7/97)

Wetland Code #D-13
Data sheets: 1

LOCATION: D-13 is located south of Dalton Lake and just west of an unimproved section of Madrona Court.

LEGAL: T.5N, R.1W, S.34

DESCRIPTION: This wetland consists of a small stream and its associated floodplain. The wetland boundary is defined by the relatively steep slopes on either side of the floodplain. The source of water in this wetland is discharge from a small spring which is probably supported by shallow subsurface flow from wetland D-11. The stream flows into the southwestern portion of Dalton Lake. The upper end of the wetland is crossed by an abandoned road. Upstream of the road is a small area of reed canarygrass.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 0.5 acres

SOIL:

SERIES: Rock Outcrops - Xerumbrepts complex SUBORDER: Xerumbrepts

DESCRIPTION: Very dark grayish brown (10YR 3/2) loam with dark yellowish brown mottles over bedrock.

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Sambucus racemosa*	*Ranunculus repens* *Juncus effusus* *Phalaris arundinacea*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: NOT APPROPRIATE
Recreation: NOT APPROPRIATE
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
5133 1	1000

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 5-26-94 (Rev. 7/97)

Wetland Code #D-14
Data sheets: 1

LOCATION: D-14 is located south of Dalton Lake, perpendicular to Madrona Court, and north of Park Drive.

LEGAL: T.5N, R.1W, S.34

DESCRIPTION: This a small intermittent tributary stream to D-15. This stream originates just west of an unimproved section of Madrona Court. The streambed consists of cobbles. No flowing water was noted in this stream during field visits in July, 1997.

CLASSIFICATION: Riverine Intermittent (R3)

WETLAND SIZE: <0.1

SOIL:

SERIES: Rock Outcrops - Xerumbrepts complex SUBORDER: Xerumbrepts

DESCRIPTION: Brown (10YR 4/3) and and very dark grayish brown (10YR 3/2) loam.

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Riparian Vegetation		
Acer macrophyllum	*Alnus rubra*	*Polystichum munitum*
Fraxinus latifolia	*Sambucus racemosa*	

WETLAND FUNCTIONAL ASSESSMENT: Not Assessed – Stream

AFFECTED TAXLOTS:

TAXMAP	LOTS
5133 1	1000

COMMENTS: Because of its intermittent nature, its small size and the disturbance that has occurred around it, this stream provides very little aquatic habitat.

WETLAND SUMMARY SHEET

Date of Verification: 5-26-94 (Rev. 7/97)

Wetland Code #D-15
Data Sheets: 1

LOCATION: D-15 is located south of Dalton Lake, east of Madrona Court, north of Park Drive, and west of 6th Street.

LEGAL: T.5N, R.1W, S.34

DESCRIPTION: This wetland consists of a narrow emergent and forested fringe along the edge of a stream. This stream originates in a series of small seeps and springs to the north of Park Drive and flows into the southern portion of Dalton Lake.

CLASSIFICATION: Palustrine forested (PFO)

WETLAND SIZE: 0.6 acres

SOIL:

SERIES: Rock Outcrops - Xerumbrepts complex SUBORDER: Xerumbrepts
DESCRIPTION: Cobble bottom stream channel.

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Acer macrophyllum	*Alnus rubra*	*Polystichum munitum*
Fraxinus latifolia		

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: PROVIDES
Fish Habitat: IMPACTED
Water Quality:IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: NOT APPROPRIATE
Recreation: NOT APPROPRIATE
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
5133 1	1000

COMMENTS:

stream channel

WETLAND SUMMARY SHEET

Date of Verification: 3/23/94 (Rev. 8/97)

Wetland Code # D-16
Data Sheets: 4

LOCATION: D-16 is located between the Columbia River Highway (west), the Columbia River (east), 6th Street (south), and Spinnaker Way (north)

LEGAL: T.5 N, R.1 W, S 34

DESCRIPTION: This wetland consists of a central area of emergent and floating leaved vegetation surrounded by an area dominated by scattered pacific willow and Oregon ash with an understory of reed canarygrass. Along the edge of the wetland is a fringe of densely forested wetland. The boundary of this wetland is fairly well defined by a topographic change which corresponds to a shift in dominant tree species from Oregon ash and cottonwood in the wetland to big-leaf maple and Oregon oak in the surrounding upland. The wetland is connected to the Columbia River by a small channel near the northwestern corner of the wetland.

CLASSIFICATION: Palustrine Scrub-shrub/Palustrine Forested/Palustrine Emergent

WETLAND SIZE: 36.3 acres

SOIL:

SERIES: Sauvie silt loam SUBORDER: Fluvaquentic Haplaquoll

DESCRIPTION: Very dark grayish brown (10YR 3/2) and grayish brown (10YR 5/2) silty clay loam with brown (7.5YR 4/4) mottles.

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Palustrine Scrub/Shrub		
Salix lasiandra	*Cornus stolonifera*	*Phalaris arundinacea*
Fraxinus latifolia		
Palustrine Forested		
Populus trichocarpa	*Spiraea douglasii*	*Phalaris arundinacea*
Fraxinus latifolia		*Solanum dulcamara*
Palustrine Emergent		
		Nuphar polysepalum
		Eleocharis palustris
		Myriophyllum hippuroides

WETLAND FUNCTIONAL ASSESSMENT RESULTS:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: DIVERSE
Fish Habitat: INTACT
Water Quality:INTACT
Hydrologic Control: INTACT
Enhancement Potential: MODERATE
Education: POTENTIAL
Recreation: PROVIDES
Aesthetic Qual.: PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
5128 4	200
5133 1	100,500,1000
5134	100

COMMENTS: The reed canarygrass in this wetland is being controlled as an ongoing part of the Dalton Lake Wetland Mitigation Bank. *Proposed Dalton Lake Mitigation Bank and Preliminary Management Recommendations* (W&H Pacific, 1993).

WETLAND SUMMARY SHEET

Date of Verification: 3/23/94 (Rev. 8/97)

Wetland Code # D-17
Data sheets: 1

LOCATION: D-17 is located east of wetland D-16 and adjacent to the Columbia River at the southern edge of Columbia City.

LEGAL: T.5N, R.1W, S.34

DESCRIPTION: This wetland is a narrow strip of land along the edge of the Columbia River It is dominated by black cottonwood and Pacific willow trees. An area of slightly higher ground separates wetland D-16 (Dalton Lake) from this wetland.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 5.4 acres

SOIL:

SERIES: Xeropsamments SUBORDER: Xeropsamments

DESCRIPTION: Dark grayish brown (10YR 4/2) fine sand with brown (7.5YR 4/4) mottles*

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa	*Cornus stolonifera*	*Phalaris arundinacea*
Salix lasiandra	*Spiraea douglasii*	

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: DIVERSE
Fish Habitat: IMPACTED
Water Quality:INTACT
Hydrologic Control: INTACT
Enhancement Potential: MODERATE
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
5134	100,200

COMMENTS: *Proposed Dalton Lake Mitigation Bank and Preliminary Management Recommendations* (W&H Pacific, 1993).

* Soil data derived from Columbia County Soil Survey

WETLAND SUMMARY SHEET

Date of Verification: 9/21/93 (Rev. 7/97)

Wetland Code # D-18
Data Sheets: 2

LOCATION: D-18 is located just east of the intersection of 6th Street and Park Drive.

LEGAL: T.5 N, R.1 W, S34

DESCRIPTION: This wetland is a depression with dense stands of Pacific willow and Pacific ninebark surrounded on three sides by rock outcrops. Deep standing water persists late into the growing season. The source of the water is probably a combination of surface runoff from a ravine to the south and discharge from fractures in the surrounding rock. The boundary of this wetland is clearly defined on three sides by the rock outcrops. On the northwest side, the boundary of the wetland is less clearly defined by the edge of the depression.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 1.4 acres

SOIL:

SERIES: Rock outcrop/Xerumbrepts SUBORDER: Rock outcrop/Xerumbrepts

DESCRIPTION: Black (10YR 2/1) muck

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Spiraea douglasii*	*Solanum dulcamara*
	Rubus spectabilis	*Carex obnupta*
	Physocarpus capitatus	

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: DIVERSE
Fish Habitat: INTACT
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: PROVIDES
Recreation: PROVIDES
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
5133 41	100
5134 23	1300,1302

COMMENTS: See the wetland delineation prepared for the northern portion of this wetland for a more detailed description of this area (Det #94-240).

WETLAND SUMMARY SHEET

Date of Verification: 7/97

Wetland Code # D-19
Data Sheets: 2

LOCATION: D-19 is located just south of the Botanical Garden on the south side of 6th Street.

LEGAL: T.5N, R.1W, S34

DESCRIPTION: This wetland is a depression located at the base of a steep cliff. It is an unusual wetland because there is no soil present. The bedrock is at the ground surface. This area is evidently flooded during a significant portion of the growing season which has permitted hydrophytic vegetation in the form of spiraea and Scouler's willow to become established. Evidence of the prolonged inundation is provided by the presence of dried algal mats throughout the wetland. These shrubs are able to support themselves using the nutrient they are able to obtain in the spaces between the rocks. The source of the water in this wetland is probably groundwater discharge from fissures in the surrounding bedrock. The rocks in this wetland are covered with mats of moss.

CLASSIFICATION: Palustrine Scrub/Shrub (PSS)

WETLAND SIZE: 0.5 acres

SOIL:

SERIES: Rock Outcrops/Xerumbrepts SUBORDER: Rock Outcrops/Xerumbrepts

DESCRIPTION: Rock.

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
	Spiraea douglasii	*Agrostis sp.*
	Salix scouleriana	

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
5133 41	100
5134 23	1302

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 9/21/93 (Rev. 7/97)

Wetland Code # D-20
Data Sheets: 0 - Delineation Report

LOCATION: JD-20 is located just south of 6th Street and west of Gray Cliffs Drive

LEGAL: T.5 N, R.1 W, S34 .

DESCRIPTION: This wetland is in the bottom of a steep sided rocky ravine. The wetland is forested and dominated by Oregon ash, red alder, and bittersweet. The water in this wetland probably comes from wetland D-18. There is no apparent outlet to this wetland so the water may disappear into fissures in the bedrock. Bedrock is present just below the ground surface. The wetland boundary is clearly defined by the steep side walls of the ravine.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 0.6 acres

SOIL:

SERIES: Rock Outcrops/Xerumbrepts SUBORDER: Rock Outcrops/Xerumbrepts

DESCRIPTION: Black (10YR 2/1) muck.

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Solanum dulcamara*	
Alnus rubra		

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: PROVIDES
Recreation: POTENTIAL
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
5134 23	1201,1300

COMMENTS: Please see the delineation prepared for Greycliffs Estates for a more detailed description of the southern end of this wetland (Det #94-240).

WETLAND SUMMARY SHEET

Date of Verification: 9/21/93 (Rev. 7/97)

Wetland Code # D-21
Data Sheets: 0 - Delineation report

LOCATION: D-21 is located south of North 6th Street and Grey Cliffs Drive.

LEGAL: T.5 N, R.1 W, S 34

DESCRIPTION: This wetland consists of two depressions surrounded by rock outcrops. These depressions are fed by surface runoff and probably by discharge from fractures in the adjacent rock outcrops. The wetlands are dominated by Oregon ash and red alder trees with dense stands of Pacific willow and spiraea in the understory. The wetland boundary is clearly defined by the edge of the adjacent rock outcrops.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 1.0 acres

SOIL:

SERIES: Rock outcrop/Xerumbrepts SUBORDER: Rock outcrop/Xerumbrepts

DESCRIPTION: Black (10YR 2/1) muck and dark grayish brown (10 YR 4/2) silt loam with common yellowish red (5YR 5/8) mottles.

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa	*Spiraea douglasii*	*Solanum dulcamara*
Acer macrophyllum	*Rubus spectabilis*	*Bidens frondosa*
Fraxinus latifolia		*Ranunculus repens*
Salix lasiandra		*Carex obnupta*
		Oenanthe sarmentosa
		Athyrium filix-femina
		Hedera helix

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
5134 23	1300,1304

COMMENTS: See the delineation prepared for the Graycliffe Estates for a more detailed account of these wetlands (Det #94-240).

WETLAND SUMMARY SHEET

Date of Verification: 9/21/93 (Rev. 7/97)

Wetland Code # D-22
Data Sheets: 0 - Delineation report.

LOCATION: D-22 is located southeast of Gray Cliffs Drive.

LEGAL: T.5 N, R.1 W, S34

DESCRIPTION: This wetland consists of a depression surrounded by rock outcrops. This depression is fed by surface runoff and probably by discharge from fractures in the adjacent rock outcrops. The wetland is dominated by Oregon ash and cottonwood trees with dense stands of Pacific willow and spiraea in the understory. The wetland boundary is clearly defined by the edge of the adjacent rock outcrops.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 0.6 acres

SOIL:

SERIES: Rock outcrop/Xerumbrepts SUBORDER: Rock outcrop/Xerumbrepts

DESCRIPTION: Black (10YR 2/1) muck

HYDROLOGIC BASIN: Dalton Lake

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa	*Spiraea douglasii*	*Phalaris arundinacea*
Acer macrophyllum	*Rubus spectabilis*	*Polystichum munitum*
Fraxinus latifolia	*Corylus cornuta*	*Pteridium aquilinum*
Salix lasiandra		*Carex obnupta*
		Bidens frondosa

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
5134 23	1304

COMMENTS: See the delineation prepared for the Graycliffe Estates for a more detailed account of this wetland (Det #94-240).

Frogmore Slough

WETLAND SUMMARY SHEET

Date of Verification: 4-29-94 (Rev. 7/97)

Wetland Code # F-1
Data Sheets: 1

LOCATION: F-1 is located between 11th and 12th Streets, and south of Plymouth Street.

LEGAL: T.4N, R.1W, S.4

DESCRIPTION: This wetland is an isolated headwater for a small stream that flows southeast towards wetland F-3 (Sewage treatment pond). The connection of this wetland to the remainder of the stream has been severed by construction of a small subdivision and the placement of the stream in a culvert through the subdivision.

CLASSIFICATION: Palustrine Scrub-shrub (PSS)

WETLAND SIZE: 0.2 acres

SOIL:

SERIES: Rock Outcrop/Xerumbrepts SUBORDER: Rock Outcrop/Xerumbrepts

DESCRIPTION: Dark grey (2.5Y 4/1) silt loam.

HYDROLOGIC BASIN: Frogmore Slough

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
	Salix lasiandra	*Phalaris arundinacea*
	Cornus stolonifera	
	Rubus discolor	

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: NOT PRESENT
Hydrologic Control: IMPACTED
Enhancement Potential: MODERATE
Education: NOT APPROPRIATE
Recreation: NOT APPROPRIATE
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
414 44	3600,4200,4300

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 4-29-94 (Rev. 7/97)

Wetland Code # F-2
Data Sheets: 1

LOCATION: F-2 is located between 11th and 12th Streets and south of Plymouth Street.

LEGAL: T.4N, R.1W, S.4

DESCRIPTION: This wetland begins where a culvert that carries the water from wetland F-1 under a recently developed area outfalls. The water from the culvert flows southeast towards wetland F-3 (Sewage treatment pond) through an undeveloped area. The dominant vegetation in this wetland includes balck cottonwood, Pacific willow and reed canarygrass.

CLASSIFICATION: Palustrine Scrub-shrub (PSS)

WETLAND SIZE: 1.3 acres

SOIL:

SERIES: Rock Outcrop/Xerumbrepts SUBORDER: Rock Outcrop/Xerumbrepts

DESCRIPTION: Dark grey (2.5Y 4/1) silt

HYDROLOGIC BASIN: Frogmore Slough

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa	*Salix lasiandra* *Cornus stolonifera* *Rubus discolor*	*Phalaris arundinacea*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: DIVERSE
Fish Habitat: IMPACTED
Water Quality:IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
414 44	4100,4200,3800,3900,3901
4110	200

COMMENTS: Wildlife habitat is significant in F-2 because of the undeveloped corridor surrounding the stream.

WETLAND SUMMARY SHEET

Date of Verification: 6-22-94 (Rev. 8/97)

Wetland Code # F-3
Data Sheets: 1

LOCATION: F-3 is Located just north of the Boise Cascade Plant and just west of the Columbia River.

LEGAL: T.4N, R.1W, S. 3&10

DESCRIPTION: This wetland is the City of St. Helens sewage lagoon. The pond was constructed in the 1970's at the former location of Frogmore Slough and an old quarry. A small stream (wetland F-2) flows into the pond from the northwest. The boundary of this wetland is clearly defined by the steep banks that surround the pond and the area of open water. There is no vegetation in the pond and the water, as expected, is very turbid and frothy.

CLASSIFICATION: Lacustrine littoral (L2)

WETLAND SIZE: 38.4 acres

SOIL:

SERIES: Rock Outcrop/Xerumbrepts SUBORDER: Rock Outcrop/Xerumbrepts

DESCRIPTION: No soil data - Inundated

HYDROLOGIC BASIN: Frogmore Slough

DOMINANT VEGETATION: None

OVERSTORY	UNDERSTORY	GROUND COVER

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: NOT PRESENT
Water Quality: INMPACTED
Hydrologic Control: INTACT
Sensitivity to Impact: SENSITIVE

Enhancement Potential: LITTLE
Education: NOT APPROPRIATE
Recreation: NOT APPROPRIATE
Aesthetic Qual.: NOT PLEASING

AFFECTED TAXLOTS:

TAXMAP	LOTS
4110	300

COMMENTS: Communication with Boise Cascade personnel indicates that frogs may be using the pond.

WETLAND SUMMARY SHEET

Date of Verification: 8/97

Wetland Code # F-4
Data Sheets: 0 - Offsite determination

LOCATION: F-4 is located between the Columbia River and railroad tracks on the northern end of Boise Cascade plant and just east of wetland F-3.

LEGAL: T.4N, R.1W, S3

DESCRIPTION: This wetland is a flat area adjacent to the Columbia River. The northern portion of the wetland is a mosaic of forested wetland dominated by cottonwood trees and reed canarygrass and upland hummocks dominated by cottonwood trees and snowberry. The southern portion of the wetland is dominated almost exclusively by reed canarygrass. The source of the water in this wetland is tidal and seasonal fluctuations in the water surface elevation of the Columbia River. The boundaries of this wetland are defined by the Columbia River to the east and by the steep slope up to the railroad tracks on the west.

CLASSIFICATION: Palustrine Forested/Emergent (PFO/EM),

WETLAND SIZE: Wetland/ Upland Mosaic Total Area = 7.4 acres
Total Wetland Area - ~6.5 acres

SOIL:

SERIES: Sauvie silt loam SUBORDER: Fluvaquentic Haplaquoll

DESCRIPTION: No soil sample taken.

HYDROLOGIC BASIN: Frogmore Slough

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa		*Phalaris arundinacea*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: MODERATE
Education: NOT APPROPRIATE
Recreation: POTENTIAL
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
4110	200,300

COMMENTS:

F.4
old drainage channel for mill site on south end.

Boise would like to develop

Jackass Canyon

WETLAND SUMMARY SHEET

Date of Verification: 6-13-94 (Rev. 7/97)

Wetland Code # J-1
Data Sheets: 2

LOCATION: J-1 is located south of Howard Street, west of Columbia River Highway, and north of Arnold Street.

LEGAL: T.4N, R.1W, S.4

DESCRIPTION: This is a scrub/shrub wetland that has formed as a result of the impoundment of water by urban fill surrounding a linear depression. The area surrounding the wetland consists of roads, urban fill, and concrete from old foundations. The wetland boundary is defined by the toe of the surrounding fill slopes. It is unknown where the water from this wetland goes.

CLASSIFICATION: Palustrine Scrub/Shrub (PSS)

WETLAND SIZE: 0.4 acres

SOIL:

SERIES: Xerumbrepts/Rock Outcrops SUBORDER: Xerumbrepts/Rock Outcrops

DESCRIPTION: Very dark grayish brown (10YR 3/2) silt loam & urban fill

HYDROLOGIC BASIN: Jackass Canyon

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa	*Salix lasiandra*	*Phalaris arundinacea*
Fraxinus latifolia	*Rubus discolor*	

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
414 23	200,300,5400,4100,4200,4300,3800,4000,4000A1

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 4-29-94 (Rev. 8/97)

Wetland Code # J-2
Data Sheets: 1

LOCATION: J-2 is located at the intersection of 18th and Willamette Streets.

LEGAL: T.4N, R.1W, S.4

DESCRIPTION: This wetland is a small isolated wetland adjacent to residential and commercial properties. The edge of this wetland is primarily defined by the toe of the fill from the adjacent roads and railroad tracks.

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 0.2 acres

SOIL:

SERIES: Rock Outcrop/Xerumbrepts SUBORDER: Rock Outcrop/Xerumbrepts

DESCRIPTION: Very dark grayish brown (10YR 3/2) silt loam with strong brown (7.5YR 4/6) mottles

HYDROLOGIC BASIN: Jackass Canyon

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa		*Phalaris arundinacea* *Typha latifolia* *Juncus effusus*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality:IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: MODERATE
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
414 24	1901

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 4-29-94 (Rev. 7/97)

Wetland Code # J-3
Data Sheets: 6

LOCATION: J-3 begins at 16th Street between St Helens Street and Willamette Street and continues east to 5th street.

LEGAL: T.4N, R1W, S4

DESCRIPTION: The wetland is confined to the flat area in the bottom of Jackass Canyon. The hydrology of the wetland is supported by surface runoff, areas of apparent groundwater discharge, and by a small stream which begins near 16th Street. The stream flows through a culvert under 15th Street which outlets into a broad flat area at the base of the 15th Street fill slope. In this flat area, the wetland is no longer limited to the area between the stream channel banks and includes the entire bottom of the canyon. From the base of the 15th Street fill east, the wetland alternates between being confined to the stream channel and spreading out to include most of the bottom of the canyon. The stream enters culverts whenever it intersects with a road.

A sewer line and maintenance road have been installed through the center of the canyon between 12th and 9th Streets. In between 9th an 10th Streets, the bottom of the canyon has been developed. There is a small area of wetland in the lawn of the house located in this area. The stream flows through a culvert underneath of 8th Street and then through a channel between two houses until it reaches 7th Street. The channel then enters another culvert and does not resurface until east of 6th Street where it again flows through a channel between two houses. When the channel reaches 5th Street it enters yet another culvert which outlets into wetland J-6 after it has gone under 5th Street, two lots, 4th Street and a portion of Godfrey Park.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 4.7 acres

SOIL:

SERIES: Rock Outcrop/Xerumbrepts SUBORDER: Rock Outcrop/Xerumbrepts
DESCRIPTION: Very dark grayish brown (10YR 3/2) silt loam and very dark gray (10YR 3/1) with common yellowish brown (10YR5/6) mottling.

HYDROLOGIC BASIN: Jackass Canyon

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Acer macrophyllum	*Rubus discolor*	*Festuca spp.*
Fraxinus latifolia	*Physocarpus capitatus*	*Ranunculus repens*
		Polystichum munitum
		Phalaris arundinacea
		Carex obnupta

WETLAND FUNCTIONAL ASSESSMENT:

(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: DIVERSE
Fish Habitat: IMPACTED
Water Quality:INTACT
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: PROVIDES
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:	TAXMAP	LOTS
	413 22	8301,8200,9800,9900
	414 12	3400,2400,2300,2200
	414 11	9501,9502,9500,9301,8800,5900,6000,4700,4600 2900,3000
	414 13	4200,4300,6300,6400,6500

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 4-29-94 (Rev. 7/97)

Wetland Code # J-4
Data Sheets: 2

LOCATION: J-4 is located northwest of Old Portland Road between 6th Street and 7th Street.

LEGAL: T.4N, R.1W, S.3

DESCRIPTION: This wetland is a mosaic of upland and wetland areas located in a depression at the southernmost end of Jackass Canyon. The wetland pockets consist of small areas of reed canarygrass and young cottonwoods while the upland areas consist almost entirely of Himalayan blackberry.

CLASSIFICATION: Palustrine Scrub-shrub (PSS)

WETLAND SIZE: Wetland/Upland Mosaic Total Area = 0.3 acres
Wetland Area = ~0.1 acres

SOIL:

SERIES: Rock Outcrop/Xerumbrepts SUBORDER: Rock Outcrop/Xerumbrepts

DESCRIPTION: Dark grey (2.5Y 4/1) silt loam.

HYDROLOGIC BASIN: Jackass Canyon

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
	Populus trichocarpa	*Holcus lanatus* *Phalaris arundinacea*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality:NOT PRESENT
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
413 23	7800,7900

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 4-29-94 (Rev. 7/97)

Wetland Code # J-5
Data Sheets: 1

LOCATION: J-5 begins in the bottom of Jackass Canyon near the intersection of 6th street and St. Helens Street. It continues northeast to Columbia Boulevard and 4th Street where it ends because Jackass Canyon has been filled. Jackass Canyon continues to north of Columbia Boulevard as wetland j-6.

LEGAL: T4N, R1W, S4

DESCRIPTION: This area consists of a big-leafed maple/red alder forest surrounding an intermittent stream which is supported by groundwater discharge and surface runoff. The wetland is limited to narrow areas on either side of the stream channel because of steep side slopes surrounding the stream. The wetland has been disturbed in some areas by utility line construction, filling, and other unknown activities which have led to the prevalence of Himalayan blackberry.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 0.8 acres

SOIL:

SERIES: Rock Outcrop/Xerumbrepts SUBORDER: Rock Outcrop/Xerumbrepts

DESCRIPTION: Very dark grayish brown (10YR 3/2) silt loam with faint mottling.

HYDROLOGIC BASIN: Jackass Canyon

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Acer macrophyllum	*Rubus discolor*	*Holcus lanatus*
Alnus rubra		*Juncus effusus*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: NOT PRESENT
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:	TAXMAP	LOTS
	413 22	5300,6600,6500,6400,8400,9600,9500,9300,9200, 9100,8600,8700,8900
	413 23	7600
	414 11	800,900,1400,1500

COMMENTS: Pursuant to the guidance in OFWAM, this wetland has been defined separately from wetland j-6 because of the culvert that carries the flow under Columbia Boulevard and two developed lots. The west branch of this wetland was determined from offsite inspection, not field-verified.

WETLAND SUMMARY SHEET

Date of Verification: 4-29-94 (Rev. 7/97)

Wetland Code # J-6
Data Sheets: 2

LOCATION: J-6 is located in the bottom of the portion of Jackass Canyon that begins in Godfrey Park, between 4th and 5th street, north of Columbia Boulevard. J-6 continues northeast to 1st street and Wyeth.

LEGAL: T.4N, R1W, S4

DESCRIPTION: This area consists of a big-leafed maple/red alder forest community surrounding an intermittent stream which is supported by groundwater discharge and surface runoff. The wetland is limited to narrow areas on either side of the stream channel because of steep side slopes surrounding the stream. In addition to the culvert from wetland J-6, a 36" culvert that carries water from wetland J-3 discharges into this wetland. This wetland terminates at 1st street where the water goes into a culvert, which transports the water to the Columbia River.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 0.5 acres

SOIL:

SERIES: Rock Outcrop/Xerumbrepts SUBORDER: Rock Outcrop/Xerumbrepts
DESCRIPTION: Very dark grayish brown (10YR 3/2) silt loam with faint dark yellowish brown (10YR 4/4) mottles.

HYDROLOGIC BASIN: Jackass Canyon

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Acer macrophyllum	*Rubus discolor*	*Phalaris arundinacea*
Alnus rubra		*Juncus effusus*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality:INTACT
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
413 22	4100,4000
5134 33	10200,11300

COMMENTS: Pursuant to the guidance in OFWAM, this wetland has been defined separately from wetland J-5 because of the culvert that carries the flow under Columbia Boulevard and two developed lots.

McNulty Creek

WETLAND SUMMARY SHEET

Date of Verification: 5/6/93 (Rev. 7/97)

Wetland Code # MC-1
Data Sheets: 3

LOCATION: *Unnamed creek* - MC-3 begins south of Pittsburg Road, just west of Meadowview Lane. The creek ends just west of Juniper Lane

LEGAL: T. 4N, R.2 W, S 5 & 6

DESCRIPTION: This is a small intermittent/perennial stream that, in some areas, has wetland vegetation, including soft rush and creeping buttercup, both within its channel and on its small floodplain. The wetland vegetation is found predominantly in the upper (western) end of the creek. Further downstream (east), the stream channel is deeper and has no vegetation. The portion of the stream that is west of wetland MC-3 appears to be perennial while the area to the east is intermittent. This is somewhat counterintuitive because one would expect that there would be more water lower down in the drainage; however, it may be that the permeability of the material in the channel is greater in the lower reaches so the water infiltrates into the soil in this area. The water that flows in this channel is apparently culverted from its eastern end underneath a development and into wetland MC-8. There are several culverted crossings of the upper portion of this stream, as well as a stormwater facility that has been constructed in the stream.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 2.3 acres

SOIL:

SERIES: Wollent silt loam SUBORDER: Typic Humaquept

DESCRIPTION: Very dark grayish brown (10YR 3/2) silt loam with strong brown (7.5YR 4/6) mottles

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Alnus rubra	*Rubus discolor*	*Juncus effusus*
		Ranunculus repens
		Epilobium cilliatum

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: INTACT
Hydrologic Control: ~~IMPACTED~~ intact
Sensitivity to Impact: POTENTIALLY SENSITIVE

Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: MODERATELY PLEASING

AFFECTED TAXLOTS:

TAXMAP	LOTS
415	500,1100,1201,1200
415 31	515
415 32	100
416 4	800,611,610,601,612,606,604,300

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 4/11/97

Wetland Code # MC-2
Data Sheets: 3

LOCATION: MC-2 is located between Pittsburg Road and Sykes Road and south of Meadow View Drive.

LEGAL: T.4N, R.1W, S6

DESCRIPTION: This is an emergent wetland located in a pasture. The upper (western) portion of the wetland is significantly wetter than the lower (eastern) portion. The dominant plants in the upper portion include soft rush, foxtail, and some small Oregon ash saplings. In the lower portion of the wetland the dominant plant is primarily bentgrass. As the water from this wetland flows downhill towards MC-1, it divides into two forks. The northern fork ends before it reaches MC-1 while the southern fork continues all of the way to MC-1. The boundaries of this wetland are clearly defined by abrupt changes in elevation which correspond to abrupt changes in soil type. A portion of the upper area has recently been filled and the remainder enhanced to mitigate for that fill in compliance with Army Corps of Engineers and Division of State Lands permits. The upper portion of this wetland has been delineated (Det #97-0296).

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 2.5 acres

SOIL:

SERIES: Wollent silt loam SUBORDER: Typic humaquept

DESCRIPTION: Very dark gray (10YR 3/1) silt loam with yellowish red (5YR 4/6) mottles.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
	Fraxinus latifolia	*Juncus effusus* *Alopecurus sp.* *Agrostis sp. (alba/tenuis)*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
416 4	612,606,604,300,1800,1900

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-22-94 (Rev. 8/97)

Wetland Code # MC-3
Data Sheets: 2

LOCATION: MC-3 is located northwest of Juniper Lane, between a Bonneville Power Administration right-of-way and wetland MC-1.

LEGAL: T.4N, R.1W, S.5

DESCRIPTION: This wetland has two distinct areas which are described separately on the following summary sheets (MC-3a & MC-3b). Wetland MC-3a is a scrub/shrub wetland with a few small upland hummocks. Wetland MC-3b is located just east of MC-3a and is part of the same wetland area; however, it is described on a separate summary sheet because of its distinct wetland class and because it is a mosaic of upland and wetland. This summary sheet is being provided primarily for the purposes of the functional assessment which is used to evaluate the functions of the entire wetland and not just an individual section of the wetland.

CLASSIFICATION: Palustrine Scrub/Shrub & Palustrine Forested (PSS/PFO)

WETLAND SIZE: Wetland/Upland Mosaic

Total Area = 5.5 acres
Wetland Area = ~4.5 acres

SOIL: The soil type and description is provided on the individual summary sheets.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION: Provided on individual summary sheets.

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: DIVERSE	Enhancement Potential: MODERATE
Fish Habitat: IMPACTED	Education: POTENTIAL
Water Quality: NOT PRESENT	Recreation: NOT APPROPRIATE
Hydrologic Control: IMPACTED	Aesthetic Qual.: PLEASING

Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
415	400,500,600,1000,1100

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-22-94 (Rev. 8/97)

Wetland Code #MC-3a
Data Sheets:

LOCATION: MC-3a is located northwest of Juniper Lane, between a Bonneville Power Administration right-of-way and wetland MC-1.

LEGAL: T.4N, R.1W, S.5

DESCRIPTION: Although this wetland was formerly forested, it was cleared quite awhile ago. It has now developed into a scrub/shrub wetland dominated by spiraea, Oregon ash and cottonwood saplings, soft rush and assorted grasses and sedges. There is no apparent surface water connection between this wetland and the stream channel to the south (MC-1), although there may be a subsurface connection. The edges of this wetland are not well defined by any obvious topographic feature. Instead, the wetland boundary is defined by a gradual shift in vegetation type and soil.

CLASSIFICATION: Palustrine Scrub/Shrub(PSS)

WETLAND SIZE: 3.8 acres

SOIL:

SERIES: Wollent silt loam SUBORDER: Typic Humaquept

DESCRIPTION: Very dark grayish brown (10 YR 3/2) with yellowish brown (10YR 5/6) mottles.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
	Spiraea douglasii	*Juncus effusus*
	Populus trichocarpa	*Ranunculus repens*
	Fraxinus latifolia	

WETLAND FUNCTIONAL ASSESSMENT:

See Summary Sheet MC-3.

AFFECTED TAXLOTS:

TAXMAP	LOTS
415	500,1000,1100

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-22-94 (Rev. 8/97)

Wetland Code # MC-3b
Data Sheets:

LOCATION: MC-3b is located northwest of Juniper Lane, between a Bonneville Power Administration right-of-way and wetland MC-1.

LEGAL: T.4N, R.1W, S.5

DESCRIPTION: This section of wetland MC-3 is forested with Oregon ash and Oregon oak trees. It contains a mosaic of wetland and upland areas. There is no surface water connection between this wetland and the stream channel to the south (MC-1); however, there is probably a subsurface connection to the stream. The boundaries of the wetlands within this area are poorly defined and can only be seen through observation of changes in dominant vegetation from wetland areas dominated by Oregon ash and slough sedge to non-wetland areas dominated by Oregon oak and snowberry.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: Wetland/Upland Mosaic

Total area = 1.7 acres
Total Wetland Area - ~0.69 acres

SOIL:

SERIES: Wollent silt loam SUBORDER: Typic Humaquept

DESCRIPTION: Very dark grayish brown (10 YR 3/2) with yellowish brown (10YR 5/6) mottles

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Symphoricarpos albus*	*Carex obnupta*
Quercus garryana		*Urtica dioica*

WETLAND FUNCTIONAL ASSESSMENT:

See Summary Sheet MC-3.

AFFECTED TAXLOTS:

TAXMAP	LOTS
415	400,500,600

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 5-27-94 (Rev. 8/97)

Wetland Code # MC-4
Data Sheets: 2

LOCATION: MC-4 is located south of Pittsburg Road and west of N. Vernonia Road

LEGAL: T.4N, R.1W, S.5

DESCRIPTION: This isolated emergent wetland dominated by soft rush and assorted weedy grasses, is currently being used as a pasture. There is no obvious connection between this wetland and any wetland areas downhill.

There appears to be a lot of drain tile in this area. Much of the drain tile is failing and wetland hydrology is returning to areas where it was previously absent. The boundary of this wetland is not clearly defined and is subject to change because of the failing drain tile. At present, the edge of the wetland is defined by a change in vegetation from an area dominated by soft rush to areas dominated by sweet vernalgrass.

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 1.2 acres

SOIL:

SERIES: Wollent silt loam SUBORDER: Typic Humaquept

DESCRIPTION: Very dark grayish brown (10YR 3/2) silt loam with reddish brown (5YR 4/4) mottles.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
		Juncus effusus
		Ranunculus repens
		Festuca rubra

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
415	200,300
415 24	1000

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6/2/94 (Rev. 7/97)

Wetland Code # MC-5
Data Sheets: 2

LOCATION: MC-5 is located west of the intersection of Sykes Road and Columbia Boulevard and on the south side of Sykes road.

LEGAL: T.4 N, R.1 W, S 5.

DESCRIPTION: This is a small forested wetland dominated by Oregon ash, slough sedge, and spiraea. No connections to other wetlands were identified at the time of the field work; however, it was probably part of a larger wetland complex prior to the construction of Sykes Road and there may have been some connection to other wetland areas to the north. The boundary of this wetland is defined on the north and south sides by the edges of roadways. On the east and west sides, the boundaries of the wetland are indistinctly defined by a change in elevation.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 0.8 acres

SOIL:

SERIES: Wollent Silt Loam SUBORDER: Typic Humaquept

DESCRIPTION: Very dark gray (10YR 3/1) silt loam.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Spiraea douglasii*	*Carex obnupta* *Agrostis alba*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: NOT PRESENT
Hydrologic Control: INTACT
Enhancement Potential: MODERATE
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
415 34	400,402,403

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-21-94 (Rev. 7/97)

Wetland Code # MC-6
Data Sheets: 1

LOCATION: MC-6 is located east of the Archer Lane stub and west of Columbia Boulevard.

LEGAL: T.4N, R.1W, S.5

DESCRIPTION: This wetland is a small channel that contains a few ash trees and some soft rush. The water in the channel flows towards wetland MC-5; however, the channel ends at the property boundary and apparently does not connect to wetland MC-5.

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 0.1 acres

SOIL:

SERIES: Wollent silt loam SUBORDER: Typic Humaquept

DESCRIPTION: Very dark gray (10YR 3/1) silt loam.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Rubus discolor*	*Juncus effusus* *Holcus lanatus*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: MODERATE
Education: NOT APPROPRIATE
Recreation: NOT APPROPRIATE
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
415 33	1200,1400,1500

COMMENTS:

This wetland may be a non-jurisdictional ditch.

WETLAND SUMMARY SHEET

Date of Verification: 6/2/94 (Rev. 7/97)

Wetland Code # MC-7
Data Sheets: 1

LOCATION: MC-7 is located southeast of the intersection of Sykes Road and Columbia Boulevard.

LEGAL: T.4 N, R.1 W, S 5.

DESCRIPTION: This wetland consists of a mosaic of non-wetland and shallow wetland depressions. These depressions appear to be the result of the clearing of woody vegetation on the site. A 1983 air photo indicates that there was previously a mixture of Oregon ash and Oregon oak trees on this site.

The boundaries of the wetlands in this mosaic are poorly defined. There is no apparent surface water connection between this wetland and wetland MC-5 across the street or between this wetland and wetland MC-8 to the south. Wetlands MC-7 and MC-5 were probably part of the same wetland prior to the construction of Sykes Road.

CLASSIFICATION: Palustrine Emergent (PEM).

WETLAND SIZE: Wetland/Upland Mosaic

Total Area = 0.5 acres
Wetland Area = ~ 0.2 acres

SOIL:

SERIES: Wollent Silt Loam SUBORDER: Typic Humaquept

DESCRIPTION: Very dark gray (10YR 3/1) silt loam

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
		Juncus effusus
		Phalaris arundinacea
		Agrostis alba

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: NOT PRESENT
Hydrologic Control: IMPACTED
Sensitivity to Impact: POTENTIALLY SENSITIVE

Enhancement Potential: LITTLE
Education: NOT APPROPRIATE
Recreation: NOT APPROPRIATE
Aesthetic Qual.: NOT PLEASING

AFFECTED TAXLOTS:

TAXMAP	LOTS
415 34	1000

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-21-94 (Rev. 7/97)

Wetland Code # MC-8
Data Sheets: 5

LOCATION: MC-8 is located east of the Bachelor Flat Road and Columbia Boulevard intersection, and West of Sykes Road.

LEGAL: T.4N, R.1W, S.5

DESCRIPTION: This wetland is fed by water that is culverted underneath Sykes Road. The water probably originates in wetland MC-1, although there is so much development in this area that it is not possible to track where all the culverts go. Once the water flows under Sykes Road, it flows southwest into an area of emergent vegetation dominated primarily by reed canarygrass. There are also a few Oregon ash trees in this area and some areas of Himalayan blackberry and spiraea. The boundary of this wetland is clearly defined by abrupt changes in elevation.

CLASSIFICATION: Palustrine emergent (PEM)

WETLAND SIZE: 3.3 acres

SOIL:

SERIES: Wollent silt loam SUBORDER Typic Humaquept

DESCRIPTION: Very dark gray (10YR 3/1) silt loam

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Spiraea douglasii*	*Phalaris arundinacea*
	Rubus discolor	*Scirpus microcarpos*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: DIVERSE
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
415 34	800,900,1000,1100,1200
415 33	2400,2500,2600

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 5-31-94 (Rev. 7/97)

Wetland Code # MC-9
Data Sheets: 1

LOCATION: MC-9 begins northwest of the intersection of Bachelor Flat Road and Columbia Boulevard and flows into McNulty Creek south of the intersection of Firlok Park Road and Hazel Road.

LEGAL: T.4N, R.1W, S.7,8,9

DESCRIPTION: This is a very small perennial stream that originates to the northwest of the Bachelor Flat Road and Columbia Boulevard intersection. The creek also receives some water from an intermittent tributary (MC-8) and an associated wetland that enters the stream from the east at the intersection of Columbia Boulevard and Bachelor Flat Road. Wetland MC-9 is crossed several times to the north of Bachelor Flat Road by private roads with culverts. These crossings have created small areas of emergent vegetation dominated by small-fruited bulrush.

CLASSIFICATION: Riverine upper perennial (R3)

WETLAND SIZE: 4.1 acres

SOIL:

SERIES: Xerochrepts SUBORDER: Xerochrepts

DESCRIPTION: Very dark gray (10YR 3/1) silt loam along bank and rock and cobble in stream channel bottom

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa	*Cornus stolonifera*	*Scirpus microcarpus*
Alnus rubra		*Phalaris arundinacea*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: DIVERSE
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
415 33	1800,1900
416 4	401,2900,3100,3200,3201,3300,3502,3601
417 12	3100
418	500
418 22	800,900,1000,2000,2100,2300,2400,3500,3600,3700
418 23	500,600,1400,1500

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 8/23/97

Wetland Code # MC-10
Data Sheets: 1 - Offsite determination

LOCATION: MC-10 is located north of Maple Street and east of Childs Road

LEGAL: T.4N, R.1W, S8

DESCRIPTION: This is a small area of emergent wetland dominated by reed canarygrass. This wetland may formerly have drained towards wetland MC-9 to the east; however, the area between MC-10 and wetland MC-9 has recently been filled. The water from this wetland may now be piped into wetland MC-9. The boundary of this wetland is defined by moderate rises in elevation on both the north and south sides and by the edge of fill on the east side. Data for this site was collected from the nearby roadway.

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 0.4 acres

SOIL:

SERIES: Wollent silt loam SUBORDER: Typic humaquept

DESCRIPTION: Very dark gray (10YR 3/1) silt loam with yellowish red (5YR 4/6) mottles.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
		Phalaris arundinacea

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: NOT PRESENT
Hydrologic Control: INTACT
Enhancement Potential: MODERATE
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
417 14	100,200

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 8/23/97

Wetland Code # MC-10
Data Sheets: 1 - Offsite determination

LOCATION: MC-10 is located north of Maple Street and east of Childs Road

LEGAL: T.4N, R.1W, S8

DESCRIPTION: This is a small area of emergent wetland dominated by reed canarygrass. This wetland may formerly have drained towards wetland MC-9 to the east; however, the area between MC-10 and wetland MC-9 has recently been filled. The water from this wetland may now be piped into wetland MC-9. The boundary of this wetland is defined by moderate rises in elevation on both the north and south sides and by the edge of fill on the east side. Data for this site was collected from the nearby roadway.

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 0.4 acres

SOIL:

SERIES: Wollent silt loam SUBORDER: Typic humaquept

DESCRIPTION: Very dark gray (10YR 3/1) silt loam with yellowish red (5YR 4/6) mottles.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
		Phalaris arundinacea

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: NOT PRESENT
Hydrologic Control: INTACT
Enhancement Potential: MODERATE
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
417 14	100,200

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 5-31-94 (Rev. 7/97)

Wetland Code # MC-11
Data Sheets: 1

LOCATION: MC-11 is located northeast of the Millard Road and Ross Road intersection, on McNulty Creek.

LEGAL: T.4N, R.1W, S.7

DESCRIPTION: This is an emergent wetland dominated by cattails with some scattered spiraea and Pacific willow shrubs on the floodplain to the north and south of McNulty Creek. The edge of the wetland is defined by the edge of the floodplain of the creek and by a dense stand of Himalayan blackberry.

CLASSIFICATION: Palustrine emergent (PEM)

WETLAND SIZE: 1.2 acres

SOIL:

SERIES: Xerochrepts SUBORDER: Xerochrepts

DESCRIPTION: Very dark gray (10YR 3/1) silt loam

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
	Salix lasiandra	*Typha latifolia*
	Spiraea douglasii	*Phalaris arundinacea*
	Rubus discolor	

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
417 4	1200

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 5-31-94 (Rev. 7/97)

Wetland Code # MC-12
Data Sheets: 3

LOCATION: *McNulty Creek.* MC-12 enters the project area near the Millard Road and Ross Road intersection. It flows east under the Columbia River Highway then turns south towards Portland Road. Eventually it flows into wetland MC-25 and Scappoose Bay to south of Portland Road.

LEGAL: T.4N, R.1W, S.7,8,9, &18

DESCRIPTION: McNulty Creek is a small perennial stream that originates in the hills to the south and west of town. It flows east through the southern portion of town until it reaches a large wetland complex (MC-25) on the edge of Scappoose Bay. McNulty Creek ranges from 5 to 10 feet wide in the upper reaches. In the lower reaches, where the gradient is lower and there is more water in the creek, the creek is significantly wider. A small tributary stream (MC-9) enters McNulty Creek south of the intersection of Firlok Park Road and Hazel Road.

In some areas, there are wetlands that occur on the floodplain of the creek. These wetlands are described on individual summary sheets.

CLASSIFICATION: Riverine upper perennial (R3)

WETLAND SIZE: 10.5 acres

SOIL:

SERIES: Xerochrepts SUBORDER: Xerochrepts

DESCRIPTION: Streambed with rock and cobble bottom.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

Riparian Vegetation

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa	*Salix lasiandra*	*Urtica dioica*
Alnus rubra	*Spiraea douglasii*	*Phalaris arundinacea*
Acer macrophyllum	*Cornus stolonifera*	
Thuja plicata	*Sambucus spp*	

WETLAND FUNCTIONAL ASSESSMENT: Not Assessed – Stream

AFFECTED TAXLOTS:

TAXMAP	LOTS
417 14	1400,1500
417 4	200,300,400,902,903,1006,1007,1008,100,1200,1300
417 3	100,300
418	600,700,800,300,307,306,305,313,302,303,304,102, 310,311,312
418 23	2800,2701,3200,2200,1700,1800,1900,2700,2600, 2000,2100,2500,1400,2201,1300,1200,1100,3500, 3400,3300
418 32	503
418 24	1401,1300,800,1100,900,1000,400,100
419 23	200,700

COMMENTS: While McNulty Creek flows through a heavily urbanized area, its riparian vegetation is relatively undisturbed and provides adequate shading throughout its length. In many areas the riparian vegetation consists of dense trees and shrubs. While this stream is subject to pollution from urban and agricultural sources, it does provide important aquatic habitat for the area. The Oregon Department of Fish and Wildlife's Oregon Rivers Information Database identifies McNulty Creek as containing a population of cutthroat trout.

WETLAND SUMMARY SHEET

Date of Verification: 6-3-94 (Rev. 7/97)

Wetland Code # MC-13
Data Sheets: 3

LOCATION: MC-13 is located northwest of the intersection of Morse Road and Millard Road, just south of McNulty Creek.

LEGAL: T.4N, R.1W, S.7

DESCRIPTION: The source of the water in this wetland is groundwater discharge from the surrounding steep upland. The boundary of MC-13 is defined by a change in topography to the surrounding upland fields. The fringe of this wetland is dominated by Oregon ash trees. Near the center of the wetland is a small area of emergent vegetation dominated by cattails. The water from this wetland flows directly into the adjacent McNulty Creek.

CLASSIFICATION: Palustrine forested (PFO)

WETLAND SIZE: 0.6 acres

SOIL:

SERIES: Xerochrepts SUBORDER: Xerochrepts

DESCRIPTION: Very dark gray (10YR 3/1) silt loam

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Corylus cornuta*	*Veronica anagallis-aquifila*
	Rubus discolor	*Ranunculus repens*
		Typha latifolia

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
417 4	100

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 5-31-94 (Rev. 7/97)

Wetland Code # MC-14
Data Sheets: 1 - Offsite determination

LOCATION: MC-14 is located just southwest of the intersection of Millard and Morse Roads.

LEGAL: T.4N, R.1W, S.7

DESCRIPTION: This is an emergent wetland dominated by soft rush, meadow foxtail, and reed canarygrass. The wetland is in a swale in a grazed meadow. The water from this wetland flows into ditches along Millard Road. The hydrology is supported by seasonal groundwater discharge.

CLASSIFICATION: Palustrine emergent (PEM)

WETLAND SIZE: 1.2 acres

SOIL:

SERIES: Dayton silt loam SUBORDER: Typic Albaqualf

DESCRIPTION: Brown and dark grayish brown (10YR 4/3 & 4/2) silt loam - data collected along edge of roadway.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
	Spiraea douglasii	*Juncus effusus*
		Alopecurus pratensis
		Phalaris arundinacea

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: NOT APPROPRIATE
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
417 4	1600,1800

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 10/8/93 (Rev. 7/97)

Wetland Code # MC-15
Data Sheets: 0 - Delineation report

LOCATION: MC-15 is located northeast of the intersection of Millard Road and Morse Road

LEGAL: T.4 N, R.1 W, S 7

DESCRIPTION: During the initial phase of the LWI, this wetland was described as consisting of a shallow depression and a drainage ditch. The ditch and shallow depression have been replaced by a single larger and deeper depression as a result of the mitigation project constructed to offset unavoidable wetland impacts resulting from the construction of the McBride School. The boundary of this wetland is now clearly defined by the steep slopes that surround it as a result of the excavation of the soil.

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 0.8 acres

SOIL:

SERIES: Dayton Silt Loam SUBORDER: Typic Albaqualf

DESCRIPTION: Very dark gray (2.5Y 3/1) silt loam with dark yellowish brown (10YR 4/6) mottles.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
	Rosa gymnocarpa	*Holcus lanatus*
		Phalaris arundinacea
		Arostis alba
		Typha latifolia
		Juncus effusus

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Sensitivity to Impact: POTENTIALLY SENSITIVE

Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING

AFFECTED TAXLOTS:

TAXMAP	LOTS
418 32	400,501

COMMENTS: A delineation has been prepared for this property (Det #93-193).

WETLAND SUMMARY SHEET

Date of Verification: 5-31-94 (Rev. 7/97)

Wetland Code # MC-16
Data Sheets: 2 - Offsite determination

LOCATION: MC-16 is located just west of Division Road and north of Millard Road in McNulty Heights.

LEGAL: T.4N, R.1W, S.7

DESCRIPTION: This wetland is on the north and south side of a private road. The wetland consists of a small isolated depression dominated by emergent plants including reed canarygrass, meadow foxtail, and soft rush. The private road through MC-16 causes water to be impounded in a small area to the south of the road. The boundary of the wetland is defined by the edge of the depression.

CLASSIFICATION: Palustrine emergent (PEM)

WETLAND SIZE: 1.5 acres

SOIL:

SERIES: Dayton silt loam SUBORDER: Typic Albaqualf

DESCRIPTION: Dark grayish brown (10YR 4/2) silt loam*. Disturbed by road construction

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
	Spiraea douglasii	*Phalaris arundinacea*
		Juncus effusus
		Alopecurus pratensis

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
418 32	900,1100,1200,1300

COMMENTS:

*Soil description obtained from Soil Survey of Columbia County, Oregon (NRCS, 1986).

WETLAND SUMMARY SHEET

Date of Verification: 10/8/93 (Rev. 7/97)

Wetland Code # MC-17
Data Sheets: 0 - Delineation report.

LOCATION: MC-17 is located northeast of the intersection of Millard Road and Morse Road, and west of Division Road.

LEGAL: T.4 N, R.1 W, S 7

DESCRIPTION: During the initial phase of the LWI, this wetland was described as consisting of a shallow depression. The shallow depression has been replaced by a larger and deeper depression as a result of the mitigation project constructed to offset unavoidable wetland impacts resulting from the construction of the McBride School. The boundary of this wetland is now clearly defined by the steep slopes that surround it as a result of the excavation of the soil.

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 2.5 acres

SOIL:

SERIES: Dayton Silt Loam SUBORDER: Typic Albaqualf

DESCRIPTION: Very dark gray (10YR 3/1) silt loam.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
		Phalaris arundinacea
		Alopecurus pratensis

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
418 32	400,1000

COMMENTS: A delineation had previously been conducted for this property (Det #93-193).

WETLAND SUMMARY SHEET

Date of Verification: 10/8/93 (Rev. 7/97)

Wetland Code # MC-18
Data Sheets: 0 - Delineation report

LOCATION: MC-18 is located northeast of the intersection of Millard Road and Morse Road, west of Division Road, and south of McNulty Creek.

LEGAL: T.4 N, R.1 W, S 7

DESCRIPTION: This wetland is a shallow depression in a hay field just south of McNulty Creek (Det #93-193). The boundary of this wetland is somewhat poorly defined both because of the subtle topography in the area but also because of the presence of drain tile in the field. This wetland probably has a subsurface connection to McNulty Creek.

CLASSIFICATION: Palustrine Emergent (PEM).

WETLAND SIZE: 0.5 acres

SOIL:

SERIES: Dayton Silt Loam SUBORDER: Typic Albaqualf

DESCRIPTION: Dark grayish brown and very dark gray (10YR 4/2 & 3/1) silt loam with yellowish brown (10YR 4/6) mottles.

HYDROLOGIC BASIN: McNulty Creek.

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
		Phalaris arundinacea
		Agrostis alba
		Alopecurus pratensis

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
418 32	400

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-23-94 (Rev. 7/97)

Wetland Code # MC-19
Data Sheets: 3

LOCATION: MC-19 is located in the McNulty Business Park, which is east of the Columbia River Highway and north of the railroad tracks. McNulty Way bisects the wetland.

LEGAL: T.4N, R.1W, S.8

DESCRIPTION: MC-19 is a series emergent wetland depressions dominated by soft rush and various grasses. The boundary of these wetlands is defined somewhat indistinctly by the edge of the depressions. These depressions do not have a surface connection to one another. The portion of the wetland located to the east of McNulty Way used to be contiguous with the wetland located to the west of McNulty Way until McNulty Way was constructed.

CLASSIFICATION: Palustrine emergent (PEM)

WETLAND SIZE: 2.8 acres

SOIL:

SERIES: Rock Outcrops/Xerumbrepts SUBORDER: Rock Outcrops/Xerumbrepts

DESCRIPTION: Very dark gray (10YR 3/1) silt loam

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
		Juncus effusus
		Holcus lanatus
		Agrostis sp.
		Typha latifolia

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: MODERATE
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
418	307,308,309

COMMENTS: Please see Wetland Determination #97-0300 for a detailed description of this site.

WETLAND SUMMARY SHEET

Date of Verification: 5-27-94 (Rev. 7/97)

Wetland Code # MC-20
Data Sheets: 2

LOCATION: MC-20 is located north of Columbia Boulevard, just east of Cherrywood Drive.

LEGAL: T.4N, R.1W, S.5

DESCRIPTION: There are two parts to this wetland. The northern portion of the wetland is dominated by emergent vegetation, primarily grasses, while the southwestern portion of the wetland is a forested mosaic dominated by Oregon ash. The boundary of this wetland is indistinctly defined by subtle changes in elevation. There is no apparent surface water connection between this wetland and wetland MC-21 to the south.

CLASSIFICATION: Palustrine forested and Emergent (PFO)

WETLAND SIZE: Wetland/Upland Mosaic

Total Area = 2.1 acres
Total Wetland Area = ~1.8 acres

SOIL:

SERIES: Wollent silt loam SUBORDER: Typic Humaquept

DESCRIPTION: Very dark grayish brown (10YR 3/2) silt loam with strong brown (7.5YR 4/6) mottles

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Spiraea douglasii*	*Juncus effusus*
		Phalaris arundinacea

WETLAND FUNCTIONAL ASSESSMENT:
An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
415 31	100
415 42	2000,1700,1800,2700,3100,3000,2702,2701,2900, 2800,2601,2600,2500,2400,2220,2219
415 41	500,600

2502 — Det 05-150

COMMENTS: See the delineation prepared for the northern portion of this wetland (Det #97-0153) for a more detailed description of that area.

WETLAND SUMMARY SHEET

Date of Verification: 5-27-94 (Rev. 7/97)

Wetland Code #MC-21
Data Sheets: 1

LOCATION: MC-21 is located south of Columbia Boulevard and Cherrywood Drive, and north of Maplwood Drive.

LEGAL: T.4N, R.1W, S.5

DESCRIPTION: This wetland is a forested mosaic of wetlands and uplands. The wetlands are dominated by Oregon ash trees, while the uplands are dominated by Oregon oak trees. The boundary of the wetland areas are not clearly defined but generally correspond to the change in dominant trees species from ash trees in the wetlands to oak trees in the uplands. The northern boundary of the wetland is defined by the edge of the road. There is no apparent surface water connection between this wetland area and any other wetland.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: Wetland/Upland Mosaic

Total Area = 2.3 acres
Total Wetland Area = ~1.5 acres

SOIL:

SERIES: Wollent silt loam SUBORDER: Typic Humaquept

DESCRIPTION: Very dark grayish brown (10YR 3/2) silt loam with strong brown (7.5YR 4/6) mottles.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Symphoricarpos albus*	*Geum macrophyllum*
Quercus garryana	*Physocarpus capitatus*	

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
415 42	5000
415 43	1000,1400,2000,2800

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 5-26-94 (Rev. 7/97)

Wetland Code # MC-22
Data Sheets: 1

LOCATION: MC-22 extends from Port Avenue, just east of Milton Way, south to the intersection of Gable Road and the McNulty Industrial Park entrance road.

LEGAL: T.4N, R.1W, S.9

DESCRIPTION: This wetland begins as a forested wetland/upland mosaic just to the north of Port Avenue. The water from the wetland flows through a culvert under Port Ave. and then into an area dominated by reed canarygrass. Just north of a railroad bed, the water flows into another area of forested wetland/upland mosaic. This mosaic wetland continues south to Gable Road. While there is a small steep channel to the south of Gable Road that carries the water from this wetland into McNulty Creek, this channel is not a wetland. Water probably only flows down this channel during high flow events.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 2.4 acres

SOIL:

SERIES: Rock Outcrops/Xerumbrepts SUBORDER: Rock Outcrops/Xerumbrepts

DESCRIPTION: Very dark grayish brown (10YR 3/2) silt loam with strong brown (7.5YR 4/6) mottles.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa	*Spiraea douglasii*	*Carex obnupta*
Quercus garryana	*Rubus discolor*	*Phalaris arundinacea*
Fraxinus latifolia		*Alopecurus geniculatus*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: NOT APPROPRIATE
Recreation: NOT APPROPRIATE
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
414	1100,1200,1300,1301,1700
418 11	103,201

COMMENTS: See DSL Determination #94-0376 for further information on the area between Port Ave. and the railroad. A restoration order for this site may change acreage.

WETLAND SUMMARY SHEET

Date of Verification: 5-26-94 (Rev. 10/97)

Wetland Code # MC-23
Data Sheets: 1

LOCATION: MC-23 is located north of Gable Road, south of railroad tracks, and east of wetland MC-22 and the intersection of Gable Road and McNulty Industrial Park access road.

LEGAL: T.4N, R.1W, S.9

DESCRIPTION: An area of emergent wetland dominated by reed canarygrass and beggarticks drains south and west into a roadside ditch dominated by willow and spiraea. An adjacent area is in the process of being cleared, apparently for future construction. The boundary of the northern side of the wetland is defined by the edge of the railroad tracks although a small area of wetland is present to the north of the tracks. This small area of the wetland is connected to the main body of the wetland by a culvert. On the eastern and western side of the wetland, the boundary is defined by topographic changes while on the south the boundary is defined by the edge of Gable Road.

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 2.7 acres

SOIL:

SERIES: Rock Outcrops/Xerumbrepts SUBORDER: Rock Outcrops/Xerumbrepts

DESCRIPTION: Very dark gray (10YR 3/1) silt loam with abundant reddish brown (5YR 4/4) mottles.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
	Spiraea douglasii	*Phalaris arundinacea*
	Salix scouleriana	*Bidens frondosa*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: NOT PRESENT
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
414	1700
418 11	200M1
419 22	100,200

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 4-29-94 (Rev. 8/97)

Wetland Code # MC-24
Data Sheets: 2

LOCATION: MC-24 is located east of Portland Road and west of Railroad Avenue.

LEGAL: T.4N, R.1W, S.9

DESCRIPTION: This is a large area of emergent wetland dominated by reed canarygrass located within an Oregon oak forest. There are some areas dominated by Oregon ash near the southern end of the wetland. This wetland is connected by subsurface flow to wetland MC-25. The boundary of this wetland is generally defined by a change in elevation although there are some areas where the edge of the wetland is only observable as a change in the dominant vegetation.

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 2.9 acres

SOIL:

SERIES: Rock Outcrops/Xerumbrepts SUBORDER: Rock Outcrops/Xerumbrepts

DESCRIPTION: Very dark grayish brown (10YR 3/2) silt loam with strong brown (7.5YR 4/6) mottles

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Salix lasiandra*	*Phalaris arundinacea*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
419	600

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-22-94 (Rev. 7/97)

Wetland Code # MC-25
Data Sheets: See individual areas

LOCATION: MC-25 is located between Portland Road and Columbia River, south of Railroad Ave.

LEGAL: T.4N, R.1W, S.9

DESCRIPTION: This is a large wetland complex with 4 distinct areas which are described separately on the following data sheets. This summary is being provided primarily for the purposes of the functional assessment which is used to evaluate the functions of the entire wetland and not just an individual section of the wetland. This wetland is a shallow bay in the Scappoose Bay.

CLASSIFICATION: Palustrine emergent/forested/open water (PEM/PFO/POW)

WETLAND SIZE: 108.8 acres

SOIL:

SERIES: Sauvie silt loam (mapped) SUBORDER: Fluvaquentic Haplaquoll

DESCRIPTION: See individual summary sheets.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:

OVERSTORY	UNDERSTORY	GROUND COVER

See individual summary sheets.

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: DIVERSE
Fish Habitat: INTACT
Water Quality: INTACT
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: PROVIDES
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-22-94 (Rev. 7/97)

Wetland Code # MC-25a
Data Sheets: 2

LOCATION: MC-25 is located between Portland Road and Scappoose Bay, south of Railroad Ave. MC-25a is on the western edge of wetland MC-25.

LEGAL: T.4N, R.1W, S.9

DESCRIPTION: This section of wetland MC-25 is primarily forested with cottonwood and Oregon ash trees, although there is an area of emergent wetland dominated by reed canarygrass in the northwestern portion of the area. Most area "a" is subject to seasonal inundation by Scappoose Bay. The only exception is the southern portion of area "a" where there is a bench of slightly higher ground. This bench is still wetland, although there appear to be pockets of non-wetland scattered throughout which are primarily dominated by Himalayan blackberry.

The hydrology of the wetland on this bench appears to be supported by a seasonally elevated water table resulting from fluctuations in the water level of Scappoose Bay. The wetland/upland boundary is clearly defined in most areas by a distinct elevation change. Along the western edge of the wetland this elevation change corrisponds to the toe of fill for railroad tracks and a road. This road separates wetland MC-25 from wetland UB-5. These wetlands were probably connected prior to construction of the road; however, there is no longer an apparent connection. It is possible that a culvert through the road bed still exists but it was not found during the field work.

CLASSIFICATION: Palustrine forested (PFO)

WETLAND SIZE: 17.9 acres

SOIL:

SERIES: Sauvie silt loam SUBORDER: Fluvaquentic Haplaquoll

DESCRIPTION: Very dark gray (10YR 3/2) silt loam with strong brown (7.5YR 5/6) mottles.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa	*Spiraea douglasii*	*Phalaris arundinacea*
Fraxinus latifolia	*Rubus discolor*	
Salix lasiandra		

AFFECTED TAXLOTS:

TAXMAP	LOTS
4117	100
418	1000,1002

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-22-94 (Rev. 7/97)

Wetland Code # MC-25b
Data Sheets: 1

LOCATION: MC-25 is located between Portland Road and Columbia River and south of Railroad Ave. MC-25b is located on the southern edge of wetland MC-25.

LEGAL: T.4N, R.1W, S.9

DESCRIPTION: This section of wetland MC-25 is primarily forested with cottonwood and Pacific willow trees. Most of this area is subject to prolonged inundation by Scappoose Bay. Inundation of this area can last at least into late summer and some years may last all year. The northern edge of this wetland is clearly defined by a steep embankment that leads up to an industrial facility. The southern edge of this wetland is Scappoose Bay.

CLASSIFICATION: Palustrine Forested Seasonal Tidal (PFOR)/ Palustrine Emergent Scrub-shrub Seasonal Tidal (PEM/SSR)*

WETLAND SIZE: 26.3 acres

SOIL:

SERIES: Sauvie silt loam (mapped) SUBORDER: Fluvaquentic Haplaquoll

DESCRIPTION: Inundated to greater than 1'

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa		*Phalaris arundinacea*
Salix lasiandra		

AFFECTED TAXLOTS:

TAXMAP	LOTS
419	600

COMMENTS:

*Based on NWI mapping, Riverine tidal unconsolidated shore regularly flooded (R1USN) wetland may be present; however, this could not be verified during fieldwork performed.

WETLAND SUMMARY SHEET

Date of Verification: 6-22-94 (Rev. 7/97)

Wetland Code # MC-25c
Data Sheets: 1

LOCATION: MC-25 is located between Portland Road and Scappoose Bay and south of Railroad Ave. MC-25c is located in the west-central portion of wetland MC-25.

LEGAL: T.4N, R.1W, S.9

DESCRIPTION: This section of wetland MC-25 is primarily forested with cottonwood and Oregon ash trees. Most of this area is subject to seasonal inundation by Scappoose Bay. The eastern edge of this wetland is clearly defined by a steep embankment.

CLASSIFICATION: Palustrine forested (PFO)

WETLAND SIZE: 3.0 acres

SOIL:

SERIES: Sauvie silt loam (mapped) SUBORDER: Fluvaquentic Haplaquoll

DESCRIPTION: Very dark gray (10YR 3/2) silt loam with strong brown (7.5YR 4/6) mottles.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa	*Rubus discolor*	*Phalaris arundinacea*
Fraxinus latifolia		

AFFECTED TAXLOTS:

TAXMAP	LOTS
419	600

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-22-94 (Rev. 7/97)

Wetland Code # MC-25d
Data Sheets: 1

LOCATION: MC-25 is located between Portland Road and Scappoose Bay, and south of Railroad Ave. MC-25d is located in the northern and central portions of wetland MC-25

LEGAL: T.4N, R.1W, S.9

DESCRIPTION: This section of wetland MC-25 consists of open water and emergent areas. Most of this area, except the far northwestern portion, is subject to semipermanent inundation by the Scappoose Bay. In the far northwestern portion of the area is an area of emergent wetland dominated by reed canarygrass. The southwest corner of MC-25d is connected to wetland MC-26 by a culvert.

CLASSIFICATION: Palustrine Emergent Seasonal Tidal (PEMR)/ Riverine Tidal Unconsolidated Shore Regularly Flooded (R1USN)*

WETLAND SIZE: 61.6 acres

SOIL:

SERIES: Sauvie silt loam (mapped) SUBORDER: Fluvaquentic Haplaquoll

DESCRIPTION: Very dark gray (10YR 3/1) silt loam with reddish brown (5YR 4/4) mottles

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
		Phalaris arundinacea

AFFECTED TAXLOTS:

TAXMAP	LOTS
4117	100
419	600

COMMENTS:

*Based on NWI mapping, Riverine tidal unconsolidated shore regularly flooded (R1USN) wetland may be present; however, this could not be verified during fieldwork performed.

WETLAND SUMMARY SHEET

Date of Verification: 6-24-94 (Rev. 8/97)

Wetland Code # MC-26
Data Sheets: 1

LOCATION: MC-26 is located on the north side of the Port of ~~Portland~~ St Helens Property on the southeast side of Portland Road.

LEGAL: T.4N, R.1W, S.9

DESCRIPTION: This wetland consists of a small pond created out of an area of fill that was originally placed on wetland soil. It is connected by a culvert to wetland MC-25. The edge of the wetland is clearly defined by the edge of the excavated area. The source of the water in this wetland is probably a combination of groundwater and water flowing in from wetland MC-25.

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 1.2 acres

SOIL:

SERIES: Sauvie silt loam SUBORDER: Fluvaquentic haplaquoll

DESCRIPTION: No soil data collected - inundated.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
		Typha latifolia

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: NOT APPROPRIATE
Recreation: POTENTIAL
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
4117	100

COMMENTS:

Milton Creek

WETLAND SUMMARY SHEET

Date of Verification: 5/6/94 (Rev. 7/97)

Wetland Code # MI-1
Data Sheets: 0

LOCATION: *Milton Creek* - This creek enters the study area at the northwestern corner of the City of St. Helens Urban Growth Boundary. The creek enters Scappoose Bay at the end of Railroad Ave.

LEGAL: T.5N, R.1W, S 31& 32 & T.4N, R1W, S 4, 5, &9

DESCRIPTION: Milton Creek begins in the hills to the north and west of town. It flows south and east towards Scappoose Bay where it finally ends in a small delta at wetland MI-10. Along its length, the channel varies in width from 25 to 60 feet. Throughout its course, the creek has a forested buffer of riparian vegetation that consists of alder, cottonwood, Oregon ash, and big-leaf maple trees. This corridor is only interrupted at Pittsburg Road, Columbia Boulevard, and the Columbia River Highway.

CLASSIFICATION: Riverine upper perennial (R3)

WETLAND SIZE: 29.5 acres

SOIL:

SERIES: Rock outcrop/Xerumbrepts SUBORDER: Rock outcrop/Xerumbrepts

DESCRIPTION: Rock, cobble, and silt bottomed streambed.

HYDROLOGIC BASIN: Milton Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Riparian Vegetation		
Alnus rubra	*Rubus discolor*	*Phalaris arundinacea*
Fraxinus latifolia	*Symphoricarpos albus*	*Pteridium aquilinum*
Acer macrophyllum	*Acer circinatum*	*Carex obnupta*
Pseudotsuga menziesii	*Ribes spp.*	*Hedera helix*
Populus trichocarpa		*Agrostis tenuis*

WETLAND FUNCTIONAL ASSESSMENT: Not Assessed - Stream

AFFECTED TAXLOTS:	TAXMAP	LOTS
	414 32	700,1300,1300A1,1600,1400,3500,3600,9700,9600, 95009400,9300
	414 31	15300,15400,15500,15600,15700,15800,16400,16499, 16700,16800,16900,16800U1
	414 3	100,200
	415 12	4100,4000,3900,3800,3700,3600,3500,3400,3300,3200
	415 14	15100,14900,15000,14800,2200,14500,2300,11500, 11400,2400,2500,11300,11100,2600,2700,9500, 2800,2900,7000,7100,3000,6900,3100,5000, 3200,4900,3300,3500,3600,3601
	416 2	100
	416 1	302,303,304,306
	419 12	100
	5132	200,1300,1700,1800,1200,1100,100
	5132 3	600,700,900,500,400

COMMENTS: While Milton Creek flows through a heavily urbanized area, its riparian vegetation is relatively undisturbed and provides adequate shading throughout its length. In many areas the riparian vegetation consists of dense trees and shrubs. While this stream is subject to pollution from urban and agricultural sources, it does provide important aquatic habitat for the area. The Oregon Department of Fish and Wildlife's Oregon Rivers Information Database identifies Milton Creek as supporting a run of coho salmon and winter steelhead in addition to resident cutthroat trout. Upper limit of this wetland was outside study area

WETLAND SUMMARY SHEET

Date of Verification: 8/23/97

Wetland Code # MI-2
Data Sheets: 1

LOCATION: *Perry Creek.* - This creek enters the study area north of Hankey Road and west of Arvid Jarvi Road.

LEGAL: T.5N, R.1W, S32.

DESCRIPTION: Perry Creek begins in the hills north of town. It enters the study area just north of the intersection of Hankey Road and Arvid Jarvi Road. It flows generally south until it enters Milton Creek just south of Hankey Road. The wetland associated with Perry Creek is confined to the area between the banks of the creek. The streambanks are vegetated with typical riparian plants including red alders, big-leaf maple, Oregon ash, Himalayan blackberry, and bracken fern.

CLASSIFICATION: Riverine Upper Perennial (R3)

WETLAND SIZE: 0.8 acres

SOIL:

SERIES: Rock Outcrops/Xerumbrepts SUBORDER: Rock Outcrops/Xerumbrepts

DESCRIPTION: Rock and cobble bottomed stream channel.

HYDROLOGIC BASIN: Milton Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Riparian Vegetation *Alnus rubra* *Fraxinus latifolia* *Acer macrophyllum*	*Rubus discolor*	*Pteridium aquilinum*

WETLAND FUNCTIONAL ASSESSMENT: Not Assessed – Stream

AFFECTED TAXLOTS:

TAXMAP	LOTS
5132	200

COMMENTS: While Perry Creek is very small and has a relatively steep gradient, the riparian vegetation provides effective shade for the creek. The Oregon Rivers Information System indicates that there are resident cutthroat trout in Perry Creek.

WETLAND SUMMARY SHEET

Date of Verification: 8/23/97

Wetland Code # MI-3
Data Sheets: 2

LOCATION: West of Mayfair Drive and north and east of Vernonia Rd.

LEGAL: T.4N, R.1W, S5 .

DESCRIPTION: This is an emergent wetland in an open field dominated by reed canarygrass. The reed canarygrass is cut periodically for hay. The edges of the wetland are not well defined but the wetland area does generally correspond to a swale that slopes towards the east. Most of the area surrounding this wetland has already been developed and the wetland is now isolated from other wetland areas.

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 2.7 acres

SOIL:

SERIES: Wollent silt loam SUBORDER: Typic humaquept

DESCRIPTION: Very dark gray (10YR 3/1) silt loam with yellowish red (5YR 4/6) mottles.

HYDROLOGIC BASIN: McNulty Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
		Phalaris arundinacea

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
415 13	2709,2708,2707,2706,2705,4400,3600,3500

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 5-26-94 (Rev. 8/97)

Wetland Code # MI-4
Data Sheets: 1

LOCATION: MI-4 is located south of Old Portland Road, just to the south of Milton Creek.

LEGAL: T.4N, R.1W, S.9

DESCRIPTION: This wetland is a constructed channel between two developed lots (Auto wrecking yards). It is a steep sided channel with wetland in the bottom. This channel probably carries water from wetland MI-6 although no culvert was located in either wetland.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 0.2 acres

SOIL:

SERIES: Xerumbrepts-Rock Outcrops SUBORDER:

DESCRIPTION: Very dark gray (10YR 3/1) silt loam.

HYDROLOGIC BASIN: Milton Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
		Phalaris arundinacea

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: NOT PRESENT
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: LITTLE
Education: NOT APPROPRIATE
Recreation: POTENTIAL
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS: No lots affected

COMMENTS:

Although this area is designated as wetland, it is not a *jurisdictional* wetland.

WETLAND SUMMARY SHEET

Date of Verification: 5-26-94 (Rev. 7/97)

Wetland Code # MI-5
Data Sheets: 2

LOCATION: MI-5 is located southeast of Old Portland Road and north of Railroad Avenue.

LEGAL: T.4N, R.1W, S.9

DESCRIPTION: This area is a mosaic of Oregon ash forest wetlands and Oregon oak dominated uplands. There are also several patches of emergent wetland resulting from the removal of the ash trees. Throughout this area, the bedrock is very close to the surface. This leads to very seasonal hydrology in the wetlands. There is no clearly defined boundary to the wetlands in this area.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: Wetland/Upland Mosaic

Total Area - 11.5 acres
Approximate Wetland Area - 4 acres

SOIL:

SERIES: Xerumbrepts-Rock Outcrops SUBORDER: Xerumbrepts-Rock Outcrops

DESCRIPTION: Very dark gray (10YR 3/1) silt loam.

HYDROLOGIC BASIN: Milton Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Symphoricarpos albus*	*Carex obnupta*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: INTACT
Enhancement Potential: MODERATE
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
419 21	600,800,1200,1100,900,700

COMMENTS: This wetland area has been disturbed by All Terrain Vehicle use.

WETLAND SUMMARY SHEET

Date of Verification: 5-26-94 (Rev. 8/97)

Wetland Code # MI-6
Data Sheets: 1

LOCATION: MI-6 is located north of Old Portland Road and just to the south of Milton Creek.

LEGAL: T.4N, R.1W, S.9

DESCRIPTION: This wetland is a small depression which ends at the toe of the fill for Old Portland Road. This wetland is dominated by Oregon ash trees and adjacent to the road there is a dense area of spiraea.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 0.1 acres

SOIL:

SERIES: Xerumbrepts-Rock Outcrops SUBORDER: Xerumbrepts-Rock Outcrops

DESCRIPTION: Very dark gray (10YR 3/1) silt loam.

HYDROLOGIC BASIN: Milton Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Spiraea douglasii*	

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: NOT PRESENT
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: LITTLE
Education: NOT APPROPRIATE
Recreation: POTENTIAL
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS: No lots affected ?

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-22-94 (Rev. 8/97)

Wetland Code # MI-7
Data Sheets: 1

LOCATION: MI-7 is located just south of the Boise Cascade plant and northwest of the railroad tracks that are adjacent to the Columbia River.

LEGAL: T.4N, R.1W, S.9

DESCRIPTION: This large wetland begins at the southern end of the Boise Cascade plant and extends southwest to Milton Creek. The majority of this wetland is dominated by reed canarygrass and Himalayan blackberry. There are, however, clumps of soft rush and spiraea scattered throughout the wetland. In addition, there are several small forested areas near the center of the wetland and in the southwestern portion of the wetland where there are cottonwood and Pacific willow trees. The boundary of the northern end of this wetland is clearly defined by the edge of a rock outcrop and the fill upon which the Boise Cascade plant has been built. The railroad bed clearly marks the eastern boundary of the wetland in most areas. In the southern portion of the wetland, the boundaries are clearly defined by the toe of a steep bank.

CLASSIFICATION: Palustrine emergent (PEM)

WETLAND SIZE: 16.0 acres

SOIL:

SERIES: Sauvie silt loam SUBORDER: Fluvaquentic haplaquoll

DESCRIPTION: Very dark grayish-brown (10YR 3/2) silt loam with brown (7.5YR 4/4) mottles

HYDROLOGIC BASIN: Milton Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Salix lasiandra	*Spiraea douglasii*	*Phalaris arundinacea*
Populus trichocarpa	*Rubus discolor*	*Juncus effusus*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: INTACT
Hydrologic Control: INTACT
Sensitivity to Impact: SENSITIVE

Enhancement Potential: MODERATE
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: NOT PLEASING

AFFECTED TAXLOTS:

TAXMAP	LOTS
4110	200
419	200,201

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-22-94 (Rev. 7/97)

Wetland Code # MI-8
Data Sheets: 2

LOCATION: MI-8 is located on the western bank of Milton Creek. It is located on both sides of the Railroad Avenue bridge.

LEGAL: T.4N, R.1W, S.9

DESCRIPTION: This wetland occurs on a bench on the west side of Milton Creek. The hydrology of the wetland is evidently supported by the seasonal and tidal fluctuations in the water surface elevation in Milton Creek. The boundary of the wetland is clearly defined by the edges of the bench.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 2.5 acres

SOIL:

SERIES: Sauvie silt loam SUBORDER: Fluvaquentic Haplaquoll

DESCRIPTION: Very dark grayish brown (10YR 3/2) silt loam with strong brown (7.5YR 4/6) mottles.

HYDROLOGIC BASIN: Milton Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa	*Salix lasiandra*	*Phalaris arundinacea*
Fraxinus latifolia	*Salix sp.*	

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: INTACT
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
419	200

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6/21/94 (Rev. 7/97)

Wetland Code # MI-9
Data Sheets: 2

LOCATION: MI-9 is located northeast of Railroad Avenue, between 3rd and 4th strees

LEGAL: T.4 N, R.1 W, S 9.

DESCRIPTION: This is an isolated forested wetland located in a small depression. The dominant plants include Oregon ash and slough sedge. The boundary of the wetland is defined by the edge of the depression and there is no apparent connection between this wetland and any other nearby wetland.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 0.1 acres

SOIL:

SERIES: Xerumbrepts SUBORDER: Xerumbrepts

DESCRIPTION: Very dark grayish brown (10YR 3/2) with strong brown (7.5YR 4/6) mottles.

HYDROLOGIC BASIN: Milton Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Spiraea douglasii* *Rosa gymnocarpa*	*Carex obnupta*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: NOT PRESENT
Hydrologic Control: IMPACTED
Enhancement Potential: MODERATE
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
419 24	701

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-22-94 (Rev. 8/97)

Wetland Code # MI-10
Data Sheets: 2

LOCATION: MI-10 is located adjacent to Scappoose Bay, at the mouth of Milton Creek which is just east of the Armstrong Plant.

LEGAL: T.4N, R.1W, S.9

DESCRIPTION: This forested wetland has two components. The first component consists of the delta at the mouth of Milton Creek. This area is flooded most years by both Milton Creek and Scappoose Bay. To the west of the delta area and at a slightly higher elevation is the second component of this wetland. Because of its slightly higher elevation, the western portion of the wetland is not subject to as frequent flooding as the delta area. The dominant plant species in both components of the wetland are similar and include cottonwood, Oregon ash, and Pacific willow.

CLASSIFICATION: Palustrine forested (PFO)

WETLAND SIZE: 16.5 acres

SOIL:

SERIES: Sauvie silt loam SUBORDER: Fluvaquentic Haplaquoll

DESCRIPTION: Very dark grayish-brown (10YR 3/2) silty clay loam with reddish brown (5YR 4/4) mottles.

HYDROLOGIC BASIN: Milton Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa		*Phalaris arundinacea*
Fraxinus latifolia		
Salix lasiandra		

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: INTACT
Hydrologic Control: INTACT
Sensitivity to Impact: SENSITIVE

Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: PROVIDES
Aesthetic Qual.: MODERATELY PLEASING

AFFECTED TAXLOTS:

TAXMAP	LOTS
419	200,600

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-22-94 (Rev. 7/97)

Wetland Code # MI-11
Data Sheets: 0 - offsite determination

LOCATION: MI-11 is located adjacent to Scappoose Bay, just north of the mouth of Milton Creek .

LEGAL: T.4N, R.1W, S.9

DESCRIPTION: This is a small area of forested wetland dominated by cottonwoods and Pacific willow trees, located on the edge of Scappoose Bay.

CLASSIFICATION: Palustrine forested (PFO)

WETLAND SIZE: 0.4 acres

SOIL:

SERIES: Sauvie silt loam SUBORDER: Fluvaquentic Haplaquoll

DESCRIPTION: no data taken - listed hydric soil

HYDROLOGIC BASIN: Milton Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa (aerial photos)		
Salix lasiandra		

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: INTACT
Water Quality: INTACT
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
419	301

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-22-94 (Rev. 7/97)

Wetland Code # MI-12
Data Sheets: 0 - Offsite determination

LOCATION: MI-12 is located on the edge of Scappoose Bay, between the mouth of Milton Creek to the south and the Boise Cascade plant to the north.

LEGAL: T.4N, R.1W, S.9

DESCRIPTION: MI-12 consists of a small area of forested wetland along the banks of Scappoose Bay. The edges of the wetland are clearly defined by a steep bank to the west and by Scappoose Bay to the east. The area to the west has been heavily disturbed by the previous industrial use of the site.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 0.6 acres

SOIL:

SERIES: Sauvie silt loam SUBORDER: Fluvaquentic Haplaquoll

DESCRIPTION: no data taken - listed hydric soil

HYDROLOGIC BASIN: Milton Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa (aerial photos)		
Salix lasiandra		

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME	Enhancement Potential: HIGH
Fish Habitat: INTACT	Education: POTENTIAL
Water Quality: INTACT	Recreation: POTENTIAL
Hydrologic Control: IMPACTED	Aesthetic Qual.: NOT PLEASING

Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
419	300

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-22-94 (Rev. 8/97)

Wetland Code # MI-13
Data Sheets: 1

LOCATION: MI-13 is located on the grounds of the Boise Cascade Corp. plant. It is west of the railroad tracks that run near the banks of the Multnomah Channel. It is between the main plant facility to the north and MI-7 to the south.

LEGAL: T.4N, R.1W, S.10

DESCRIPTION: This wetland is an artificial pond constructed for the purpose of catching accidental spills from an adjacent storage tank. A few weedy plant species have established a foothold in the bottom of the pond. The boundary of this wetland is clearly defined by the steep sides of the excavated area.

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 0.7 acres

SOIL:

SERIES: Sauvie silt loam SUBORDER: Fluvaquentic haplaquoll

DESCRIPTION: Gravel

HYDROLOGIC BASIN: Milton Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
		Typha latifolia
		Epilobium cilliatum
		Cirsium vulgare

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: NOT PRESENT
Water Quality: IMPACTED
Hydrologic Control: INTACT X some
Sensitivity to Impact: POTENTIALLY SENSITIVE

Enhancement Potential: LITTLE
Education: NOT APPROPRIATE
Recreation: NOT APPROPRIATE
Aesthetic Qual.: NOT PLEASING

AFFECTED TAXLOTS:

TAXMAP	LOTS
4110	200

COMMENTS: Not significant

WETLAND SUMMARY SHEET

Date of Verification: 6-22-94 (Rev. 8/97)

Wetland Code # MI-14
Data Sheets: 1

LOCATION: MI-14 is located at the southern end of the Boise Cascade Plant, between a railroad bed to the west and the Multnomah Channel to the east.

LEGAL: T.4N, R.1W, S.10

DESCRIPTION: This wetland area consists of two artificially constructed ponds built to catch spills from the storage tank located just to the north. There are a few, primarily weedy, plants located in the bottom of the ponds. The edge of this wetland is clearly defined by the edge of the excavated area.

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 1.9 acres

SOIL:

SERIES: Sauvie silt loam - mapped SUBORDER: Fluvaquentic haplaquoll

DESCRIPTION: Gravel

HYDROLOGIC BASIN: Milton Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
		Eleocharis sp.
		Epilobium cilliatum

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: NOT PRESENT
Water Quality: IMPACTED
Hydrologic Control: INTACT ~~X~~ some
Sensitivity to Impact: POTENTIALLY SENSITIVE

Enhancement Potential: LITTLE
Education: NOT APPROPRIATE
Recreation: NOT APPROPRIATE
Aesthetic Qual.: NOT PLEASING

AFFECTED TAXLOTS:

TAXMAP	LOTS
4110	200

COMMENTS:

Not significant

WETLAND SUMMARY SHEET

Date of Verification: 6-22-94 (Rev. 7/97)

Wetland Code # MI-15
Data Sheets: 3

LOCATION: MI-15 is located southeast of Old Portland Road and north of Kaster Road.

LEGAL: T.4N, R.1W, S.4

DESCRIPTION: This wetland consists of an ash forest and an adjacent emergent wetland dominated by cattails and reed canarygrass. There is no clear boundary to this wetland and, within the forested portion of this wetland, there are areas that may not be wetland.

CLASSIFICATION: Palustrine Forested (PFO)

WETLAND SIZE: 3.7 acres

SOIL:

SERIES: Rock Outcrop/Xerumbrepts SUBORDER:Rock Outcrop/Xerumbrepts

DESCRIPTION: black (10YR 2/1) muck

HYDROLOGIC BASIN: Milton Creek

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Salix lasiandra*	*Phalaris arundinacea*
Acer macrophyllum	*Rubus discolor*	*Solanum dulcamara*
		Typha latifolia

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: NOT PRESENT
Water Quality: INTACT
Hydrologic Control: INTACT
Enhancement Potential: MODERATE
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
419 11	601,700

COMMENTS: Wildlife habitat is significant due to the diverse vegetative strata and large size of the open space.

Unnamed Creek A

WETLAND SUMMARY SHEET

Date of Verification: 5/31/94 (Rev. 7/97)

Wetland Code # UA-1
Data Sheets: 1

LOCATION: UA-1 is located between the Columbia River Highway and Old Portland Road and south of Millard Road.

LEGAL: T.4 N, R.1 W, S 17.

DESCRIPTION: This emergent wetland is located in a pasture. Two small wetland depression are located to the north of the main body of the wetland. The western of these depressions has a surface water connection to the main body of the wetland. The main body of the wetland begins as a broad area dominated by reed canarygrass. As it proceedes south towards Portland Road, the wetland becomes very narrow and is limited to a small channel. Ultimately, this channel flows under Portland Road and Scappoose Bay at wetland UA-2.

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 4.7 acres

SOIL:

SERIES: Wollent Silt Loam SUBORDER: Typic Humaquept

DESCRIPTION: Very dark grayish brown (10YR 3/2) with strong brown (7.5YR 4/6) mottles.

HYDROLOGIC BASIN: Unnamed Creek A

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
		Phalaris arundinacea

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
4117 2	300,4900,4800,4600,4400,4300,4200,4100,4000, 3700,3600,3500

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-27-94 (Rev. 8/97)

Wetland Code # UA-2
Data Sheets: 1

LOCATION: UA-2 is located adjacent to Scappoose Bay - just north of the Port of St. Helens Marina

LEGAL: T.4N, R.1W, S.17

DESCRIPTION: This area is a forested wetland located at the mouth of a small creek. It is dominated by cottonwood and Pacific willow trees, spiraea, and reed canarygrass. A path system has been constructed through this wetland to provide educational and recreational opportunities for the public. This wetland is seasonally inundated by Scappoose Bay and by the unnamed creek. The boundary of the wetland is defined by an abrupt change in elevation on its northern, western, and eastern boundaries. The southern boundary is defined by the edge of Scappoose Bay.

CLASSIFICATION: Palustrine forested (PFO)

WETLAND SIZE: 3.4 acres

SOIL:

SERIES: Sauvie silt loam SUBORDER: Fluvaquentic Haplaquoll

DESCRIPTION: No soil data - Inundated to 2'

HYDROLOGIC BASIN: Unnamed Creek A

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa	*Salix lasiandra* *Spiraea douglasii*	*Phalaris arundinacea*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: INTACT
Water Quality: INTACT
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: PROVIDES
Aesthetic Qual.: PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
4117 2	3600

COMMENTS:

Unnamed Creek B

WETLAND SUMMARY SHEET

Date of Verification: 5-31-94 (Rev. 7/97)

Wetland Code # UB-1
Data Sheets: 2

LOCATION: UB-1 is located just east of Highway 30, around Millard Road and the vacated Millard Road bed.

LEGAL: T.4N, R.1W, S.8

DESCRIPTION: This wetland consists of small pockets of emergent wetland dominated by cattails, reed canarygrass and creeping buttercup. The boundaries of wetland are clearly defined in many areas by the toe of the road fill. In other areas, the wetland boundary is defined by a change in elevation. Water from this wetland appears to flow north and may end up, through a subsurface connection, in wetland UB-4.

CLASSIFICATION: Palustrine emergent (PEM)

WETLAND SIZE: 1.4 acres

SOIL:

SERIES: Wollent silt loam SUBORDER: Typic Humaquept

DESCRIPTION: Very dark grayish brown (10YR 3/2) silt loam with reddish brown (5YR 4/4) mottles.

HYDROLOGIC BASIN: Unnamed Creek B

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
		Phalaris arundinacea
		Typha latifolia
		Ranunculus repens

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
4117 2	300
418 34	1400,1701,1800,1600

COMMENTS: See the wetland delineation for the Columbia River Highway improvement project (ODOT) and determination ##93-137 for more detailed information regarding this wetland.

WETLAND SUMMARY SHEET

Date of Verification: 5-31-94 (Rev. 7/97)

Wetland Code # UB-2
Data Sheets: 5

LOCATION: UB-2 is located at the intersection of railroad and Columbia River Highway, south of McNulty Way and wetland MC-19.

LEGAL: T.4N, R.1W, S.8

DESCRIPTION: Two forested wetland depressions are present on either side of a railroad bed. The dominant plants in these depressions are Oregon ash and cottonwood trees, slough sedge, and reed canarygrass. The water from this wetland appears to flow subsurface into wetland UB-4 which flows into wetland UB-5. The wetland boundary is formed by the railroad bed and by changes topography.

CLASSIFICATION: Palustrine forested (PFO)

WETLAND SIZE: 0.9 acres

SOIL:

SERIES: Wollent Silt Loam SUBORDER: Typic Humaquept

DESCRIPTION: Very dark gray (10YR 3/1) silt loam with yellowish brown (10YR 5/6) and reddish brown (5YR 4/4) mottles.

HYDROLOGIC BASIN: Unnamed Creek B

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Fraxinus latifolia	*Corylus comuta*	*Carex obnupta*
Populus trichocarpa		*Phalaris arundinacea*
		Ranunculus repens

WETLAND FUNCTIONAL ASSESSMENT: :
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: MODERATE
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
418	307
418 4	200

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 8-25-94 (Rev. 7/97)

Wetland Code # UB-3
Data Sheets: 4

LOCATION: UB-3 is located north of the railroad, east of Columbia River Highway and west of Portland Road.

LEGAL: T.4N, R.1W, S.8

DESCRIPTION: This wetland consists of two small isolated depressions dominated by Oregon ash and cottonwood saplings, spiraea, and reed canarygrass. The area appears to have been disturbed by grading or filling at some point in the past. Purpose or date of disturbance is unknown. The boundary of this wetland is defined by the edge of the depressions.

CLASSIFICATION: Palustrine Scrub/Shrub (PSS)

WETLAND SIZE: 0.3 acres

SOIL:

SERIES: Wollent silt loam SUBORDER: Typic Humaquept

DESCRIPTION: Very dark grayish brown (10YR 3/2) silt loam with reddish brown (5YR 4/4) mottling.

HYDROLOGIC BASIN: Unnamed Creek B

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
	Populus trichocarpa	*Phalaris arundinacea*
	Fraxinus latifolia	
	Spiraea douglasii	

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: MODERATE
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
418	308
418 4	101

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 5-31-94 (Rev. 7/97)

Wetland Code # UB-4
Data Sheets: 0 - offsite determination

LOCATION: UB-4 runs from just south of the intersection of the railroad and Columbia River Highway south to Portland Road.

LEGAL: T.4N, R.1W, S.8

DESCRIPTION: This is an emergent wetland dominated by reed canarygrass that exists on both sides of a small stream channel. The wetland extends a short distance up the side slopes of the swale that surrounds the channel. The width of the wetland is dependant on the steepness of the side slopes of the swale and on the stream channel gradient. Water from wetland UB-2 appears to flow subsurface into this wetland. The stream in this wetland flows underneath of Portland Road and into wetland UB-5.

CLASSIFICATION: Palustrine emergent (PEM)

WETLAND SIZE: 2.5 acres

SOIL:

SERIES: Wollent silt loam SUBORDER: Typic Humaquept

DESCRIPTION: Very dark grayish brown (10YR 3/2) silt loam with yellowish red (5YR 4/6) mottles.

HYDROLOGIC BASIN: Unnamed Creek B

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
		Phalaris arundinacea

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: IMPACTED
Hydrologic Control: IMPACTED
Enhancement Potential: HIGH
Education: NOT APPROPRIATE
Recreation: NOT APPROPRIATE
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:

TAXMAP	LOTS
418 4	200,1100,1200
418 34	2500

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-23-94 (Rev. 7/97)

Wetland Code # UB-5
Data Sheets: See UB-5a & 5b.

LOCATION: Southeast of Portland Road, west of Scappoose Bay. Just south of wetland MC-25.

LEGAL: T.4N, R.1W, S.8

DESCRIPTION: There are two areas in this wetland. The northern portion of the wetland, designated 5a, is a forested area located just south of Portland Road. The southern portion of the wetland, designated 5b, is an emergent wetland area adjacent to Scappoose Bay. A timber industry facility is located just east of this wetland.

CLASSIFICATION: Palustrine forested/Emergent/Open Water (PFO/EM/OW)

WETLAND SIZE: 41.9 acres

SOIL:

SERIES: Sauvie silt loam SUBORDER: Fluvaquentic Haplaquoll

DESCRIPTION: see individual areas

HYDROLOGIC BASIN: Unnamed Creek B

DOMINANT VEGETATION:

OVERSTORY	UNDERSTORY	GROUND COVER

see individual areas.

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: DIVERSE
Fish Habitat: INTACT
Water Quality: INTACT
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: POTENTIAL
Aesthetic Qual.: MODERATELY PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-23-94 (Rev. 8/97)

Wetland Code # UB-5a
Data Sheets: 2

LOCATION: UB-5 is located southeast of Portland Road, west of Scappoose Bay, and just west of wetland MC-25.

LEGAL: T.4N, R.1W, S.8

DESCRIPTION: This is a forested wetland dominated by cottonwood and Pacific willow trees. A small unnamed creek flows into the northwest corner of this wetland. The road and railroad located just to the north separates UB-5a from wetland MC-25. These two wetlands may have been connected in the past, but the road has apparently severed any surface connection between them. No culverts that would connect UB-5a to MC-25 were located during the field work although they may just have been obscured by dense brush. The water from UB-5a area flows through a small channel into UB-5b. An access road to the timber yard located to the south of this wetland separates UB-5a from wetland UB-6. Although there may be a culvert that links UB-5a to wetland UB-6, none was located during the field work. The boundary of this wetland is clearly defined in the east and south by the toe of the road fills. In the north and the west the boundary of this wetland is clearly defined by an abrupt rise in elevation.

CLASSIFICATION: Palustrine forested (PFO)

WETLAND SIZE: 2.85 acres

SOIL:

SERIES: Sauvie silt loam SUBORDER: Fluvaquentic Haplaquoll

DESCRIPTION: Very dark grayish brown (10YR 3/2) loam with strong brown (7.5YR 5/6) mottles.

HYDROLOGIC BASIN: Unnamed Creek B

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa	*Cornus stolonifera*	*Phalaris arundinacea*
Salix lasiandra		*Carex obnupta*

AFFECTED TAXLOTS:

TAXMAP	LOTS
4117 2	700
4117	100

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-23-94 (Rev. 8/97)

Wetland Code # UB-5b
Data Sheets: 1

LOCATION: UB-5b is located southeast of Portland Road, north of Scappoose Bay, and just south of wetland MC-25.

LEGAL: T.4N, R.1W, S.8

DESCRIPTION: This is an emergent wetland area around the mouth of McNulty Creek. Water in this wetland results from seasonal and semi-permanent inundation by Scappoose Bay and a small creek. The boundary of this wetland is clearly defined on every side except the south by an abrupt rise in elevation. In the south, the boundary of this wetland is defined by the edge of the Scappoose Bay.

CLASSIFICATION: Palustrine Emergent (PEM)

WETLAND SIZE: 2.85 acres

SOIL:

SERIES: Sauvie silt loam SUBORDER: Fluvaquentic Haplaquoll

DESCRIPTION: Soil not sampled - inundated

HYDROLOGIC BASIN: Unnamed Creek B

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
		Phalaris arundinacea

AFFECTED TAXLOTS:

TAXMAP	LOTS
4117	100

COMMENTS:

WETLAND SUMMARY SHEET

Date of Verification: 6-23-94 (Rev. 7/97)

Wetland Code # UB-6
Data Sheets: 1

LOCATION: UB-6 is located southeast of Portland Road, north of Scappoose Bay, just south of wetland MC-25, and east of wetland UB-5.

LEGAL: T.4N, R.1W, S.8

DESCRIPTION: Forested wetland dominated by cottonwood and Oregon ash trees. The road and railroad located just to the north of this wetland separates it from wetland MC-25. These two wetlands may have been connected in the past but the road has apparently severed any surface connection between the two. Although no culverts were located during the field work, they may just have been obscured by dense brush. An access road to the timber yard located to the south and east of this wetland separates UB-6 from wetland UB-5. There may be a culvert that links this wetland to wetland UB-5 but none was located during the field work. The boundary of this wetland is clearly defined in the east and north by the toe of the road fills. Throughout the rest of the wetland, the boundary is defined by an abrupt rise in elevation up to the adjacent industrial sites.

CLASSIFICATION: Palustrine forested (PFO)

WETLAND SIZE: 9.4 acres

SOIL:

SERIES: Sauvie silt loam SUBORDER: Fluvaquentic Haplaquoll

DESCRIPTION: Very dark grayish brown (10YR 3/2) loam with strong brown (7.5YR 5/6) mottles.

HYDROLOGIC BASIN: Unnamed Creek B

DOMINANT VEGETATION:
(A scientific name to common name conversion chart is provided in Appendix B of the LWI report)

OVERSTORY	UNDERSTORY	GROUND COVER
Populus trichocarpa		*Phalaris arundinacea*
Fraxinus latifolia		*Carex obnupta*

WETLAND FUNCTIONAL ASSESSMENT:
(An explanation of these ratings is provided in Appendix D of the LWI report.)

Wildlife Habitat: SOME
Fish Habitat: IMPACTED
Water Quality: INTACT
Hydrologic Control: INTACT
Enhancement Potential: HIGH
Education: POTENTIAL
Recreation: NOT APPROPRIATE
Aesthetic Qual.: NOT PLEASING
Sensitivity to Impact: POTENTIALLY SENSITIVE

AFFECTED TAXLOTS:	TAXMAP	LOTS
	4117	100

COMMENTS:

Appendix E

(Description of Oregon Freshwater Assessment Methodology(OFWAM))

Appendix E. Oregon Freshwater Wetland Assessment Methodology (OFWAM)

The OFWAM was developed in 1993, and revised in 1996, by an inter-agency team made up of a variety of state and federal agencies, including: the Division of State Lands (DSL); the Natural Resources Conservation Service (NRCS); the Oregon Department of Fish and Wildlife (ODFW); and the U.S. Environmental Protection Agency (USEPA). The OFWAM was developed to provide a useful wetland assessment methodology for planning and educational purposes (OFWAM, 1996). OFWAM evaluates 9 wetland functions and provides a methodology for rating wetlands, in regard to their ability to perform a given function.

The first step in OFWAM involves collecting available information about the watershed that surrounds the wetland. This includes collecting information regarding land use, water quality, and documented fish and wildlife habitats. The next step in OFWAM involves conducting a field visit to the wetland in order to characterize wetland conditions. Once characterization of the wetland is complete, the information is used to answer a series of wetland assessment questions. The responses to the wetland assessment questions are used to determine the rating for each wetland function. The results of the assessment are presented on the individual summary sheets prepared for the St. Helens LWI (Appendix E). The following is a description of each of the functions evaluated by OFWAM and the ratings available for each function:

1. *Wildlife Habitat*

This function evaluates the habitat diversity for species typically associated with wetlands and wetland edges. No single species is emphasized.

Ratings:	*Diverse*	The wetland provides diverse wildlife habitat.
	Some	The wetland provides some wildlife habitat.
	Not Present or Lost	Wildlife habitat function is either lost or not present.

2. *Fish Habitat*

This function evaluates how the wetland contributes to fish habitat in streams, ponds, or lakes associated with the wetland for either warm-water or cold-water fisheries. No single species or group is emphasized.

Ratings:	*Intact*	The wetland's fish habitat function is intact
	Impacted	The wetland's fish habitat function has been impacted.
	Not Present or Lost	Fish habitat is either not present or lost.

3. *Water Quality*

This function evaluates the potential of the wetland to reduce the impacts that excess nutrients in runoff water will have on downstream waters.

Ratings:	*Intact*	The wetland's water quality function is intact
	Impacted	The wetland's water quality function has been impacted.
	Not Present or Lost	The water quality function is either not present or lost.

4. *Hydrologic Control*

This function evaluates the effectiveness of the wetland in storing floodwaters and reducing downstream flood peaks.

Ratings:	*Intact*	The wetland's hydrologic control function is intact
	Impacted	The wetland's hydrologic control function has been impacted.
	Not Present or Lost	The hydrologic control function is not present or is lost.

5. *Sensitivity to Impacts*

This function evaluates the susceptibility of a wetland to secondary effects of impacts.

Ratings:	*Sensitive*	The wetland is sensitive to future impacts.
	Potentially Sensitive	The wetland is potentially sensitive to future impacts.
	Not Sensitive	The wetland is not sensitive to future impacts.

6. *Enhancement Potential*

This function evaluates the suitability of a degraded wetland site for enhancement use.

Ratings:	*High*	The wetland has high enhancement potential
	Moderate	The wetland has moderate enhancement potential
	Little	The wetland has little enhancement potential.

7. *Education*

This function evaluates the suitability of the wetland for use as an "outdoor classroom."

Ratings:	*Provides*	The wetland has educational uses
	Potential	The wetland has potential for educational uses
	Not Appropriate	The wetland is not appropriate for educational uses.

8. *Recreation*

This function evaluates the suitability of the wetland and associated watercourses for non-powered boating, fishing, and similar recreational activities.

Ratings:	*Provides*	The wetland provides recreational opportunities.
	Potential	The wetland has the potential to provide recreational opportunities.
	Not Appropriate	The wetland is not appropriate or does not provide recreational opportunities.

9. *Aesthetic Quality*

This function evaluates the visual and aesthetic quality of the wetland.

Ratings:	*Pleasing*	The wetland is aesthetically pleasing.
	Moderately Pleasing	The wetland is moderately aesthetically pleasing.
	Not Pleasing	The wetland is not aesthetically pleasing.

Appendix F

(OFWAM Results/Wetland Assessment Data Sheets)

Dalton Lake

Significance Determinations for Individual Wetland Bodies Within the City of St. Helens

DRAINAGE NAME	*WETLAND UNIT*	*SIGNIFICANT*	*NOT SIGNIFICANT*
Dalton Lake			
	D-1	X	
	D-2	X	
	D-3	X	
	D-4	X	
	D-5		X
	D-6	X	
	D-7	X	
	D-8	X	
	D-9		X
	D-10	X	
	D-11	X	
	D-12		X
	D-13		X
	D-14		X(stream)
	D-15		X
	D-16	X	
	D-17	X	
	D-18	X	
	D-19	X	
	D-20	X	
	D-21	X	
	D-22	X	

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	D-1	D-2	D-3	D-4
Wildlife Habitat				
Question 1	B	B	B	B
Question 2	A	A	A	A
Question 3	C	C	C	C
Question 4	C	C	C	C
Question 5	B	B	B	B
Question 6	B	A	B	B
Question 7	A	A	A	A
Question 8	C	C	C	C
Question 9	A	A	B	B
Assessment descriptor	SOME	SOME	SOME	SOME
Fish Habitat				
Streams and Rivers				
Question 1				
Question 2				
Question 3				
Question 4				
Question 5				
Question 6				
Lakes and Ponds				
Question 1	C	C	A	A
Question 2	B	C	C	C
Question 3	B	A	A	A
Question 4	A	A	A	A
Question 5	C	C	C	C
Question 6	C	C	C	C
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	IMPACTED
Water Quality				
Question 1	C	C	C	C
Question 2	A	A	A	A
Question 3	A	A	B	B
Question 4	B	B	B	C
Question 5	A	A	A	A
Question 6	C	C	C	C
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	IMPACTED
Hydrologic Control				
Question 1	B	B	B	B
Question 2	A	A	A	A
Question 3	B	B	B	C
Question 4	A	A	A	A
Question 5	A	A	B	B
Question 6	A	A	A	A
Question 7	A	A	A	A
Assessment descriptor	INTACT	INTACT	INTACT	INTACT

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	D-1	D-2	D-3	D-4
Sensitivity to Impact				
Question 1	A	A	A	A
Question 2	A	A	A	A
Question 3	C	C	C	C
Question 4	A	A	A	A
Question 5	A	A	A	A
Question 6	A	A	C	C
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	POTENTIAL
Enhancement Potential				
Question 1	A	A	A	A
Question 2	B	B	B	B
Question 3	C	A	A	A
Question 4	B	B	C	C
Question 5	A	A	A	A
Question 6	B	B	B	B
Assessment descriptor	HIGH	HIGH	HIGH	HIGH
Education				
Question 1	B	B	B	B
Question 2	B	B	C	C
Question 3	B	B	B	B
Question 4	B	B	C	C
Question 5	C	B	C	C
Question 6	B	B	B	B
Assessment descriptor	POTENTIAL	POTENTIAL	NOT APPROP.	NOT APPROP.
Recreation				
Question 1	C	C	C	C
Question 2	C	C	C	C
Question 3	B	C	C	C
Question 4	B	B	B	B
Question 5	B	B	B	B
Question 6	B	B	B	B
Assessment descriptor	NOT APPROP.	NOT APPROP.	NOT APPROP.	NOT APPROP.
Aesthetic Quality				
Question 1	C	C	C	C
Question 2	A	B	A	A
Question 3	B	B	C	C
Question 4	B	B	C	C
Question 5	B	B	C	C
Question 6	B	B	C	C
Assessment descriptor	MOD. PLEASING	MOD. PLEASING	NOT PLEASING	NOT PLEASING

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	D-5	D-6	D-7	D-8
Wildlife Habitat				
Question 1	B	B	B	B
Question 2	A	A	B	A
Question 3	C	C	C	C
Question 4	C	B	C	C
Question 5	B	B	B	B
Question 6	B	A	B	B
Question 7	A	A	A	A
Question 8	C	C	C	A
Question 9	B	A	A	A
Assessment descriptor	SOME	SOME	SOME	SOME
Fish Habitat				
Streams and Rivers				
Question 1				
Question 2				
Question 3				
Question 4				
Question 5				
Question 6				
Lakes and Ponds				
Question 1	C	C	A	C
Question 2	C	B	C	C
Question 3	B	A	A	A
Question 4	A	A	A	A
Question 5	C	C	C	A
Question 6	C	B	C	C
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	IMPACTED
Water Quality				
Question 1	C	B	C	A
Question 2	A	A	A	A
Question 3	B	A	C	B
Question 4	C	B	C	B
Question 5	A	A	A	C
Question 6	C	C	C	C
Assessment descriptor	IMPACTED	INTACT	NOT PRESENT	IMPACTED
Hydrologic Control				
Question 1	B	B	B	B
Question 2	A	A	A	A
Question 3	C	B	C	B
Question 4	A	A	A	A
Question 5	B	A	B	A
Question 6	A	A	A	C
Question 7	A	A	A	A
Assessment descriptor	INTACT	INTACT	INTACT	INTACT

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	D-5	D-6	D-7	D-8
Sensitivity to Impact				
Question 1	A	A	A	A
Question 2	A	A	A	A
Question 3	C	C	C	C
Question 4	A	A	A	C
Question 5	A	A	A	A
Question 6	A	C	C	A
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	POTENTIAL
Enhancement Potential				
Question 1	A	A	B	A
Question 2	B	A	B	A
Question 3	B	B	B	A
Question 4	C	B	C	B
Question 5	B	A	A	A
Question 6	B	B	B	B
Assessment descriptor	HIGH	HIGH	MOD	HIGH
Education				
Question 1	B	A	B	B
Question 2	C	A	C	B
Question 3	B	B	B	B
Question 4	C	A	C	B
Question 5	C	A	C	B
Question 6	B	A	B	A
Assessment descriptor	NOT APPROP.	USE PRESENT	NOT APPROP.	POTENTIAL
Recreation				
Question 1	C	A	C	C
Question 2	C	C	C	C
Question 3	C	A	C	B
Question 4	B	B	B	B
Question 5	B	B	B	B
Question 6	B	B	B	B
Assessment descriptor	NONE	PROVIDES	NOT APPROP.	NOT APPROP.
Aesthetic Quality				
Question 1	C	B	C	C
Question 2	A	A	A	B
Question 3	C	B	C	B
Question 4	B	B	C	B
Question 5	B	A	C	B
Question 6	C	A	C	B
Assessment descriptor	NOT PLEASING	PLEASING	NOT PLEASING	MOD. PLEASING

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	D-9	D-10	D-11	D-12
Wildlife Habitat				
Question 1	A	A	A	B
Question 2	B	A	A	A
Question 3	B	B	B	C
Question 4	C	A	B	C
Question 5	B	A	A	A
Question 6	B	A	A	A
Question 7	A	A	A	A
Question 8	C	A	A	C
Question 9	A	A	A	A
Assessment descriptor	SOME	DIVERSE	DIVERSE	SOME
Fish Habitat				
Streams and Rivers				
Question 1				
Question 2				
Question 3				
Question 4				
Question 5				
Question 6				
Lakes and Ponds				
Question 1	C	A	A	A
Question 2	C	B	A	B
Question 3	C	A	A	A
Question 4	A	A	A	A
Question 5	C	A	A	C
Question 6	C	B	B	C
Assessment descriptor	IMPACTED	INTACT	INTACT	IMPACTED
Water Quality				
Question 1	C	A	A	C
Question 2	C	A	A	A
Question 3	A	C	A	B
Question 4	B	B	B	C
Question 5	A	C	C	A
Question 6	C	C	C	C
Assessment descriptor	IMPACTED	IMPACTED	INTACT	IMPACTED
Hydrologic Control				
Question 1	B	A	A	B
Question 2	C	A	A	A
Question 3	B	B	B	C
Question 4	B	A	A	B
Question 5	C	B	A	A
Question 6	A	C	C	A
Question 7	A	A	A	A
Assessment descriptor	IMPACTED	INTACT	INTACT	IMPACTED

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	D-9	D-10	D-11	D-12
Sensitivity to Impact				
Question 1	A	B	B	A
Question 2	A	B	B	A
Question 3	C	A	A	C
Question 4	A	C	C	A
Question 5	A	A	A	A
Question 6	B	C	A	A
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	POTENTIAL
Enhancement Potential				
Question 1	A	A	B	A
Question 2	B	A	A	B
Question 3	C	A	A	C
Question 4	B	B	B	C
Question 5	A	A	A	A
Question 6	B	B	B	B
Assessment descriptor	HIGH	HIGH	MODERATE	MOD
Education				
Question 1	C	C	C	B
Question 2	B	B	B	B
Question 3	B	A	A	B
Question 4	B	C	C	B
Question 5	C	C	C	C
Question 6	B	B	B	B
Assessment descriptor	NOT APPROP.	NOT APPROP.	NOT APPROP.	POTENTIAL
Recreation				
Question 1	C	C	C	C
Question 2	C	C	C	C
Question 3	C	C	C	C
Question 4	B	A	A	B
Question 5	B	B	B	B
Question 6	B	B	B	B
Assessment descriptor	NOT APPROP.	NOT APPROP.	NOT APPROP.	POTENTIAL
Aesthetic Quality				
Question 1	B	B	B	C
Question 2	B	C	C	A
Question 3	B	A	A	B
Question 4	B	A	A	B
Question 5	B	A	A	B
Question 6	B	A	A	B
Assessment descriptor	MOD. PLEASING	MOD. PLEASING	MOD. PLEASING	MOD. PLEASING

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	D-13	D-14	D-15	D-16
Wildlife Habitat				
Question 1	B	B	B	A
Question 2	A	A	A	A
Question 3	C	C	C	A
Question 4	C	C	C	B
Question 5	A	A	A	A
Question 6	A	A	A	A
Question 7	A	A	A	A
Question 8	B	B	B	A
Question 9	A	A	A	A
Assessment descriptor	PROVIDES	PROVIDES	PROVIDES	DIVERSE
Fish Habitat				
Streams and Rivers				
Question 1	A	A	A	
Question 2	B	C	A	
Question 3	B	C	C	
Question 4	A	A	A	
Question 5	A	A	A	
Question 6	C	C	C	
Lakes and Ponds				
Question 1				A
Question 2				A
Question 3				A
Question 4				A
Question 5				A
Question 6				A
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	INTACT
Water Quality				
Question 1	A	A	A	A
Question 2	C	C	C	A
Question 3	B	B	B	A
Question 4	B	C	B	A
Question 5	C	A	C	C
Question 6	C	C	C	C
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	INTACT
Hydrologic Control				
Question 1	B	B	B	A
Question 2	C	C	C	A
Question 3	B	B	B	A
Question 4	B	C	C	A
Question 5	C	C	C	A
Question 6	C	C	C	C
Question 7	A	A	A	A
Assessment descriptor	IMPACTED	NONE	NONE Impacted	INTACT

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	D-13	D-14	D-15	D-16
Sensitivity to Impact				
Question 1	A	A	A	B
Question 2	B	B	B	B
Question 3	C	C	C	C
Question 4	C	C	C	C
Question 5	A	A	A	C
Question 6	C	C	C	A
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	POTENTIAL
Enhancement Potential				
Question 1	A	A	A	B
Question 2	A	A	A	A
Question 3	B	B	B	B
Question 4	C	C	B	A
Question 5	A	B	A	A
Question 6	B	B	B	B
Assessment descriptor	HIGH	HIGH	HIGH	MODERATE
				CURRENTLY BEING ENHANCED
Education				
Question 1	C	C	C	A
Question 2	B	B	B	B
Question 3	B	B	B	A
Question 4	C	C	C	A
Question 5	C	C	C	A
Question 6	B	B	B	A
Assessment descriptor	NOT APPROPRIATE	NOT APPROPRIATE	NOT APPROPRIATE	POTENTIAL
Recreation				
Question 1	C	C	C	A
Question 2	C	C	C	B
Question 3	C	C	C	B
Question 4	B	B	B	A
Question 5	B	B	B	A
Question 6	B	B	B	B
Assessment descriptor	NOT APPROPRIATE	NOT APPROPRIATE	NOT APPROPRIATE	PROVIDES
Aesthetic Quality				
Question 1	C	C	C	A
Question 2	C	C	C	B
Question 3	C	C	A	A
Question 4	A	A	A	A
Question 5	B	B	B	A
Question 6	A	A	A	A
Assessment descriptor	NOT PLEASING	NOT PLEASING	NOT PLEASING	PLEASING

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	D-17	D-18	D-19	D-20
Wildlife Habitat				
Question 1	A	A	B	B
Question 2	A	A	A	A
Question 3	B	B	C	C
Question 4	A	C	C	C
Question 5	A	B	B	B
Question 6	A	B	B	B
Question 7	A	A	A	A
Question 8	A	A	A	A
Question 9	A	A	A	A
Assessment descriptor	DIVERSE	DIVERSE	SOME	SOME
Fish Habitat				
Streams and Rivers				
Question 1	C			
Question 2	A			
Question 3	C			
Question 4	C			
Question 5	A			
Question 6	A			
Lakes and Ponds				
Question 1		A	C	C
Question 2		A	B	A
Question 3		A	A	A
Question 4		A	A	A
Question 5		A	A	A
Question 6		B	C	C
Assessment descriptor	IMPACTED	INTACT	IMPACTED	IMPACTED
Water Quality				
Question 1	A	C	C	C
Question 2	A	A	A	A
Question 3	A	A	B	A
Question 4	A	B	B	B
Question 5	C	C	C	C
Question 6	A	C	C	C
Assessment descriptor	INTACT	IMPACTED	IMPACTED	IMPACTED
Hydrologic Control				
Question 1	A	B	B	A
Question 2	A	A	A	A
Question 3	A	B	B	B
Question 4	C	A	A	A
Question 5	A	A	A	A
Question 6	C	C	C	C
Question 7	C	A	A	A
Assessment descriptor	INTACT	INTACT	INTACT	INTACT

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	D-17	D-18	D-19	D-20
Sensitivity to Impact				
Question 1	B	A	A	A
Question 2	A	A	A	A
Question 3	A	C	C	C
Question 4	C	C	C	A
Question 5	C	C	C	C
Question 6	A	A	A	A
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	POTENTIAL
Enhancement Potential				
Question 1	B	A	A	A
Question 2	A	B	B	B
Question 3	A	C	C	C
Question 4	A	B	B	B
Question 5	A	A	A	A
Question 6	B	B	B	B
Assessment descriptor	MODERATE	HIGH	HIGH	HIGH
Education				
Question 1	A	A	A	A
Question 2	B	B	A	A
Question 3	A	A	B	B
Question 4	A	A	A	A
Question 5	B	A	B	B
Question 6	B	B	B	B
Assessment descriptor	POTENTIAL	PROVIDES	POTENTIAL	PROVIDES
Recreation				
Question 1	B	A	B	A
Question 2	B	C	C	C
Question 3	B	A	B	B
Question 4	A	A	B	B
Question 5	A	A	B	B
Question 6	B	B	B	B
Assessment descriptor	POTENTIAL	PROVIDES	POTENTIAL	POTENTIAL
Aesthetic Quality				
Question 1	A	B	C	C
Question 2	B	A	A	A
Question 3	A	A	A	A
Question 4	A	A	A	A
Question 5	A	A	A	A
Question 6	A	A	A	A
Assessment descriptor	PLEASING	PLEASING	MOD. PLEASING	MOD. PLEASING

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	D-21	D-22		
Wildlife Habitat				
Question 1	B	B		
Question 2	A	A		
Question 3	C	C		
Question 4	C	C		
Question 5	B	B		
Question 6	B	B		
Question 7	A	A		
Question 8	A	A		
Question 9	A	A		
Assessment descriptor	SOME	SOME		
Fish Habitat				
Streams and Rivers				
Question 1				
Question 2				
Question 3				
Question 4				
Question 5				
Question 6				
Lakes and Ponds				
Question 1	C	C		
Question 2	A	A		
Question 3	A	A		
Question 4	A	A		
Question 5	A	A		
Question 6	C	C		
Assessment descriptor	IMPACTED	IMPACTED		
Water Quality				
Question 1	C	C		
Question 2	A	A		
Question 3	A	A		
Question 4	B	B		
Question 5	C	C		
Question 6	C	C		
Assessment descriptor	IMPACTED	IMPACTED		
Hydrologic Control				
Question 1	A	A		
Question 2	A	A		
Question 3	B	B		
Question 4	A	A		
Question 5	A	A		
Question 6	C	C		
Question 7	A	A		
Assessment descriptor	INTACT	INTACT		

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	D-21	D-22		
Sensitivity to Impact				
Question 1	A	A		
Question 2	A	A		
Question 3	C	C		
Question 4	A	A		
Question 5	C	C		
Question 6	A	A		
Assessment descriptor	POTENTIAL	POTENTIAL		
Enhancement Potential				
Question 1	A	A		
Question 2	B	B		
Question 3	C	C		
Question 4	B	B		
Question 5	A	A		
Question 6	B	B		
Assessment descriptor	HIGH	HIGH		
Education				
Question 1	B	B		
Question 2	A	A		
Question 3	B	B		
Question 4	B	B		
Question 5	B	B		
Question 6	B	B		
Assessment descriptor	POTENTIAL	POTENTIAL		
Recreation				
Question 1	A	A		
Question 2	C	C		
Question 3	B	B		
Question 4	B	B		
Question 5	B	B		
Question 6	B	B		
Assessment descriptor	POTENTIAL	POTENTIAL		
Aesthetic Quality				
Question 1	C	C		
Question 2	A	A		
Question 3	A	A		
Question 4	A	A		
Question 5	A	A		
Question 6	A	A		
Assessment descriptor	MOD. PLEASING	MOD. PLEASING		

Frogmore Slough

Significance Determinations for Individual Wetland Bodies Within the City of St. Helens

DRAINAGE NAME	*WETLAND UNIT*	*SIGNIFICANT*	*NOT SIGNIFICANT*
Frogmore Slough			
	F-1		X
	F-2	X	
	F-3	X	
	F-4	X	

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	f-1	f-2	f-3	f-4
Wildlife Habitat				
Question 1	B	B	C	A
Question 2	A	A	B	A
Question 3	C	B	C	B
Question 4	C	B	A	C
Question 5	A	A	A	A
Question 6	B	A	A	B
Question 7	A	A	C	C
Question 8	C	C	C	C
Question 9	C	A	C	A
Assessment descriptor	SOME	DIVERSE	SOME	SOME
Fish Habitat				
Streams and Rivers				
Question 1	A	A		C
Question 2	C	B		B
Question 3	C	B		C
Question 4	A	A		C
Question 5	C	C		A
Question 6	C	C		A
Lakes and Ponds				
Question 1			C	
Question 2			C	
Question 3			C	
Question 4			C	
Question 5			C	
Question 6			C	
Assessment descriptor	IMPACTED	IMPACTED	NOT PRESENT	IMPACTED
Water Quality				
Question 1	C	A	A	C
Question 2	C	B	A	A
Question 3	A	A	C	A
Question 4	C	B	A	A
Question 5	A	A	A	C
Question 6	C	C	A	A
Assessment descriptor	NOT PRESENT	IMPACTED	IMPACTED	IMPACTED
Hydrologic Control				
Question 1	B	B	B	A
Question 2	C	B	A	A
Question 3	C	B	A	A
Question 4	B	B	A	C
Question 5	A	A	B	A
Question 6	A	A	A	C
Question 7	A	A	A	A
Assessment descriptor	IMPACTED	IMPACTED	INTACT	INTACT

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	f-1	f-2	f-3	f-4
Sensitivity to Impact				
Question 1	A	A	A	A
Question 2	B	B	A	A
Question 3	C	C	A	A
Question 4	A	A	A	C
Question 5	A	A	A	C
Question 6	A	A	C	A
Assessment descriptor	POTENTIAL	POTENTIAL	SENSITIVE	SENSITIVE
Enhancement Potential				
Question 1	A	A	B	A
Question 2	B	A	A	B
Question 3	C	B	C	C
Question 4	C	B	A	A
Question 5	B	A	C	A
Question 6	B	B	C	C
Assessment descriptor	MOD	HIGH	LITTLE	MOD
Education				
Question 1	C	B	B	C
Question 2	B	B	C	C
Question 3	B	A	B	B
Question 4	B	B	B	B
Question 5	C	C	C	C
Question 6	B	B	B	B
Assessment descriptor	NOT APPROP.	POTENTIAL	NOT APPROP.	NOT APPROP.
Recreation				
Question 1	C	C	C	C
Question 2	C	C	C	B
Question 3	C	C	C	C
Question 4	B	A	B	B
Question 5	B	B	B	A
Question 6	B	B	B	B
Assessment descriptor	NONE	NOT APPROP	NOT APPROP.	POTENTIAL
Aesthetic Quality				
Question 1	C	C	C	B
Question 2	A	A	A	B
Question 3	C	A	C	C
Question 4	B	A	C	B
Question 5	B	B	C	C
Question 6	B	B	C	B
Assessment descriptor	NOT PLEASING	MOD PLEASING	NOT PLEASING	NOT PLEASING

Jackass Canyon

Significance Determinations for Individual Wetland Bodies Within the City of St. Helens

DRAINAGE NAME	*WETLAND UNIT*	*SIGNIFICANT*	*NOT SIGNIFICANT*
Jackass Canyon			
	J-1		X
	J-2		X
	J-3	X	
	J-4		X
	J-5		X
	J-6	X	

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	j-1	j-2	j-3	j-4
Wildlife Habitat				
Question 1	B	B	A	C
Question 2	A	B	A	C
Question 3	C	C	B	C
Question 4	C	C	C	C
Question 5	B	B	A	B
Question 6	B	B	A	B
Question 7	A	A	A	A
Question 8	C	C	B	A
Question 9	A	B	A	A
Assessment descriptor	SOME	SOME	DIVERSE	SOME
Fish Habitat				
Streams and Rivers				
Question 1	A		A	A
Question 2	B		B	B
Question 3	C		C	C
Question 4	A		A	A
Question 5	C		A	A
Question 6	C		C	C
Lakes and Ponds				
Question 1		C		
Question 2		C		
Question 3		C		
Question 4		A		
Question 5		C		
Question 6		C		
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	IMPACTED
Water Quality				
Question 1	A	C	A	C
Question 2	A	C	A	C
Question 3	A	B	A	A
Question 4	C	C	B	C
Question 5	C	A	C	C
Question 6	C	C	C	C
Assessment descriptor	IMPACTED	IMPACTED	INTACT	NOT PRESENT
Hydrologic Control				
Question 1	B	B	B	B
Question 2	A	C	A	C
Question 3	C	C	B	C
Question 4	A	B	B	A
Question 5	A	C	A	A
Question 6	A	A	C	C
Question 7	A	A	C	A
Assessment descriptor	INTACT	IMPACTED	IMPACTED	IMPACTED

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	j-1	j-2	j-3	j-4
Sensitivity to Impact				
Question 1	A	B	A	B
Question 2	A	A	B	A
Question 3	C	C	A	C
Question 4	A	A	C	C
Question 5	A	A	C	C
Question 6	A	B	A	B
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	POTENTIAL
Enhancement Potential				
Question 1	A	A	A	A
Question 2	A	B	A	B
Question 3	B	B	B	A
Question 4	C	C	B	C
Question 5	A	C	A	A
Question 6	B	B	B	B
Assessment descriptor	HIGH	MOD	HIGH	HIGH
Education				
Question 1	A	B	A	A
Question 2	B	B	B	B
Question 3	B	B	B	B
Question 4	B	C	A	B
Question 5	A	C	A	B
Question 6	A	B	A	B
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	POTENTIAL
Recreation				
Question 1	A	C	A	C
Question 2	C	C	C	C
Question 3	C	C	A	C
Question 4	B	B	A	B
Question 5	B	B	B	B
Question 6	B	B	B	B
Assessment descriptor	POTENTIAL	NONE	PROVIDES	NONE
Aesthetic Quality				
Question 1	C	C	B	C
Question 2	A	B	A	A
Question 3	C	C	B	B
Question 4	B	C	B	B
Question 5	B	B	B	B
Question 6	B	B	B	B
Assessment descriptor	NOT PLEASING	NOT PLEASING	MOD. PLEASING	MOD PLEASING

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	j-5	j-6		
Wildlife Habitat				
Question 1	B	B		
Question 2	A	B		
Question 3	C	C		
Question 4	C	C		
Question 5	A	A		
Question 6	A	A		
Question 7	A	A		
Question 8	C	A		
Question 9	A	A		
Assessment descriptor	SOME	SOME		
Fish Habitat				
Streams and Rivers				
Question 1	A	A		
Question 2	B	B		
Question 3	C	C		
Question 4	A	A		
Question 5	C	A		
Question 6	C	C		
Lakes and Ponds				
Question 1				
Question 2				
Question 3				
Question 4				
Question 5				
Question 6				
Assessment descriptor	IMPACTED	IMPACTED		
Water Quality				
Question 1	C	A		
Question 2	C	A		
Question 3	A	A		
Question 4	B	B		
Question 5	C	C		
Question 6	C	C		
Assessment descriptor	NOT PRESENT	INTACT		
Hydrologic Control				
Question 1	B	B		
Question 2	B	A		
Question 3	B	B		
Question 4	B	B		
Question 5	A	A		
Question 6	A	A		
Question 7	A			
Assessment descriptor	IMPACTED	IMPACTED		

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	j-5	j-6		
Sensitivity to Impact				
Question 1	A	A		
Question 2	B	B		
Question 3	A	A		
Question 4	C	C		
Question 5	C	C		
Question 6	A	A		
Assessment descriptor	POTENTIAL	POTENTIAL		
Enhancement Potential				
Question 1	A	A		
Question 2	B	A		
Question 3	A	B		
Question 4	B	B		
Question 5	A	A		
Question 6	B	B		
Assessment descriptor	HIGH	HIGH		
Education				
Question 1	A	A		
Question 2	B	B		
Question 3	B	B		
Question 4	A	A		
Question 5	B	A		
Question 6	B	B		
Assessment descriptor	POTENTIAL	POTENTIAL		
Recreation				
Question 1	A	B		
Question 2	C	C		
Question 3	C	B		
Question 4	B	B		
Question 5	B	B		
Question 6	B	B		
Assessment descriptor	POTENTIAL	POTENTIAL		
Aesthetic Quality				
Question 1	C	C		
Question 2	C	B		
Question 3	C	B		
Question 4	B	A		
Question 5	B	B		
Question 6	B	B		
Assessment descriptor	NOT PLEASING	MOD. PLEASING		

McNulty Creek

DRAINAGE NAME	*WETLAND UNIT*	*SIGNIFICANT*	*NOT SIGNIFICANT*
McNulty Creek			
	MC-1	X	
	MC-2	X	
	MC-3	X	
	MC-4		X
	MC-5	X	
	MC-6		X
	MC-7		X
	MC-8	X	
	MC-9	X	
	MC-10	X	
	MC-11		X
	MC-12		X(stream)
	MC-13		X
	MC-14		X
	MC-15		X
	MC-16	X	
	MC-17	X	
	MC-18		X
	MC-19		X
	MC-20	X	
	MC-21	X	
	MC-22	X	
	MC-23		X
	MC-24		X
	MC-25	X	
	MC-26	X	

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	Mc-1	Mc-2	Mc-3	Mc-4
Wildlife Habitat				
Question 1	A	B	A	C
Question 2	A	C	A	C
Question 3	B	C	A	C
Question 4	C	C	C	C
Question 5	B	A	A	B
Question 6	B	A	A	B
Question 7	A	A	A	A
Question 8	B	C	A	B
Question 9	A	A	A	A
Assessment descriptor	SOME	SOME	DIVERSE	SOME
Fish Habitat				
Streams and Rivers				
Question 1	A			
Question 2	B			
Question 3	C			
Question 4	A			
Question 5	B			
Question 6	A			
Lakes and Ponds				
Question 1		C	C	C
Question 2		C	C	C
Question 3		C	C	C
Question 4		A	A	A
Question 5		C	A	B
Question 6		C	C	C
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	IMPACTED
Water Quality				
Question 1	A	C	C	C
Question 2	A	A	C	C
Question 3	A	A	A	B
Question 4	B	B	B	B
Question 5	A	A	C	B
Question 6	C	C	C	C
Assessment descriptor	INTACT ✓	IMPACTED	NOT PRESENT	IMPACTED
Hydrologic Control				
Question 1	A	B	B	B
Question 2	A	A	C	C
Question 3	B	B	B	B
Question 4	B	A	B	A
Question 5	A	C	A	C
Question 6	B	A	C	B
Question 7	A	A	A	A
Assessment descriptor	INTACT ✓	INTACT	IMPACTED	IMPACTED

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	Mc-1	Mc-2	Mc-3	Mc-4
Sensitivity to Impact				
Question 1	A	A	B	A
Question 2	B	B	B	A
Question 3	C	C	C	C
Question 4	B	A	C	B
Question 5	A	A	A	A
Question 6	A	B	A	B
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	POTENTIAL
Enhancement Potential				
Question 1	A	A	B	A
Question 2	A	B	B	B
Question 3	B	C	C	C
Question 4	B	B	B	B
Question 5	A	A	A	A
Question 6	B	B	B	B
Assessment descriptor	HIGH	HIGH	MOD	HIGH
Education				
Question 1	A	B	B	B
Question 2	B	B	A	A
Question 3	B	B	A	B
Question 4	A	C	B	B
Question 5	A	C	C	C
Question 6	A	B	B	B
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	POTENTIAL
Recreation				
Question 1	A	C	C	C
Question 2	C	C	C	C
Question 3	C	C	C	C
Question 4	B	B	A	B
Question 5	B	B	B	B
Question 6	B	B	B	B
Assessment descriptor	POTENTIAL	NOT APPROP.	NOT APPROP.	POTENTIAL
Aesthetic Quality				
Question 1	B	C	A	C
Question 2	B	A	A	A
Question 3	B	C	B	B
Question 4	B	B	A	B
Question 5	A	B	A	A
Question 6	A	B	A	A
Assessment descriptor	MOD. PLEASING	NOT PLEASING	PLEASING	MOD. PLEASING

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	Mc-5	Mc-6	Mc-7	Mc-8
Wildlife Habitat				
Question 1	B	C	B	A
Question 2	A	A	C	A
Question 3	C	C	C	B
Question 4	C	C	C	C
Question 5	B	B	B	A
Question 6	B	B	B	A
Question 7	A	A	A	A
Question 8	C	C	C	C
Question 9	A	A	A	A
Assessment descriptor	SOME	SOME	SOME	DIVERSE
Fish Habitat				
Streams and Rivers				
Question 1				B
Question 2				B
Question 3				B
Question 4				A
Question 5				C
Question 6				A
Lakes and Ponds				
Question 1	C	C	C	
Question 2	C	C	C	
Question 3	C	C	C	
Question 4	A	A	A	
Question 5	C	C	C	
Question 6	C	C	C	
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	IMPACTED
Water Quality				
Question 1	C	B	B	A
Question 2	C	C	C	A
Question 3	A	C	C	A
Question 4	B	B	C	B
Question 5	A	A	A	A
Question 6	C	C	C	C
Assessment descriptor	NOT PRESENT	IMPACTED	NOT PRESENT	IMPACTED
Hydrologic Control				
Question 1	B	B	B	B
Question 2	C	C	C	A
Question 3	B	C	C	B
Question 4	A	A	A	B
Question 5	A	A	C	B
Question 6	A	A	A	A
Question 7	A	A	A	A
Assessment descriptor	INTACT	INTACT	IMPACTED	IMPACTED

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	Mc-5	Mc-6	Mc-7	Mc-8
Sensitivity to Impact				
Question 1	A	A	A	A
Question 2	A	A	A	B
Question 3	C	C	C	C
Question 4	A	A	A	A
Question 5	A	A	A	A
Question 6	A	A	B	C
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	POTENTIAL
Enhancement Potential				
Question 1	B	A	B	A
Question 2	B	C	C	A
Question 3	C	C	C	B
Question 4	B	C	C	B
Question 5	A	A	A	A
Question 6	B	B	B	B
Assessment descriptor	MOD	MOD.	LITTLE	HIGH
Education				
Question 1	B	C	C	B
Question 2	B	A	B	B
Question 3	B	B	B	A
Question 4	B	C	B	B
Question 5	C	C	A	C
Question 6	B	B	B	B
Assessment descriptor	POTENTIAL	NOT APPROP.	NOT APPROP.	POTENTIAL
Recreation				
Question 1	C	C	C	B
Question 2	C	C	C	C
Question 3	C	C	C	C
Question 4	B	B	B	A
Question 5	B	B	B	A
Question 6	B	B	B	B
Assessment descriptor	NOT APPROP.	NOT APPROP.	NOT APPROP.	POTENTIAL
Aesthetic Quality				
Question 1	C	C	C	A
Question 2	A	A	A	A
Question 3	B	C	B	B
Question 4	B	B	B	B
Question 5	B	B	B	B
Question 6	C	B	C	B
Assessment descriptor	NOT PLEASING	NOT PLEASING	NOT PLEASING	PLEASING

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	Mc-9	Mc-10	Mc-11	Mc-12
				NOT EVAL.- STREAM
Wildlife Habitat				
Question 1	A	C	A	
Question 2	A	C	B	
Question 3	B	C	B	
Question 4	B	C	C	
Question 5	A	B	A	
Question 6	A	B	A	
Question 7	A	A	C	
Question 8	C	C	A	
Question 9	A	A	A	
Assessment descriptor	DIVERSE	SOME	SOME	
Fish Habitat				
Streams and Rivers				
Question 1	B		B	
Question 2	B		B	
Question 3	B		B	
Question 4	A		C	
Question 5	C		A	
Question 6	A		A	
Lakes and Ponds				
Question 1		C		
Question 2		C		
Question 3		C		
Question 4		A		
Question 5		C		
Question 6		C		
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	
Water Quality				
Question 1	A	C	A	
Question 2	A	C	A	
Question 3	B	A	A	
Question 4	B	C	B	
Question 5	A	A	C	
Question 6	C	C	A	
Assessment descriptor	IMPACTED	NOT PRESENT	IMPACTED	
Hydrologic Control				
Question 1	B	A	A	
Question 2	A	C	A	
Question 3	B	C	B	
Question 4	B	A	C	
Question 5	A	C	B	
Question 6	A	A	C	
Question 7	A	A	A	
Assessment descriptor	INTACT	INTACT	IMPACTED	

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	Mc-9	Mc-10	Mc-11	Mc-12
Sensitivity to Impact				
Question 1	A	A	A	
Question 2	B	A	B	
Question 3	C	C	A	
Question 4	A	A	C	
Question 5	A	A	C	
Question 6	A	B	C	
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	
Enhancement Potential				
Question 1	A	A	A	
Question 2	A	B	A	
Question 3	B	C	A	
Question 4	B	C	B	
Question 5	A	A	A	
Question 6	B	B	B	
Assessment descriptor	HIGH	MOD. POTENTIAL	HIGH	
Education				
Question 1	B	B	B	
Question 2	B	A	B	
Question 3	A	B	B	
Question 4	B	B	B	
Question 5	C	C	C	
Question 6	B	B	B	
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	
Recreation				
Question 1	B	C	B	
Question 2	C	C	C	
Question 3	C	C	C	
Question 4	A	B	B	
Question 5	A	B	A	
Question 6	B	B	B	
Assessment descriptor	POTENTIAL	NOT APPROP.	POTENTIAL	
Aesthetic Quality				
Question 1	B	C	B	
Question 2	C	A	A	
Question 3	C	B	A	
Question 4	B	B	A	
Question 5	B	B	B	
Question 6	B	B	B	
Assessment descriptor	NOT PLEASING	MOD. PLEASING	MOD. PLEASING	

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	Mc-13	Mc-14	Mc-15	Mc-16
Wildlife Habitat				
Question 1	B	C	B	B
Question 2	A	C	A	A
Question 3	C	C	C	C
Question 4	C	C	C	C
Question 5	A	B	B	B
Question 6	A	B	B	B
Question 7	C	A	B	A
Question 8	A	A	B	A
Question 9	A	A	A	A
Assessment descriptor	SOME	SOME	SOME	SOME
Fish Habitat				
Streams and Rivers				
Question 1				
Question 2				
Question 3				
Question 4				
Question 5				
Question 6				
Lakes and Ponds				
Question 1	C	C	C	C
Question 2	B	C	C	C
Question 3	A	C	B	C
Question 4	A	A	B	A
Question 5	A	B	B	B
Question 6	C	C	C	C
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	IMPACTED
Water Quality				
Question 1	C	C	C	C
Question 2	A	B	A	A
Question 3	B	A	A	A
Question 4	B	B	B	B
Question 5	C	B	B	B
Question 6	A	C	B	C
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	IMPACTED
Hydrologic Control				
Question 1	A	B	B	B
Question 2	A	C	A	A
Question 3	B	B	B	B
Question 4	B	B	A	A
Question 5	A	C	A	C
Question 6	C	A	B	A
Question 7	B	A	B	A
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	INTACT

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	Mc-13	Mc-14	Mc-15	Mc-16
Sensitivity to Impact				
Question 1	B	A	A	A
Question 2	B	A	A	A
Question 3	A	C	B	C
Question 4	C	B	B	B
Question 5	C	A	A	A
Question 6	A	B	A	B
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	POTENTIAL
Enhancement Potential				
Question 1	A	A	A	A
Question 2	B	B	B	B
Question 3	C	C	C	C
Question 4	B	B	B	B
Question 5	A	A	A	A
Question 6	B	B	B	B
Assessment descriptor	HIGH	HIGH	HIGH	HIGH
Education				
Question 1	B	C	B	B
Question 2	B	A	A	B
Question 3	B	B	B	B
Question 4	B	B	B	B
Question 5	C	C	C	C
Question 6	B	B	B	B
Assessment descriptor	POTENTIAL	NOT APPROP.	POTENTIAL	POTENTIAL
Recreation				
Question 1	C	C	C	C
Question 2	C	C	C	C
Question 3	C	C	C	C
Question 4	B	B	B	B
Question 5	B	B	B	B
Question 6	B	B	B	B
Assessment descriptor	NOT APPROP.	NOT APPROP.	NOT APPROP.	NOT APPROP.
Aesthetic Quality				
Question 1	B	C	C	C
Question 2	A	A	A	A
Question 3	A	B	B	B
Question 4	A	B	B	B
Question 5	A	B	B	B
Question 6	A	B	B	B
Assessment descriptor	PLEASING	MOD. PLEASING	MOD. PLEASING	MOD PLEASING

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	Mc-17	Mc-18	Mc-19	Mc-20
Wildlife Habitat				
Question 1	B	C	B	A
Question 2	A	C	B	A
Question 3	C	C	C	B
Question 4	C	C	C	C
Question 5	B	B	B	B
Question 6	B	B	B	B
Question 7	B	B	A	A
Question 8	B	B	B	C
Question 9	A	A	A	A
Assessment descriptor	SOME	SOME	SOME	SOME
Fish Habitat				
Streams and Rivers				
Question 1				
Question 2				
Question 3				
Question 4				
Question 5				
Question 6				
Lakes and Ponds				
Question 1	C	C	C	C
Question 2	C	C	C	C
Question 3	B	C	C	A
Question 4	B	B	A	A
Question 5	B	B	B	C
Question 6	C	C	C	C
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	IMPACTED
Water Quality				
Question 1	C	C	B	C
Question 2	A	A	C	A
Question 3	A	A	A	A
Question 4	B	B	B	B
Question 5	B	B	B	A
Question 6	B	B	C	C
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	IMPACTED
Hydrologic Control				
Question 1	B	B	B	B
Question 2	A	A	C	A
Question 3	B	B	B	B
Question 4	A	A	A	A
Question 5	A	C	C	A
Question 6	B	B	B	A
Question 7	B	B	A	A
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	INTACT

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	Mc-17	Mc-18	Mc-19	Mc-20
Sensitivity to Impact				
Question 1	A	A	A	A
Question 2	A	A	A	A
Question 3	B	B	C	C
Question 4	B	B	B	A
Question 5	A	A	A	A
Question 6	A	B	B	A
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	POTENTIAL
Enhancement Potential				
Question 1	A	A	A	A
Question 2	B	B	C	B
Question 3	C	C	C	C
Question 4	B	B	B	B
Question 5	A	A	A	A
Question 6	B	B	B	B
Assessment descriptor	HIGH	HIGH	MOD	HIGH
Education				
Question 1	B	B	B	A
Question 2	A	A	A	B
Question 3	B	B	B	B
Question 4	B	B	B	A
Question 5	C	C	C	B
Question 6	B	B	B	A
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	POTENTIAL
Recreation				
Question 1	C	C	C	A
Question 2	C	C	C	C
Question 3	C	C	C	B
Question 4	B	B	B	B
Question 5	B	B	B	B
Question 6	B	B	B	B
Assessment descriptor	NOT APPROP.	NOT APPROP.	NOT APPROP.	POTENTIAL
Aesthetic Quality				
Question 1	C	C	C	B
Question 2	A	A	A	B
Question 3	A	A	B	B
Question 4	B	B	B	B
Question 5	B	B	B	B
Question 6	A	A	A	B
Assessment descriptor	MOD. PLEASING	MOD. PLEASING	MOD. PLEASING	MOD. PLEASING

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	Mc-21	Mc-22	Mc-23	Mc-24
Wildlife Habitat				
Question 1	B	A	B	C
Question 2	A	A	C	C
Question 3	C	B	C	C
Question 4	C	C	C	C
Question 5	B	A	A	B
Question 6	B	A	A	B
Question 7	A	C	C	A
Question 8	C	C	C	A
Question 9	A	A	A	A
Assessment descriptor	SOME	SOME	SOME	SOME
Fish Habitat				
Streams and Rivers				
Question 1				
Question 2				
Question 3				
Question 4				
Question 5				
Question 6				
Lakes and Ponds				
Question 1	C	C	C	C
Question 2	C	B	C	A
Question 3	A	A	C	C
Question 4	A	C	C	A
Question 5	C	C	C	A
Question 6	C	C	C	C
Assessment descriptor	IMPACTED	IMPACTED	NOT PRESENT	IMPACTED
Water Quality				
Question 1	C	C	C	C
Question 2	C	A	A	A
Question 3	A	A	A	A
Question 4	B	B	B	B
Question 5	A	A	A	C
Question 6	C	A	A	C
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	IMPACTED
Hydrologic Control				
Question 1	B	B	B	B
Question 2	C	A	A	A
Question 3	B	B	B	B
Question 4	A	B	B	A
Question 5	A	A	C	C
Question 6	A	A	A	C
Question 7	A	A	A	A
Assessment descriptor	INTACT	INTACT	IMPACTED	IMPACTED

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	Mc-21	Mc-22	Mc-23	Mc-24
Sensitivity to Impact				
Question 1	A	A	A	A
Question 2	A	B	B	A
Question 3	C	A	A	C
Question 4	A	A	A	C
Question 5	A	A	A	A
Question 6	A	A	B	B
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	POTENTIAL
Enhancement Potential				
Question 1	A	A	A	A
Question 2	B	B	B	B
Question 3	C	C	C	C
Question 4	B	B	B	B
Question 5	A	A	A	A
Question 6	B	B	B	B
Assessment descriptor	HIGH	HIGH	HIGH	HIGH
Education				
Question 1	B	C	B	B
Question 2	B	B	B	B
Question 3	B	B	B	B
Question 4	B	B	B	B
Question 5	C	C	C	C
Question 6	B	B	B	B
Assessment descriptor	POTENTIAL	NOT APPROP.	POTENTIAL	POTENTIAL
Recreation				
Question 1	C	C	C	C
Question 2	C	C	C	C
Question 3	C	C	C	B
Question 4	B	B	B	B
Question 5	B	B	B	B
Question 6	B	B	B	B
Assessment descriptor	NOT APPROP.	NOT APPROP.	NOT APPROP.	POTENTIAL
Aesthetic Quality				
Question 1	C	C	C	C
Question 2	B	B	B	B
Question 3	B	C	C	B
Question 4	B	B	B	A
Question 5	B	B	B	B
Question 6	B	B	B	B
Assessment descriptor	MOD. PLEASING	NOT PLEASING	NOT PLEASING	MOD. PLEASING

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	Mc-25	Mc-26		
Wildlife Habitat				
Question 1	A	B		
Question 2	A	B		
Question 3	A	C		
Question 4	A	B		
Question 5	A	A		
Question 6	A	A		
Question 7	C	C		
Question 8	A	C		
Question 9	A	B		
Assessment descriptor	DIVERSE	SOME		
Fish Habitat				
Streams and Rivers				
Question 1	A			
Question 2	B			
Question 3	B			
Question 4	C			
Question 5	A			
Question 6	A			
Lakes and Ponds				
Question 1		C		
Question 2		C		
Question 3		C		
Question 4		C		
Question 5		C		
Question 6		B		
Assessment descriptor	INTACT	IMPACTED		
Water Quality				
Question 1	A	A		
Question 2	A	A		
Question 3	A	B		
Question 4	A	B		
Question 5	C	A		
Question 6	A	A		
Assessment descriptor	INTACT	IMPACTED		
Hydrologic Control				
Question 1	A	A		
Question 2	A	A		
Question 3	A	B		
Question 4	C	B		
Question 5	A	B		
Question 6	C	A		
Question 7	A	A		
Assessment descriptor	INTACT	INTACT		

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	Mc-25	Mc-26		
Sensitivity to Impact				
Question 1	A	A		
Question 2	B	B		
Question 3	A	A		
Question 4	C	A		
Question 5	A	A		
Question 6	A	C		
Assessment descriptor	POTENTIAL	POTENTIAL		
Enhancement Potential				
Question 1	A	A		
Question 2	A	A		
Question 3	B	B		
Question 4	A	B		
Question 5	A	C		
Question 6	B	B		
Assessment descriptor	HIGH	HIGH		
Education				
Question 1	B	B		
Question 2	B	C		
Question 3	A	B		
Question 4	B	A		
Question 5	C	C		
Question 6	B	B		
Assessment descriptor	POTENTIAL	NOT APPROP.		
Recreation				
Question 1	C	C		
Question 2	A	B		
Question 3	C	C		
Question 4	A	B		
Question 5	A	A		
Question 6	B	B		
Assessment descriptor	PROVIDES	POTENTIAL		
Aesthetic Quality				
Question 1	B	C		
Question 2	C	A		
Question 3	A	C		
Question 4	A	C		
Question 5	B	C		
Question 6	A	C		
Assessment descriptor	MOD. PLEASING	NOT PLEASING		

Milton Creek

DRAINAGE NAME	*WETLAND UNIT*	*SIGNIFICANT*	*NOT SIGNIFICANT*
Milton Creek			
	M-1		X(stream)
	M-2		X(stream)
	M-3	X	
	M-4		X
	M-5	X	
	M-6		X
	M-7	X	
	M-8	X	
	M-9		X
	M-10	X	
	M-11	X	
	M-12	X	
	M-13	X	
	M-14	X	
	M-15	X	

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	mi-1	mi-2	mi-3	mi-4
	NOT EVAL - STREAM	NOT EVAL - STREAM		
Wildlife Habitat				
Question 1			C	B
Question 2			C	C
Question 3			C	C
Question 4			C	C
Question 5			B	B
Question 6			B	B
Question 7			A	C
Question 8			C	C
Question 9			A	C
Assessment descriptor			SOME	SOME
Fish Habitat				
Streams and Rivers				
Question 1				
Question 2				
Question 3				
Question 4				
Question 5				
Question 6				
Lakes and Ponds				
Question 1			C	C
Question 2			C	C
Question 3			C	C
Question 4			A	C
Question 5			C	C
Question 6			C	C
Assessment descriptor			IMPACTED	NOT PRESENT
Water Quality				
Question 1			C	B
Question 2			C	A
Question 3			A	A
Question 4			C	C
Question 5			A	A
Question 6			C	C
Assessment descriptor			NOT PRESENT	IMPACTED
Hydrologic Control				
Question 1			A	B
Question 2			C	A
Question 3			C	C
Question 4			A	B
Question 5			C	C
Question 6			A	A
Question 7			A	A
Assessment descriptor			INTACT	IMPACTED

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	mi-1	mi-2	mi-3	mi-4
Sensitivity to Impact				
Question 1			A	A
Question 2			A	B
Question 3			C	A
Question 4			A	A
Question 5			A	A
Question 6			B	B
Assessment descriptor			POTENTIAL	POTENTIAL
Enhancement Potential				
Question 1			A	B
Question 2			B	C
Question 3			C	C
Question 4			C	C
Question 5			A	C
Question 6			B	B
Assessment descriptor			MOD. POTENTIAL	LITTLE
Education				
Question 1			B	C
Question 2			A	C
Question 3			B	B
Question 4			B	B
Question 5			C	B
Question 6			B	B
Assessment descriptor			POTENTIAL	NOT APPROP.
Recreation				
Question 1			C	B
Question 2			C	C
Question 3			C	C
Question 4			B	B
Question 5			B	B
Question 6			B	B
Assessment descriptor			NOT APPROP.	POTENTIAL
Aesthetic Quality				
Question 1			C	C
Question 2			A	A
Question 3			B	C
Question 4			B	B
Question 5			B	B
Question 6			B	B
Assessment descriptor			MOD. PLEASING	NOT PLEASING

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	mi-5	mi-6	mi-7	mi-8
Wildlife Habitat				
Question 1	A	B	A	A
Question 2	A	C	A	A
Question 3	B	C	A	B
Question 4	C	C	C	C
Question 5	B	B	A	A
Question 6	B	B	A	A
Question 7	C	C	C	C
Question 8	C	C	A	C
Question 9	A	C	A	A
Assessment descriptor	SOME	SOME	SOME	SOME
Fish Habitat				
Streams and Rivers				
Question 1				A
Question 2				B
Question 3				B
Question 4				C
Question 5				C
Question 6				C
Lakes and Ponds				
Question 1	C	C	C	
Question 2	C	C	A	
Question 3	A	C	A	
Question 4	C	C	C	
Question 5	C	C	A	
Question 6	C	C	C	
Assessment descriptor	IMPACTED	NOT PRESENT	IMPACTED	IMPACTED
Water Quality				
Question 1	B	B	C	A
Question 2	A	A	A	A
Question 3	A	A	A	A
Question 4	A	C	A	B
Question 5	C	A	C	A
Question 6	C	C	A	C
Assessment descriptor	IMPACTED	IMPACTED	INTACT	INTACT
Hydrologic Control				
Question 1	A	B	A	A
Question 2	A	A	A	A
Question 3	A	C	A	B
Question 4	A	B	A	B
Question 5	A	C	A	A
Question 6	C	A	C	C
Question 7	A	A	A	A
Assessment descriptor	INTACT	IMPACTED	INTACT	INTACT

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	mi-5	mi-6	mi-7	mi-8
Sensitivity to Impact				
Question 1	B	A	A	A
Question 2	B	B	A	B
Question 3	A	A	A	A
Question 4	C	A	C	A
Question 5	A	A	A	A
Question 6	A	B	A	A
Assessment descriptor	POTENTIAL	POTENTIAL	SENSITIVE	POTENTIAL
Enhancement Potential				
Question 1	A	B	A	A
Question 2	C	C	B	A
Question 3	C	C	C	C
Question 4	A	C	A	B
Question 5	A	C	A	B
Question 6	B	B	C	B
Assessment descriptor	MOD	LITTLE	MOD.	HIGH
Education				
Question 1	B	C	B	B
Question 2	A	C	B	B
Question 3	B	B	B	B
Question 4	A	B	B	A
Question 5	B	B	C	A
Question 6	B	B	B	B
Assessment descriptor	POTENTIAL	NOT APPROP.	POTENTIAL	POTENTIAL
Recreation				
Question 1	B	B	C	B
Question 2	C	C	C	C
Question 3	B	C	C	C
Question 4	B	B	B	B
Question 5	B	B	B	B
Question 6	B	B	B	B
Assessment descriptor	POTENTIAL	POTENTIAL	NOT APPROP.	POTENTIAL
Aesthetic Quality				
Question 1	B	C	B	B
Question 2	C	A	B	B
Question 3	B	C	C	B
Question 4	A	B	A	A
Question 5	B	B	C	B
Question 6	A	B	B	A
Assessment descriptor	MOD	NOT PLEASING	NOT PLEASING	MOD

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	mi-9	mi-10	mi-11	mi-12
Wildlife Habitat				
Question 1	B	A	B	B
Question 2	A	A	A	A
Question 3	C	A	B	B
Question 4	C	A	C	C
Question 5	B	A	A	A
Question 6	B	A	A	A
Question 7	A	C	C	C
Question 8	A	C	A	A
Question 9	A	A	A	A
Assessment descriptor	SOME	SOME	SOME	SOME
Fish Habitat				
Streams and Rivers				
Question 1		A		
Question 2		B		
Question 3		A		
Question 4		C		
Question 5		C		
Question 6		A		
Lakes and Ponds				
Question 1	C		A	A
Question 2	C		A	A
Question 3	A		A	A
Question 4	A		C	C
Question 5	A		A	A
Question 6	C		A	A
Assessment descriptor	IMPACTED	IMPACTED	INTACT	INTACT
Water Quality				
Question 1	B	A	A	A
Question 2	C	A	A	A
Question 3	A	A	A	A
Question 4	C	A	B	B
Question 5	C	A	C	C
Question 6	C	A	A	A
Assessment descriptor	NOT PRESENT	INTACT	INTACT	INTACT
Hydrologic Control				
Question 1	B	A	A	A
Question 2	C	A	A	A
Question 3	C	A	B	B
Question 4	A	C	C	C
Question 5	A	A	A	A
Question 6	C	C	C	C
Question 7	A	A	C	C
Assessment descriptor	IMPACTED	INTACT	IMPACTED	IMPACTED

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	mi-9	mi-10	mi-11	mi-12
Sensitivity to Impact				
Question 1	A	A	B	B
Question 2	A	A	A	A
Question 3	C	A	A	A
Question 4	C	A	C	C
Question 5	A	A	C	C
Question 6	A	A	A	A
Assessment descriptor	POTENTIAL	SENSITIVE	POTENTIAL	POTENTIAL
Enhancement Potential				
Question 1	A	A	A	A
Question 2	B	A	A	A
Question 3	C	A	A	A
Question 4	C	A	B	B
Question 5	A	A	A	A
Question 6	B	C	B	B
Assessment descriptor	MOD	HIGH	HIGH	HIGH
Education				
Question 1	C	B	B	B
Question 2	B	B	B	B
Question 3	B	B	A	A
Question 4	B	C	B	B
Question 5	C	C	C	C
Question 6	B	B	B	B
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	POTENTIAL
Recreation				
Question 1	C	C	C	C
Question 2	C	A	A	A
Question 3	C	C	C	C
Question 4	B	B	B	B
Question 5	B	A	A	A
Question 6	B	B	B	B
Assessment descriptor	POTENTIAL	PROVIDES	POTENTIAL	POTENTIAL
Aesthetic Quality				
Question 1	C	A	B	B
Question 2	A	C	A	A
Question 3	B	C	C	C
Question 4	A	A	A	A
Question 5	B	B	C	C
Question 6	B	B	B	B
Assessment descriptor	MOD. PLEASING	MOD.	NOT PLEASING	NOT PLEASING

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	mi-13	mi-14	mi-15	
Wildlife Habitat				
Question 1	C	C	A	
Question 2	B	B	A	
Question 3	C	C	B	
Question 4	C	C	B	
Question 5	B	B	B	
Question 6	B	B	B	
Question 7	C	C	B	
Question 8	C	C	C	
Question 9	C	C	A	
Assessment descriptor	SOME	SOME	SOME	
Fish Habitat				
Streams and Rivers				
Question 1				
Question 2				
Question 3				
Question 4				
Question 5				
Question 6				
Lakes and Ponds				
Question 1	C	C	C	
Question 2	C	C	B	
Question 3	C	C	A	
Question 4	C	C	C	
Question 5	C	C	C	
Question 6	C	C	C	
Assessment descriptor	NOT PRESENT	NOT PRESENT	NOT PRESENT	
Water Quality				
Question 1	B	B	B	
Question 2	A	A	A	
Question 3	C	C	A	
Question 4	B	B	B	
Question 5	A	A	A	
Question 6	A	A	B	
Assessment descriptor	IMPACTED	IMPACTED	INTACT	
Hydrologic Control				
Question 1	B	B	B	
Question 2	A	A	A	
Question 3	B	B	B	
Question 4	A	A	A	
Question 5	C	C	A	
Question 6	A	A	A	
Question 7	A	A	A	
Assessment descriptor	INTACT / some	INTACT / some	INTACT	

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	mi-13	mi-14	mi-15	
Sensitivity to Impact				
Question 1	A	A	B	
Question 2	B	B	B	
Question 3	A	A	C	
Question 4	A	A	A	
Question 5	A	A	A	
Question 6	B	B	A	
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	
Enhancement Potential				
Question 1	B	B	B	
Question 2	C	C	B	
Question 3	C	C	B	
Question 4	B	B	B	
Question 5	C	C	A	
Question 6	B	B	B	
Assessment descriptor	LITTLE	LITTLE	MOD	
Education				
Question 1	C	C	B	
Question 2	C	C	B	
Question 3	B	B	B	
Question 4	B	B	C	
Question 5	C	C	C	
Question 6	B	B	B	
Assessment descriptor	NOT APPROP.	NOT APPROP.	POTENTIAL	
Recreation				
Question 1	C	C	C	
Question 2	C	C	C	
Question 3	C	C	C	
Question 4	B	B	B	
Question 5	B	B	B	
Question 6	B	B	B	
Assessment descriptor	NOT APPROP.	NOT APPROP.	NOT APPROP	
Aesthetic Quality				
Question 1	C	C	B	
Question 2	A	A	B	
Question 3	C	C	B	
Question 4	C	C	C	
Question 5	C	C	B	
Question 6	C	C	B	
Assessment descriptor	NOT PLEASING	NOT PLEASING	MOD PLEASING	

Unnamed Creek A

Significance Determinations for Individual Wetland Bodies Within the City of St. Helens

DRAINAGE NAME	*WETLAND UNIT*	*SIGNIFICANT*	*NOT SIGNIFICANT*
Unnamed Creek A			
	UA-1		X
	UA-2	X	

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	UA-1	UA-2		
Wildlife Habitat				
Question 1	A	A		
Question 2	C	A		
Question 3	C	B		
Question 4	C	C		
Question 5	A	A		
Question 6	A	A		
Question 7	A	C		
Question 8	B	B		
Question 9	A	A		
Assessment descriptor	SOME	SOME		
Fish Habitat				
Streams and Rivers				
Question 1	C	A		
Question 2	B	B		
Question 3	C	C		
Question 4	A	A		
Question 5	B	B		
Question 6	C	B		
Lakes and Ponds				
Question 1				
Question 2				
Question 3				
Question 4				
Question 5				
Question 6				
Assessment descriptor	IMPACTED	IMPACTED		
Water Quality				
Question 1	C	A		
Question 2	B	A		
Question 3	A	A		
Question 4	B	A		
Question 5	B	B		
Question 6	C	B		
Assessment descriptor	IMPACTED	INTACT		
Hydrologic Control				
Question 1	B	A		
Question 2	B	A		
Question 3	B	B		
Question 4	B	C		
Question 5	C	A		
Question 6	B	C		
Question 7	A	A		
Assessment descriptor	IMPACTED	INTACT		

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	UA-1	UA-2		
Sensitivity to Impact				
Question 1	B	A		
Question 2	B	B		
Question 3	C	B		
Question 4	B	B		
Question 5	A	A		
Question 6	B	A		
Assessment descriptor	POTENTIAL	POTENTIAL		
Enhancement Potential				
Question 1	A	A		
Question 2	A	A		
Question 3	B	B		
Question 4	B	B		
Question 5	A	A		
Question 6	B	B		
Assessment descriptor	HIGH	HIGH		
Education				
Question 1	A	A		
Question 2	B	B		
Question 3	B	B		
Question 4	A	A		
Question 5	B	A		
Question 6	B	A		
Assessment descriptor	POTENTIAL	POTENTIAL		
Recreation				
Question 1	A	A		
Question 2	C	A		
Question 3	B	A		
Question 4	B	B		
Question 5	A	A		
Question 6	B	B		
Assessment descriptor	POTENTIAL	PROVIDES		
Aesthetic Quality				
Question 1	B	B		
Question 2	B	A		
Question 3	B	B		
Question 4	B	B		
Question 5	B	A		
Question 6	B	B		
Assessment descriptor	MOD. PLEASING	PLEASING		

Unnamed Creek B

DRAINAGE NAME	*WETLAND UNIT*	*SIGNIFICANT*	*NOT SIGNIFICANT*
Unnamed Creek B			
	UB-1		X
	UB-2		X
	UB-3		X
	UB-4		X
	UB-5A	X	
	UB-5B	X	
	UB-6	X	

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	UB-1	UB-2	UB-3	UB-4
Wildlife Habitat				
Question 1	B	B	B	B
Question 2	B	B	A	B
Question 3	C	C	C	C
Question 4	B	C	C	C
Question 5	B	B	B	A
Question 6	B	B	B	A
Question 7	B	A	A	A
Question 8	B	B	B	B
Question 9	B	A	A	A
Assessment descriptor	SOME	SOME	SOME	SOME
Fish Habitat				
Streams and Rivers				
Question 1				C
Question 2				B
Question 3				C
Question 4				A
Question 5				B
Question 6				C
Lakes and Ponds				
Question 1	C	C	C	
Question 2	A	C	C	
Question 3	C	B	C	
Question 4	B	A	A	
Question 5	B	B	B	
Question 6	C	C	C	
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	IMPACTED
Water Quality				
Question 1	C	B	B	B
Question 2	A	C	C	C
Question 3	A	A	A	A
Question 4	B	B	C	B
Question 5	B	B	B	B
Question 6	B	C	C	C
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	IMPACTED
Hydrologic Control				
Question 1	B	B	B	B
Question 2	A	C	C	C
Question 3	B	B	C	B
Question 4	A	A	A	B
Question 5	B	C	A	C
Question 6	B	B	B	B
Question 7	A	A	A	A
Assessment descriptor	IMPACTED	IMPACTED	IMPACTED	IMPACTED

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	UB-1	UB-2	UB-3	UB-4
Sensitivity to Impact				
Question 1	A	A	A	A
Question 2	A	A	A	B
Question 3	B	C	C	C
Question 4	B	B	B	B
Question 5	A	A	A	A
Question 6	C	B	B	B
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	POTENTIAL
Enhancement Potential				
Question 1	A	A	A	A
Question 2	B	C	C	A
Question 3	C	C	C	A
Question 4	B	B	C	B
Question 5	A	A	A	A
Question 6	B	B	B	B
Assessment descriptor	HIGH	MOD	MOD	HIGH
Education				
Question 1	A	B	B	B
Question 2	B	A	B	C
Question 3	B	B	B	B
Question 4	A	B	B	B
Question 5	B	C	C	C
Question 6	B	B	B	B
Assessment descriptor	POTENTIAL	POTENTIAL	POTENTIAL	NOT APPROP.
Recreation				
Question 1	B	C	C	C
Question 2	C	C	C	C
Question 3	C	C	C	C
Question 4	B	B	B	B
Question 5	B	B	B	B
Question 6	B	B	B	B
Assessment descriptor	POTENTIAL	NOT APPROP.	NOT APPROP.	NOT APPROP.
Aesthetic Quality				
Question 1	C	C	C	C
Question 2	A	A	A	B
Question 3	C	B	B	B
Question 4	B	B	B	B
Question 5	B	B	B	B
Question 6	B	A	A	B
Assessment descriptor	NOT PLEASING	MOD. PLEASING	MOD. PLEASING	MOD. PLEASING

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	UB-5	UB-6		
Wildlife Habitat				
Question 1	A	B		
Question 2	A	A		
Question 3	B	C		
Question 4	A	C		
Question 5	A	B		
Question 6	A	A		
Question 7	C	C		
Question 8	A	A		
Question 9	A	A		
Assessment descriptor	DIVERSE	SOME		
Fish Habitat				
Streams and Rivers				
Question 1	A			
Question 2	A			
Question 3	A			
Question 4	B			
Question 5	A			
Question 6	B			
Lakes and Ponds				
Question 1		C		
Question 2		B		
Question 3		A		
Question 4		A		
Question 5		C		
Question 6		C		
Assessment descriptor	INTACT	IMPACTED		
Water Quality				
Question 1	A	B		
Question 2	A	A		
Question 3	A	A		
Question 4	A	A		
Question 5	C	A		
Question 6	A	A		
Assessment descriptor	INTACT	INTACT		
Hydrologic Control				
Question 1	A	A		
Question 2	A	A		
Question 3	A	A		
Question 4	B	B		
Question 5	A	A		
Question 6	C	A		
Question 7	A	A		
Assessment descriptor	INTACT	INTACT		

Wetland Assessment Questions: Answer Sheet				
Wetland Identifier	UB-5	UB-6		
Sensitivity to Impact				
Question 1	A	A		
Question 2	B	B		
Question 3	A	A		
Question 4	C	A		
Question 5	A	A		
Question 6	A	A		
Assessment descriptor	POTENTIAL	POTENTIAL		
Enhancement Potential				
Question 1	A	A		
Question 2	A	A		
Question 3	B	B		
Question 4	A	A		
Question 5	A	A		
Question 6	B	B		
Assessment descriptor	HIGH	HIGH		
Education				
Question 1	B	B		
Question 2	B	B		
Question 3	A	B		
Question 4	B	B		
Question 5	C	C		
Question 6	B	B		
Assessment descriptor	POTENTIAL	POTENTIAL		
Recreation				
Question 1	C	C		
Question 2	B	C		
Question 3	C	C		
Question 4	A	B		
Question 5	A	B		
Question 6	B	B		
Assessment descriptor	POTENTIAL	NOT APPROP.		
Aesthetic Quality				
Question 1	B	C		
Question 2	B	C		
Question 3	A	C		
Question 4	A	B		
Question 5	B	B		
Question 6	B	B		
Assessment descriptor	MOD. PLEASING	NOT PLEASING		

Appendix G
(Wetland Data Sheets)

Dalton Lake

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		10/23/97
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-1 Data Point # 1

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. Fraxinus latifolia	FACW	20
2. Spiraea douglasii	FACW	20
3.		
Herbs 1. Carex obnupta	OBL	40
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No__ Basis:		

SOILS

Series and Phase: Rock Outcrops/Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No √ Histosol or Histic Epipedon? Yes ____No___
Matrix Color: 10 YR 3/1 Gleyed? Yes___ No___ Mottled: Yes √ No_____ Depth__4"___

Mottle Color: 5 YR 4/4 Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 1"
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
__√__Water marks __√__Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): A. Solomon

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		10/23/97
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-1 Data Point # 2

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Quercus garryana	NL	40
2.		
3.		
Saplings/Shrubs		
1. Symphoricarpos albus	FACU	25
2.		
3.		
Herbs		
1. Polystichum munitum	FACU	20
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 0%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: Rock Outcrops/Xerumbrepts Classification: _____
On Hydric Soil List? Yes ___No √ Histosol or Histic Epipedon? Yes ____No √
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No √ Mottled: Yes___ No √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes____No √ Depth of Standing Water:_____
Saturated?: Yes ___No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): A. Solomon

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/27/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 4 Wetland # D-2	Data Point # 1

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	10
2. Amelanchier alnifolia	FACU	10
3.		
Saplings/Shrubs		
1.		
2.		
3.		
Herbs		
1. Juncus effusus	FACW	20
2. Geum macrophyllum	FACW	20
3. Alopecurus pratensis	FACW	20
% of Dominant Spp that are OBL, FACW, and/or FAC: 80 %	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No √
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No___ Mottled: Yes √ No_____ Depth_____

Mottle Color: 5 YR 4/4 Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:_____
Saturated?: Yes ___ No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves √ Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks √ Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/27/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 4 Wetland # D-2 Data Point # 2	

Normal Environmental Conditions?: Yes_√_ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No_√__

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Amelanchier alnifolia	FACU	30
2.		
3.		
Saplings/Shrubs		
1. Symphoricarpos albus	FACU	35
2.		
3.		
Herbs		
1. Geum macrophyllum	FACW	10
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 33%	Other Indicators:	
Hydrophytic Vegetation: Yes__ No_√__ Basis:		

SOILS

Series and Phase: ___Xerumbrepts_____Classification: _____
On Hydric Soil List? Yes _√_No___Histosol or Histic Epipedon? Yes ____No___
Matrix Color: ___10 YR 3/2_____ Gleyed? Yes___ No___ Mottled: Yes__ No_√____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No_√__ Basis:

HYDROLOGY

Inundated?: Yes____No_√__ Depth of Standing Water:_____
Saturated?: Yes ___No_√__ Depth to saturated soil:_____
Depth to water table:__>18"___
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No_√__ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/27/94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4 Wetland # D-2	
Columbia, OR	Data Point # 3	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	20
2.		
3.		
Saplings/Shrubs		
1. Spiraea douglasii	FACW	15
2.		
3.		
Herbs		
1. Juncus effusus	FACW	20
2. Geum macrophyllum	FACW	20
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No √
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No___ Mottled: Yes √ No_____ Depth 6-10"

Mottle Color: 5 YR 4/4 Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water:_____
Saturated?: Yes √ No___ Depth to saturated soil: 4-8"
Depth to water table:_____
Other Indicators:
√ Water-stained leaves √ Oxidized rhizospheres
√ Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/27/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-2 Data Point # 4

Normal Environmental Conditions?: Yes_√_ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No_√__

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	20
2. Salix lasiandra	FACW	20
3.		
Saplings/Shrubs		
1. Spiraea douglasii	FACW	25
2.		
3.		
Herbs		
1. Juncus effusus	FACW	20
2. Typha latifolia	OBL	25
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes_√_ No___ Basis:		

SOILS

Series and Phase: _____Classification: _____
On Hydric Soil List? Yes __No___Histosol or Histic Epipedon? Yes ____No___
Matrix Color: _____ Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes_√_ No___ Basis: No data taken—inundation.

HYDROLOGY

Inundated?: Yes__√__No___ Depth of Standing Water:___1'_____
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes_√__ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/5/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 4 Wetland # D-3 Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	20
2.		
3.		
Saplings/Shrubs		
1. Spiraea douglasii	FACW	25
2.		
3.		
Herbs		
1. Typha latifolia	OBL	20
2. Phalaris arundinacea	FACW	35
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes No √ Histosol or Histic Epipedon? Yes ____No___
Matrix Color: _____ Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis: Inundation.

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 18"
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/5/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-4 Data Point # 1

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. Spiraea douglasii	FACW	20
2. Rubus discolor	FACU	35
3. Salix lasiandra	FACW	20
Herbs 1. Typha latifolia	OBL	20
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 75%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No √ Histosol or Histic Epipedon? Yes ____No___
Matrix Color: _____ Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis: No data—inundation.

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 12-18"
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/5/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-4 Data Point # 2

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Pseudotsuga menziesii	FACU	15
2.		
3.		
Saplings/Shrubs		
1. Sambucus racemosa	FACU	20
2. Rubus discolor	FACU	25
3. Rhamnus purshiana	FACU	20
Herbs		
1. Hedera helix	NL	30
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 0%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: Xerumbrepts/Rock Outcrops Classification: _____
On Hydric Soil List? Yes No √ Histosol or Histic Epipedon? Yes ____ No___
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:_____
Saturated?: Yes ___ No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-29-94
COUNTY AND STATE	TOWNSHIP: RANGE: 1W SECT: 4 Wetland # D-5	
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes No ✓ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	25%
2.		
3.		
Saplings/Shrubs		
1. Salix lasiandra	FACW+	25%
2.		
3.		
Herbs		
1.		
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes ✓ No_ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____

On Hydric Soil List? Yes __No ✓ Histosol or Histic Epipedon? Yes ____No ✓

Matrix Color: _____ Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description: No data-open water

Hydric Soil: Yes ✓ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No ___ Depth of Standing Water: 1-2'

Saturated?: Yes ___No___ Depth to saturated soil:_____

Depth to water table: 0"

Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres

____Surface scour ____Sediment deposits

____Water marks ✓ Drainage patterns

____Plant adaptations ____Other:

Criteria Met?: Yes ✓ No_ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:

Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-29-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-6
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Populus trichocarpa	FAC	10%
2.		
3.		
Saplings/Shrubs		
1.Rubus discolor	FACU	30%
2. Spiraea douglasii	FACW	20%
3. Salix lasiandra	FACW	20%
Herbs		
1. Typha latifolia	OBL	20%
2.		
3.		

% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:

Hydrophytic Vegetation: Yes_√_ No___ Basis:

SOILS

Series and Phase: Rock Outcrops/Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No_√_ Histosol or Histic Epipedon? Yes___No_√__
Matrix Color: 10YR 3/2 Gleyed? Yes___No_√__ Mottled: Yes_√__No___Depth____
Mottle Color: 10YR 4/6 Mottle Description:_____

Hydric Soil: Yes_√_ No_____ Basis:

HYDROLOGY

Inundated?: Yes__√__No____ Depth of Standing Water:__8"__
Saturated?: Yes ___No ____ Depth to saturated soil:_____
Depth to water table:____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes_√__ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:
Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-29-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland #D-6
Columbia, OR		Data Point #2

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Quercus garryana	NL	10%
2.		
3.		
Saplings/Shrubs		
1.Rubus discolor	FACU	30%
2.		
3.		
Herbs		
1. Festuca sp.	FAC-FACU	35%
2. Lolium perenne	FACU	35%
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 0-25%	Other Indicators:	
Hydrophytic Vegetation: Yes__ No✓ Basis:		

SOILS

Series and Phase: Urbanfill Classification: _____
On Hydric Soil List? Yes __No✓__Histosol or Histic Epipedon? Yes___No___
Matrix Color: _____ Gleyed? Yes____No____ Mottled: Yes___No___Depth_____
Mottle Color: 10YR3/2 Mottle Description:_____

Hydric Soil: Yes___ No✓___ Basis:

HYDROLOGY

Inundated?: Yes_____No✓ Depth of Standing Water:_____
Saturated?: Yes ___No ✓ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No✓ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: ✓
Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		4/24/94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-7
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	20
2.		
3.		
Saplings/Shrubs		
1. Amalanchier alnifolia	FACU	10
2. Spiraea douglasii	FACW	30
3.		
Herbs		
1.		
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 67%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Rock Outcrops/Xerumbrepts Classification: _____
On Hydric Soil List? Yes ___No √ Histosol or Histic Epipedon? Yes ____No √
Matrix Color: _____ Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis: No data - inundated for very long duration.

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 1'
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		4/24/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 4 Wetland # D-8 Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. Rubus discolor	FACU	35
2.		
3.		
Herbs 1. Alopecurus pratensis	FACW	10
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 50%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis: Bare ground dominant.		

SOILS

Series and Phase: Urban fill Classification: _____
On Hydric Soil List? Yes __No___Histosol or Histic Epipedon? Yes ____No___
Matrix Color: _____ Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes____No √ Depth of Standing Water:_____
Saturated?: Yes ___No √ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		4/24/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-8 Data Point # 2

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	20
2.		
3.		
Saplings/Shrubs		
1. Symphoricarpos albus	FACU	20
2.		
3.		
Herbs		
1. Juncus patens	FACW	20
2. Carex obnupta	OBL	20
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No √ Histosol or Histic Epipedon? Yes ____No √
Matrix Color: 10 YR 3/1 Gleyed? Yes___ No √ Mottled: Yes__ No √ Depth___

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 1-2"
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		8-20-97
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-10
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1.		
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 0%	Other Indicators:	

Hydrophytic Vegetation: Yes_√_ No___ Basis: No vegetation - open water

SOILS

Series and Phase: Rock Outcrops/Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No_√_Histosol or Histic Epipedon? Yes___No_ __
Matrix Color: _____Gleyed? Yes____No__ __ Mottled: Yes_ __No___Depth_____
Mottle Color: _____ Mottle Description:_____

Hydric Soil: Yes_√_ No_____ Basis: Inundated for very long duration

HYDROLOGY

Inundated?: Yes__√__No____ Depth of Standing Water:__3'__
Saturated?: Yes ___No ____ Depth to saturated soil:_____
Depth to water table:___
Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes_√__ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:
Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-29-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-10
Columbia, OR		Data Point # 2

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Quercus garryana	N1	30%
2.		
3.		
Saplings/Shrubs		
1. Symphoricarpos alba	FACU	20%
2.		
3.		
Herbs		
1. Berberis aquilinum	FACU	25%
2. Polystichum munitum	FACU	20%
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 0-%	Other Indicators:	

Hydrophytic Vegetation: Yes___ No ✓ Basis:

SOILS

Series and Phase: Xerumbrepts/Rock Outcrops Classification: _____
On Hydric Soil List? Yes __No ✓ Histosol or Histic Epipedon? Yes___No___
Matrix Color: 10YR 3/2 silt loam Gleyed? Yes___No √ Mottled: Yes___No √ Depth____
Mottle Color: _____ Mottle Description:_____

Hydric Soil: Yes___ No ✓ Basis:

HYDROLOGY

Inundated?: Yes____No ✓ Depth of Standing Water:_____
Saturated?: Yes ___No ✓ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No ✓ Basis:_____

WETLAND DETERMINATION: Wetland:___ Non-Wetland: ✓
Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		8-05-97
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland #D-11
Columbia, OR		Data Point #1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	30
2. Alnus rubra	FAC	20
3.		
Saplings/Shrubs		
1. Salix lasiandra	FACW	20
2. Fraxinus latifolia	FACW	20
3.		
Herbs		
1. Carex obnupta	OBL	25
2. Bidens frondosa	FACW+	20
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	

Hydrophytic Vegetation: Yes_√_ No___ Basis:

SOILS

Series and Phase: Rock Outcrops/Xerumbrepts Classification: _____

On Hydric Soil List? Yes __No_√_Histosol or Histic Epipedon? Yes_√__No_ __

Matrix Color: 10YR 2/2 &2/1Gleyed? Yes____No__ __ Mottled: Yes_ __No___Depth_____

Mottle Color: _____ Mottle Description:_____

Hydric Soil: Yes_√_ No_____ Basis: Organic soils

HYDROLOGY

Inundated?: Yes____No_√__ Depth of Standing Water:____

Saturated?: Yes ___No _√__ Depth to saturated soil:_____

Depth to water table: >18"

Other Indicators:

___√_Water-stained leaves ____Oxidized rhizospheres

__√__Surface scour ____Sediment deposits

__√__Water marks __√__Drainage patterns

____Plant adaptations __√__Other: Dried algal mats

Criteria Met?: Yes_√__ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): A. Solomon

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-29-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland #D-11
Columbia, OR		Data Point #2

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Quercus garryana	N1	30%
2.		
3.		
Saplings/Shrubs		
1. Symphoricarpos albus	FACU	20%
2.		
3.		
Herbs		
1. Berberis aquilinum	FACU	30%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 0-%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No_✓_ Basis:		

SOILS

Series and Phase: Xerumbrepts/Rock Outcrops Classification: _____
On Hydric Soil List? Yes __No_✓__Histosol or Histic Epipedon? Yes___No___
Matrix Color: 10YR 3/2 silt loam Gleyed? Yes___No_√___ Mottled: Yes___No__√_Depth_____
Mottle Color: _____ Mottle Description:_____

Hydric Soil: Yes___ No_✓___ Basis:

HYDROLOGY

Inundated?: Yes_____No_✓ Depth of Standing Water:_____
Saturated?: Yes ___No ✓ Depth to saturated soil:_____
Depth to water table: >18"___
Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No_✓_ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: ✓
Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		7-20-97
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-12
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1. Fraxinus latifolia	FACW	30
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1.		
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	

Hydrophytic Vegetation: Yes_√_ No___ Basis:

SOILS

Series and Phase: Rock Outcrops/Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No_√_Histosol or Histic Epipedon? Yes_ __No_ __
Matrix Color: _____Gleyed? Yes____No__ __ Mottled: Yes_ __No___Depth_____
Mottle Color: _____ Mottle Description:_____

Hydric Soil: Yes_√_ No_____ Basis: No soil - inundated for very long duration

HYDROLOGY

Inundated?: Yes_____No_√___ Depth of Standing Water:_____
Saturated?: Yes ___No _√___ Depth to saturated soil:_____
Depth to water table: >18"__
Other Indicators:

__√__Water-stained leaves ____Oxidized rhizospheres
__√__Surface scour ____Sediment deposits
__√__Water marks __√__Drainage patterns
____Plant adaptations __√__Other: Dried algal mats

Criteria Met?: Yes_√__ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:
Comments:
Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-29-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-13
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1. Fraxinus latifolia	FACW	30
2.		
3.		
Saplings/Shrubs 1. Sambucus racemosa	FACU	20
2.		
3.		
Herbs 1. Juncus effusus	FACW	25
2. Ranunculus repens	FACW	20
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	

Hydrophytic Vegetation: Yes_√_ No___ Basis:

SOILS

Series and Phase: Rock Outcrops/Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No_√_Histosol or Histic Epipedon? Yes_√__No_ __
Matrix Color: 10YR 3/2 Gleyed? Yes____No__ __ Mottled: Yes __√__No___Depth____
Mottle Color: 10YR 4/4 Mottle Description:_____

Hydric Soil: Yes_√_ No____ Basis: Organic soils

HYDROLOGY

Inundated?: Yes_√___No____ Depth of Standing Water:_3"___
Saturated?: Yes ___No ___ Depth to saturated soil:_____
Depth to water table:____
Other Indicators:
__√_Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks __√__Drainage patterns
____Plant adaptations ____Other: Dried algal mats

Criteria Met?: Yes_√__ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:
Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		7-15-97
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-14
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	30
2. Acer macrophyllum	FACU	20
3.		
Saplings/Shrubs		
1. Sambucus racemosa	FACU	20
2. Alnus rubra	FAC	20
3.		
Herbs		
1. Polystichum munitum	FACU	20
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC	Other Indicators:	

Hydrophytic Vegetation: Yes___ No___ Basis: Riparian Vegetation - no vegetation in stream channel

SOILS

Series and Phase: Rock Outcrops/Xerumbrepts Classification: _____

On Hydric Soil List? Yes __No_√_Histosol or Histic Epipedon? Yes_ __No_ √__

Matrix Color: _____Gleyed? Yes____No_ __ Mottled: Yes ___No___Depth_____

Mottle Color: _____ Mottle Description:_____

Hydric Soil: Yes___ No_____ Basis: Cobble bottom stream channel

HYDROLOGY

Inundated?: Yes_____No_√___ Depth of Standing Water:_____

Saturated?: Yes ___No __√_ Depth to saturated soil:_____

Depth to water table:__>18"__

Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres

__√__Surface scour ____Sediment deposits

____Water marks __√__Drainage patterns

____Plant adaptations ____Other:

Criteria Met?: Yes_√__ No___ Basis:_Intermittent stream channel

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments: Stream channel

Investigator(s): A. Solomon

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		7-15-97
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-15
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1. Fraxinus latifolia	FACW	30
2. Acer macrophyllum	FACU	20
3.		
Saplings/Shrubs 1. Alnus rubra	FAC	30
2.		
3.		
Herbs 1. Polystichum munitum	FACU	20
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC	Other Indicators:	

Hydrophytic Vegetation: Yes___ No___ Basis: Riparian Vegetation - no vegetation in stream channel

SOILS

Series and Phase: Rock Outcrops/Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No_√_Histosol or Histic Epipedon? Yes_ __No_ √__
Matrix Color: _____Gleyed? Yes____No__ __ Mottled: Yes ___No___Depth_____
Mottle Color: _____ Mottle Description:_____

Hydric Soil: Yes___ No_____ Basis: Cobble bottom stream channel

HYDROLOGY

Inundated?: Yes_√___No_____ Depth of Standing Water:__2"___
Saturated?: Yes ___No ____ Depth to saturated soil:_____
Depth to water table:___
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
__√__Surface scour ____Sediment deposits
____Water marks __√__Drainage patterns
_____Plant adaptations ____Other:

Criteria Met?: Yes_√__ No___ Basis: stream channel

WETLAND DETERMINATION: Wetland: √ Non-Wetland:
Comments: Stream channel

Investigator(s): A. Solomon

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5-15-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-16
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Populus trichocarpa	FAC	20
2. Fraxinus latifolia	FACW	35
3.		
Saplings/Shrubs		
1. Spiraea douglasii	FACW	25
2. Solanum dulcamara	FAC	20
3.		
Herbs		
1. Phalaris arundinacea	FACW	30
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Sauvie silt loam Classification: Fluvaquentic haplaquoll
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ___ No √
Matrix Color: 10YR 3/2 & 5/2 Gleyed? Yes___ No √ Mottled: Yes √ No___ Depth 4"

Mottle Color: 7.5YR 4/4 Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 6"
Saturated?: Yes ___ No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
___Water-stained leaves ___Oxidized rhizospheres
___Surface scour ___Sediment deposits
√ Water marks √ Drainage patterns
___Plant adaptations ___Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5-15-94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-16 Data Point # 2

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Nuphar polysepalum	OBL	30
2. Eleocharis palustris	OBL	20
3. Myriophyllum hippuroides	OBL	20
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Sauvie silt loam Classification: Fluvaquentic haplaquoll
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ___ No √
Matrix Color: _____ Gleyed? Yes___ No___ Mottled: Yes___ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis: Inundated for very long duration

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: ~3'
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
___Water-stained leaves ___Oxidized rhizospheres
___Surface scour ___Sediment deposits
___Water marks ___Drainage patterns
___Plant adaptations ___Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5-15-94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-16 Data Point # 3

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Acer macrophyllum	FACU	60
2. Quercus garryana	NL	20
3.		
Saplings/Shrubs		
1. Symphoricarpos albus	FACU	20
2.		
3.		
Herbs		
1. Trisetum cernuum	FACU	35
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 0%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: Sauvie silt loam Classification: Fluvaquentic haplaquoll
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No √
Matrix Color: 10YR 3/2 Gleyed? Yes___ No____ Mottled: Yes___ No √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:____
Saturated?: Yes ___ No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes____ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5-15-94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-16 Data Point # 4

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Populus trichocarpa	FAC	30
2.		
3.		
Saplings/Shrubs		
1. Symphoricarpos albus	FACU	20
2. Rubus discolor	FACU	25
3. Cornus stolonifera	FACW	20
Herbs		
1. Polystichum munitum	FACU	20
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 40%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: xeropsamments Classification: Fluvaquentic haplaquoll
On Hydric Soil List? Yes __No √ Histosol or Histic Epipedon? Yes ____No √
Matrix Color: 10YR 4/2 Gleyed? Yes___ No____ Mottled: Yes__ No √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes____No √ Depth of Standing Water:____
Saturated?: Yes ___No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes____ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5-15-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # D-17
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Populus trichocarpa	FAC	30
2. Salix lasiandra	FACW	25
3.		
Saplings/Shrubs		
1. Spiraea douglasii	FACW	25
2. Cornus stolonifera	FACW	20
3.		
Herbs		
1. Phalaris arundinacea	FACW	30
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: xeropsamments Classification: _____
On Hydric Soil List? Yes ___No √ Histosol or Histic Epipedon? Yes ____No √
Matrix Color: _____ Gleyed? Yes___ No √ Mottled: Yes__ No √ Depth___

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis: Inundated for very long duration

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 2'
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
√ Water marks √ Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/5/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT:	Wetland # D-18 Data Point # 1

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	20
2.		
3.		
Saplings/Shrubs		
1. Salix lasiandra	FACW	40
2. Physocarpus capitatus	FAC+	30
3.		
Herbs		
1. Rubus spectabilis	FAC+	25
2. Carex obnupta	OBL	20
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No √ Histosol or Histic Epipedon? Yes ____No___
Matrix Color: _____ Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis: Inundated for very long duration.

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 1-2'
Saturated?: Yes √ No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/5/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT:	Wetland # D-18 Data Point # 2

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Quercus garryana	NL	40
2.		
3.		
Saplings/Shrubs		
1. Symphoricarpos albus	FACU	20
2.		
3.		
Herbs		
1. Berberis aquilinum	FACU	25
2. Polystichum munitum	FACU	20
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 0%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: Rock outcrops/Xerumbrepts Classification: _____
On Hydric Soil List? Yes No √ Histosol or Histic Epipedon? Yes ____No___
Matrix Color: 10YR 3/2 Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes____No √ Depth of Standing Water:___
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes____ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		7/15/97
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT:	Wetland # D-19 Data Point # 1

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. Salix scouleriana	FAC	30
2. Spiraea douglasii	FACW	30
3.		
Herbs 1. Agrostis sp.	FAC	40
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes No √ Histosol or Histic Epipedon? Yes ____No___
Matrix Color: _____ Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis: No soil - Inundated for very long duration.

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 1"
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
√ Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
√ Water marks ____Drainage patterns
____Plant adaptations √ Other: Dried algal mats

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): A. Solomon

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		7/15/97
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT:	Wetland # D-19 Data Point # 2

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Psuedotsuga menziesii	FACU	10
2.		
3.		
Saplings/Shrubs		
1. Cytisus scoparius	NL	20
2. Rosa nutkana	FAC	20
3.		
Herbs		
1. Dactylis glomerata	FACU	30
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 25%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No √ Histosol or Histic Epipedon? Yes ____No___
Matrix Color: _____ Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis: No soil

HYDROLOGY

Inundated?: Yes___No √ Depth of Standing Water:_____
Saturated?: Yes ___No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other: Dried algal mats

Criteria Met?: Yes____ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): A. Solomon

Frogmore Slough

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-29-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # F-1
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. Salix lasiandra	FACW	20%
2. Cornus stolonifera	FACW	20%
3. Rubus discolor	FACU	20%
Herbs 1. Phalaris arundinacea	FACW	30%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 75%	Other Indicators:	
Hydrophytic Vegetation: Yes ✓ No___ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____

On Hydric Soil List? Yes __No ✓ Histosol or Histic Epipedon? Yes ____No ✓

Matrix Color: 2.5YR4/1 Gleyed? Yes___ No ✓ Mottled: Yes___ No___ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes ✓ No___ Basis:

HYDROLOGY

Inundated?: Yes____No ✓ Depth of Standing Water:_____

Saturated?: Yes ✓ No ___ Depth to saturated soil: 9"

Depth to water table: >12"

Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres

___Surface scour ____Sediment deposits

____Water marks ✓ Drainage patterns

____Plant adaptations ____Other:

Criteria Met?: Yes ✓ No____ Basis:_____

~~WETLAND DETERMINATION Wetland ✓ Non-Wetland~~

Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-29-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland #F-2
Columbia, OR		Data Point # 2

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.Acer macrophyllum	FACU	15%
2. Populus trichocarpa	FAC	10%
3.		
Saplings/Shrubs		
1. Rubus discolor	FACU	35%
2.		
3.		
Herbs		
1. Festuca	FAC-FACU	35%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC ≤50%	Other Indicators:	

Hydrophytic Vegetation: Yes___ No_✓_ Basis: Disturbed area surrounding wetland

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No ✓__Histosol or Histic Epipedon? Yes ____No_✓_
Matrix Color: 10yr3/2 Gleyed? Yes___ No_✓_ Mottled: Yes__ No_✓_ Depth_____
Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No_✓_ Basis:

HYDROLOGY

Inundated?: Yes____No ✓ Depth of Standing Water:_____
Saturated?: Yes ____No ✓ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
___Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No_✓_ Basis: Outside channel

WETLAND DETERMINATION: Wetland: Non-Wetland: ✓
Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-29-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland #F-3
Columbia, OR		Data Point #1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1.		
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC	Other Indicators:	

Hydrophytic Vegetation: Yes √ No___ Basis: No vegetation - sewage lagoon

SOILS

Series and Phase: Xerumbrepts Classification: _____

On Hydric Soil List? Yes __No ✓ Histosol or Histic Epipedon? Yes ____No ✓

Matrix Color: _____ Gleyed? Yes___ No ✓ Mottled: Yes___ No ✓ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No_____ Basis: No soil data - inundated for very long duration

HYDROLOGY

Inundated?: Yes √ No Depth of Standing Water: Unknown - sewage lagoon

Saturated?: Yes ____No___ Depth to saturated soil:_____

Depth to water table:____

Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres

____Surface scour ____Sediment deposits

____Water marks ____Drainage patterns

____Plant adaptations ____Other:

Criteria Met?: Yes √ No_____ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): JDD

Jackass Canyon

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		6/13/94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4 Wetland # J-1	
Columbia, OR	Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.		
2.		
3.		
Saplings/Shrubs		
1. Rubus discolor	FACU	10
2.		
3.		
Herbs		
1. Phalaris arundinacea	FACW	75
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 50%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis: Prevalence of Phalaris		

SOILS

Series and Phase: Xerumbrepts/Urban fill Classification: _____
On Hydric Soil List? Yes __No √ Histosol or Histic Epipedon? Yes ____No √
Matrix Color: 10YR 3/2 Gleyed? Yes___ No √ Mottled: Yes__ No √ Depth_____

Mottle Color: NA Mottle Description:_____

Hydric Soil: Yes √ No___ Basis: Soil recently disturbed - other indicators positive.

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 6"—4-6' wide
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:
Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		6/13/04
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 4 Wetland # J-1 Data Point # 2	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Populus trichocarpa	FAC	25
2.		
3.		
Saplings/Shrubs		
1. Salix lasiandra	FACW	20
2. Fraxinus latifolia	FACW	25
3.		
Herbs		
1.		
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Xerumbrepts/Urban fill Classification: _____
On Hydric Soil List? Yes __No √ Histosol or Histic Epipedon? Yes ____No √
Matrix Color: 10YR3/2 Gleyed? Yes___ No √ Mottled: Yes__ No √ Depth_____

Mottle Color: NA Mottle Description:_____

Hydric Soil: Yes √ No___ Basis: soil ?

HYDROLOGY disturbed site ?

Inundated?: Yes √ No___ Depth of Standing Water: 4-6"—2-3' wide
Saturated?: Yes √ No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-29-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # J-2
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes ✓ No *Disturbed conditions described below

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Populus trichocarpa	FAC	10%
2.		
3.		
Saplings/Shrubs		
1.		
2.		
3.		
Herbs		
1. Phalaris arundinacea	FACW	20%
2. Typha latifolia	OBL	20%
3. Juncus effusus	FACW	25%
% of Dominant Spp that are OBL, FACW, and/or FAC >50%	Other Indicators:	
Hydrophytic Vegetation: Yes ✓ No__ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____

On Hydric Soil List? Yes __No ✓ Histosol or Histic Epipedon? Yes ____No ✓

Matrix Color: _____ Gleyed? Yes___ No ✓ Mottled: Yes__ No ✓ Depth_____

Mottle Color:_____ Mottle Description: No data-open water

Hydric Soil: Yes ✓ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No_ Depth of Standing Water: 1'

Saturated?: Yes ____No Depth to saturated soil:_____

Depth to water table:___

Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres

____Surface scour ____Sediment deposits

____Water marks ____Drainage patterns

____Plant adaptations ____Other:

Criteria Met?: Yes ✓ No_ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:

Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-18-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 44	Wetland # J-3
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes✓ No___ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes___ No✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Acer macrophyllum	FACU	40%
2.		
3.		
Saplings/Shrubs		
1. Sambucus racemosa	FACU	20%
2.		
3.		
Herbs		
1. Polystichum munitum	FACU	20%
2. Symphoricarpos albus	FACU	25%
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 0%	Other Indicators:	
Hydrophytic Vegetation: Yes____ No √ Basis:		

SOILS

Series and Phase: Rock outcrop/Xerumbrepts Classification: _____

On Hydric Soil List? Yes __No ✓ Histosol or Histic Epipedon? Yes ____No___

Matrix Color: 10YR3/3 Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes____ No √ Basis: Mottling

HYDROLOGY

Inundated?: Yes____No✓ Depth of Standing Water:_____

Saturated?: Yes ___No __√__ Depth to saturated soil:_____

Depth to water table: >18"

Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres

____Surface scour ____Sediment deposits

____Water marks ____Drainage patterns

____Plant adaptations ____Other:

Criteria Met?: Yes_____ No √ Basis:_____

WETLAND DETERMINATION: Wetland:___ Non-Wetland: √

Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-18-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 44	Wetland # J-3
Columbia, OR		Data Point # 2

Normal Environmental Conditions?: Yes✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	20%
2.		
3.		
Saplings/Shrubs		
1. Physocarpus capitatus	FAC+	20%
2.		
3.		
Herbs		
1. Ranunculus repens	FACW	30%
2. Lawn grass (fescue?)	FAC-FACU	60%
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC >75%	Other Indicators:	

Hydrophytic Vegetation: Yes✓ No__ Basis:

SOILS

Series and Phase: Rock outcrop/Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No✓__Histosol or Histic Epipedon? Yes ____No___
Matrix Color: 10YR3/2 Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____
Mottle Color: 10YR5/6 Mottle Description:_____

Hydric Soil: Yes✓ No___ Basis: Mottling

HYDROLOGY

Inundated?: Yes____No✓ Depth of Standing Water:_____
Saturated?: Yes ✓No Depth to saturated soil:___0"_____
Depth to water table:__5"__
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes✓ No__ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-18-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4	Wetland # J-3
Columbia, OR		Data Point # 3

Normal Environmental Conditions?: Yes✓ No___ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes___ No✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	20%
2.		
3.		
Saplings/Shrubs		
1. Physocarpus capitatus	FAC+	20%
2.		
3.		
Herbs		
1. Carex obnupta	OBL	20%
2. Juncus patens	FACW	20%
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes✓ No_ Basis:		

SOILS

Series and Phase: Rock outcrop/Xerumbrepts Classification: _____

On Hydric Soil List? Yes __No✓ Histosol or Histic Epipedon? Yes ____No____

Matrix Color: 10YR3/2 Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color: 10YR5/6 Mottle Description:_____

Hydric Soil: Yes✓ No___ Basis: Mottling

HYDROLOGY

Inundated?: Yes____No✓ Depth of Standing Water:_____

Saturated?: Yes ✓No Depth to saturated soil:___0"_____

Depth to water table:___5"___

Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres

____Surface scour ____Sediment deposits

____Water marks ____Drainage patterns

____Plant adaptations ____Other:

Criteria Met?: Yes✓____ No_ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:

Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-18-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 44	Wetland # J-3
Columbia, OR		Data Point # 4

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.Acer macrophyllum	FACU	25%
2.		
3.		
Saplings/Shrubs		
1. Rosa nutkana	FAC	20%
2.		
3.		
Herbs		
1. Carex obnupta	OBL	20%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 67%	Other Indicators:	
Hydrophytic Vegetation: Yes✓ No_ Basis:		

SOILS

Series and Phase: Rock outcrop/ Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No_✓__Histosol or Histic Epipedon? Yes ____No_✓__
Matrix Color: 10YR3/1 Gleyed? Yes____ No_√__ Mottled: Yes✓__ No_____ Depth__
Mottle Color:__10YR 5/6 Mottle Description:_____
Hydric Soil: Yes_✓__ No___ Basis:

HYDROLOGY

Inundated?: Yes____No_✓ Depth of Standing Water:_____
Saturated?: Yes __✓__No Depth to saturated soil:__3"_____
Depth to water table:__7"___
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks __√_Drainage patterns
____Plant adaptations ____Other:
Criteria Met?: Yes_✓__ No_ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments:
Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-18-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 44	Wetland # J-3
Columbia, OR		Data Point # 5

Normal Environmental Conditions?: Yes ✓ No___ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes___ No✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.		
2.		
3.		
Saplings/Shrubs		
1. Rubus discolor	FACU	35%
2.		
3.		
Herbs		
1. Phalaris arundinacea	FACW	80%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 50%	Other Indicators:	
Hydrophytic Vegetation: Yes ✓ No_ Basis: Prevalence of Phalaris		

SOILS

Series and Phase: Rock outcrop/ Xerumbrepts Classification: _____

On Hydric Soil List? Yes __No ✓ Histosol or Histic Epipedon? Yes ____No ✓

Matrix Color: 10YR3/1 Gleyed? Yes____ No √ Mottled: Yes ✓ No_____ Depth__

Mottle Color: 10YR 5/6 Mottle Description:_____

Hydric Soil: Yes ✓ No___ Basis:

HYDROLOGY

Inundated?: Yes____No ✓ Depth of Standing Water:_____

Saturated?: Yes ✓ No Depth to saturated soil: 0"

Depth to water table: 6"

Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres

____Surface scour ____Sediment deposits

____Water marks __√__Drainage patterns

____Plant adaptations ____Other:

Criteria Met?: Yes ✓ No_ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:

Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-18-94
COUNTY AND STATE	TOWNSHIP: 5N RANGE: 1W SECT: 44	Wetland # J-3
Columbia, OR		Data Point # 6

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.Acer macrophyllum	FACU	25%
2.		
3.		
Saplings/Shrubs		
1. Rubus discolor	FACU	25%
2.		
3.		
Herbs		
1. Festuca pratensis	FACU	10%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 25%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No ✓ Basis:		

SOILS

Series and Phase: Gravel/ asphalt Classification: _____
On Hydric Soil List? Yes __No ✓ Histosol or Histic Epipedon? Yes ____No ✓
Matrix Color: _____ Gleyed? Yes___ No ✓ Mottled: Yes__ No ✓ Depth_____
Mottle Color:_____ Mottle Description:_____
Hydric Soil: Yes___ No ✓ Basis:

HYDROLOGY

Inundated?: Yes____No ✓ Depth of Standing Water:_____
Saturated?: Yes ___No ✓ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:
Criteria Met?: Yes___ No ✓ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: ✓
Comments:
Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-24-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland #J-4
Columbia, OR		Data Point #1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. Rubus discolor	FACU	80%
2.		
3.		
Herbs 1. Holcus lanatus	FAC	20%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 50%	Other Indicators:	
Hydrophytic Vegetation: Yes_____ No_✓_ Basis: Prevalence of Rubus.		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes ___No ✓ Histosol or Histic Epipedon? Yes ____No ✓
Matrix Color: 2.5 YR 4/1 Gleyed? Yes___ No ✓ Mottled: Yes___ No ✓ Depth_____
Mottle Color:_____ Mottle Description:_____
Hydric Soil: Yes___ No ✓ Basis:

HYDROLOGY

Inundated?: Yes_____No ✓ Depth of Standing Water:___
Saturated?: Yes____ No ✓ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:
Criteria Met?: Yes_____ No ✓ Basis:_____

WETLAND DETERMINATION: Wetland:___ Non-Wetland: ✓
Comments

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-24-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland #J-4
Columbia, OR		Data Point # 2

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. Rubus discolor	FACU	30%
2.		
3.		
Herbs 1. Holcus lanatus	FAC	20%
2. Phalaris arundinacea	FACW	70%
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 67%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No____		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes ___No ✓ Histosol or Histic Epipedon? Yes ____No ✓
Matrix Color: 2.5 YR 4/1 Gleyed? Yes___ No ✓ Mottled: Yes___ No ✓ Depth_____
Mottle Color:_____ Mottle Description:_____
Hydric Soil: Yes √ No____ Basis:

HYDROLOGY

Inundated?: Yes____No ✓ Depth of Standing Water:___
Saturated?: Yes √ No Depth to saturated soil: 10"
Depth to water table: 16"
Other Indicators:
____Water-stained leaves √ Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks √ Drainage patterns
____Plant adaptations ____Other:
Criteria Met?: Yes √ No____ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:
Comments

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-29-94
COUNTY AND STATE	TOWNSHIP: 5N RANGE: 1W SECT:	Wetland # J-5
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.Alnus rubra	FAC	15%
2.		
3.		
Saplings/Shrubs		
1. Rubus discolor	FACU	25%
2.		
3.		
Herbs		
1. Holcus lanatus	FAC	35%
2. Juncus effusus	FACW	20%
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 75%	Other Indicators:	
Hydrophytic Vegetation: Yes✓ No__ Basis:		

SOILS

Series and Phase: Rock Outcrops/Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No✓ Histosol or Histic Epipedon? Yes ____No✓
Matrix Color: 10YR3/2 Gleyed? Yes___ No✓ Mottled: Yes√ No_____ Depth_____
Mottle Color: 10YR 4/4 Mottle Description:_____
Hydric Soil: Yes√ No____ Basis:

HYDROLOGY

Inundated?: Yes____No✓ Depth of Standing Water:_____
Saturated?: Yes ___No✓ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
√ Water marks √ Drainage patterns
____Plant adaptations ____Other:
Criteria Met?: Yes√ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:
Comments:
Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-29-94
COUNTY AND STATE	TOWNSHIP: 5N RANGE: 1W SECT:	Wetland # J-6
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes___ No✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.Alnus rubra	FAC	15%
2.		
3.		
Saplings/Shrubs		
1. Rubus discolor	FACU	30%
2.		
3.		
Herbs		
1. Phalaris arundinacea	FACW	45%
2. Juncus effusus	FACW	20%
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 75%	Other Indicators:	

Hydrophytic Vegetation: Yes✓ No__ Basis:

SOILS

Series and Phase: Rock Outcrops/Xerumbrepts Classification: _____

On Hydric Soil List? Yes __No✓ Histosol or Histic Epipedon? Yes _____No✓

Matrix Color: 10YR3/2 Gleyed? Yes___ No✓ Mottled: Yes√ No_____ Depth_____

Mottle Color: 10YR 4/4 Mottle Description:_____

Hydric Soil: Yes√ No____ Basis:

HYDROLOGY

Inundated?: Yes_____No✓ Depth of Standing Water:_____

Saturated?: Yes ___No✓ Depth to saturated soil:_____

Depth to water table: >18"

Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres

____Surface scour ____Sediment deposits

__√__Water marks __√__Drainage patterns

_____Plant adaptations _____Other:

Criteria Met?: Yes√ No___ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:

Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		4-29-94
COUNTY AND STATE	TOWNSHIP: 5N RANGE: 1W SECT: 44	Wetland # J-6
Columbia, OR		Data Point # 2

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.Alnus rubra	FAC	15%
2.		
3.		
Saplings/Shrubs		
1. Rubus discolor	FACU-	25%
2.		
3.		
Herbs		
1. Festuca spp.	FAC	35%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 67%	Other Indicators:	
Hydrophytic Vegetation: Yes✓ No_ Basis:		

SOILS

Series and Phase: Urban fill Classification: Gravel/ loam mix
On Hydric Soil List? Yes __No✓ Histosol or Histic Epipedon? Yes _____No✓
Matrix Color: 10YR3/2 Gleyed? Yes___ No✓ Mottled: Yes__ No___✓__ Depth_____
Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No✓___ Basis:

HYDROLOGY

Inundated?: Yes_____No✓ Depth of Standing Water:_____
Saturated?: Yes ___No✓ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
_____Plant adaptations ____Other:

Criteria Met?: Yes____ No✓ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: ✓

Comments: Non-wetland within canyon - lack hydrol -

Investigator(s): JDD

McNulty Creek

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		8/10/97
COUNTY AND STATE Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MC-1 Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1. Acer macrophyllum	FACU	60
2.		
3.		
Saplings/Shrubs 1. Corylus cornuta	FACU	20
2.		
3.		
Herbs 1. Polystichum munitum	FACU	20
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 0%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis: Vegetation on banks of intermittent stream channel		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No___
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No √ Mottled: Yes___ No √ Depth____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis: Streambank soil

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:_____
Saturated?: Yes ___ No √ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks √ Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis: Intermittent stream channel

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments: Intermittent stream channel with no vegetation in channel

Investigator(s): A. Solomon

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	
St Helens LWI	Sykes Road, St. Helens, OR	DATE 04/11/97
COUNTY AND STATE Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 6	Wetland # MC-1 Data Point # 2

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √
If Yes, complete the back side of this form.

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. *Alnus rubra*	Fac	35
2. *Pseudostuga menziesii*	FacU	25
3.		
Saplings/Shrubs		
1. *Sambucus racemosa*	FacU	20
2.		
3.		
Herbs		
1. *Rubus ursinus*	FacU	40
2. *Polystichum munitum*	FacU	20
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 20%	Other Indicators:	
Hydrophytic Vegetation: Yes__ No √ Basis:		

SOILS

Series and Phase: Xerochrepts Classification: Xerochrept
On Hydric Soil List? Yes __No √ Histosol or Histic Epipedon? Yes __No √ Gleyed? Yes___ No √
Sample Depth Matrix Color/Description Mottled: Yes__ No √
0-16" 10YR 3/2 L Mottle Depth: _____
_____ _____ Mottle Color: _____
_____ _____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes____No √ Depth of Standing Water:_____
Saturated?: Yes ___No √ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
___Water-stained leaves ____Oxidized rhizospheres
___Plant adaptations ____Surface scour
___Water marks ____Drainage patterns
___Sediment deposits ____Other:

Criteria Met?: Yes___ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): Andrew Solomon (PALSA L.L.C.)

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	
St Helens LWI	Sykes Road, St. Helens, OR	DATE 04/11/97
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 6	Wetland # MC 1 Data Point # 3

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √
If Yes, complete the back side of this form.

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. *Rubus spectabilis*	Fac+	30
2. *Rubus discolor*	FacU	30
3.		
Herbs 1. *Ranunculus repens*	FacW	30
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 67%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent silt loam Classification: Typic Humaquept
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes _No √ Gleyed? Yes___ No √
Sample Depth Matrix Color/Description Mottled: Yes √ No___
0-2" 10YR 3/2 SL Mottle Depth: 5"
2-16" 10YR 3/1 SL Mottle Color: 5YR 4/6
_____ _____ Mottle Description: Common, distinct

Hydric Soil: Yes √ No____ Basis:

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:_____
Saturated?: Yes √ No____ Depth to saturated soil: 0"
Depth to water table: 3"
Other Indicators:
___Water-stained leaves √ Oxidized rhizospheres
___Plant adaptations ____Surface scour
___Water marks √ Drainage patterns
___Sediment deposits ____Other:

Criteria Met?: Yes √ No____ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:
Comments:

Investigator(s): Andrew Solomon (PALSA L.L.C.)

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	
St Helens LWI	Sykes Road, St. Helens, OR	DATE 04/11/97
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 6	Wetland #: MC-2 Data Point # 1

Normal Environmental Conditions?: Yes_√_ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No_√_
If Yes, complete the back side of this form.

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. *Anthoxatheum odoratum*	FacU	50
2. *Agrostis* Sp.	Fac	50
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 50%	Other Indicators:	
Hydrophytic Vegetation: Yes__ No_√_ Basis:		

SOILS

Series and Phase: Quatama silt loam Classification: Aquultic Haploxeralf
On Hydric Soil List? Yes __No_√_Histosol or Histic Epipedon? Yes __No_√_Gleyed? Yes___ No_√_
Sample Depth Matrix Color/Description Mottled: Yes__ No_√_
0-6" 10YR 3/3 SL Mottle Depth: _____
6-16" 10YR 4/3 SL Mottle Color: _____
_____ _____ Mottle Description:_____

Hydric Soil: Yes___ No_√_ Basis:

HYDROLOGY

Inundated?: Yes_____No_√_ Depth of Standing Water:_____
Saturated?: Yes ___No_√_ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Plant adaptations ____Surface scour
____Water marks ____Drainage patterns
____Sediment deposits ____Other:

Criteria Met?: Yes____ No_√_ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √
Comments:

Investigator(s): Andrew Solomon (PALSA L.L.C.)

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	
St Helens LWI	Sykes Road, St. Helens, OR	DATE 04/11/97
COUNTY AND STATE Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 6	Wetland # MC-2 Data Point # 2

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √
If Yes, complete the back side of this form.

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. *Fraxinus latifolia*	FacW	25
2.		
3.		
Herbs 1. *Juncus effusus*	FacW	60
2. *Alopecurus* sp.	FacW-Obl	30
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent silt loam Classification: Typic Humaquept
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes _No √ Gleyed? Yes___ No √
Sample Depth Matrix Color/Description Mottled: Yes √ No___
0-16" 10YR 3/1 SL Mottle Depth: 2
_____ _____ Mottle Color: 5YR 4/6
_____ _____ Mottle Description: Distinct, abundant

Hydric Soil: Yes √ No____ Basis:

HYDROLOGY

Inundated?: Yes √ No____ Depth of Standing Water: 8"
Saturated?: Yes _____ No____ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
___Water-stained leaves ___√ Oxidized rhizospheres
___Plant adaptations ___Surface scour
___Water marks ___√ Drainage patterns
___Sediment deposits ___Other:

Criteria Met?: Yes √ No____ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:
Comments:

Investigator(s): Andrew Solomon (PALSA L.L.C.)

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St Helens LWI	Sykes Road, St. Helens, OR	04/11/97
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 6	Wetland # MC-2 Data Point # 3

Normal Environmental Conditions?: Yes_√_ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No_√__
If Yes, complete the back side of this form.

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. *Anthoxatheum odoratum*	FacU	65
2. *Agrostis* Sp.	Fac	30
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 50%	Other Indicators:	
Hydrophytic Vegetation: Yes__ No_√_ Basis:		

SOILS

Series and Phase: Quatama silt loam Classification: Aquultic Haploxeralf
On Hydric Soil List? Yes __No_√_Histosol or Histic Epipedon? Yes __No_√_Gleyed? Yes___ No_√_
Sample Depth Matrix Color/Description Mottled: Yes__ No_√_
0-6" 10YR 3/3 SL Mottle Depth: _____
6-16" 10YR 4/3 SL Mottle Color: _____
_____ _____ Mottle Description:_____

Hydric Soil: Yes___ No_√_ Basis:

HYDROLOGY

Inundated?: Yes____No_√_ Depth of Standing Water:_____
Saturated?: Yes ___No_√_ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
___Water-stained leaves ____Oxidized rhizospheres
___Plant adaptations ____Surface scour
___Water marks ____Drainage patterns
___Sediment deposits ____Other:

Criteria Met?: Yes____ No_√_ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √
Comments:

Investigator(s): Andrew Solomon (PALSA L.L.C.)

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/27/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MC-3 Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. Spiraea douglasii	FACW	20
2. Fraxinus latifolia	FACW	20
3. Populus trichocarpa	FAC	20
Herbs 1. Juncus effusus	FACW	20
2. Ranunculus repens	FACW	20
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis: Emergent strata.		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No___
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No √ Mottled: Yes √ No____ Depth 8-10"

Mottle Color: 10 YR 5/6 Mottle Description:

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 2"
Saturated?: Yes ___ No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/27/94
COUNTY AND STATE Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5	Wetland # MC-3 Data Point # 2

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	30
2. Quercus garryana	FACU	20
3.		
Saplings/Shrubs		
1. Symphoricarpos albus	FACU	20
2.		
3.		
Herbs		
1. Carex obnupta	OBL	25
2. Urtica dioica	FAC+	20
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 60%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No √
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No___ Mottled: Yes √ No_____ Depth 2"

Mottle Color: 10 YR 5/6 Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:_____
Saturated?: Yes √ No___ Depth to saturated soil: 2-4"
Depth to water table: 12"
Other Indicators:
____Water-stained leaves ___√ Oxidized rhizospheres
____Surface scour ____Sediment deposits
___√ Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/27/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5	Wetland # MC-4 Data Point # 1

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.		
2.		
3.		
Saplings/Shrubs		
1.		
2.		
3.		
Herbs		
1. Juncus effusus	FACW	25
2. Ranunculus repens	FACW	25
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes No Histosol or Histic Epipedon? Yes ____No____
Matrix Color: 10 YR 3/2 Gleyed? Yes √ No___ Mottled: Yes__ No_____ Depth 4"

Mottle Color: 5YR 4/4 Mottle Description: _____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes____No √ Depth of Standing Water:_____
Saturated?: Yes √ No___ Depth to saturated soil: 0"
Depth to water table:_____
Other Indicators:
____Water-stained leaves __√__Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments: old drain tile

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/27/94
COUNTY AND STATE Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MC-4 Data Point # 2	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Agrostis sp.	FAC	30
2. Trifolium pratense	FACU	25
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 50%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes No Histosol or Histic Epipedon? Yes ____No____
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No___ Mottled: Yes___ No √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes____No √ Depth of Standing Water:_____
Saturated?: Yes ___No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √	
Comments:	
	Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		6/21/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MC-5 Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Lawn grasses	?(FAC)	80
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 0%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis: Cultivated veg.		

SOILS

Series and Phase: Urban fill Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No___
Matrix Color: 10YR 3/3 Gleyed? Yes___ No √ Mottled: Yes__ No √ Depth_

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:_____
Saturated?: Yes ____ No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		6/21/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MC-5 Data Point # 2	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	30
2.		
3.		
Saplings/Shrubs		
1. Spiraea douglasii	FACW	20
2.		
3.		
Herbs		
1. Carex obnupta	OBL	70
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No___
Matrix Color: 10YR 3/1 Gleyed? Yes___ No √ Mottled: Yes__ No √ Depth_

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 2"
Saturated?: Yes ___ No___ Depth to saturated soil:_____
Depth to water table:____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No____ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		6/21/94
COUNTY AND STATE Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MC-6 Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1. Fraxinus latifolia	FACW	15
2.		
3.		
Saplings/Shrubs 1. Rubus discolor	FACU	20
2.		
3.		
Herbs 1. Juncus effusus	FACW	25
2. Holcus lanatus	FAC	30
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No___
Matrix Color: 10 YR 3/1 in channel Gleyed? Yes___ No___ Mottled: Yes___ No_____ Depth_

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis: Inundation.

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 2"
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		6/21/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MC-7 Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Juncus effusus	FACW	20
2. Phalaris arundinacea	FACW	20
3. Agrostis alba	FAC	20
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No___
Matrix Color: 10YR 3/1 Gleyed? Yes___ No √ Mottled: Yes__ No √ Depth_

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 1"
Saturated?: Yes ___ No___ Depth to saturated soil:_____
Depth to water table:____
Other Indicators:

____Water-stained leaves	√ Oxidized rhizospheres
____Surface scour	____Sediment deposits
____Water marks	√ Drainage patterns
____Plant adaptations	____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		6/21/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MC-8 Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	20
2.		
3.		
Saplings/Shrubs		
1. Spiraea douglasii	FACW	20
2. Rubus discolor	FACU	20
3.		
Herbs		
1. Phalaris arundinacea	FACW	10
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No √
Matrix Color: 10 YR 3/1 Gleyed? Yes___ No √ Mottled: Yes___ No √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 1"
Saturated?: Yes ___ No___ Depth to saturated soil:_____
Depth to water table:___
Other Indicators:

____Water-stained leaves	____Oxidized rhizospheres
____Surface scour	____Sediment deposits
____Water marks	√ Drainage patterns
____Plant adaptations	____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		6/21/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MC-8 Data Point # 2	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.		
2.		
3.		
Saplings/Shrubs		
1.		
2.		
3.		
Herbs		
1. Ranunculus repens	FACW	25
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No √
Matrix Color: 10 YR 3/1 Gleyed? Yes___ No √ Mottled: Yes___ No √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes____ No___ Depth of Standing Water:_____
Saturated?: Yes √ No___ Depth to saturated soil: 7"
Depth to water table: 12"
Other Indicators:

____Water-stained leaves	____Oxidized rhizospheres
____Surface scour	____Sediment deposits
____Water marks	____Drainage patterns
____Plant adaptations	____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:	
Comments:	
	Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		6/21/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MC-8 Data Point # 3	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.		
2.		
3.		
Saplings/Shrubs		
1.		
2.		
3.		
Herbs		
1. Scirpus microcarpus	OBL	25
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent silt loam Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No √
Matrix Color: 10YR 3/1 Gleyed? Yes___ No √ Mottled: Yes___ No___ √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 4-6"
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		6/21/94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MC-8	
Columbia, OR	Data Point # 4	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.		
2.		
3.		
Saplings/Shrubs		
1.		
2.		
3.		
Herbs		
1. Phalaris arundinacea	FACW	20
2. Festuca arundinacea	FAC-	20
3. Lolium perenne	FACU	20
% of Dominant Spp that are OBL, FACW, and/or FAC: 33%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No____
Matrix Color: 10 YR 2/2 Gleyed? Yes___ No √ Mottled: Yes__ No √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:_____
Saturated?: Yes ___ No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes____ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments: Lawn area above sat. zone.

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		6/21/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MC-8 Data Point # 5	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. Rubus discolor	FACU	20
2.		
3.		
Herbs 1. Scirpus microcarpus	OBL	60
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 50%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis: Prevalence of Scirpus		

SOILS

Series and Phase: Wollent silt loam Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No √
Matrix Color: 10YR 3/1 Gleyed? Yes___ No √ Mottled: Yes__ No___ √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 8"
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		7/21/97
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MC-10 Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Phalaris arundinacea	FACW	80
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent silt loam Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No √
Matrix Color: 10YR 3/1 Gleyed? Yes___ No √ Mottled: Yes √ No____ Depth____

Mottle Color: 5YR 4/6 Mottle Description: _____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes___ No √ Depth of Standing Water: _____
Saturated?: Yes √ No___ Depth to saturated soil: 9"
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks √ Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis: _____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:
Comments:

Investigator(s): A. Solomon

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		7/21/97
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MC-9	
Columbia, OR	Data Point # 1	

Normal Environmental Conditions?: Yes_√_ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No_√__

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Populus trichocarpa	FAC	20
2. Alnus rubra	FAC	20
3.		
Saplings/Shrubs		
1. Cornus stolonifera	FACW	20
2.		
3.		
Herbs		
1. Scirpus microcarpus	OBL	60
2. Phalaris arundinacea	FACW	20
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes_√_ No___ Basis:		

SOILS

Series and Phase: Wollent silt loam Classification: _____
On Hydric Soil List? Yes √ No___Histosol or Histic Epipedon? Yes ____No_√_
Matrix Color: 10YR 3/1 Gleyed? Yes___ No_√__ Mottled: Yes__ No___√___ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes_√__ No___ Basis:

HYDROLOGY

Inundated?: Yes__√__No___ Depth of Standing Water:__4"_____
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes_√__ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): A. Solomon

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		6/3/94
COUNTY AND STATE Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 7	Wetland # MC-11 Data Point # 1

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. Salix lasiandra	FACW	25
2. Spiraea douglasii	FACW	20
3. Rubus discolor	FACU	20
Herbs 1. Typha latifolia	OBL	20
2. Phalaris arundinacea	FACW	35
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 80%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Xerochrepts Classification: _____
On Hydric Soil List? Yes __No √ Histosol or Histic Epipedon? Yes ____No √
Matrix Color: 10 YR 3/1 Gleyed? Yes___ No √ Mottled: Yes__ No √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 8"
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table: 0"
Other Indicators:
____Water-stained leaves √ Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks √ Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:__

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/31/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 7,8,9 Wetland # MC-12 Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Alnus rubra	FAC	20
2. Pseudotsuga menziesii	FACU	20
3.		
Saplings/Shrubs		
1. Oemleria cerasiformis	FACU	25
2.		
3.		
Herbs		
1. Vancouveria hexandra	FACU	20
2. Hedera helix	NL	60
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 20%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No___Histosol or Histic Epipedon? Yes _____No____
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No____ Mottled: Yes__ No √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis: Hydric conditions confined to channel.

HYDROLOGY

Inundated?: Yes_____No √ Depth of Standing Water:_____
Saturated?: Yes ___No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
_____Plant adaptations ____Other:

Criteria Met?: Yes____ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments: Wetland conditions confined to stream channel.

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/31/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 7,8,9 Wetland # MC-12 Data Point # 2	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Alnus rubra	FAC	20
2. Pseudotsuga menziesii	FACU	20
3.		
Saplings/Shrubs		
1. Rubus discolor	FACU	40
2. Oemleria cerasiformis	FACU	20
3.		
Herbs		
1. Hedera helix	NL	25
2. Vancouveria hexandra	FACU	20
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 17%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: Xerumbrupts Classification: _____
On Hydric Soil List? Yes __No___Histosol or Histic Epipedon? Yes ____No___
Matrix Color: 10 YR 5/4 Gleyed? Yes___ No √ Mottled: Yes__ No √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water:_____
Saturated?: Yes √ No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis: Adjacent to creek (open channel).

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/27/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 7,8,9 Wetland # MC-12 Data Point # 3	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	20
2. Populus trichocarpa	FAC	20
3.		
Saplings/Shrubs		
1. Rubus discolor	FACU	40
2.		
3.		
Herbs		
1. Urtica dioica	FAC+	15
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 75%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Xerachrepts (mapped) Classification: _____
On Hydric Soil List? Yes __No √ Histosol or Histic Epipedon? Yes ____No____
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No___ Mottled: Yes √ No_____ Depth_____

Mottle Color: 7.5 YR 4/6 Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 1'
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ___√ Drainage patterns
____Plant adaptations ____Other: Width—10'

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE 6/3/94
St. Helens LWI		
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 7	Wetland # MC-13
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	15
2. Quercus garryana	FACU	10
3.		
Saplings/Shrubs		
1.		
2.		
3.		
Herbs		
1. Holcus lanatus	FAC	25
2. Ranunclus repens	FACW	25
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 75%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Quatama Classification: _____
On Hydric Soil List? Yes No √ Histosol or Histic Epipedon? Yes ____No √
Matrix Color: 10 YR 3/1 Gleyed? Yes √ No___ Mottled: Yes √ No_____ Depth_____

Mottle Color: 10 YR 5/6 Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes____No___ Depth of Standing Water:_____
Saturated?: Yes √ No___ Depth to saturated soil:_____
Depth to water table: 0"
Other Indicators:
____Water-stained leaves √ Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks √ Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis: Spring source of hydrology.

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		6/3/94
COUNTY AND STATE Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 7 Wetland # MC-13 Data Point # 2	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Alnus rubra	FAC	20
2.		
3.		
Saplings/Shrubs		
1. Corylus cornuta	FACU	20
2. Rubus discolor	FACU	20
3.		
Herbs		
1. Polystichum munitum	FACU	20
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 25%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: Quatama Classification: _____
On Hydric Soil List? Yes __No___Histosol or Histic Epipedon? Yes ____No____
Matrix Color: 10 YR 3/2 - 3/3 Gleyed? Yes___ No √ Mottled: Yes__ No___ √ Depth___
—

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes____No √ Depth of Standing Water:_____
Saturated?: Yes ___No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √	
Comments:	
	Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		6/3/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 7 Wetland # MC-13 Data Point # 3	

Normal Environmental Conditions?: Yes √ No ___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.		
2.		
3.		
Saplings/Shrubs		
1. Rubus discolor	FACU	20
2.		
3.		
Herbs		
1. Veronica anagallis-aquifila	OBL	25
2. Rumex spp.	FAC-OBL	25
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis: Edge of open water.		

SOILS

Series and Phase: Xerachrepts Classification: _____
On Hydric Soil List? Yes __No √ Histosol or Histic Epipedon? Yes ____No √
Matrix Color: 10 YR 3/1 Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 1.5'
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/31/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 7	Wetland # MC-14 Data Point # 1

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. Spiraea douglasii	FACW	10
2.		
3.		
Herbs 1. Juncus effusus	FACW	40
2. Alopecurus pratensis	FACW	20
3. Phalaris arundinacea	FACW	20
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No___
Matrix Color: 10YR 4/3 & 4/2 Gleyed? Yes___ No___ Mottled: Yes___ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis: presumed - soil data from edge of road - disturbed (no data taken within wetland)

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:_____
Saturated?: Yes √ No___ Depth to saturated soil: 6"
Depth to water table: 12"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks √ Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis: Drainage pattern

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/31/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 7	Wetland # MC-16 Data Point # 1

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. Spiraea douglasii	FACW	20
2.		
3.		
Herbs 1. Juncus effusus	FACW	20
2. Alopecurus pratensis	FACW	20
3. Phalaris arundinacea	FACW	40
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No___
Matrix Color: 10YR 4/2 Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis: presumed - soil data from edge of road - disturbed (no data taken within wetland)

HYDROLOGY

Inundated?: Yes √ No__ Depth of Standing Water: 2"
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks √ Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/31/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 7	Wetland # MC-16 Data Point # 2

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Alopecurus pratensis	FACW	40
2. Phalaris arundinacea	FACW	30
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No____
Matrix Color: 10YR 4/2 Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis: presumed - soil data from edge of road - disturbed (no data taken within wetland)

HYDROLOGY

Inundated?: Yes √ No__ Depth of Standing Water: 2"
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks √ Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-23-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 8	Wetland #MC-19
Columbia, OR		Data Point #_1_

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Holcus lanatus	FAC	20%
2. Juncus effusus	FACW	30%
3. Agrostis alba	FAC	25%
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes_✓_ No_____ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes ___No_✓_Histosol or Histic Epipedon? Yes ____No____
Matrix Color: 10YR 3/1 Gleyed? Yes___ No_✓_ Mottled: Yes_✓_ No___ Depth____
Mottle Color:_____ Mottle Description:_____
Hydric Soil: Yes_✓_ No___ Basis:

HYDROLOGY

Inundated?: Yes____No _√_ Depth of Standing Water:_____
Saturated?: Yes_√_ No____ Depth to saturated soil:__0"____
Depth to water table:__3"___
Other Indicators:
_✓_Water-stained leaves _√_Oxidized rhizospheres
_____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:
Criteria Met?: Yes_✓_ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments:
Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-23-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 8 Wetland #MC-19	
Columbia, OR	Data Point #_2__	

Normal Environmental Conditions?: Yes ✓ No___ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Typha latifolia	OBL	20%
2. Juncus effusus	FACW	30%
3. Agrostis alba	FAC	25%
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes_✓__ No_____ Basis:		

SOILS

Series and Phase: _Xerumbrepts_____Classification: _____

On Hydric Soil List? Yes ___No_✓__Histosol or Histic Epipedon? Yes _____No_____

Matrix Color: _10YR 3/1_____ Gleyed? Yes___ No_✓__ Mottled: Yes_✓__ No___ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes_✓__ No___ Basis:

HYDROLOGY

Inundated?: Yes_✓__No Depth of Standing Water:__1"____

Saturated?: Yes__ No Depth to saturated soil:_____

Depth to water table:_____

Other Indicators:

_✓__Water-stained leaves ____Oxidized rhizospheres

_✓__Surface scour ____Sediment deposits

____Water marks ____Drainage patterns

____Plant adaptations ____Other:

Criteria Met?: Yes_✓__ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:

Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-23-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 8	Wetland #MC-19
Columbia, OR		Data Point # 3

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Agrostis alba	FAC	40%
2. Daucus carota	NL	30%
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 50%	Other Indicators:	
Hydrophytic Vegetation: Yes_____ No_√___ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes ___No_✓___Histosol or Histic Epipedon? Yes ____No____
Matrix Color: 10YR 3/3 Gleyed? Yes___ No_✓__ Mottled: Yes___ No_√__ Depth____
Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes____ No_√__ Basis:

HYDROLOGY

Inundated?: Yes____No __√__ Depth of Standing Water:_____
Saturated?: Yes__ No_√__ Depth to saturated soil:_____
Depth to water table:__>18"___
Other Indicators:
_____Water-stained leaves _____Oxidized rhizospheres
_____Surface scour ____Sediment deposits
____Water marks ___Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes____ No__√__ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √
Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/27/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MC-20 Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Acer macrophyllum	FACU	20
2. Quercus garryana	NL	20
3.		
Saplings/Shrubs		
1. Rubus discolor	FACU	25
2.		
3.		
Herbs		
1. Dactylis glomerata	FACU	25
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 0%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes ___No___Histosol or Histic Epipedon? Yes _____No____
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No___ Mottled: Yes___ No √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes_____No √ Depth of Standing Water:_____
Saturated?: Yes ___No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes____ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/27/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MC-20 Data Point # 2	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	35
2.		
3.		
Saplings/Shrubs		
1. Spiraea douglasii	FACW	20
2.		
3.		
Herbs		
1. Phalaris arundinacea	FACW	20
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes No √ Histosol or Histic Epipedon? Yes No √
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No √ Mottled: Yes √ No_____ Depth 4-5"

Mottle Color: 7.5YR 4/6 Mottle Description: _____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes No √ Depth of Standing Water:_____
Saturated?: Yes No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
√ Surface scour ____Sediment deposits
____Water marks √ Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/27/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MC-21 Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	35
2. Quercus garryana	FACU	20
3.		
Saplings/Shrubs		
1. Symphoricarpos albus	FACU	25
2. Physocarpus capitatus	FAC	20
3.		
Herbs		
1. Geum macrophyllum	FACW	25
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 60%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No √
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No √ Mottled: Yes √ No_____ Depth_____

Mottle Color: 7.5YR 4/6 Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:_____
Saturated?: Yes √ No___ Depth to saturated soil: 8"
Depth to water table: 16"
Other Indicators:
√ Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		7/15/97
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland #MC-22
Columbia, OR		Data Point #1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	40
2.		
3.		
Saplings/Shrubs		
1. Spiraea douglasii	FACW	20
2.		
3.		
Herbs		
1. Carex obnupta	OBL	20%
2. Alopecurus geniculatus	OBL	30%
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes ✓ No_____ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes ___No ✓ Histosol or Histic Epipedon? Yes ____No____
Matrix Color: 10YR 3/2 Gleyed? Yes___ No ✓ Mottled: Yes ✓ No___ Depth____
Mottle Color: 7.5YR 4/6 Mottle Description:_____
Hydric Soil: Yes ✓ No___ Basis:

HYDROLOGY

Inundated?: Yes____No √ Depth of Standing Water:_____
Saturated?: Yes__ No √ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
✓ Water-stained leaves ____Oxidized rhizospheres
✓ Surface scour ____Sediment deposits
____Water marks ___√ Drainage patterns
____Plant adaptations ___√ Other: dried algal mats
Criteria Met?: Yes ✓ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments:
Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-23-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9 Wetland #MC-23	
Columbia, OR	Data Point #_1_	

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. Spiraea douglasii	FACW	20
2. Salix scouleriana	FAC	20
3.		
Herbs 1. Phalaris arundinacea	FACW	80%
2. Bidens frondosa	FACW+	20%
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes_✓__ No_____ Basis:		

SOILS

Series and Phase: _Xerumbrepts_____Classification: _____
On Hydric Soil List? Yes ___No_✓___Histosol or Histic Epipedon? Yes ____No____
Matrix Color: _10YR 3/1_____ Gleyed? Yes___ No_✓__ Mottled: Yes_✓___ No___ Depth____
Mottle Color:_5YR 4/4_____ Mottle Description:_____
Hydric Soil: Yes_✓__ No___ Basis:

HYDROLOGY

Inundated?: Yes_√___No ____ Depth of Standing Water:_6"_____
Saturated?: Yes__ No __ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
_✓___Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ___√ Drainage patterns
____Plant adaptations ___Other:
Criteria Met?: Yes_✓___ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments:
Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		8/10/97
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 9 Wetland # MC-24 Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Phalaris arundinacea	FACW	100
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes No √ Histosol or Histic Epipedon? Yes ____No___
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No___ Mottled: Yes √ No_____ Depth_____

Mottle Color: 7.5 YR 4/6 Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes____No √ Depth of Standing Water:_____
Saturated?: Yes √ No___ Depth to saturated soil: 4"
Depth to water table: 8"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
√ Water marks √ Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		8/10/97
COUNTY AND STATE Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 9 Wetland # MC-24 Data Point # 2	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1. Quercus garryana	NL	45
2.		
3.		
Saplings/Shrubs 1. Symphoricarpos albus	FACU	20
2.		
3.		
Herbs 1. Berberis aquilinum	FACU	35
2. Polystichum munitum	FACU	20
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 0%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes No √ Histosol or Histic Epipedon? Yes ____ No___
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No___ Mottled: Yes___ No √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:_____
Saturated?: Yes ___ No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-24-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland #MC-25
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes__ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Typha latifolia	OBL	30%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes ✓ No_____ Basis:		

SOILS

Series and Phase: Sauvie silt loam Classification: _____

On Hydric Soil List? Yes √ No Histosol or Histic Epipedon? Yes ____ No____

Matrix Color:_____ Gleyed? Yes___ No____ Mottled: Yes___ No____ Depth____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes ✓ No___ Basis: Inundated for very long duration

HYDROLOGY

Inundated?: Yes ✓ No___ Depth of Standing Water: 2'

Saturated?: Yes____ No ___ Depth to saturated soil:_____

Depth to water table:_____

Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres

____Surface scour ____Sediment deposits

√ Water marks ____Drainage patterns

____Plant adaptations ____Other:

Criteria Met?: Yes ✓ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:

Comments

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-24-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland # MC-25A
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. Rubus discolor	FACU	20%
2.		
3.		
Herbs 1. Phalaris arundinacea	FACW	80%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 50%	Other Indicators:	
Hydrophytic Vegetation: Yes ✓ No_____ Basis: Prevalence of Phalaris		

SOILS

Series and Phase: Sauvie Classification: _____
On Hydric Soil List? Yes ✓ No Histosol or Histic Epipedon? Yes ____ No ✓
Matrix Color: 10YR3/2 Gleyed? Yes___ No ✓ Mottled: Yes___ No ✓ Depth_____
Mottle Color: 7.5YR5/6 Mottle Description: _____
Hydric Soil: Yes ✓ No___ Basis: Presumed

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 2"
Saturated?: Yes____ No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
_____Surface scour ____Sediment deposits
____Water marks ___√ Drainage patterns
____Plant adaptations ____Other:
Criteria Met?: Yes ✓ No_____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-24-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland # MC-25A
Columbia, OR		Data Point # 2

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.Populus trichocarpa	FAC	20%
2. Fraxinus latifolia	FACW	20%
3. Salix lasiandra	FACW	20%
Saplings/Shrubs		
1.Rubus discolor	FACU	35%
2.		
3.		
Herbs		
1. Phalaris arundinacea	FACW	30%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 80%	Other Indicators:	
Hydrophytic Vegetation: Yes ✓ No_____ Basis:		

SOILS

Series and Phase: Sauvie Classification: _____
On Hydric Soil List? Yes ✓ No Histosol or Histic Epipedon? Yes _____ No ✓
Matrix Color: 10YR3/2 Gleyed? Yes___ No ✓ Mottled: Yes___ No ✓ Depth_____
Mottle Color: 7.5YR5/6 Mottle Description:_____
Hydric Soil: Yes ✓ No___ Basis: Presumed

HYDROLOGY

Inundated?: Yes ✓ No Depth of Standing Water: 2-3"
Saturated?: Yes_____ No Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
√ Water-stained leaves ____Oxidized rhizospheres
✓ Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:
Criteria Met?: Yes ✓ No_____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-24-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland #MC-25B
Columbia, OR		Data Point #1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Populus trichocarpa	FAC	20%
2.		
3.		
Saplings/Shrubs		
1. Salix lasiandra	FACW	40%
2.		
3.		
Herbs		
1. Phalaris arundinacea	FACW	80%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes ✓ No_____ Basis:		

SOILS - No data taken - Inundation

Series and Phase: Sauvie silt loam Classification: _____

On Hydric Soil List? Yes √ No Histosol or Histic Epipedon? Yes _____ No √

Matrix Color: _____ Gleyed? Yes___ No____ Mottled: Yes___ No____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis: Inundated for very long duration

HYDROLOGY

Inundated?: Yes ✓ No Depth of Standing Water: >1'

Saturated?: Yes____ No Depth to saturated soil:_____

Depth to water table:_____

Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres

____Surface scour ____Sediment deposits

____Water marks ____Drainage patterns

____Plant adaptations ____Other:

Criteria Met?: Yes ✓ No_____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:

Comments

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE 8-25-97
St. Helen's LWI		
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland # MC-25C
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes__ No_✓_

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.Populus trichocarpa	FAC	20%
2. Fraxinus latifolia	FACW	20%
3.		
Saplings/Shrubs		
1. Rubus discolor	FACU	20%
2.		
3.		
Herbs		
1. Phalaris arundinacea	FACW	80%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes_✓_ No_____ Basis:		

SOILS

Series and Phase: Sauvie silt loam Classification: _____
On Hydric Soil List? Yes _√_ No__Histosol or Histic Epipedon? Yes _____No_√_
Matrix Color: 10YR3/2 Gleyed? Yes___ No_√_ Mottled: Yes_√_ No____ Depth___
Mottle Color: 7.5YR4/6 Mottle Description:

Hydric Soil: Yes_✓_ No___ Basis:

HYDROLOGY

Inundated?: Yes____No ✓ Depth of Standing Water:_____
Saturated?: Yes_✓_ No Depth to saturated soil:_4"_____
Depth to water table:_10"_____
Other Indicators:
_✓_Water-stained leaves _____Oxidized rhizospheres
_✓_Surface scour _____Sediment deposits
_____Water marks ____Drainage patterns
_____Plant adaptations ____Other:

Criteria Met?: Yes_✓_____ No_____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-24-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9 Wetland # MC-25d	
Columbia, OR	Data Point # 1	

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes__ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Phalaris arundinacea	FACW	90%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes ✓ No_____ Basis:		

SOILS

Series and Phase: Sauvie silt loam Classification: _____
On Hydric Soil List? Yes √ No Histosol or Histic Epipedon? Yes ____ No √
Matrix Color: 10YR 3/1 Gleyed? Yes___ No √ Mottled: Yes √ No____ Depth____
Mottle Color: 5YR 4/4 Mottle Description:_____
Hydric Soil: Yes ✓ No___ Basis:

HYDROLOGY

Inundated?: Yes ✓ No___ Depth of Standing Water: 6"
Saturated?: Yes____ No ___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
√ Water marks √ Drainage patterns
____Plant adaptations ____Other:
Criteria Met?: Yes ✓ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments
Investigator(s): JDD

Milton Creek

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE 5/6/94
St. Helens LWI		
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 4,5,7 Wetland # MI-2	
Columbia, OR	Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1.		
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC:	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis: No vegetation—stream channel.		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No___Histosol or Histic Epipedon? Yes ____No___
Matrix Color: _____ Gleyed? Yes___ No___ Mottled: Yes √ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis: Inundated

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 2'--stream
Saturated?: Yes √ No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		8/5/97
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MI-3 Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Phalaris arundinacea	FACW	100
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No √
Matrix Color: 10 YR 3/1 Gleyed? Yes___ No √ Mottled: Yes √ No_____ Depth 8"

Mottle Color: 5YR 4/6 Mottle Description: _____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:_____
Saturated?: Yes √ No___ Depth to saturated soil: 8"
Depth to water table: 16"
Other Indicators:
____Water-stained leaves __√__Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		8/5/97
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5 Wetland # MI-3 Data Point # 2	

Normal Environmental Conditions?: Yes_√_ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No_√__

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Agrostis Sp. (tenuis/alba)	FAC	40
2. Daucus carota	NL	20
3. Trifolium pratense	FACU	20
% of Dominant Spp that are OBL, FACW, and/or FAC: 33%	Other Indicators:	
Hydrophytic Vegetation: Yes_ No_√_ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes _√_No__Histosol or Histic Epipedon? Yes ____No_√_
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No_√__ Mottled: Yes_ No_√___ Depth__

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No_√_ Basis:

HYDROLOGY

Inundated?: Yes____No_√_ Depth of Standing Water:_____
Saturated?: Yes ___No_√_ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No_√__ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √
Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		5-26-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland # MI-4
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1.Phalaris arundinacea	FACW	100%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No_____ Basis:		

SOILS

Series and Phase: Rock outcrop/xerumbrepts Classification: _____
On Hydric Soil List? Yes ___No ✓ Histosol or Histic Epipedon? Yes ____No ✓
Matrix Color: 10YR 3/1 Gleyed? Yes___ No √ Mottled: Yes___ No √ Depth_____
Mottle Color:_____ Mottle Description:_____
Hydric Soil: Yes √ No_____ Basis:

HYDROLOGY

Inundated?: Yes____No √ Depth of Standing Water:_____
Saturated?: Yes √ No ____ Depth to saturated soil: 0"
Depth to water table: 10"
Other Indicators:
____Water-stained leaves ___√ Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ___√ Drainage patterns
____Plant adaptations ____Other:
Criteria Met?: Yes √ No_____ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:
Comments

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		5-26-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9 Wetland # MI-5	
Columbia, OR	Data Point # 1	

Normal Environmental Conditions?: Yes ✓ No___ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	40%
2. Quercus garryana	NL	25%
3.		
Saplings/Shrubs		
1. Symphoricarpos albus	FACU	20%
2.		
3.		
Herbs		
1. Carex obnupta	OBL	20%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 50%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No____ Basis: Prevalence of Fraxinus and presence of Carex		

SOILS

Series and Phase: xerumbrepts/Rock outcrop Classification: __

On Hydric Soil List? Yes ___No ✓ Histosol or Histic Epipedon? Yes ____No ✓

Matrix Color: 10YR 3/1 Gleyed? Yes___ No √ Mottled: Yes___ No √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No____ Basis:

HYDROLOGY

Inundated?: Yes____No ✓ Depth of Standing Water:_____

Saturated?: Yes____ No ✓ Depth to saturated soil:_____

Depth to water table: >18"

Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres

____Surface scour __√__Sediment deposits

__√__Water marks __√__Drainage patterns

____Plant adaptations __√__Other: dried algal mats

Criteria Met?: Yes √ No_____ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		5-26-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland #MI- 5
Columbia, OR		Data Point #_2_

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	25%
2. Quercus garryana	NL	30%
3.		
Saplings/Shrubs		
1. Symphoricarpos albus	FACU	20%
2.		
3.		
Herbs		
1. Polystichum munitum	FACU	20%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 25%	Other Indicators:	
Hydrophytic Vegetation: Yes____ No_✓__ Basis:		

SOILS

Series and Phase: _xerumbrept/Rock outcrop_____Classification: _____
On Hydric Soil List? Yes ___No_✓__Histosol or Histic Epipedon? Yes ____No_✓___
Matrix Color: _10YR 3/2_____ Gleyed? Yes___ No_√__ Mottled: Yes__ No_√__ Depth_____
Mottle Color:_____ Mottle Description:_____
Hydric Soil: Yes____ No_✓__ Basis:

HYDROLOGY

Inundated?: Yes____No ✓ Depth of Standing Water:_____
Saturated?: Yes____ No ✓ Depth to saturated soil:_____
Depth to water table: >18"____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:
Criteria Met?: Yes____ No_✓__ Basis:_____

WETLAND DETERMINATION: Wetland:___ Non-Wetland: ✓
Comments

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		5-26-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9 Wetland # MI-6	
Columbia, OR	Data Point # 1	

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1. Fraxinus latifolia	FACW	40
2.		
3.		
Saplings/Shrubs 1. Spiraea douglasii	FACW	60
2.		
3.		
Herbs 1.		
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes_√___ No_____ Basis:		

SOILS

Series and Phase: Rock outcrop/xerumbrepts Classification: _____
On Hydric Soil List? Yes ___No_✓_Histosol or Histic Epipedon? Yes ____No_✓___
Matrix Color: 10YR 3/1 Gleyed? Yes___ No_√__ Mottled: Yes__ No_√__ Depth_____
Mottle Color:_____ Mottle Description:_____
Hydric Soil: Yes_√___ No_____ Basis:

HYDROLOGY

Inundated?: Yes____No _√__ Depth of Standing Water:_____
Saturated?: Yes__√__ No ____ Depth to saturated soil: 0"
Depth to water table: 10"
Other Indicators:
____Water-stained leaves __√__Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks __√__Drainage patterns
____Plant adaptations ____Other:
Criteria Met?: Yes__√__ No_____ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:
Comments

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		5-26-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9 Wetland # MI-7	
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. Rubus discolor	FACU	20
2. Spiraea douglasii	FACW	20
3.		
Herbs 1.Phalaris arundinacea	FACW	75
2.Juncus effusus	FACW	20
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes ✓ No____ Basis:		

SOILS

Series and Phase: Rock outcrop/ Xerumbrepts Classification: _____
On Hydric Soil List? Yes ___No ✓ Histosol or Histic Epipedon? Yes ____No ✓
Matrix Color: 10YR 3/1 Gleyed? Yes___ No ✓ Mottled: Yes___ No ✓ Depth_____
Mottle Color:_____ Mottle Description:_____
Hydric Soil: Yes ✓ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No ___ Depth of Standing Water: 1"
Saturated?: Yes_____ No ___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves √ Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks √ Drainage patterns
____Plant adaptations ____Other:
Criteria Met?: Yes ✓ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments
Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-23-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9 Wetland # MI-8	
Columbia, OR	Data Point # 1	

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Populus trichocarpa	FAC	15%
2. Fraxinus latifolia	FACW	10%
3.		
Saplings/Shrubs		
1. Salix lasiandra	FACW+	10%
2. Salix sp.	FAC-FACW	10%
3.		
Herbs		
1. Phalaris arundinacea	FACW	35%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes ✓ No____ Basis:		

SOILS

Series and Phase: Sauvie Classification: _____
On Hydric Soil List? Yes ✓ No___ Histosol or Histic Epipedon? Yes ____ No____
Matrix Color: 10YR 3/2 Gleyed? Yes___ No____ Mottled: Yes √ No___ Depth____
Mottle Color: 7.5YR 4/6 Mottle Description:_____
Hydric Soil: Yes ✓ No___ Basis:

HYDROLOGY

Inundated?: Yes____ No ✓ Depth of Standing Water:_____
Saturated?: Yes____ No ✓ Depth to saturated soil:_____
Depth to water table:___
Other Indicators:
✓ Water-stained leaves ✓ Oxidized rhizospheres
___ Surface scour ____ Sediment deposits
____ Water marks ✓ Drainage patterns
____ Plant adaptations ____ Other:
Criteria Met?: Yes ✓ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments
Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-22-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland # MI-8
Columbia, OR		Data Point # 2

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Populus trichocarpa	FAC	10%
2.		
3.		
Saplings/Shrubs		
1. Salix lasiandra	FACW+	25%
2.		
3.		
Herbs		
1. Phalaris arundinacea	FACW	45%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes ✓ No____ Basis:		

SOILS

Series and Phase: Sauvie Classification: Silt loam with organic streaking
On Hydric Soil List? Yes ✓ No___ Histosol or Histic Epipedon? Yes ____ No____
Matrix Color: 10yr3/2 Gleyed? Yes___ No ✓ Mottled: Yes √ No____ Depth____
Mottle Color: 7.5YR 4/6 Mottle Description:_____
Hydric Soil: Yes ✓ No___ Basis:

HYDROLOGY

Inundated?: Yes____ No ✓ Depth of Standing Water:_____
Saturated?: Yes____ No ✓ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ___✓Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ___✓ Drainage patterns
____Plant adaptations ____Other:
Criteria Met?: Yes ✓ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments
Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		6/21/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 5	Wetland # MI-9 Data Point # 1

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	20
2.		
3.		
Saplings/Shrubs		
1. Spiraea douglasii	FACW	20
2.		
3.		
Herbs		
1. Carex obnupta	OBL	30
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes No √ Histosol or Histic Epipedon? Yes ____ No____
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No___ Mottled: Yes √ No_____ Depth_____

Mottle Color: 7.5 YR 4/6 Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:_____
Saturated?: Yes ___ No √ Depth to saturated soil:_____
Depth to water table: >12"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
__√__Surface scour ____Sediment deposits
__√__Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		6/21/94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 5	Wetland # MI-9
Columbia, OR		Data Point # 2

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	10
2. Quercus garryana	NL	15
3.		
Saplings/Shrubs		
1. Amelanchier alnifolia	FACU	20
2.		
3.		
Herbs		
1. Geum Macrophyllum	FACW	10
2. Festuca arundinacea	FAC-	10
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 40%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No √ Histosol or Histic Epipedon? Yes ____No √
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No √ Mottled: Yes__ No √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes____No √ Depth of Standing Water:_____
Saturated?: Yes ___No √ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
√ Water-stained leaves ____Oxidized rhizospheres
√ Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		8-10-97
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland # MI-10
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Populus trichocarpa	FAC	20
2. Fraxinus latifolia	FACW	20
3. Salix lasiandra	FACW	20
Saplings/Shrubs		
1.		
2.		
3.		
Herbs		
1. Phalaris arundinacea	FACW	60
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	

Hydrophytic Vegetation: Yes ✓ No____ Basis:

SOILS

Series and Phase: Sauvie Classification: _____

On Hydric Soil List? Yes ✓ No___ Histosol or Histic Epipedon? Yes ____ No_____

Matrix Color: 10YR 3/2 Gleyed? Yes___ No____ Mottled: Yes √ No___ Depth_____

Mottle Color: 5YR 4/4 Mottle Description:_____

Hydric Soil: Yes ✓ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No__ Depth of Standing Water: 5"

Saturated?: Yes____ No___ Depth to saturated soil:_____

Depth to water table:___

Other Indicators:

✓ Water-stained leaves ✓ Oxidized rhizospheres

___ Surface scour ___ Sediment deposits

___ Water marks ✓ Drainage patterns

___ Plant adaptations ___ Other:

Criteria Met?: Yes ✓ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:

Comments

Investigator(s): A. Solomon

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		8-10-97
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9 Wetland # MI-10	Data Point # 2
Columbia, OR		

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1. Rubus discolor	FACU	90
2.		
3.		
Herbs 1.		
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 0%	Other Indicators:	
Hydrophytic Vegetation: Yes_____ No_√___ Basis:		

SOILS

Series and Phase: Xerumbrepts/rock outcrops Classification: _____
On Hydric Soil List? Yes ✓ No___ Histosol or Histic Epipedon? Yes ____ No_____
Matrix Color: 10YR 3/2 Gleyed? Yes___ No____ Mottled: Yes_√_ No___ Depth_____
Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No_√_ Basis: Urban fill material

HYDROLOGY

Inundated?: Yes_____ No_√_ Depth of Standing Water:_____
Saturated?: Yes_____ No_√_ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
_____Water-stained leaves ___Oxidized rhizospheres
___Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes_____ No_√_ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments

Investigator(s): A. Solomon

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-22-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland #MI-13
Columbia, OR		Data Point #_1_

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.		
2.		
3.		
Saplings/Shrubs		
1.		
2.		
3.		
Herbs		
1.Typha latifolia	OBL	20
2. Epilobium cilliatum	FACW	20
3. Cirsium vulgare	FACU	20
% of Dominant Spp that are OBL, FACW, and/or FAC 67%	Other Indicators:	

Hydrophytic Vegetation: Yes✓___ No____ Basis: Disturbed area

SOILS

Series and Phase: _Sauvie silt loam_____Classification: _____
On Hydric Soil List? Yes _√_No____Histosol or Histic Epipedon? Yes ____No_✓_
Matrix Color: _____ Gleyed? Yes___ No_✓___ Mottled: Yes___ No_✓___ Depth_____
Mottle Color:_____ Mottle Description:_____ Gravel fill material

Hydric Soil: Yes_✓___ No___ Basis: Inundated for long duration.

HYDROLOGY

Inundated?: Yes__√_No ___ Depth of Standing Water:__6"_____
Saturated?: Yes _____No_____ Depth to saturated soil:_____
Depth to water table:____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
__✓_Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes_✓___ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-22-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9 Wetland #MI-14	
Columbia, OR	Data Point #_1_	

Normal Environmental Conditions?: Yes ✓ No___ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1.Eleocharis sp.	FACW-OBL	20
2. Epilobium cilliatum	FACW	20
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	

Hydrophytic Vegetation: Yes ✓ No____ Basis: Disturbed area

SOILS

Series and Phase: Sauvie silt loam Classification: _____

On Hydric Soil List? Yes √ No____ Histosol or Histic Epipedon? Yes ____ No ✓

Matrix Color: _____ Gleyed? Yes___ No ✓___ Mottled: Yes___ No ✓___ Depth_____

Mottle Color:_____ Mottle Description:_____ Gravel fill material

Hydric Soil: Yes ✓___ No___ Basis: Inundated for long duration.

HYDROLOGY

Inundated?: Yes √ No ___ Depth of Standing Water: 2"

Saturated?: Yes _____No_____ Depth to saturated soil:_____

Depth to water table:____

Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres

___Surface scour ____Sediment deposits

✓Water marks ____Drainage patterns

____Plant adaptations ____Other:

Criteria Met?: Yes ✓___ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:

Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-22-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland #MI-15
Columbia, OR		Data Point #1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1.Typha latifolia	OBL	40
2. Phalaris arundinacea	FACW	60
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes✓ No____ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No✓__Histosol or Histic Epipedon? Yes ____No__✓__
Matrix Color: 10YR 2/1 Gleyed? Yes___ No✓___ Mottled: Yes__ No__✓__ Depth_____
Mottle Color:_____ Mottle Description:_____
Hydric Soil: Yes✓___ No___ Basis: Muck

HYDROLOGY

Inundated?: Yes__√__No__ Depth of Standing Water:__8"_____
Saturated?: Yes ___No __ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
___Surface scour ____Sediment deposits
__✓Water marks ____Drainage patterns
____Plant adaptations ____Other:
Criteria Met?: Yes✓___ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments:
Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-22-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland #MI-15
Columbia, OR		Data Point #_2__

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Acer macrophyllum	FACU	15%
2. Fraxinus latifolia	FACW	15%
3.		
Saplings/Shrubs		
1. Salix lasiandra	FACW	25%
2.		
3.		
Herbs		
1.Solanum dulcamara	FAC	15%
2. Phalaris arundinacea	FACW	15%
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 80%	Other Indicators:	
Hydrophytic Vegetation: Yes✓___ No____ Basis:		

SOILS

Series and Phase: _Xerumbrepts_____Classification: _____
On Hydric Soil List? Yes __No_✓__Histosol or Histic Epipedon? Yes ____No__✓__
Matrix Color: __10YR 3/1__ Gleyed? Yes___ No_✓___ Mottled: Yes__ No__✓__ Depth_____
Mottle Color:_____ Mottle Description:_____
Hydric Soil: Yes_✓___ No___ Basis:

HYDROLOGY

Inundated?: Yes____No ✓ Depth of Standing Water:_____
Saturated?: Yes _✓___No Depth to saturated soil:_4- 6"_____
Depth to water table:____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
___Surface scour ____Sediment deposits
__✓Water marks ____Drainage patterns
____Plant adaptations ____Other:
Criteria Met?: Yes_✓__ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments:

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-22-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland # MI-15
Columbia, OR		Data Point # 3

Normal Environmental Conditions?: Yes ✓ No___ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Acer macrophyllum	FACU	15%
2. Fraxinus latifolia	FACW	15%
3.		
Saplings/Shrubs		
1. Corylus cornuta	FACU	25%
2.		
3.		
Herbs		
1.Polystichum munitum	FACU	20%
2. Symphoricarpos albus	FACU	20%
3.		

% of Dominant Spp that are OBL, FACW, and/or FAC 20%	Other Indicators:

Hydrophytic Vegetation: Yes___ No √ Basis:

SOILS

Series and Phase: Xerumbrepts/Rock outcrops Classification: _____

On Hydric Soil List? Yes __No ✓ Histosol or Histic Epipedon? Yes ____No ✓

Matrix Color: 10YR 3/2 Gleyed? Yes___ No ✓ Mottled: Yes__ No ✓ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes____ No √ Basis:

HYDROLOGY

Inundated?: Yes____No ✓ Depth of Standing Water:_____

Saturated?: Yes ____No √ Depth to saturated soil:_____

Depth to water table: >18"

Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres

____Surface scour ____Sediment deposits

____Water marks ____Drainage patterns

____Plant adaptations ____Other:

Criteria Met?: Yes_____ No √ Basis:_____

WETLAND DETERMINATION: Wetland:____ Non-Wetland: √

Comments:

Investigator(s): JDD

Unnamed Creek A

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		7/20/97
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 7 Wetland # UA-1 Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Phalaris arundinacea	FACW	80
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent silt loam Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No___
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No___ Mottled: Yes √ No_____ Depth_____

Mottle Color: 7.5 YR 4/6 Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes_____ No √ Depth of Standing Water:_____
Saturated?: Yes √ No___ Depth to saturated soil: 10"
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks √ Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/31/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 7	Wetland # UA-2 Data Point # 1

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Populus trichocarpa	FAC	50
2.		
3.		
Saplings/Shrubs		
1. Spiraea douglasii	FACW	20
2. Salix lasiandra	FACW	30
3.		
Herbs		
1. Phalaris arundinacea	FACW	45
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Sauvie silt loam Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No___
Matrix Color: _____ Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes √ No___ Basis: Inundated for very long duration

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 1.5'
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks √ Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:	
Comments:	
	Investigator(s): J. Dalton

Unnamed Creek B

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/31/94
COUNTY AND STATE Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 8 Wetland # UB-1 Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Phalaris arundinacea	FACW	50
2. Ranunculus repens	FACW	30
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No____
Matrix Color: 10 YR 3/2 Gleyed? Yes √ No___ Mottled: Yes √ No_____ Depth_____

Mottle Color: 5YR 4/4 Mottle Description: _____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 2"
Saturated?: Yes ___No___ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis: _____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/31/94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 8 Wetland # UB-1	
Columbia, OR		Data Point # 2

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.		
2.		
3.		
Saplings/Shrubs		
1.		
2.		
3.		
Herbs		
1. Typha latifolia	OBL	60
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No √
Matrix Color: 10 YR 3/2 Gleyed? Yes √ No___ Mottled: Yes √ No_____ Depth 8"
—

Mottle Color: 5 YR 4/4 Mottle Description: _____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes √ No___ Depth of Standing Water: 12-18"
Saturated?: Yes √ No___ Depth to saturated soil:_____
Depth to water table: 0"
Other Indicators:

____Water-stained leaves	____Oxidized rhizospheres
____Surface scour	____Sediment deposits
____Water marks	____Drainage patterns
____Plant adaptations	____Other:

Criteria Met?: Yes √ No___ Basis: _____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/31/94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 8	Wetland # UB-2
Columbia, OR		Data Point # 1

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	40
2.		
3.		
Saplings/Shrubs		
1.		
2.		
3.		
Herbs		
1. Carex obnupta	OBL	35
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No √
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No___ Mottled: Yes √ No_____ Depth_____

Mottle Color: 10 YR 5/6 Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:_____
Saturated?: Yes ___ No √ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:

√ Water-stained leaves	____ Oxidized rhizospheres
√ Surface scour	____ Sediment deposits
√ Water marks	____ Drainage patterns
____ Plant adaptations	____ Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/31/94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 8	Wetland # UB-2
Columbia, OR		Data Point # 2

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Acer macrophyllum	FACU	10
2.		
3.		
Saplings/Shrubs		
1. Corylus cornuta	FACU	25
2.		
3.		
Herbs		
1. Polystichum munitum	FACU	25
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 0%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No___
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No___ Mottled: Yes___ No √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:_____
Saturated?: Yes ___ No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/31/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 8	Wetland # UB-2 Data Point # 3

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1. Fraxinus latifolia	FACW	25
2. Populus trichocarpa	FAC	20
3.		
Saplings/Shrubs		
1.		
2.		
3.		
Herbs		
1. Carex obnupta	OBL	25
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No √
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No___ Mottled: Yes √ No_____ Depth_____

Mottle Color: 10 YR 5/6 Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:_____
Saturated?: Yes ___ No √ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:

√ Water-stained leaves	____ Oxidized rhizospheres
√ Surface scour	____ Sediment deposits
√ Water marks	____ Drainage patterns
____ Plant adaptations	____ Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/31/94
COUNTY AND STATE Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 8 Wetland # UB-2 Data Point # 4	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Phalaris arundinacea	FACW	80
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes No Histosol or Histic Epipedon? Yes √ No
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No √ Mottled: Yes √ No_____ Depth 8"
-

Mottle Color: 5YR 4/4 Mottle Description: _____
Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes_____ No √ Depth of Standing Water:_____
Saturated?: Yes √ No___ Depth to saturated soil: 10"
Depth to water table: 14"
Other Indicators:
____Water-stained leaves √ Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:	
Comments:	
	Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		5/31/94
COUNTY AND STATE		
Columbia, OR	TOWNSHIP: 4N RANGE: 1W SECT: 8 Wetland # UB-2 Data Point # 5	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1. Acer macrophyllum	FACU	10
2.		
3.		
Saplings/Shrubs 1. Corylus cornuta	FACU	25
2. Rubus discolor	FACU	15
3.		
Herbs 1.		
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 0%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes __No___Histosol or Histic Epipedon? Yes ____No___
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No___ Mottled: Yes__ No √ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes____No √ Depth of Standing Water:_____
Saturated?: Yes ___No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		8/25/94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 8 Wetland # UB-3	
Columbia, OR	Data Point # 1	

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.		
2.		
3.		
Saplings/Shrubs		
1. Populus trichocarpa	FAC	10
2. Fraxinus latifolia	FACW	10
3. Salix lasiandra	FACW	10
Herbs		
1. Phalaris arundinacea	FACW	45
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No √
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No √ Mottled: Yes √ No_____ Depth_____

Mottle Color: 5YR 4/4 Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:_____
Saturated?: Yes ___ No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks √ Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		8/25/94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 8	Wetland # UB-3
Columbia, OR		Data Point # 2

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.		
2.		
3.		
Saplings/Shrubs		
1. Spiraea douglasii	FACW	15
2.		
3.		
Herbs		
1. Phalaris arundinacea	FACW	30
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 100%	Other Indicators:	
Hydrophytic Vegetation: Yes √ No___ Basis:		

SOILS

Series and Phase: Wollent Classification: _____
On Hydric Soil List? Yes √ No___ Histosol or Histic Epipedon? Yes ____ No √
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No √ Mottled: Yes √ No_____ Depth 5"

Mottle Color: 10 YR 5/6 Mottle Description:_____

Hydric Soil: Yes √ No___ Basis:

HYDROLOGY

Inundated?: Yes____ No √ Depth of Standing Water:_____
Saturated?: Yes ___ No √ Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
√ Water-stained leaves ____ Oxidized rhizospheres
√ Surface scour ____ Sediment deposits
____ Water marks ____ Drainage patterns
____ Plant adaptations ____ Other:

Criteria Met?: Yes √ No___ Basis:_____

WETLAND DETERMINATION: Wetland: √ Non-Wetland:

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		8/25/94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 8	Wetland # UB-3
Columbia, OR		Data Point # 3

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Festuca pratensis	FACU	60
2. Agrostis tenuis	FAC	20
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 50%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No___Histosol or Histic Epipedon? Yes ____No___
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes____No √ Depth of Standing Water:_____
Saturated?: Yes ___No √ Depth to saturated soil:_____
Depth to water table: >18"____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helens LWI		8/25/94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 8	Wetland # UB-3
Columbia, OR		Data Point # 4

Normal Environmental Conditions?: Yes √ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No √

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Festuca pratensis	FACU	45
2. Agrostis tenuis	FAC	45
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC: 50%	Other Indicators:	
Hydrophytic Vegetation: Yes___ No √ Basis:		

SOILS

Series and Phase: Xerumbrepts Classification: _____
On Hydric Soil List? Yes __No___Histosol or Histic Epipedon? Yes ____No___
Matrix Color: 10 YR 3/2 Gleyed? Yes___ No___ Mottled: Yes__ No_____ Depth_____

Mottle Color:_____ Mottle Description:_____

Hydric Soil: Yes___ No √ Basis:

HYDROLOGY

Inundated?: Yes____No √ Depth of Standing Water:_____
Saturated?: Yes ___No √ Depth to saturated soil:_____
Depth to water table: >18"
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes___ No √ Basis:_____

WETLAND DETERMINATION: Wetland: Non-Wetland: √

Comments:

Investigator(s): J. Dalton

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-24-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland #UB-5a
Columbia, OR		Data Point #1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.Populus trichocarpa	FAC	20%
2. Fraxinus latifolia	FACW	30%
3. Salix lasiandra	FACW	20%
Saplings/Shrubs		
1.		
2.		
3.		
Herbs		
1. Carex obnupta	OBL	30%
2.		
3.		

% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:

Hydrophytic Vegetation: Yes✓ No_____ Basis: Edge of vegetation - plant site/road.

SOILS

Series and Phase: Sauvie Classification: _____
On Hydric Soil List? Yes ✓ No Histosol or Histic Epipedon? Yes ____ No ✓
Matrix Color: 10YR3/2 Gleyed? Yes___ No✓ Mottled: Yes___ No✓ Depth_____
Mottle Color: 7.5YR5/6 Mottle Description:_____

Hydric Soil: Yes✓ No___ Basis: Presumed

HYDROLOGY

Inundated?: Yes✓ No Depth of Standing Water: 2-3"
Saturated?: Yes✓ No Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
✓ Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:

Criteria Met?: Yes✓ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-24-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland #UB-5a
Columbia, OR		Data Point #2

Normal Environmental Conditions?: Yes ✓ No___ Explain_____

Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Phalaris arundinacea	FACW	100%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes ✓ No_____ Basis: Edge of vegetation - plant site/road.		

SOILS

Series and Phase: Sauvie Classification: _____

On Hydric Soil List? Yes ✓ No Histosol or Histic Epipedon? Yes ____ No ✓

Matrix Color: 10YR3/2 Gleyed? Yes___ No ✓ Mottled: Yes___ No ✓ Depth_____

Mottle Color: 7.5YR5/6 Mottle Description:_____

Hydric Soil: Yes ✓ No___ Basis: Presumed

HYDROLOGY

Inundated?: Yes ✓ No Depth of Standing Water: 2-3"

Saturated?: Yes ✓ No Depth to saturated soil:_____

Depth to water table:_____

Other Indicators:

____Water-stained leaves ____Oxidized rhizospheres

✓ Surface scour ____Sediment deposits

____Water marks ____Drainage patterns

____Plant adaptations ____Other:

Criteria Met?: Yes ✓ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:

Comments

Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-24-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland #UB-5b
Columbia, OR		Data Point #1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees 1.		
2.		
3.		
Saplings/Shrubs 1.		
2.		
3.		
Herbs 1. Phalaris arundinacea	FACW	80%
2.		
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes ✓ No_____ Basis:		

SOILS

Series and Phase: Sauvie Classification: _____
On Hydric Soil List? Yes ✓ No Histosol or Histic Epipedon? Yes ____ No ✓
Matrix Color: 10YR3/2 Gleyed? Yes___ No ✓ Mottled: Yes___ No ✓ Depth_____
Mottle Color: 7.5YR5/6 Mottle Description:_____
Hydric Soil: Yes ✓ No___ Basis: Presumed

HYDROLOGY

Inundated?: Yes ✓ No Depth of Standing Water: 1.5'
Saturated?: Yes ✓ No Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
____Water-stained leaves ____Oxidized rhizospheres
_____Surface scour ____Sediment deposits
√ Water marks ____Drainage patterns
_____Plant adaptations ____Other:
Criteria Met?: Yes ✓ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments
Investigator(s): JDD

Routine Wetlands Delineation Data Form

APPLICANT NAME	SITE LOCATION	DATE
St. Helen's LWI		6-24-94
COUNTY AND STATE	TOWNSHIP: 4N RANGE: 1W SECT: 9	Wetland #UB-6
Columbia, OR		Data Point #1

Normal Environmental Conditions?: Yes ✓ No___ Explain_____
Is the vegetation, soils, or hydrology disturbed?: Yes___ No ✓

VEGETATION

DOMINANT SPECIES	FWS INDICATOR	PERCENT COVER
Trees		
1.Populus trichocarpa	FAC	60%
2. Fraxinus latifolia	FACW	20%
3.		
Saplings/Shrubs		
1.		
2.		
3.		
Herbs		
1. Carex obnupta	OBL	40%
2. Phalaris arundinacea	FACW	20%
3.		
% of Dominant Spp that are OBL, FACW, and/or FAC 100%	Other Indicators:	
Hydrophytic Vegetation: Yes ✓ No_____ Basis:		

SOILS

Series and Phase: Sauvie Classification: _____
On Hydric Soil List? Yes ✓ No Histosol or Histic Epipedon? Yes ____ No ✓
Matrix Color: 10YR3/2 Gleyed? Yes___ No ✓ Mottled: Yes___ No ✓ Depth_____
Mottle Color: 7.5YR5/6 Mottle Description:_____
Hydric Soil: Yes ✓ No___ Basis: Presumed

HYDROLOGY

Inundated?: Yes ✓ No Depth of Standing Water: 5"
Saturated?: Yes ✓ No Depth to saturated soil:_____
Depth to water table:_____
Other Indicators:
√ Water-stained leaves ____Oxidized rhizospheres
_____Surface scour ____Sediment deposits
____Water marks ____Drainage patterns
____Plant adaptations ____Other:
Criteria Met?: Yes ✓ No____ Basis:_____

WETLAND DETERMINATION: Wetland: ✓ Non-Wetland:
Comments

Investigator(s): JDD

Appendix H

Potentially Affected Tax Lots

Master List of Tax Lots Potentially Affected by Wetland Resources Within the City of St. Helens.

Tax Map		*Tax Lot*	*Wetland*
413			
	413 22	4100	J-6
		4000	J-6
		8301	J-3
		8200	J-3
		9800	J-3
		9900	J-3
		5300	J-5
		6600	J-5
		6500	J-5
		6400	J-5
		8400	J-5
		9600	J-5
		9500	J-5
		9300	J-5
		9200	J-5
		9100	J-5
		8600	J-5
		8700	J-5
		8900	J-5
	413 23	7800	J-4
		7900	J-4
		7600	J-5
414			
	See note*	1100	MC-22
		1200	MC-22
		1300	MC-22
		1301	MC-22
		1700	MC-22, MC-23
	See note*	102	D-1
		103	D-1
	414 22	405	D-2
		401	D-7
		402	D-7
		403	D-7
		200	D-4
		300	D-3
	414 21	1700	D-5
		100	D-6
	414 12	3400	D-6, J-3

* Tax lots listed under this note are contained within the corresponding tax map; however, sub-map identification is undetermined.

Master List of Tax Lots Potentially Affected by Wetland Resources Within the City of St. Helens.

Tax Map		*Tax Lot*	*Wetland*
414	414 12	2400	J-3
		2300	J-3
		2200	J-3
	41411	9501	J-3
		9502	J-3
		9500	J-3
		9301	J-3
		8800	J-3
		5900	J-3
		6000	J-3
		4700	J-3
		4600	J-3
		2900	J-3
		3000	J-3
		1500	J-5
		900	J-5
		800	J-5
		1400	J-5
	414 13	4200	J-3
		4300	J-3
		6300	J-3
		6400	J-3
		6500	J-3
	414 24	1901	J-2
	414 23	200	J-1
		300	J-1
		5400	J-1
		4100	J-1
		4200	J-1
		4300	J-1
		3800	J-1
		4000	J-1
		4000 A1	J-1
	414 32	700	MI-1
		1300	MI-1
		1300 A1	MI-1
		1600	MI-1
		1400	MI-1
		3500	MI-1
		3600	MI-1
		9700	MI-1
		9600	MI-1
		9500	MI-1
		9400	MI-1

Tax Map		*Tax Lot*	*Wetland*
414	414 32	9300	MI-1
	414 31	15300	MI-1
		15400	MI-1
		15500	MI-1
		15600	MI-1
		15700	MI-1
		15800	MI-1
		16400	MI-1
		16499	MI-1
		16700	MI-1
		16800	MI-1
		16900	MI-1
		16800 U1	MI-1
	414 3	200	MI-1
		100	MI-1
	414 44	3600	F-1
		4200	F-1, F-2
		4300	F-1
		3900	F-2
		3800	F-2
		3901	F-2
		4100	F-2
415			
	See note*	300	MC-4
		200	MC-4
		1000	MC-3a
		600	MC-3b WU
		400	MC-3b WU
		500	MC-3b WU,MC-3a,MC-1
		1100	MC-3a,MC-1
		1201	MC-1
		1200	MC-1
	415 12	4100	MI-1
		4000	MI-1
		3900	MI-1
		3800	MI-1
		3700	MI-1
		3600	MI-1
		3500	MI-1
		3400	MI-1
		3300	MI-1

* Tax lots listed under this note are contained within the corresponding tax map; however, sub-map identification is undetermined.

Master List of Tax Lots Potentially Affected by Wetland Resources Within the City of St. Helens.

Tax Map		*Tax Lot*	*Wetland*
415	415 12	3200	MI-1
	415 13	2709	MI-3
		2708	MI-3
		2707	MI-3
		2706	MI-3
		2705	MI-3
		4400	MI-3
		3600	MI-3
		3500	MI-3
	415 14	15100	MI-1
		14900	MI-1
		15000	MI-1
		14800	MI-1
		2200	MI-1
		14500	MI-1
		2300	MI-1
		11500	MI-1
		11400	MI-1
		2400	MI-1
		2500	MI-1
		11300	MI-1
		11100	MI-1
		2600	MI-1
		2700	MI-1
		9500	MI-1
		2800	MI-1
		2900	MI-1
		7000	MI-1
		7100	MI-1
		3000	MI-1
		6900	MI-1
		3100	MI-1
		5000	MI-1
		3200	MI-1
		4900	MI-1
		3300	MI-1
		3500	MI-1
		3600	MI-1
		3601	MI-1
	415 24	1000	MC-4
	415 31	515	MC-1
		100	MC-20
	415 32	100	MC-1
	415 42	2000	MC-20

Master List of Tax Lots Potentially Affected by Wetland Resources Within the City of St. Helens.

Tax Map		*Tax Lot*	*Wetland*
415	415 42	1700	MC-20
		1800	MC-20
		2700	MC-20
		3100	MC-20
		3000	MC-20
		2702	MC-20
		2701	MC-20
		2900	MC-20
		2800	MC-20
		2601	MC-20
		2600	MC-20
		2500	MC-20
		2400	MC-20
		2220	MC-20
		2219	MC-20
		5000	MC-21
	415 41	500	MC-20
		600	MC-20
	415 43	1000	MC-21
		1400	MC-21
		2000	MC-21
		2800	MC-21
	415 34	402	MC-5
		403	MC-5
		400	MC-5
		1000	MC-7, MC-8
		800	MC-8
		900	MC-8
		1200	MC-8
		1100	MC-8
	415 33	1200	MC-6
		1400	MC-6
		1500	MC-6
		2600	MC-8
		2500	MC-8
		2400	MC-8
		1900	MC-9
		1800	MC-9
416			
	416 2	100	MI-1
	416 1	302	MI-1
		304	MI-1
		303	MI-1
		306	MI-1

Master List of Tax Lots Potentially Affected by Wetland Resources Within the City of St. Helens.

Tax Map		*Tax Lot*	*Wetland*
416	416 4	800	MC-1
		611	MC-1
		610	MC-1
		601	MC-1
		612	MC-1, MC-2
		606	MC-1, MC-2
		604	MC-1, MC-2
		300	MC-1,MC-2
		1800	MC-2
		1900	MC-2
		3601	MC-9
		3100	MC-9
		2900	MC-9
		401	MC-9
		3502	MC-9
	416 3	3200	MC-9
		3201	MC-9
		3300	MC-9
417			
	417 12	3100	MC-9
	417 14	100	MC-10
		200	MC-10
		1400	MC-12
		1500	MC-12
	417 4	100	MC-13
		200	MC-12
		300	MC-12
		1300	MC-12
		400	MC-12
		902	MC-12
		1200	MC-12
		903	MC-12
		1006	MC-12
		1100	MC-12
		1008	MC-12
		1007	MC-12
		1200	MC-11
		1600	MC-14
		1800	MC-14
	417 3	100	MC-12
		300	MC-12

Master List of Tax Lots Potentially Affected by Wetland Resources Within the City of St. Helens.

Tax Map		*Tax Lot*	*Wetland*
418	See note*	1000	MC-25a
		1002	MC-25a
	See note*	600	MC-12
		800	MC-12
		700	MC-12
	See note*	307	MC-12,MC-19,UB-2
		306	MC-12
		305	MC-12
		300	MC-12
		313	MC-12
		302	MC-12
		303	MC-12
		304	MC-12
		102	MC-12
		310	MC-12
		311	MC-12
		309	MC-19
		312	MC-12
		308	MC-19,UB-3
	See note*	500	MC-9
	418 22	800	MC-9
		900	MC-9
		1000	MC-9
		2000	MC-9
		2100	MC-9
		2300	MC-9
		2400	MC-9
		3500	MC-9
		3600	MC-9
		3700	MC-9
	418 23	500	MC-9
		600	MC-9
		1500	MC-9
		1400	MC-9
		2800	MC-12
		2701	MC-12
		3200	MC-12
		2200	MC-12
		1700	MC-12

* Tax lots listed under this note are contained within the corresponding tax map; however, sub-map identification is undetermined.

Master List of Tax Lots Potentially Affected by Wetland Resources Within the City of St. Helens.

Tax Map		*Tax Lot*	*Wetland*
418	418 23	1800	MC-12
		1900	MC-12
		2700	MC-12
		2600	MC-12
		2000	MC-12
		2100	MC-12
		2500	MC-12
		1400	MC-12
		2201	MC-12
		1300	MC-12
		1200	MC-12
		1100	MC-12
		3500	MC-12
		3400	MC-12
		3300	MC-12
	418 32	503	MC-12
		400	MC-18,MC-17,MC-15
		1000	MC-17
		501	MC-15
		900	MC-16
		1100	MC-16
		1200	MC-16
		1300	MC-16
	418 24	1401	MC-12
		1300	MC-12
		800	MC-12
		1100	MC-12
		900	MC-12
		1000	MC-12
		400	MC-12
	418 4	100	MC-12
		1000	MC-25d,MC-25a
		1002	MC-25a
		200	UB-2,UB-4
		1100	UB-4
		1200	UB-4
		101	UB-3
	418 34	2500	UB-4
		1400	UB-1
		1701	UB-1
		1800	UB-1
		1600	UB-1
	418 11	200 M1	MC-23

Tax Map		*Tax Lot*	*Wetland*
419	See note*	200	MI-7,MI-8,MI-10
		201	MI-7
		600	MI-10,MC-24, MC-25b,MC-25c, MC-25d
		301	MI-11
		300	MI-12
	418 11	201	MC-22
		103	MC-22
	419 11	601	MI-15
		700	MI-15
	419 12	100	MI-1
	419 21	600	MI-5
		800	MI-5
		1200	MI-5
		1100	MI-5
		900	MI-5
		700	MI-5
	419 24	701	MI-9
	419 22	100	MC-23
		200	MC-23
	419 23	200	MC-12
		700	MC-12
4110			
	See note*	300	F-3 AW,F-4WU
		200	F-2,F-4,MI-14AW, MI-13AW
4117			
	See note*	100	MC-25d,MC-26, MC-25a, UB-5a, UB-5b,UB-6
	4117 2	300	UB-1,UA-1
		4900	UA-1
		4800	UA-1
		4600	UA-1
		4400	UA-1
		4300	UA-1
		4200	UA-1

* Tax lots listed under this note are contained within the corresponding tax map; however, sub-map identification is undetermined.

Master List of Tax Lots Potentially Affected by Wetland Resources Within the City of St. Helens.

Tax Map		*Tax Lot*	*Wetland*
4117	4117 2	4100	UA-1
		4000	UA-1
		3700	UA-1
		3600	UA-1,UA-2
		3500	UA-1
		3300	UB-5b
		2500	UB-5b
		1800	UB-5b
		700	UB-5b, UB-5a
5128			
	5128 4	200	D-16
5132			
	See note*	200	MI-1
	See note*	1300	MI-1
5132		1700	MI-1
		1800	MI-1
		1200	MI-1
		1100	MI-1
		100	MI-1
		200	MI-2
	5132 3	600	MI-1
		700	MI-1
		900	MI-1
		500	MI-1
		400	MI-1
5133			
	See note*	401	D-8
		400	D-8,D-9
	5133 1	100	D-16
		500	D-16
		700	D-11
		1000	D-13,D-14,D-15, D-16
	5133 41	1400	D-10
		1404	D-10
		1403	D-10
		1405	D-10
		1000	D-10, D-11
		200	D-11
		100	D-18,D-19,D-12

* Tax lots listed under this note are contained within the corresponding tax map; however, sub-map identification is undetermined.

Master List of Tax Lots Potentially Affected by Wetland Resources Within the City of St. Helens.

Tax Map		*Tax Lot*	*Wetland*
5133	5133 34	700	D-9 OD
		800	D-9 OD
		900	D-9 OD
		1000	D-9 OD
		1100	D-9 OD
		1300	D-9
5134			
	See note*	100	D-16,D-17
		200	D-17
	5134 23	1201	D-20
		1300	D-20,D-18,D-21
		1302	D-18,D-19
		1304	D-21,D-22
	5134 33	11300	J-6
		10200	J-6

* Tax lots listed under this note are contained within the corresponding tax map; however, sub-map identification is undetermined.

Appendix H

Potentially Affected Tax Lots

Tax Map		*Tax Lot*	*Wetland*
413			
	413 22	4100	J-6
		4000	J-6
		8301	J-3
		8200	J-3
		9800	J-3
		9900	J-3
		5300	J-5
		6600	J-5
		6500	J-5
		6400	J-5
		8400	J-5
		9600	J-5
		9500	J-5
		9300	J-5
		9200	J-5
		9100	J-5
		8600	J-5
		8700	J-5
		8900	J-5
	413 23	7800	J-4
		7900	J-4
		7600	J-5
414			
	See note*	1100	MC-22
		1200	MC-22
		1300	MC-22
		1301	MC-22
		1700	MC-22, MC-23
	See note*	102	D-1
		103	D-1
	414 22	405	D-2
		401	D-7
		402	D-7
		403	D-7
		200	D-4
		300	D-3
	414 21	1700	D-5
		100	D-6
	414 12	3400	D-6, J-3

* Tax lots listed under this note are contained within the corresponding tax map; however, sub-map identification is undetermined.

Tax Map		*Tax Lot*	*Wetland*
414	414 12	2400	J-3
		2300	J-3
		2200	J-3
	41411	9501	J-3
		9502	J-3
		9500	J-3
		9301	J-3
		8800	J-3
		5900	J-3
		6000	J-3
		4700	J-3
		4600	J-3
		2900	J-3
		3000	J-3
		1500	J-5
		900	J-5
		800	J-5
		1400	J-5
	414 13	4200	J-3
		4300	J-3
		6300	J-3
		6400	J-3
		6500	J-3
	414 24	1901	J-2
	414 23	200	J-1
		300	J-1
		5400	J-1
		4100	J-1
		4200	J-1
		4300	J-1
		3800	J-1
		4000	J-1
		4000 A1	J-1
	414 32	700	MI-1
		1300	MI-1
		1300 A1	MI-1
		1600	MI-1
		1400	MI-1
		3500	MI-1
		3600	MI-1
		9700	MI-1
		9600	MI-1
		9500	MI-1
		9400	MI-1

Master List of Tax Lots Potentially Affected by Wetland Resources Within the City of St. Helens.

Tax Map		*Tax Lot*	*Wetland*
414	414 32	9300	MI-1
	414 31	15300	MI-1
		15400	MI-1
		15500	MI-1
		15600	MI-1
		15700	MI-1
		15800	MI-1
		16400	MI-1
		16499	MI-1
		16700	MI-1
		16800	MI-1
		16900	MI-1
		16800 U1	MI-1
	414 3	200	MI-1
		100	MI-1
	414 44	3600	F-1
		4200	F-1, F-2
		4300	F-1
		3900	F-2
		3800	F-2
		3901	F-2
		4100	F-2
415			
	See note*	300	MC-4
		200	MC-4
		1000	MC-3a
		600	MC-3b WU
		400	MC-3b WU
		500	MC-3b WU,MC-3a,MC-1
		1100	MC-3a,MC-1
		1201	MC-1
		1200	MC-1
	415 12	4100	MI-1
		4000	MI-1
		3900	MI-1
		3800	MI-1
		3700	MI-1
		3600	MI-1
		3500	MI-1
		3400	MI-1
		3300	MI-1

* Tax lots listed under this note are contained within the corresponding tax map; however, sub-map identification is undetermined.

Tax Map		*Tax Lot*	*Wetland*
415	415 12	3200	MI-1
	415 13	2709	MI-3
		2708	MI-3
		2707	MI-3
		2706	MI-3
		2705	MI-3
		4400	MI-3
		3600	MI-3
		3500	MI-3
	415 14	15100	MI-1
		14900	MI-1
		15000	MI-1
		14800	MI-1
		2200	MI-1
		14500	MI-1
		2300	MI-1
		11500	MI-1
		11400	MI-1
		2400	MI-1
		2500	MI-1
		11300	MI-1
		11100	MI-1
		2600	MI-1
		2700	MI-1
		9500	MI-1
		2800	MI-1
		2900	MI-1
		7000	MI-1
		7100	MI-1
		3000	MI-1
		6900	MI-1
		3100	MI-1
		5000	MI-1
		3200	MI-1
		4900	MI-1
		3300	MI-1
		3500	MI-1
		3600	MI-1
		3601	MI-1
	415 24	1000	MC-4
	415 31	515	MC-1
		100	MC-20
	415 32	100	MC-1
	415 42	2000	MC-20

Master List of Tax Lots Potentially Affected by Wetland Resources Within the City of St. Helens.

Tax Map		*Tax Lot*	*Wetland*
415	415 42	1700	MC-20
		1800	MC-20
		2700	MC-20
		3100	MC-20
		3000	MC-20
		2702	MC-20
		2701	MC-20
		2900	MC-20
		2800	MC-20
		2601	MC-20
		2600	MC-20
		2500	MC-20
		2400	MC-20
		2220	MC-20
		2219	MC-20
		5000	MC-21
	415 41	500	MC-20
		600	MC-20
	415 43	1000	MC-21
		1400	MC-21
		2000	MC-21
		2800	MC-21
	415 34	402	MC-5
		403	MC-5
		400	MC-5
		1000	MC-7, MC-8
		800	MC-8
		900	MC-8
		1200	MC-8
		1100	MC-8
	415 33	1200	MC-6
		1400	MC-6
		1500	MC-6
		2600	MC-8
		2500	MC-8
		2400	MC-8
		1900	MC-9
		1800	MC-9
416			
	416 2	100	MI-1
	416 1	302	MI-1
		304	MI-1
		303	MI-1
		306	MI-1

Master List of Tax Lots Potentially Affected by Wetland Resources Within the City of St. Helens.

Tax Map		*Tax Lot*	*Wetland*
416	416 4	800	MC-1
		611	MC-1
		610	MC-1
		601	MC-1
		612	MC-1, MC-2
		606	MC-1, MC-2
		604	MC-1, MC-2
		300	MC-1,MC-2
		1800	MC-2
		1900	MC-2
		3601	MC-9
		3100	MC-9
		2900	MC-9
		401	MC-9
		3502	MC-9
	416 3	3200	MC-9
		3201	MC-9
		3300	MC-9
417			
	417 12	3100	MC-9
	417 14	100	MC-10
		200	MC-10
		1400	MC-12
		1500	MC-12
	417 4	100	MC-13
		200	MC-12
		300	MC-12
		1300	MC-12
		400	MC-12
		902	MC-12
		1200	MC-12
		903	MC-12
		1006	MC-12
		1100	MC-12
		1008	MC-12
		1007	MC-12
		1200	MC-11
		1600	MC-14
		1800	MC-14
	417 3	100	MC-12
		300	MC-12

Tax Map		*Tax Lot*	*Wetland*
418	See note*	1000	MC-25a
		1002	MC-25a
	See note*	600	MC-12
		800	MC-12
		700	MC-12
	See note*	307	MC-12,MC-19,UB-2
		306	MC-12
		305	MC-12
		300	MC-12
		313	MC-12
		302	MC-12
		303	MC-12
		304	MC-12
		102	MC-12
		310	MC-12
		311	MC-12
		309	MC-19
		312	MC-12
		308	MC-19,UB-3
	See note*	500	MC-9
	418 22	800	MC-9
		900	MC-9
		1000	MC-9
		2000	MC-9
		2100	MC-9
		2300	MC-9
		2400	MC-9
		3500	MC-9
		3600	MC-9
		3700	MC-9
	418 23	500	MC-9
		600	MC-9
		1500	MC-9
		1400	MC-9
		2800	MC-12
		2701	MC-12
		3200	MC-12
		2200	MC-12
		1700	MC-12

* Tax lots listed under this note are contained within the corresponding tax map; however, sub-map identification is undetermined.

Master List of Tax Lots Potentially Affected by Wetland Resources Within the City of St. Helens.

Tax Map		*Tax Lot*	*Wetland*
418	418 23	1800	MC-12
		1900	MC-12
		2700	MC-12
		2600	MC-12
		2000	MC-12
		2100	MC-12
		2500	MC-12
		1400	MC-12
		2201	MC-12
		1300	MC-12
		1200	MC-12
		1100	MC-12
		3500	MC-12
		3400	MC-12
		3300	MC-12
	418 32	503	MC-12
		400	MC-18,MC-17,MC-15
		1000	MC-17
		501	MC-15
		900	MC-16
		1100	MC-16
		1200	MC-16
		1300	MC-16
	418 24	1401	MC-12
		1300	MC-12
		800	MC-12
		1100	MC-12
		900	MC-12
		1000	MC-12
		400	MC-12
	418 4	100	MC-12
		1000	MC-25d,MC-25a
		1002	MC-25a
		200	UB-2,UB-4
		1100	UB-4
		1200	UB-4
		101	UB-3
	418 34	2500	UB-4
		1400	UB-1
		1701	UB-1
		1800	UB-1
		1600	UB-1
	418 11	200 M1	MC-23

Master List of Tax Lots Potentially Affected by Wetland Resources Within the City of St. Helens.

Tax Map		*Tax Lot*	*Wetland*
419	See note*	200	MI-7,MI-8,MI-10
		201	MI-7
		600	MI-10,MC-24, MC-25b,MC-25c, MC-25d
		301	MI-11
		300	MI-12
	418 11	201	MC-22
		103	MC-22
	419 11	601	MI-15
		700	MI-15
	419 12	100	MI-1
	419 21	600	MI-5
		800	MI-5
		1200	MI-5
		1100	MI-5
		900	MI-5
		700	MI-5
	419 24	701	MI-9
	419 22	100	MC-23
		200	MC-23
	419 23	200	MC-12
		700	MC-12
4110			
	See note*	300	F-3 AW,F-4WU
		200	F-2,F-4,MI-14AW, MI-13AW
4117			
	See note*	100	MC-25d,MC-26, MC-25a, UB-5a, UB-5b,UB-6
	4117 2	300	UB-1,UA-1
		4900	UA-1
		4800	UA-1
		4600	UA-1
		4400	UA-1
		4300	UA-1
		4200	UA-1

* Tax lots listed under this note are contained within the corresponding tax map; however, sub-map identification is undetermined.

Tax Map		*Tax Lot*	*Wetland*
4117	4117 2	4100	UA-1
		4000	UA-1
		3700	UA-1
		3600	UA-1,UA-2
		3500	UA-1
		3300	UB-5b
		2500	UB-5b
		1800	UB-5b
		700	UB-5b, UB-5a
5128			
	5128 4	200	D-16
5132			
	See note*	200	MI-1
	See note*	1300	MI-1
5132		1700	MI-1
		1800	MI-1
		1200	MI-1
		1100	MI-1
		100	MI-1
		200	MI-2
	5132 3	600	MI-1
		700	MI-1
		900	MI-1
		500	MI-1
		400	MI-1
5133			
	See note*	401	D-8
		400	D-8,D-9
	5133 1	100	D-16
		500	D-16
		700	D-11
		1000	D-13,D-14,D-15, D-16
	5133 41	1400	D-10
		1404	D-10
		1403	D-10
		1405	D-10
		1000	D-10, D-11
		200	D-11
		100	D-18,D-19,D-12

* Tax lots listed under this note are contained within the corresponding tax map; however, sub-map identification is undetermined.

Master List of Tax Lots Potentially Affected by Wetland Resources Within the City of St. Helens.

Tax Map		*Tax Lot*	*Wetland*
5133	5133 34	700	D-9 OD
		800	D-9 OD
		900	D-9 OD
		1000	D-9 OD
		1100	D-9 OD
		1300	D-9
5134			
	See note*	100	D-16,D-17
		200	D-17
	5134 23	1201	D-20
		1300	D-20,D-18,D-21
		1302	D-18,D-19
		1304	D-21,D-22
	5134 33	11300	J-6
		10200	J-6

* Tax lots listed under this note are contained within the corresponding tax map; however, sub-map identification is undetermined.

St. Helens Riparian Ordinance Adopted Aug. 2000
File with LWI

ORDINANCE NO. 2824

AN ORDINANCE TO ADOPT GOAL 5 RIPARIAN CORRIDOR RESOURCE INVENTORY INTO THE ACKNOWLEDGED COMPREHENSIVE PLAN FOR THE CITY OF ST. HELENS.

WHEREAS, the City did contract with a consultant to develop an assessment of possible riparian resources in accordance with the applicable State regulations for all riparian corridor resources; and

WHEREAS, the City is in Periodic Review and must inventory its Goal 5 resources, including riparian corridors; and

WHEREAS, the City did give notice in accordance with the Measure 56 requirements, to all property owners inside the Urban Growth Boundary; and

WHEREAS, the Planning Commission, in a duly noticed public hearing, recommended that the City Council accept their list of riparian corridor resources as the significant riparian corridors inventory; and

WHEREAS, the Council determined that the criteria for significance shall be all those riparian corridor resources identified by Oregon Department of Fish and Wildlife as fish bearing and identified by Pacific Habitat Services, Inc. report dated February 4, 2000 and amended March 24, 2000, as having two or more assessed functions that they have rated as High; and

WHEREAS, the City Council in a duly noticed public hearing, and after due consideration and deliberation, approved adoption of a list of riparian corridor resources as found in the Attachments A & B; and

WHEREAS, because some sections of St. Helens Ordinance No. 2785, Community Development Code may appear to impose regulatory requirements to protect significant resources; the City; and

WHEREAS, the City has not completed the Goal 5 process, the City Council has decided to suspend such sections of the Community Development Code until the Goal 5 process is completed for the applicable resource; and

WHEREAS, the Council has considered findings of compliance with criteria and law applicable to the proposal.

NOW THEREFORE, THE CITY OF ST. HELENS DOES ORDAIN AS FOLLOWS:

1. The above recitations are true and correct and are incorporated herein by this reference.
2. The attached List of Significant Goal 5 Resources (reference Attachments A & B) is added to the Acknowledged Comprehensive Plan and is incorporated herein by this reference.

3. Not withstanding any other sections of the St. Helens Community Development Code (Ordinance No. 2785) any section of the Code which appears to impose regulatory requirements pertaining to Goal 5 resources is hereby suspended and said section shall have no regulatory affect until the completion of the Goal 5 protection phase the applicable Goal 5 resources and the adoption of an ordinance imposing such protections, if any.

4. The attached Findings of Fact and Conclusions of Law dated August 16, 2000 are approved.

Read the first time:	August 2, 2000
Read the second time:	August 2, 2000
Read the third time:	August 16, 2000
Approved by the Mayor	August 16, 2000

Attested by:

Brian D. Little, City Recorder

Randy Peterson, Council President

ATTACHMENT A

LIST OF SIGNIFICANT RIPARIAN CORRIDOR RESOURCES

As shown on the Pacific Habitat Services, Inc. maps identified as Attachment B, and based upon the criteria chosen by the City Council, the following riparian resources are considered as Significant Goal 5 Riparian Corridor Resources:

This list includes the riparian inventory that has two or more assessed functions rated as high and are considered fish bearing waterways.

R-MC-5b
R-MC-7R
R-MC-7L
R-MC-8L
R-MC-10
R-MC-12
R-MC-13R
R-MC-13L
R-MC-15
R-MC-16a
R-MC-16b
R-MI-21
R-MI-22
R-MI-23R
R-MI-23L
R-MI-24
R-MI-26a
R-D-34

NOTE:
The above listed reaches are included in different form in the Pacific Habitat Services, Inc. report dated February 4, 2000 and amended March 24, 2000 to adjust for labeling errors on the maps and in the report.

City of St. Helens
P.O. BOX 278 PHONE (503) 397-6272
St. Helens, Oregon
97051

FINDINGS OF FACT AND CONCLUSIONS OF LAW
Riparian Corridor Significant Goal 5 Resources

REQUEST:

Complete the Periodic Review Work Task #6 for Goal 5 Riparian Corridors.

CRITERIA AND EVALUATION

Comply with Goal 5 process found in Oregon Administrative Rule (OAR) 660-023-030, 040, and 090. The City may either inventory the resource in accordance with the Safe Harbor or the Standard Procedure methodology.

1. Inventory Goal 5 resources -

Finding: Riparian corridors are listed in the Oregon Statewide Planning Goals and Guidelines as a resource that must be inventoried.

Finding: The St. Helens Acknowledged Comprehensive Plan indicates that there are fish habitats inside the City's Urban Growth Boundary.

Finding: The City is in Periodic Review and one Work Task is to comply with Goal 5 of the Oregon Statewide Planning Goals and Guidelines.

Finding: The Planning Commission did review the available information concerning riparian corridor resources and did decide to use and to recommend to the City Council that they also use the Safe Harbor methodology to comply with the Inventory Phase of the Goal 5 process for riparian corridor resources within the St. Helens Urban Growth Boundary.

Finding: The City Council did consider the recommendation from the Planning Commission to use Safe Harbor as the inventory methodology for riparian corridor resources but chose to apply the Standard methodology for this phase of the process.

Finding: The City did enter into an agreement with a consultant (Pacific Habitat Services, Inc.) to determine the riparian corridor resources inventory within the St. Helens Urban Growth Boundary.

Finding: The City's consultant did accomplish an inventory and did present the

inventory to the City at a duly noticed public hearing.

Finding: The City's consultant did also suggest some possible criteria to help the City determine significance of the resource inventory.

Finding: The City's consultant included all bodies of water within the Urban Growth Boundary that are more than .5 acres in size and that are listed in the Local Wetlands Inventory approved by the Oregon Division of State Lands.

Finding: The City's consultant did review the wetlands and other bodies of water in the Urban Growth Boundary and did assess the lands adjacent to each body of water for its ability to provide water quality, flood management, thermal regulation, and wildlife habitat functions.

Finding: The City did contact several agencies of the State of Oregon including Oregon Department of Forestry and the Oregon Department of Fish and Wildlife to determine which bodies of water are considered fish habitats.

Finding: The City did review several maps to determine where the resources are located. The maps reviewed included ODF stream classification maps, USGS quadrangle maps, National Wetland Inventory maps, ODFW maps, FEMA maps, and aerial photographs.

Finding: The City did hold several work sessions, public forums, and public hearings and received evidence and testimony into the record as regards the location, quantity and quality of riparian corridor resources.

2. Determine the significance of inventoried resources

Finding: The City's consultant did make recommendations as to which inventoried riparian areas met certain ratings as to assessed functions.

Finding: The City's consultant did emphasize that approximately 75% of the riparian areas have a high rating in at least one supporting function.

Finding: The City Council did hold a duly noticed public hearing in September of 1999 to receive testimony and evidence into the record regarding the recommendation from the Planning Commission.

Finding: The Council considered the Planning Commission recommendation and decided against the Safe Harbor methodology due to the significant amount of riparian area that does not appear to have definable tops of banks or has steep slopes.

Finding: The Council continued the Public Hearing on the portion concerning riparian corridor resource's inventory to allow all parties time to gather more information and to allow interested parties more time to consider the evidence and impacts on their properties.

3. Citizen review and comments -

Finding: The City staff and consultant held two public forums (December 1997 and January 14, 1999) for public input on Goal 5 process and on the proposed options and possible inventory.

Finding: The St. Helens Planning Commission held a duly noticed public hearing April 13, 1999 for citizen input on the matter of inventory of Goal 5 resources including riparian corridors.

Finding: There were comments from interested persons concerning the impact that this process could have on their property (use and value).

Finding: There were comments from interested persons concerning the extent of protection that could result from this process.

Finding: There were comments from interested persons stating that they did not believe the proposed riparian corridor resources were correct as regards their properties.

Finding: There were comments from interested persons stating that they did not like the Safe Harbor methodology and wanted the Standard Procedure to be used for their properties.

Finding: There were comments from interested persons stating that their properties did not qualify for the Safe Harbor methodology due to lack of top of bank or steep cliffs.

Finding: The St. Helens City Council held a public hearing (July 21, 1999, which was continued to subsequent dates in October 20, 1999, February 16, 2000, and March 29, 2000) for citizen input on the matter of inventory of Goal 5 resources including riparian corridors.

4. Adopt Inventory Lists -

Finding: The City Council deliberated July 19, 2000 and decided to adopt a list of inventoried riparian corridor resources based upon the City consultant's report and other information as to location, quality and quantity of the potential

riparian corridor resources.

Finding: Based upon all the testimony, evidence and reports in the records of the public hearings held by the Planning Commission and the City Council on the riparian corridor resources, the City Council chose as its criteria for determining significance the following:

(a). Any body of water within the St. Helens Urban Growth Boundary that is considered a fish habitat per the maps supplied by Oregon Department of Forestry and Oregon Department of Fish and Wildlife.

(b). Any land area adjacent to the bodies of water referenced in paragraph (a) above and that is in the Pacific Habitat Services Inc. report of February 4, 2000 and amended March 24, 2000 to correct minor map errors, as having two or more assessed riparian functions of high rating.

Finding: In accordance with the Oregon Administrative Rules 660 Division 023, the approved Periodic Review Work Task #6 on Goal 5 and all the testimony, evidence and reports placed into the record concerning riparian resources the City Council has decided to adopt the list of significant riparian corridor resources as an Appendix to the City's Acknowledged Comprehensive Plan.

CONCLUSIONS:

1. Inventory Goal 5 Riparian Corridor resources - Completed.

2. Determine the significance of inventoried resources - Completed.

3. Citizen review and comments - There were many meetings during a year's time and that allow significant time for input from affected property owners and interested parties. Considerable testimony, evidence and reports were received and placed into the record.

4. Adopt Inventory Lists - The City has chosen to adopt Ordinance 2824 to add the list of significant riparian corridor resources to the Acknowledged Comprehensive Plan.

Brian D. Little, City Recorder

Date 8/29/00

Randy Peterson, Council President

Date 8/23/00

City of St. Helens
P.O. BOX 278 PHONE (503) 397-6272
St. Helens, Oregon
97051

FINDINGS OF FACT AND CONCLUSIONS OF LAW
Riparian Corridor Significant Goal 5 Resources

REQUEST:

Complete the Periodic Review Work Task #6 for Goal 5 Riparian Corridors.

CRITERIA AND EVALUATION

Comply with Goal 5 process found in Oregon Administrative Rule (OAR) 660-023-030, 040, and 090. The City may either inventory the resource in accordance with the Safe Harbor or the Standard Procedure methodology.

1. Inventory Goal 5 resources -

Finding: Riparian corridors are listed in the Oregon Statewide Planning Goals and Guidelines as a resource that must be inventoried.

Finding: The St. Helens Acknowledged Comprehensive Plan indicates that there are fish habitats inside the City's Urban Growth Boundary.

Finding: The City is in Periodic Review and one Work Task is to comply with Goal 5 of the Oregon Statewide Planning Goals and Guidelines.

Finding: The Planning Commission did review the available information concerning riparian corridor resources and did decide to use and to recommend to the City Council that they also use the Safe Harbor methodology to comply with the Inventory Phase of the Goal 5 process for riparian corridor resources within the St. Helens Urban Growth Boundary.

Finding: The City Council did consider the recommendation from the Planning Commission to use Safe Harbor as the inventory methodology for riparian corridor resources but chose to apply the Standard methodology for this phase of the process.

Finding: The City did enter into an agreement with a consultant (Pacific Habitat Services, Inc.) to determine the riparian corridor resources inventory within the St. Helens Urban Growth Boundary.

Finding: The City's consultant did accomplish an inventory and did present the

inventory to the City at a duly noticed public hearing.

Finding: The City's consultant did also suggest some possible criteria to help the City determine significance of the resource inventory.

Finding: The City's consultant included all bodies of water within the Urban Growth Boundary that are more than .5 acres in size and that are listed in the Local Wetlands Inventory approved by the Oregon Division of State Lands.

Finding: The City's consultant did review the wetlands and other bodies of water in the Urban Growth Boundary and did assess the lands adjacent to each body of water for its ability to provide water quality, flood management, thermal regulation, and wildlife habitat functions.

Finding: The City did contact several agencies of the State of Oregon including Oregon Department of Forestry and the Oregon Department of Fish and Wildlife to determine which bodies of water are considered fish habitats.

Finding: The City did review several maps to determine where the resources are located. The maps reviewed included ODF stream classification maps, USGS quadrangle maps, National Wetland Inventory maps, ODFW maps, FEMA maps, and aerial photographs.

Finding: The City did hold several work sessions, public forums, and public hearings and received evidence and testimony into the record as regards the location, quantity and quality of riparian corridor resources.

2. Determine the significance of inventoried resources

Finding: The City's consultant did make recommendations as to which inventoried riparian areas met certain ratings as to assessed functions.

Finding: The City's consultant did emphasize that approximately 75% of the riparian areas have a high rating in at least one supporting function.

Finding: The City Council did hold a duly noticed public hearing in September of 1999 to receive testimony and evidence into the record regarding the recommendation from the Planning Commission.

Finding: The Council considered the Planning Commission recommendation and decided against the Safe Harbor methodology due to the significant amount of riparian area that does not appear to have definable tops of banks or has steep slopes.

Finding: The Council continued the Public Hearing on the portion concerning riparian corridor resource's inventory to allow all parties time to gather more information and to allow interested parties more time to consider the evidence and impacts on their properties.

3. Citizen review and comments -

Finding: The City staff and consultant held two public forums (December 1997 and January 14, 1999) for public input on Goal 5 process and on the proposed options and possible inventory.

Finding: The St. Helens Planning Commission held a duly noticed public hearing April 13, 1999 for citizen input on the matter of inventory of Goal 5 resources including riparian corridors.

Finding: There were comments from interested persons concerning the impact that this process could have on their property (use and value).

Finding: There were comments from interested persons concerning the extent of protection that could result from this process.

Finding: There were comments from interested persons stating that they did not believe the proposed riparian corridor resources were correct as regards their properties.

Finding: There were comments from interested persons stating that they did not like the Safe Harbor methodology and wanted the Standard Procedure to be used for their properties.

Finding: There were comments from interested persons stating that their properties did not qualify for the Safe Harbor methodology due to lack of top of bank or steep cliffs.

Finding: The St. Helens City Council held a public hearing (July 21, 1999, which was continued to subsequent dates in October 20, 1999, February 16, 2000, and March 29, 2000) for citizen input on the matter of inventory of Goal 5 resources including riparian corridors.

4. Adopt Inventory Lists -

Finding: The City Council deliberated July 19, 2000 and decided to adopt a list of inventoried riparian corridor resources based upon the City consultant's report and other information as to location, quality and quantity of the potential

riparian corridor resources.

Finding: Based upon all the testimony, evidence and reports in the records of the public hearings held by the Planning Commission and the City Council on the riparian corridor resources, the City Council chose as its criteria for determining significance the following:

(a). Any body of water within the St. Helens Urban Growth Boundary that is considered a fish habitat per the maps supplied by Oregon Department of Forestry and Oregon Department of Fish and Wildlife.

(b). Any land area adjacent to the bodies of water referenced in paragraph (a) above and that is in the Pacific Habitat Services Inc. report of February 4, 2000 and amended March 24, 2000 to correct minor map errors, as having two or more assessed riparian functions of high rating.

Finding: In accordance with the Oregon Administrative Rules 660 Division 023, the approved Periodic Review Work Task #6 on Goal 5 and all the testimony, evidence and reports placed into the record concerning riparian resources the City Council has decided to adopt the list of significant riparian corridor resources as an Appendix to the City's Acknowledged Comprehensive Plan.

CONCLUSIONS:

1. Inventory Goal 5 Riparian Corridor resources - Completed.

2. Determine the significance of inventoried resources - Completed.

3. Citizen review and comments - There were many meetings during a year's time and that allow significant time for input from affected property owners and interested parties. Considerable testimony, evidence and reports were received and placed into the record.

4. Adopt Inventory Lists - The City has chosen to adopt Ordinance 2824 to add the list of significant riparian corridor resources to the Acknowledged Comprehensive Plan.

Brian D. Little, City Recorder

Date_____

Randy Peterson, Council President

Date_____